

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2023/24

Chief Editor: Prof. Shaul Chorev

Editor: Dr. Ehud Gonen



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ABOUT MPS

The sea component in Israel's security and resilience is of crucial importance. There is a significant gap between the importance of the sea to the State of Israel and the research activity in the field, which causes a lack of awareness of the maritime space and the lack of public discourse on the subject. Israel is considered an "economic island", since most of its exports and imports are made by sea, due to its unique geo-strategic location in the eastern Mediterranean to the shores of the Mediterranean and the Red Sea; the proportion of the high population living in its coastal strip of the Mediterranean Sea; Discovery of natural gas deposits in Israel's economic waters; Israel's absolute dependence on maritime trade (import and export); The sea as the engine of economic growth (blue economy), desalination of water from the sea as a main component of drinking water in Israel, as well as the sea as a single area available for new infrastructures and the evacuation of dangerous infrastructures from populated areas. All of these create challenges and opportunities in the marine sector.

The development of blue economy as a long-term strategy aimed at supporting sustainable economic growth and the establishment of the Institute for Maritime Policy and Strategy (MPS) at the National Center for Blue Economy and Innovation under HiCenter, the Center for Technological Entrepreneurship in Haifa Ltd., is a complementary step to the positioning of the city of Haifa as a capital of blue economy in Israel.

The Institute for Maritime Policy and Strategy (MPS) at the National Center for Blue Economy and Innovation in Haifa is an independent, non-partisan research institute that operates in the Israeli public arena in the fields of policy, strategy and maritime security (Maritime Security) in the broadest sense.

MPS vision is to be an interdisciplinary Israeli research institute and the center of knowledge, leading and unique in the world in the fields of maritime policy and strategy in its broadest sense, with an emphasis on the Eastern Mediterranean and the Red Sea region.

MPS Mission is to conduct high-quality interdisciplinary applied research on policy issues related to maritime strategy and maritime security; to provide recommendations in these fields to local and national government decision-makers, and to the business sector; and to initiate and participate in public discussion on issues related to Israel's maritime domain in order to increase public awareness of the importance of this arena for Israel's resilience and security.

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Global Developments in the Maritime Domain 2023/24

Shaul Chorev

Introduction

Although the assessment of the situation in this report focuses on the Eastern Mediterranean and the Red Sea, it is impossible to separate the events in these two arenas from other global developments in general and in the maritime domain in particular, due to the close links between events in the global domain and their impact on the arenas close to Israel.

The year 2024 was characterized by a number of notable events and processes that also affected the maritime domain:

The events of October 7 and the subsequent 'Israel-Hamas' war declared by the State of Israel against Hamas and its rule in the Gaza Strip, quickly turned into a regional campaign between Israel and Iran and its proxies, including deep involvement by the United States, and exploitation of the situation by China and Russia to change the International Global Order. The election of Masoud Pezeshkian as President of Iran in July 2024 does not signify a fundamental change in Iran's position, and so far the new president has obediently echoed the official line, harshly criticized Israel, and expressed support for the "Axis of Resistance" against Israel and the United States.

The Ukraine-Russia war that broke out on February 24, 2022, a war in which Russia is trying to redraw Europe's security architecture, has entered its third year without a decision being reached by either side. As a result of Russia's invasion of Ukraine, NATO came together and played two main roles: the first was to provide weapons to allow Ukraine to defend itself, and the second was to try to contain the conflict by strengthening the deterrence of the alliance's own forces. NATO accepted Sweden and Finland as new members, thereby also strengthening its defense lines in Eastern and Northern Europe.

At the same time, the geopolitical and geo-economic competition between the United States and China has continued and even intensified, with Taiwan remaining the most explosive point of friction in the complex relationship between the two superpowers. Accordingly, the United States continues its efforts to strengthen its Balancing Strategies against China in the Indo-Pacific Region.

Russia's isolation in Europe has led it to tighten its relations with other rogue states such as Iran, North Korea, Syria, Afghanistan, Cuba, and Venezuela. This bloc of states has

increased mutual support among its members, and it poses a growing threat to global stability.¹

With its invasion of Ukraine, Russia announced the lowering of the threshold for the use of nuclear weapons as a "tactical weapon", which led to the collapse of arms control and disarmament mechanisms that maintained world security even during the most difficult periods of the Cold War. The failure of negotiations to return Iran to the nuclear agreement, and Iran's continued pursuit of becoming a nuclear threshold state, also indicates the weakening of international norms, in this case the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).²

The United States, Russia, and China (each in its own way) are dismantling the liberal order that has dominated the global political and economic system for years. As a result, the international system is returning to a situation where war is once again the default for great powers, as it was during the Cold War. Today, there are four times more sanctions imposed on countries, companies, and individuals than there were during the 1990s; for example, the United States recently imposed secondary sanctions on entities that support the Russian military.³

In parallel with the political struggle, a "subsidy war" is taking place between countries that want to imitate the large-scale government support that China and the United States provide to their industries, and although the US dollar remains the dominant currency in world trade, global capital flows are beginning to diverge. The World Trade Organization (WTO), which will celebrate its 30th anniversary next year, has failed in recent years to achieve its goals of encouraging free trade, partly due to the lack of attention from the United States. The International Monetary Fund (IMF) is in the midst of an identity crisis, torn between an environmental agenda and managing global financial stability. The UN Security Council is unable to reach decisions due to the veto system, and the international legal system organs such as the International Court of Justice (ICJ) have become a tool of political slander, a phenomenon from which Israel has also suffered recently.

¹ Hlivco, A. (January 12, 2024). [Global Security at Risk: Russia's Alarming Alliance with Rogue States Raises Urgent Concerns](#), *Henry Jackson Society*.

² "New World Order" is a term historically used to discuss the need for changes in the balance of power in international relations. The political concept refers to the idea of world governance in the sense of new collaborative initiatives to identify, understand, or solve global problems beyond the ability of individual states to solve (Nye, J. (1992). What New World Order?).

³ *Calcalist*. (February 23, 2024). [A week after Navalny's death: The US imposed over 500 additional sanctions on Russia](#).

Global military spending rose in 2023 for the ninth consecutive year, reaching a total of \$2,443 billion. The 6.8 percent increase in 2023 was the sharpest annual increase since 2009, bringing global defense spending to its highest level ever (Figure 1). The global military burden—defined as military spending as a percentage of global gross domestic product—increased to 2.3 percent in 2023. The United States and China remained the top two defense spenders, and both increased their military spending in 2023.⁴

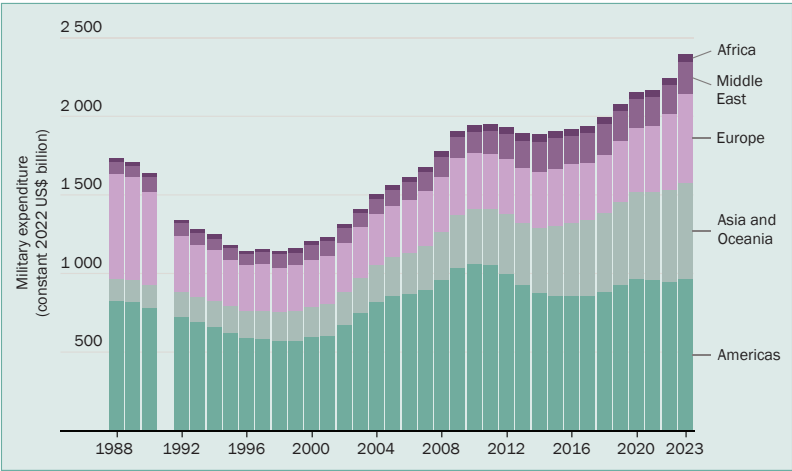


Figure 1: Defense/security spending by geographic region in the years 1988–2023⁵

In addition to these events, unprecedented natural phenomena are occurring that result from climate change on Earth – the product of human activity. For example, 2023 was the hottest year on Earth since scientific measurements began. Hundreds of millions of people around the world experienced extreme heat. Each month, from June to December, a global record was set for that month, and July was the hottest month of all. Overall, the Earth warmed by about 1.5 degrees Celsius compared to the average at the end of the 19th century, (when modern temperature measurements began).⁶

The Inter-Superpowers Conflict

China continues to pursue its goals of becoming a leading global power, maintaining what it sees as its territory and areas of influence, and establishing its weight in regional affairs

⁴ Tian, N., Lopes da Silva, D., Liang, X., and Scarazzato, L. (April 2024). [Trends in world military expenditure, 2023](#). SIPRI Fact Sheet. p.1.

⁵ Ibid.

⁶ Society for the Conservation of Nature (June 1, 2024). [Last year was the hottest in the world, and in Israel they continue to ignore the climate crisis](#).

by building its military into a global power, which could undermine the stability and norms of international relations. China's plans for its military include a multi-year programs of comprehensive initiatives and military reform, combined with a plan to expand its military on an extraordinary scale. The question is what use will be made of this military power. This question is particularly acute given China's increasing aggressiveness regarding its territorial claims in the South China Sea and Taiwan.

China is leading the expansion of an organization that is challenging traditional Western dominance in international relations – BRICS (Brazil, Russia, India, China and South Africa). China has invited Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates to join the organization as members from January 1, 2024, which has indeed happened. This approach allows China to leverage its global positioning to promote a "Pax Sinica" that will extend from the Persian Gulf to the Suez Canal. Meanwhile, Saudi Arabia and the United Arab Emirates continue to demonstrate that they can continue the approach of the parallel and close relationship with the two rival superpowers and weave joint ventures, both with China and with the United States and the West (Figure 2).

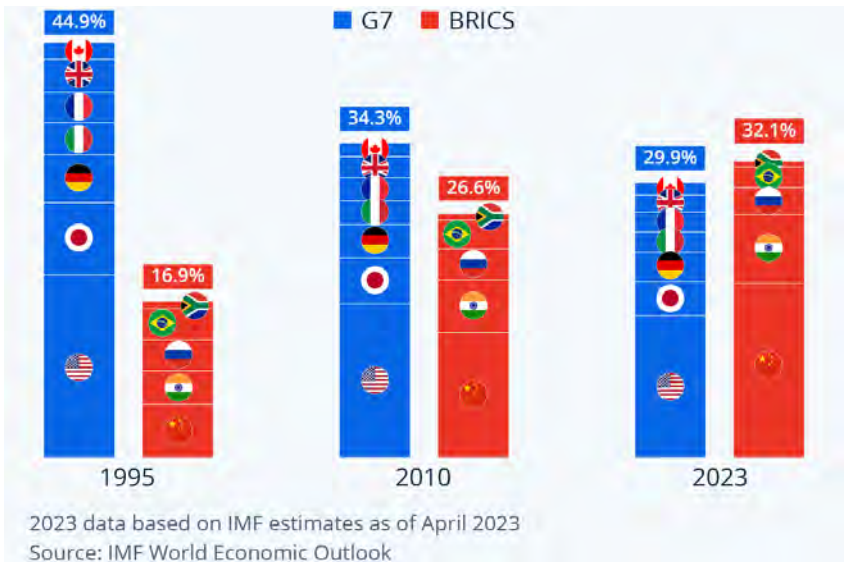


Figure 2: The Rise of the BRICS - BRICS vs. G7 (by Felix Richter, Aug 22, 2023)

In January 2024, Taiwan elected William Lai, a man China called a "separatist", as its president. The exercises conducted by the Chinese military and navy in the first week of Lai's presidency in the waters around Taiwan were designed to convey the message that they were "punishment for separatist acts", and went to great lengths to emphasize that Lai was the "worst" of Taiwan's presidents to date. The current situation between

the United States, China, and Taiwan suggests a significant possibility of a serious crisis between the United States and China over the Taiwan issue, and in certain circumstances, ultimately a military confrontation. Experts on the subject point out that "in some cases, such a disaster can occur precisely under conditions in which each side believed that it was taking actions designed to stabilize the situation or prevent escalation".⁷

There are several sources of Chinese-American tension, including disagreements over how to handle the decades-old conflict on the Korean Peninsula and territorial disputes between China and US allies in the South China Sea (such as with the Philippines). The United States also accuses China of helping Russia rebuild its defense industrial base, which could negatively affect the ongoing campaign between Russia and Ukraine. (Russian President Vladimir Putin met with Chinese President Xi Jinping in Beijing in May 2024 and discussed energy and security issues with him.) However, the most dangerous issue for bilateral dispute is the Taiwan issue, which presents a combination of conflicting interests, high risk, and erosion of trust and assurances that could create a full-blown conflict and escalation between the United States and China.⁸

China has expanded its influence in the Middle East and was the bridesmaid in the renewal of relations between Saudi Arabia and Iran in March 2023 and the opening of embassies in the capital of the other. There have been no diplomatic relations between Iran and Saudi Arabia since 2016. The agreement that was formed through Chinese mediation reflects the change in the status of the two powers, the United States and China, in the Middle East in general and the Persian Gulf in particular. The agreement was signed through the mediation of the Chinese Foreign Minister and is also used by China in its diplomatic efforts to strengthen its international status. During the Israel-Hamas War, Saudi Arabia approached Iran directly and through several channels, with the aim of preventing the spread of violence, and the leaders of the countries even met to discuss the consequences of the war in Gaza.⁹

The Quadrilateral Security Dialogue (Quad), which includes the United States, Australia, India, and Japan, was established to cooperate after the 2004 Indian Ocean tsunami, and has recently begun to change the nature of its discourse. At its 2023 summit in Hiroshima, Japan, it focused specifically on maritime issues, and leaders made clear their opposition to attempts to change the maritime status quo "by force or coercion". The four member

⁷ BBC News. (May 23, 2024). [What's behind China-Taiwan tensions?](#)

⁸ Swaine, M. D., and Park, J. (2024). [Paths to Crisis and Conflict Over Taiwan](#), *The Quincy Institute for Responsible Statecraft*.

⁹ For more information on the subject of China's position, see 'China's Position in the 'Israel-Hamas' War' by Benny Ben Ari.

states of the dialogue group reiterated the importance of adhering to international law, such as the United Nations Convention on the Law of the Sea (UNCLOS), for peace and stability in the region.¹⁰

China's growing influence in the small island nations scattered across the Pacific Ocean continues to worry the United States. Monitoring Chinese activity reveals that Chinese officials are working slowly and quietly in these countries, trying to increase their dependence on China by financing infrastructure projects and conducting "persuasion diplomacy" with decision-makers. China's intentions are to sign ten Pacific nations to a comprehensive deal that could fundamentally change the balance of power in the region, which covers almost a third of the world's land area.¹¹ China has made significant progress in achieving these goals in recent years, and in 2019 the Solomon Islands and Kiribati switched their diplomatic recognition from Taiwan to China, leading to a series of economic and security agreements between China and these nations. The Solomon Islands also signed a security agreement with Beijing in 2022 and a policing agreement in 2023, raising concerns that China would gain access to a seaport for its navy. Meanwhile, in Kiribati, rumors persist that China may attempt to rebuild a military airstrip located 2,400 miles southwest of Hawaii. In fact, Chinese police officers were seen in Kiribati in early 2023, an event that led the United States to express its concerns to the authorities. After months of delay, the US Congress approved the renewed Compacts of Free Association (COFA) with Palau, Micronesia, and the Marshall Islands in March 2024. These agreements extend a range of benefits and services to these Pacific island nations, as well as the United States' obligation to defend them from attack, while allowing the United States to take an expansive security approach.¹²

Ostensibly, the blockade imposed by the Houthi rebels on shipping in the southern Red Sea was supposed to harm China's economy, which relies on this shipping lane as a major route for exporting its products to Europe. At one point, there were expectations in the international system that China would exert its influence on Iran to end the blockade, or send Chinese naval ships from the port of Djibouti to secure this shipping lane. However, it turns out that China's geopolitical considerations outweigh geo-economic considerations. From China's perspective, the threat posed by the Houthis to the security of international shipping lanes represents an opportunity for the Chinese, as expressed in the words of

¹⁰ Hatakeyama, K. (February 28, 2024). [The Quad's growing focus on maritime security](#), *East Asia Forum*.

¹¹ Haaretz. (May 26, 2022). [The Chinese path to influence in the Pacific: many carrots for the countries of the region, but also sticks](#).

¹² Piekos, W. (April 3, 2024). [In the Pacific Islands, US delay is an invitation for China to step in](#), *The Atlantic Council*.

Professor Xiao Yunhua of the People's Liberation Army National Defense University: "Our international strategy is to cut off the global hegemony of the United States, undermine the supremacy of the American navy, and promote a multipolar world".¹³

On the other hand, the Israel-Hamas War has stalled the normalization process that the United States has been trying to promote between Israel and Saudi Arabia. Israel's interest is to link a normalization agreement with Saudi Arabia to the kingdom's involvement in the Palestinian arena, especially Riyadh's commitment to the reconstruction and management of the Gaza Strip in "the day after". However, Israel's refusal to define a diplomatic vision for resolving the Israeli-Palestinian conflict and the conditional and gradual integration of the Palestinian Authority in the management of Gaza could delay an agreement between Israel and Saudi Arabia. From mid-2023 onwards, relations between the United States and Saudi Arabia are gradually improving, and a possible scenario may develop – even if its probability is low – in which the United States and Saudi Arabia upgrade bilateral ties without any relation to normalization between Israel and Saudi Arabia. As a result, Israel may lose two strategic opportunities: (1) forging a regional power alliance, led by the United States and Saudi Arabia, against the Iranian-led Axis of Resistance; (2) active involvement of additional countries in the regional international community, including Saudi Arabia, in promoting reforms within the Palestinian Authority and in the reconstruction and stabilization of the Gaza Strip.

Another risk is that if the normalization process between Saudi Arabia and Israel is not advanced in the foreseeable future, two possible developments could occur, both of which are dangerous for Israel. The first is that a delay in strengthening ties between Saudi Arabia and the United States will bring Saudi Arabia even closer to Iran, which will strengthen the Iranian-jihadist axis that threatens Israel. The second is that the United States will not be willing to continue to jeopardize its interests in the Middle East and will continue to strengthen its relations with Saudi Arabia, while leaving Israel out of the process. As the election date in the United States approaches, the need for President Biden and Democratic candidate Harris to achieve an international achievement that will improve the party's chances in the elections increases – and with it the danger that the United States will strengthen ties with Saudi Arabia while leaving Israel out of the arrangements, including the nuclear agreement that will be concluded with Saudi Arabia and that could endanger Israel's security. On the other hand, some claim that Saudi Arabia is on a long-term path of rapprochement with China.¹⁴

¹³ Feng, J. (December 22, 2023). Yemen's Houthis Doing China 'A Big Favor', *Newsweek*.

¹⁴ See more about Saudi policy in the chapter 'A New Saudi Strategy for the Red Sea: The Search for Alternatives to Maritime Security' by Alexander Bligh.

Almost a year after the outbreak of the Israel-Hamas War, the Middle East remains divided. Paradoxically, the "Arab street" has been less active and less influential in Arab countries such as Egypt, Saudi Arabia and Morocco than in Western arenas such as Paris, London, Brussels or even in US cities. Bahrain, Jordan and Turkey have called on their ambassadors to return to their countries, but the Arab partners in the Abraham Accords (the United Arab Emirates, Morocco) have not changed their positions on these agreements, nor have they downgraded diplomatic relations with Israel. Street protests against Israel's actions have been virtually ignored by the authorities of those countries. The United Arab Emirates has played a role in pushing for humanitarian aid to Gaza. It has also assisted the Gazans with medical assistance. Qatar, along with Egypt, assisted in the negotiations underway with Hamas over the return of the hostages. Other countries at peace with Israel, such as Jordan, support Gaza by transferring supplies to hospitals established in the Strip. All of these are positive developments overall, but there are also negative developments that occurred after October 7. Jordan has harshly criticized Israel's war against Hamas. Egypt has expressed its displeasure at the possibility that residents of Gaza might flee to Sinai following the IDF's entry into Rafah, as well as at the proximity of IDF operations to Egyptian forces on the "Philadelphia Axis". The IDF's actual entry into Rafah has caused a deterioration in relations between Israel and Egypt (it should be noted that even after the IDF's occupation of Rafah, there have been no reports of a mass exodus from Gaza to Egyptian territory).

However, the war between Israel and Hamas serves the strategic goals of Iran, which is at the head of the "Axis of Resistance" and has always known that peace deals and normalization of Arab states with Israel are partly conditional on reducing violence in Gaza and the West Bank. Israel sought to "manage the conflict" and Iran wanted to "expand the conflict" by encouraging the Houthis in Yemen and Hezbollah in Lebanon to carry out attacks against Israel and to strive against order and stability in Syria and Iraq. It seems that so far Iran is succeeding in realizing its goals.

In the Middle East, the Biden administration has not developed a consistent policy toward Turkey, even though situations and events are developing in the region surrounding Turkey that affect its relations with the United States and other key players, as Turkey seeks a more independent foreign policy. Although the United States and Turkey held comprehensive talks in early March 2024 to discuss whether NATO allies can move beyond fundamental differences on issues such as Syria or Ankara's close ties with Russia, these talks have not resolved all the long-standing tensions between the two countries. Turkey joined its NATO allies and suspended an arms treaty that imposed restrictions on conventional military equipment in Europe, after Russia withdrew from the agreement last year. Turkey also ratified Sweden's accession as a new NATO member state in January 2024, but this

has not yet removed the suspicion of NATO countries towards it. Furthermore, Turkey's support for Hamas in the Israel-Hamas War and its trade sanctions on Israel have left it outside regional diplomatic processes and further strained its ties with the United States. In the past, there have been discussions about Turkey having a role in the reconstruction of Gaza or within a multinational force to maintain peace in the region. Today, it is difficult to imagine the current Israeli government agreeing to such a role for Turkey at the end of the war.¹⁵

The UN Security Council – which was supposed to play a "central role" in resolving such crises – appears paralyzed in the face of a growing number of wars, conflicts, and deep internal divisions. The UN General Assembly is struggling to achieve its mission for sustainable development within the framework of the global development goals that seek to move humanity away from a path of poverty and growing inequality (Sustainable Development Goals – SDG). However, it seems that the UN is not succeeding on the environmental side either (in addition to the geostrategic challenges). The almost universal promises of the 'Paris Agreement' to deal with global warming have not yet reduced carbon emissions, challenged the fuel subsidies provided by some countries, and prevented temperatures from rising to new heights.

At the same time, challenges to the status quo of global governance and finance are emerging, as evidenced by the decision of the BRICS bloc of developing countries to invite additional members to join their group. The move was interpreted as a wake-up call, reflecting not only China's challenge to the status quo but also the failure of Western countries to build a broader and more inclusive international order. The change is also echoed through other channels: China is using a strategy of economic financing to expand its economic and political influence.

In conclusion, the great powers compete, coexist, or confront each other around the world, but none of them is able to impose the version of world order that it advocates. Wars that cause great destruction, dangerous tensions, and disruptive changes are causing the world order to enter a turbulent phase in international relations, which is expressed, among other things, in Russia's invasion of Ukraine, the conflict between Hamas and Israel, or the fierce competition between the United States and China.

The changes in the character of the contemporary naval warfare

Before we discuss the changes themselves, it is important to clarify the difference between the concepts of the nature of war/warfare and the character of war/warfare.

¹⁵ Aydıntaşbaş, A. (February 5, 2024). [NATO, Gaza, and the future of US-Turkish relations](#), *European Council on Foreign Relations*.

No one claims that warfare does not change, however, there are differences of opinion among those who deal with the subject as to whether the nature of warfare changes, the character of warfare changes, or both change. According to Clausewitz, the nature of war is chaotic, inherently political, and violent.¹⁶ However, Clausewitz states that although "war has a resemblance to accidental events, all the vicissitudes of passion, courage, imagination, and enthusiasm that it includes are solely its special characteristics".¹⁷ In other words, all the changes in warfare are smaller segments that develop and interact to create the character of war. That is, the nature of warfare/war does not change, but its character does.¹⁸ This is a very important distinction for the question of what changes in the nature of naval warfare arise from the events that occurred in the naval arena, both in the Russia-Ukraine War, mainly in the Black Sea arena, and in the 'Israel-Hamas' War, mainly in the Red Sea and Gulf of Aden arena.

The term "littoral" (Latin) refers to the maritime area adjacent to the coast (Figure 3). There is no single agreed-upon definition of this zone, although the United States Navy defines the zone as extending from the beach/shore to a water depth of approximately 60 meters (200 feet). There is disagreement about this definition, with some arguing that the correct definition should take into account the detection and weapons capabilities of the force located on the coast, and that this zone should be extended to a range of up to 50 miles from the coast.¹⁹

The accepted definition of littoral warfare is "military warfare conducted on the continental shelf, in shallow waters and near the coast".²⁰ It can include dealing with diverse threats such as: mines, artillery and missile batteries located in the littoral zone, especially in landing missions, or commando operations carried out from the sea. Therefore, littoral warfare requires mastering the "art of warfare" in sea areas near the coast, near islands, in shallow waters and restricted to movement, usually within the continental shelf and far

¹⁶ Carl Von Clausewitz. (1976). *On war*. M. Howard and P. Paret (eds.), Princeton University Press, Princeto.

¹⁷ Ibid. p. 86.

¹⁸ For an expansion and adaptation of the concept to the present day, see a joint publication by the Hudson Institute and the Center for Naval Policy and Strategy Research, University of Haifa: Feith, D. J., and Chorev, S. (May 6, 2020). *The Evolving Nature of War*. National Institute for Public Policy, Issue No. 458, National Institute Press, Fairfax.

¹⁹ US, Department of the Navy, Office of the Chief of Naval Operations (1994). *Naval Doctrine Publication 1: Naval Warfare*, Washington DC.

²⁰ Sibel defines the continental shelf as "a geographical concept that describes the natural continuation of the land surface beyond territorial waters, extending below the water surface, until the steep drop to the depths of the sea". Sibel, R. (2010). *Law of the Sea*. Jerusalem: Nevo Publishing, p. 483.

from the open sea, which requires good navigation and maneuverability of the vessels. This type of warfare differs significantly from naval warfare on the high seas for two reasons: Due to physical restrictions of the maritime domain (depth, coastline), the vessels that can operate there are also limited in size, speed of movement and dimensions (due to limited ability to maneuver). Also, since the fighting is close to the enemy's coast, it is likely that the enemy will utilize its capabilities from the coast, using small, fast vessels armed with missiles.²¹

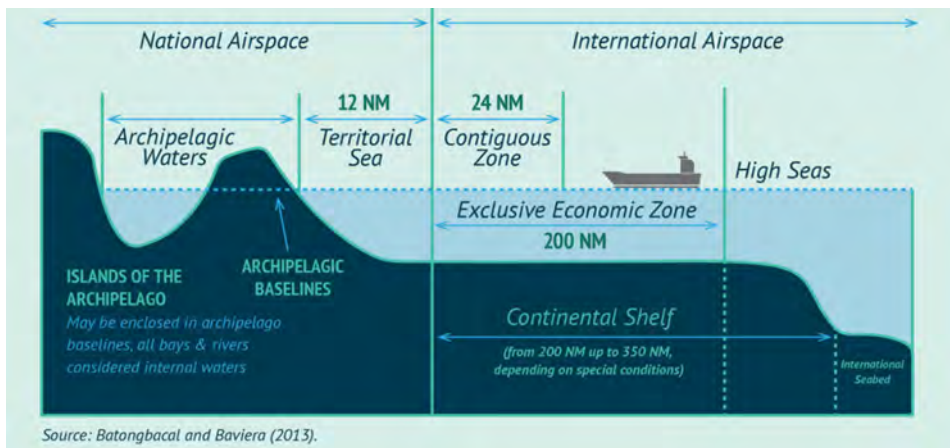


Figure 3: The coastal/ littoral zone and its components

The differences between the characteristics of naval warfare on the high seas and the characteristics of littoral warfare must be well understood, otherwise it will be difficult for the commanders of the vessels and their crews to plan and execute their activities properly.²² The shallow waters and limited space require the use of different tactics than on the open sea. A littoral warfare vessel must be fast, agile, well-armed and capable of self-defense against a variety of threats that can develop, some of which – from weapons launched from the coast itself.

Milan Vego notes that littoral warfare requires close cooperation (Jointness) between the various participating navies and the establishment of mechanisms for preventing incidents (Deconfliction), as well as close cooperation with air forces and intelligence.²³ He also notes that the ability of the weaker naval side to challenge the stronger side in this

²¹ *Defencyclopedia*, s.v (2014). [Littoral Warfare: Introduction](#).

²² Vego, M. (Spring 2015). On Littoral Warfare. *Naval War College Review*, 68(2).

²³ DE conflict – creating a mechanism to prevent collisions or accidents between different forces in a particular combat zone.

type of warfare is greater than in warfare on the open sea.²⁴ The goals of littoral warfare are generally similar or identical to those of warfare on the open sea, such as achieving naval superiority or naval control, and yet there are significant differences in the way these goals are achieved in littoral warfare. In contrast to warfare on the open sea, the most common method in littoral warfare is tactical action: opportunities to plan and execute large-scale naval operations are relatively rare.²⁵ Vigo further argues that during the second decade of the 21st century, the regions of Southeast Asia, the Middle East (especially the Persian Gulf and the Gulf of Aden), North Africa, the Western Pacific, and the Black Sea have developed as areas of tension with the potential for regional conflicts and wars. Although the area of these littoral zones is barely 16 percent of the maritime domain, they are of crucial importance, since the origins as well as the destinations of world trade are located in them, and the importance of this trade to the economic well-being and security of countries has perhaps never been as great as it is today.²⁶

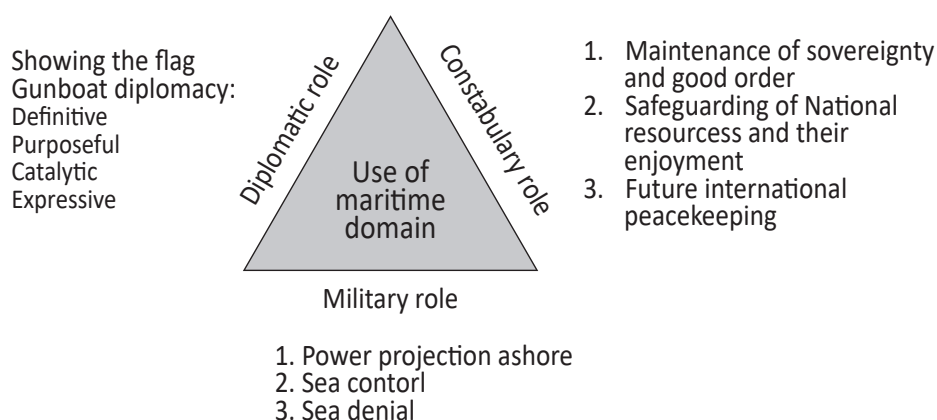


Figure 4: The triangle of contemporary use of maritime domain and possible roles for a warship

In the naval campaign between Russia and Ukraine, as well as the one that took place in the southern Red Sea and the Gulf of Aden, securing sea lanes of communications took on a new form in that, in addition to being in littoral zones, it also drained into important chokepoints, such as the Bab-el-Mandeb Strait and the Turkish Straits. The asymmetry was demonstrated by the fact that both the Ukrainian Navy and the Houthi rebels succeeded in properly exploiting the terrain conditions to dictate the rules of the

²⁴ Vego, M. *Maritime Strategy and Sea Denial, Disputing Sea Control*, p. 110. No date.

²⁵ Vego, M. (Spring 2015). *On littoral warfare*. *US Naval War College*, p. 35.

²⁶ Ibid.

game to the fleets that on the face of it were ranked first in the world in the naval power index. The Ukrainians managed to sink or cause heavy damage to at least 15 Russian warships, and the means of attack were: cruise missiles fired from land, unmanned aerial vehicles (UAVs) of the 'Magura 5' type, which have high maneuverability and carry 200 kg of explosives.²⁷

The successes of unmanned aerial and naval systems in destroying high-value targets at low cost to their operators are changing the nature of naval warfare. The Ukrainians' success in operating UAS at sea was due in part to the fact that the combat medium was in this case in confined littoral waters against targets that were in a nearly stationary state. Notable weaknesses in basic naval readiness in the Russian Black Sea Fleet were revealed when the Ukrainians sank the Moscow (RTS-71), a guided missile cruiser, with two Soviet-built Neptune subsonic missiles, and the Ukrainians increased their range and explosives. The ability to innovate technologically and doctrinally during war has always been noted as an important component of the power of states at war. The repeated Ukrainian attacks on Black Sea Fleet ships in port and on port infrastructure; some of them were successful – eventually caused the Russian Black Sea Fleet to withdraw and find more distant ports to thwart further attacks. In the southern Red Sea, the Houthis have also succeeded in striking a large number of vessels using coastal missiles (both ballistic and cruise missiles), UAVs and, more recently, surface-to-air missiles. The actions of the navies of the United States, Great Britain, France and other countries to secure shipping lanes, including attacks on Houthi detection and weapons systems on the coast in what were called "preventive strikes", have so far not resulted in the removal of the threat.²⁸ Projection of power on the coast was done through strikes by aircraft that took off from American aircraft carriers and attacked the Houthi coastal infrastructure, or through Tomahawk land attack missiles (TLAM) and, in the Ukrainian case, Kalibr missiles, which were launched, among other things, from improved Russian KILo submarines, some of which were involved in the massive missile attacks on Ukraine on June 1, 2024.

The "Gunboats Diplomacy" strategy and the deterrent component used in it were reflected in the early stages of the "Israel-Hamas" war by the deployment of two task forces led by American aircraft carriers (Gerald Ford and Eisenhower) in the eastern Mediterranean and later also found expression in the Gulf of Aden. In addition to deterrence, these ships provided a defensive envelope (Theater Missile Defense – TMD) and intercepted dozens of missiles fired from the Yemeni coast at merchant ships, as well as participating in the

²⁷ Grady, J. (June 13, 2024). [Battles in the Black Sea Changing the Character of Naval Warfare, Experts Say, USNI News](#).

²⁸ *Middle East Monitor* (June 18, 2024). [UK, US air strikes on Yemen are not deterring Houthi attacks on Red Sea vessels, report finds](#).

interception of the hundreds of missiles that Iran launched at Israel on the night of April 13–14, 2024.

In all that is said about the changing nature of contemporary naval warfare, it is also worth noting the increased use of the underwater medium by various countries. A recent study conducted by the Swedish Stockholm International Peace Research Institute (SIPRI) on the Indo-Pacific region noted the sharp increase in underwater capabilities, which is reflected in the countries in this region acquiring submarines and underwater weapons. The dynamics are largely driven by the "security dilemma dynamics". The meaning of such dynamics is that capabilities intended for defense by one side will be perceived as offensive by the other side and as requiring a response. Such dynamics increase the armament of submarines in the region and create additional tensions. Such a process is taking place especially around the Chinese-American rivalry in the Indo-Pacific region, but it is also spreading - including to the Korean Peninsula. This submarine acquisition has implications for the risks of escalation (horizontally or vertically), i.e., the expansion of the conflict in the Indo-Pacific region, and a greater number of states, or vertical escalation – i.e., an increase in the intensity of the escalation, especially since some submarines are also equipped with nuclear weapons. Nuclear-conventional entanglement related to the counterforce potential of anti-submarine warfare (ASW) capabilities requires special attention as it appears to have driven incidents in the past and may lead to future escalation. Moreover, submarine-to-submarine incidents – although still rare – as well as incidents between submarines and surface ships are becoming more likely as the number of vessels and submarine operators increases, especially in the East and South China seas.²⁹

Red Sea, Arabian Sea and Persian Gulf region

The Red Sea itself is rife with regional and international geopolitical barriers, especially its chokepoints. The Strait of Hormuz between the Persian Gulf and the Gulf of Oman has been and remains "captive" by Iran and its naval Revolutionary Guard forces. The civil war in Yemen and Iran's support for the Houthi rebels in the conflict make the geographic and geopolitical threats in the Red Sea region, especially its southern part, similar to those in the Persian Gulf.³⁰

²⁹ Tyytti Erästö, Fei Su, Wilfred wan. (June 2024). [Navigating security, Dilemmas in Indo-Pacific Waters, Undersea Capabilities and Armament Dynamics](#), *Stockholm International Peace Research Institute – SIPRI*, p. vi.

³⁰ For more on the historical background to Israel's activities in the Red Sea, see 'The Red Sea Region and the State of Israel – A Historical Review' by Nir Maor. For more on the global aspects of this region, see 'The impact of the Houthi maritime blockade of the southern Red Sea and the Gulf of Aden on Egypt, Jordan, and Saudi Arabia' by Moshe Teridman, both in this volume.

The Red Sea, Gulf of Aden and Persian Gulf regions were at the center of international tensions in 2024. Security threats in the Red Sea caused a significant diversion of shipping traffic to alternative routes, with far-reaching global trade and transportation implications. Vessels on all shipping segments of the Asia-Europe and Asia-Atlantic trade routes diverted their routes and began sailing around the Cape of Good Hope in South Africa. Rerouting vessels creates pressure on the supply side, driving up costs and causing delays.³¹ The crisis in the Red Sea also affected ports on the African continent, causing congestion. Disruption in the Red Sea and increased shipping traffic across Africa highlight the need for African countries and ports to increase efforts aimed at implementing trade facilitation measures, adopting advanced communication, command and control systems and implementing green processes to reduce congestion at the port and expedite the transportation of goods.

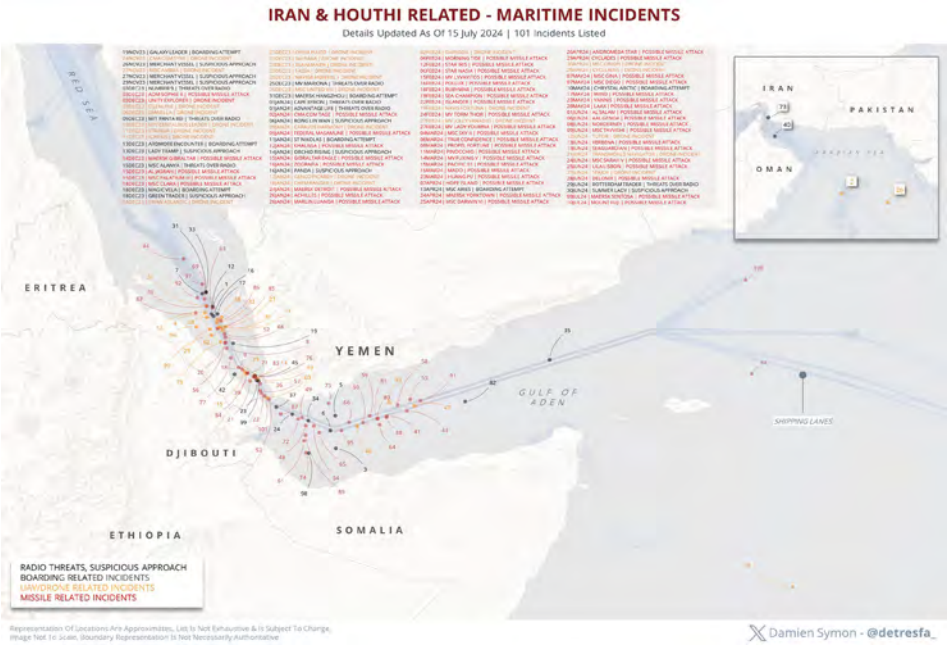


Figure 5: Iranian and Houthi rebel attacks through July 2024

After the United States and Britain's naval forces succeeded on January 9, 2024, in intercepting a barrage of missiles and drones fired from Houthi-controlled territory at merchant ships sailing in the southern Red Sea, the UN Security Council decided to

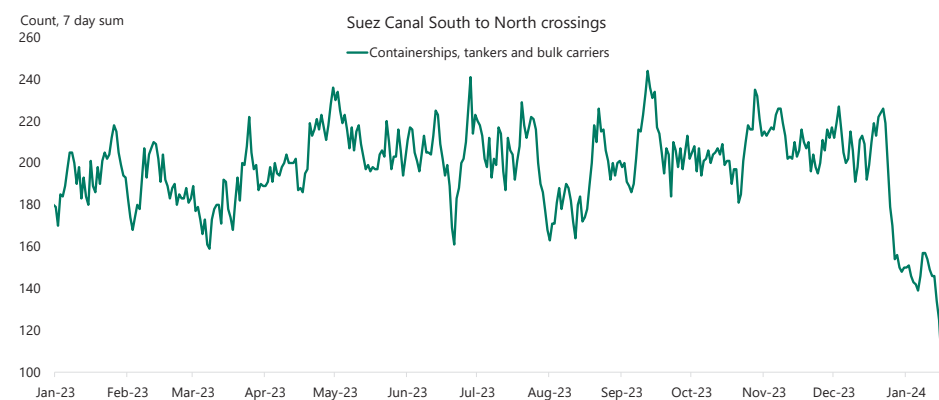
³¹ For more information on the commercial impacts of the Houthis attacks, see 'A Geo-Economic Analysis of the Consequences of the Houthis Attacks on Israeli Foreign Trade' by Ehud Gonen.

demand that the Houthis immediately cease all attacks on merchant ships in the Red Sea and the Gulf of Aden.³² So far, the attacks have not stopped and have even intensified. So far (June 2024), two ships have been hijacked by armed Houthis, one ship and 25 crew members remain in Houthi custody, while one ship has been released. At least 30 ships have been damaged by Houthi attacks. Two ships have been sunk (one British-owned and one Greek-owned).³³

Short-term effects of the naval blockade in the southern Red Sea

The Suez Canal is a strategic global waterway that carries 10%–15% of global seaborne trade, and about 22% of global container trade. Revenue from the Suez Canal to Egypt in the 2022–2023 fiscal year amounted to about \$8.6 billion, a vital foreign exchange earner that Egypt desperately needs. By October 2023, the number of ships transiting the canal, the weight of goods transiting the canal, and Egypt's revenue from the canal had all increased compared to the corresponding months in previous years. However, in mid-February 2024, Egyptian President Abdel Fattah al-Sisi indicated that revenue from the Suez Canal would drop by 40 to 50 percent due to attacks by Yemeni Houthi rebels on shipping in the southern Red Sea.

Suez Canal traffic has declined 50%



Source: Bloomberg, Apollo Chief Economist

Figure 6: Ship traffic in the Suez Canal from south to north in 2023

³² Adopting Resolution 2722 (2024) by Recorded Vote, [Security Council Demands Houthis Immediately Stop Attacks on Merchant, Commercial Vessels in Red Sea](#).

³³ Gambrell, J. (June 27, 2024). [Ship attacked in Red Sea in latest maritime assault carried out by Yemen's Houthi rebels](#), AP.

The mirror image of the decline in Suez Canal traffic is the diversion of ships to a route around the Cape of Good Hope. The volume of goods (in weight terms) in trade around Africa increased by 328%, as shown in Figure 7.

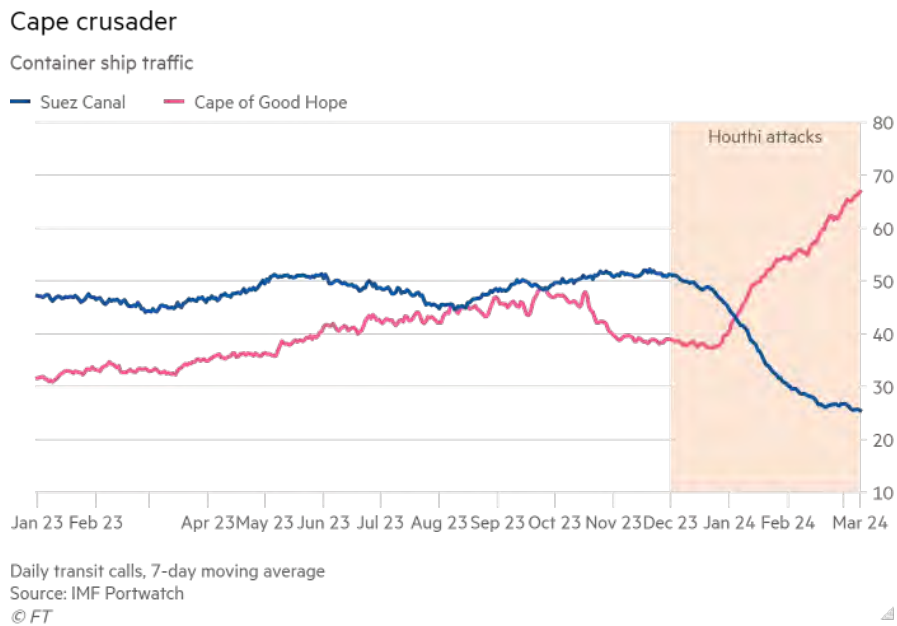


Figure 7: Average weekly passage of ships through the Suez Canal and the Cape of Good Hope in the months of January 2023 – March 2024

The state of the global economy

It can be identified from the geopolitical trends noted above that the process of de-globalization and fragmentation in the global system will strengthen, and on the other hand, there will be an increased emphasis on regional links, the formation of close and "friendly" economic blocs that will serve regional free trade. Countries will implement protectionist policies to protect strategically important or sensitive sectors.³⁴

The war between Russia and Ukraine is also affecting the global economy: Figure 8 shows the GDP cost of the war between Russia and Ukraine on the global economy and highlights the impact on the price paid by the Russian economy for this war.³⁵

³⁴ Global Maritime Trends 2050, [What does the future of the maritime industry look like?](#) Lloyd's Register Foundation and Lloyd's Register, *The Economist Group* 2023, p. 10.

³⁵ Kilfoyle, M. (October 24, 2023). [Ukraine: what's the global economic impact of Russia's invasion?](#) *Economics Observatory*.

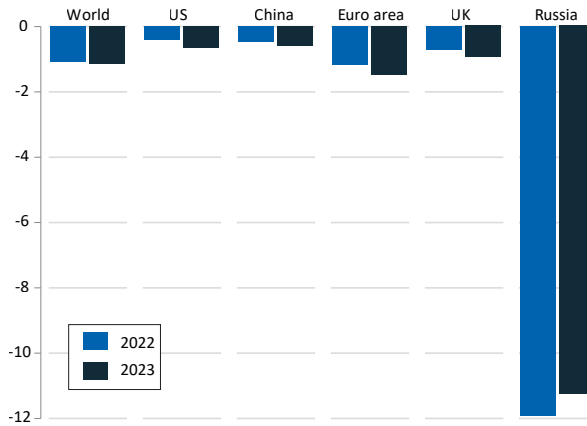


Figure 8: The GDP cost of the war between Russia and Ukraine to the global economy³⁶

The state of the global trade

The maritime supply chain as part of the global supply chain

The Global Supply Chain includes all the steps involved in the production and delivery of a product or service, and these steps occur in more than one country. The Maritime Supply Chain is a very significant part of the Global Supply Chain.

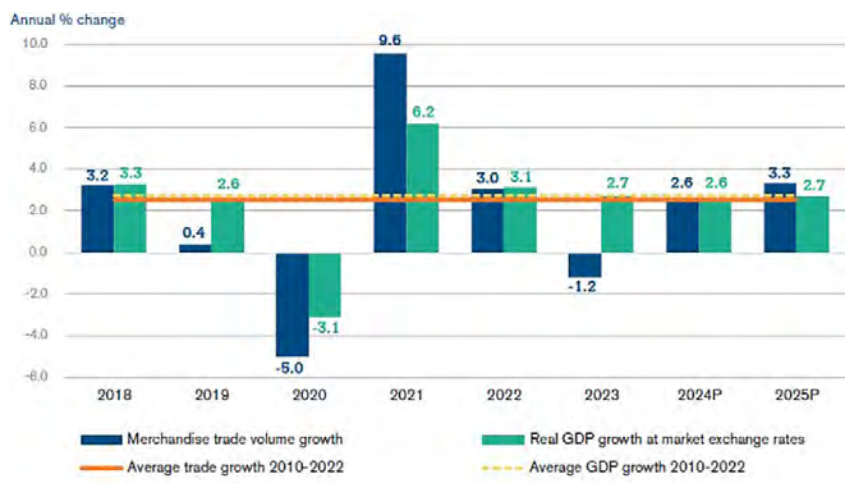
There are clear signs that the global economy is splitting into two separate blocs, putting the global trade rules that have underpinned trade for nearly 30 years at risk. Rising geopolitical tensions, both following the outbreak of the Russia-Ukraine and Gaza wars, and the decade-long tensions between the United States and China, are all increasing concerns about economic security and leading to mutual sanctions, trade curbs, and signs of a widening split between poles in the global system, for example between countries that support Russia and those that support Ukraine. More than 30 countries have refused to ratify the UN resolution condemning Russia's invasion of Ukraine, demonstrating the "revenge of the global south". Friend-shoring, coined by US Treasury Secretary Janet Yellen, is designed to encourage countries to diversify supply chains away from China to market-oriented democracies like India.³⁷ Advanced technologies are influencing the "smart" supply chain and are on their way to becoming the new norm.³⁸ It is estimated that by 2025, many supply chains could shift from global flows of goods and services to national, regional and local networks of buyers and suppliers.

³⁶ National Institute Global Econometric Model (NiGEM) simulations.

³⁷ Blenkinsop, P. (February 22, 2024). [Global trade rift widening as Ukraine war passes two-year mark](#), Reuters.

³⁸ Liddle, P. (2024). [Supply chain trends 2024: The digital shake-up](#), KPMG.

In May 2024, US President Joe Biden announced that he was raising tariffs on a wide range of products imported from China – including semiconductors, batteries, solar panels and certain minerals – in an attempt to boost domestic US manufacturing in critical industries. The administration will also raise tariffs on port cranes and medical products, in addition to previously reported increases on steel, aluminum and electric cars. The changes will take effect gradually from 2024 to 2026. For some imported products, this is the first time they have been subject to such a tariff, such as steel, which will see its tariff increase from 0% to 25% this year. For others, it will be a doubling of tariffs, such as on semiconductors, which will see its tariff increase from 25% to 50% by 2025. The biggest jump in tariffs is on electric cars, which will quadruple to 102.5%, up from 27.5% now. The immediate impact of the tariffs on Chinese companies is likely to be small, as Chinese electric car makers – which dominate the global market – are anyway locked out of the US market by automotive tariffs. Most Chinese solar panel makers export to the US through third countries to avoid similar restrictions.³⁹ Such trade restrictions and distortions (in both blocs), reflect a shift away to protectionist trade policies, and undermine global principles of open trade and the extent to which countries could support domestic industry through subsidies and other measures.



Note: Figures for 2024 and 2025 are projections. Merchandise trade grew 2.5% per year on average between 2010 and 2023 while GDP growth averaged 2.7%.
Source: WTO for merchandise trade volume and consensus estimates for GDP.

Figure 9: Global merchandise trade volume and GDP growth in 2018–2025⁴⁰

³⁹ Wingrove, J. (May 14, 2024). [Biden Accuses China of 'Cheating' on Trade, Imposes New Tariffs](#), Bloomberg.

⁴⁰ WTO. (April 10, 2024). [WTO forecasts rebound in global trade but warns of downside risks](#).

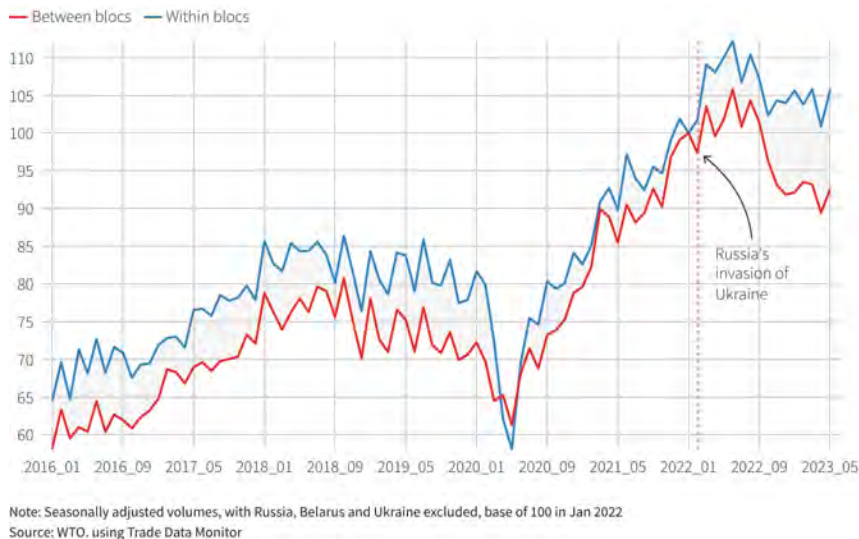


Figure 10: Trade within and between geopolitical blocs

The maritime supply chain continues to be the backbone of the global supply chain, enabling the efficient movement of goods around the world. While it faces challenges and opportunities in the digital age, as the maritime industry embraces sustainability and greater reliance on automation, it is expected to remain a key player in shaping the future of global trade.

The maritime supply chain has been affected in recent years by a series of significant events, including the outbreak of war between Russia and Ukraine in the Black Sea, the blockade imposed by the Houthis on the Bab-el-Mandeb Strait in the Red Sea, the increase in Somali piracy, restrictions on transit through the Panama Canal, and even the collapse of the Francis Scott Key Bridge in Baltimore.⁴¹ All of these are causing disruptions in maritime trade and the maritime supply chain, and requiring the formulation of alternative plans by private actors as well as governments and international organizations.

The ongoing war between Russia and Ukraine has had a general impact on regional trade, but its impact has been more noticeable on a number of specific commodities. Black Sea ports have always served as ports of departure for the export of grain and cereals, mainly to Middle Eastern markets. The maritime blockade imposed by the Russians on Ukrainian ports has disrupted and sometimes even cut off the supply chain from Ukrainian ports. This maritime blockade has created a food supply problem for many countries that

⁴¹ On March 26, 2024, a container ship collided with the bridge, causing it to collapse. Clearing the wreckage took about two months, during which time the sea crossing was blocked.

relied on Black Sea cereals, caused both by the shortage and by the need for substitutes from more distant and expensive sources. Some of the reasons for the blockade were also Russia's pressure on Western countries by undermining the food security of third countries. On the other hand, Russian grain exports have also been affected by sanctions imposed on Russian state-owned companies or companies with ties to the government, both in matters related to production and in the context of maritime transport. Figure 11 indicates the decrease in the number of ships visiting Ukraine's deep-water ports.

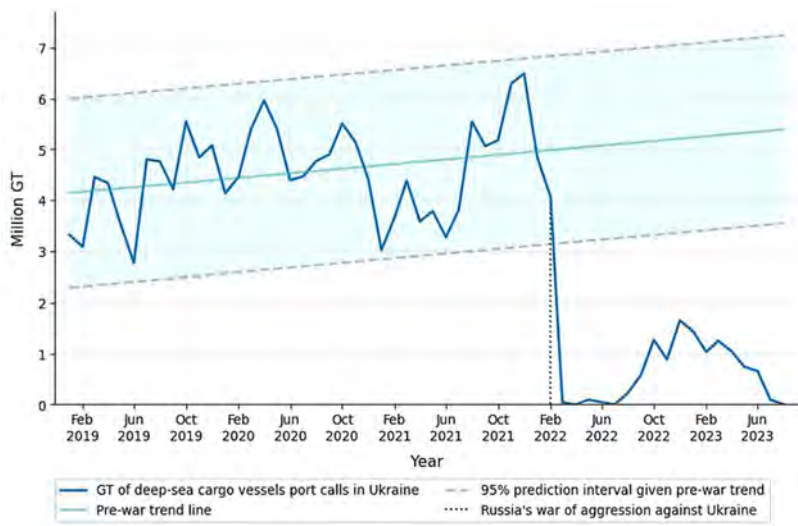
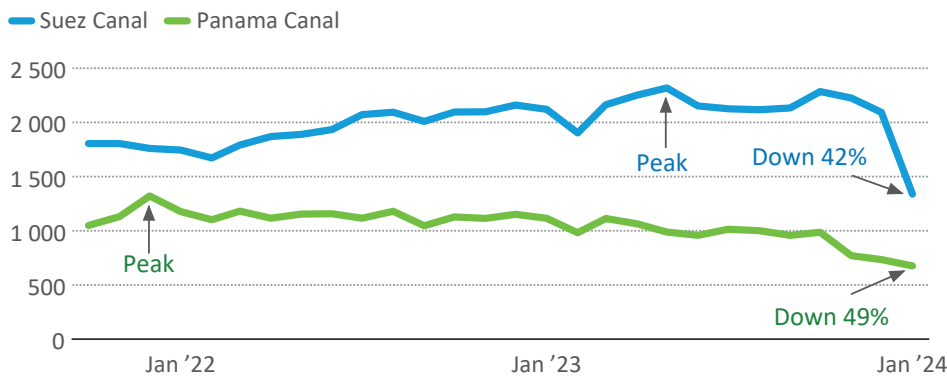


Figure 11: The decline in gross tonnage (GT) of large cargo ships in Ukrainian ports, 2019–2023⁴²

After the outbreak of the war in Gaza, the Houthis began attacking ships in the Bab-el-Mandeb Strait. A serious impact of these attacks was the unexpected resurgence of piracy in much of the western Indian Ocean. The immediate impact of the Red Sea crisis is seen in the disruption of maritime supply chains, increasing shipping costs, and congestion at ports. These consequences have far-reaching implications, affecting various industries and potentially jeopardizing the cost and availability of essential products for consumers around the world.

On the other side of the world, a severe drought in Central America has forced authorities to impose restrictions that have significantly reduced the number of daily ship transits through the Panama Canal since last October, slowing maritime trade through another major chokepoint that accounts for about 5% of global shipping (Figure 12).

⁴² [OECD calculations based on Clarkson Research Services Limited.](#)



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

Figure 12: The decline in shipping volume in the Suez Canal and the Panama Canal⁴³

On July 22, 2022, the Russian Defense Minister and the Ukrainian Infrastructure Minister signed an agreement that will allow the opening of Ukrainian ports on the Black Sea for the export of wheat and fertilizers. The agreement, reached through Turkish mediation and under the auspices of the UN, was supposed to affect the entire global food market, and mainly benefit developing countries, which are unable to meet the high wheat prices due to the war in Ukraine. Despite this, in July 2023, Russia announced that it was suspending its participation in the Black Sea Wheat Export Agreement, threatening all commercial vessels sailing to and from Ukraine, which led to the cessation of grain exports by sea from August 2023. In an attempt to restart exports, the Ukrainian military launched a campaign to remove the Russian fleet from parts of the Black Sea, destroying many of the Russian warships and attacking Russian headquarters in the Crimean Peninsula. The successful operation allowed Ukraine to establish a new shipping corridor deployed along the Ukrainian coast in the western Black Sea towards the territorial waters of Romania, Bulgaria, and Turkey, which are NATO members.

The number of grain ship calls at the three ports of the Odessa region (Port of Odessa, Port of Pivdennyi and Port of Chornomorsk) was increased to 231 entries in March 2024 (compared to 5 arrivals in September 2023). This increase was also aided by marine insurance solutions that Ukraine brokered with global insurers to provide coverage for ships. Ukraine can only use the ports in the Odessa region to export its grain by sea, as its other seaports are either too close to the Russian front lines or have been occupied

⁴³ United Nations Conference on Trade and Development. (February 2024). [Navigating troubled waters: Impact to global trade of disruption of shipping routes in the Red Sea, Black Sea and Panama Canal](#).

by Russian forces. Despite this, the ports are handling an average of 4.1 million tons of grain and cereals, and the three ports are now close to their total pre-war export volumes (Figure 13).⁴⁴

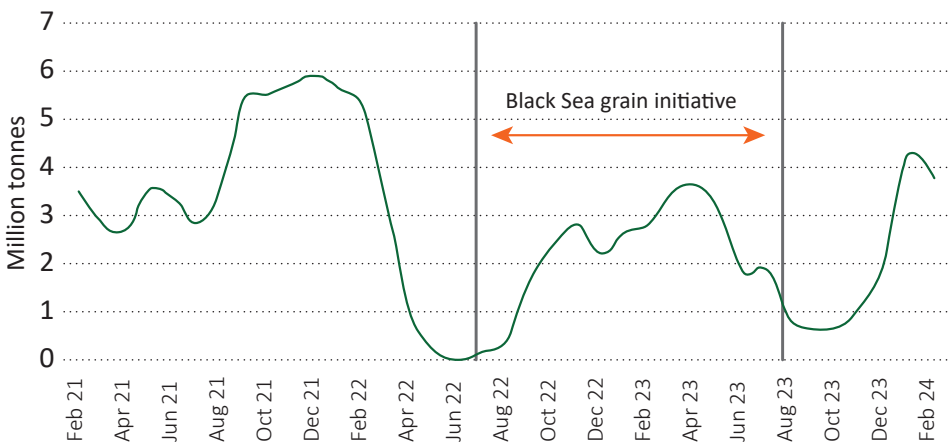


Figure 13: Aggregate exports from Ukraine by ports of the Odessa region and other ports of Ukraine⁴⁵

Challenges in maritime supply chains are turning attention to alternative land trade routes. China has launched a new rail-sea transport route connecting its east coast to Europe and the Caspian Sea countries, bypassing Russia and offering an alternative to traditional ocean and land routes. The new route, which stretches 11,300 kilometers and reaches the German city of Mannheim, crosses several countries and two seas (Kazakhstan, Azerbaijan, Romania, Hungary, Slovakia, the Czech Republic, the Caspian Sea and the Black Sea). The China-Europe freight train service, the flagship program of the Belt and Road Initiative (BRI), saw a surge in demand in the first quarter of 2024. Traffic on the land route grew by 44 percent compared to the same period in 2023, totaling almost 90,000 TEU. Despite the alternative geographical routes, the economic efficiency of land routes falls significantly short of sea routes.

Fuel demand and the state of the tanker fleet

Crude oil plays a central role in driving the global economy, serving as a key energy source for economic growth. Its importance extends beyond fuel to various industries including

⁴⁴ Méheut, C. (May 12, 2024). [Ukraine's Seaborne Grain Exports Bounce Back to Near Prewar Levels](#), *The New York Times*.
⁴⁵ according to: *Logistics Update Africa*. (March 5, 2024). [Ukraine's grain exports flourish amidst expired Black Sea Initiative](#).

transportation, manufacturing, and agriculture, as well as the production of various plastic products and more.

The crisis in the Red Sea has increased the sailing distances from the Persian Gulf region to Europe, and tankers are avoiding the Red Sea and passing through the Suez Canal and instead continuing via the Cape of Good Hope, an issue that will likely affect the market as long as the Israel-Hamas War continues and the Houthis continue their blockade of the southern Red Sea. For crude oil tankers, it is estimated that the low growth in the tanker fleet, together with the increase in sailing distances, creates the basis for an increase in demand for tankers, despite some slowdown in oil demand (Figure 14).⁴⁶ It is estimated that tanker sailing speeds and utilization levels will remain static. Despite the desire to reduce sailing speeds to reduce emissions into the atmosphere, it does not seem that the required delivery times will allow tankers to slow down their sailing speeds.

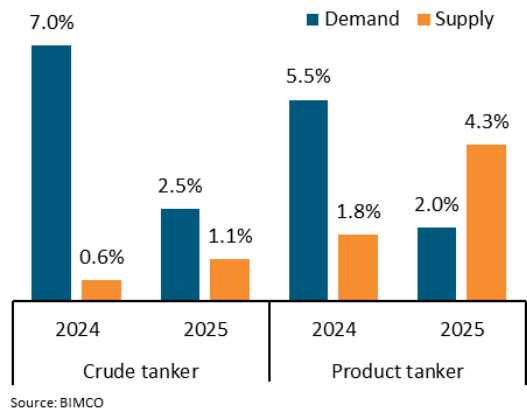


Figure 14: The increase in demand and supply of tankers for crude oil and its products

As for Iranian oil exports, in June 2024 there were approximately 163 Very Large Crude Carriers (VLCCs) worldwide actively transporting Iranian oil. Only one new tanker joined this fleet in mid-May 2024. It should be noted that the National Iranian Tanker Company (NITC) was privatized in 2009, and a large part of its tankers are insured with Western insurance. Gibson's vessel database indicates that at least 90 VLCCs are designated for Iranian export service, including the NITC fleet, representing approximately 10% of the global VLCC fleet. For the Suezmax tanker segment (tankers capable of sailing through the Suez Canal), there are at least 34 such ships in the Iranian tanker fleet, which is 5% of the global tanker fleet.⁴⁷

⁴⁶ Rasmussen, N. (April 25, 2024). [Tanker Shipping Market Overview & Outlook](#), BIMCO.

⁴⁷ [TankerTrackers.com](#), Inc. on X.

Since the EU and G7 ban on Russian oil imports on December 5, 2022, Russia has shifted its oil export destinations; China has become the main destination, purchasing 53% of Russia's crude exports (April 2024), followed by India (32%), the EU (7%), and Turkey (5%). Shipments of crude oil transported by sea from Russian ports exceeded 3.7 million barrels per day, and average shipments in the first quarter were close to the level Russia committed to the Organization of the Petroleum Exporting Countries (OPEC).⁴⁸

Energy companies around the world are planning a "gold rush" for liquefied natural gas (LNG). European demand for liquefied gas has increased by 60% since 2022 and is expected to remain high due to the ongoing war between Russia and Ukraine. Moreover, emerging markets are also expected to increase demand for liquefied gas as they try to reduce greenhouse gas emissions. At the end of 2022, the global liquefied gas tanker fleet numbered 734 ships. This figure also includes floating storage units (Floating LNG). It is estimated that by 2028, there will be more liquefied gas tankers in operation than VLCC and ULCC (Ultra Large Crude Carrier) tankers for transporting fuels and distillates.

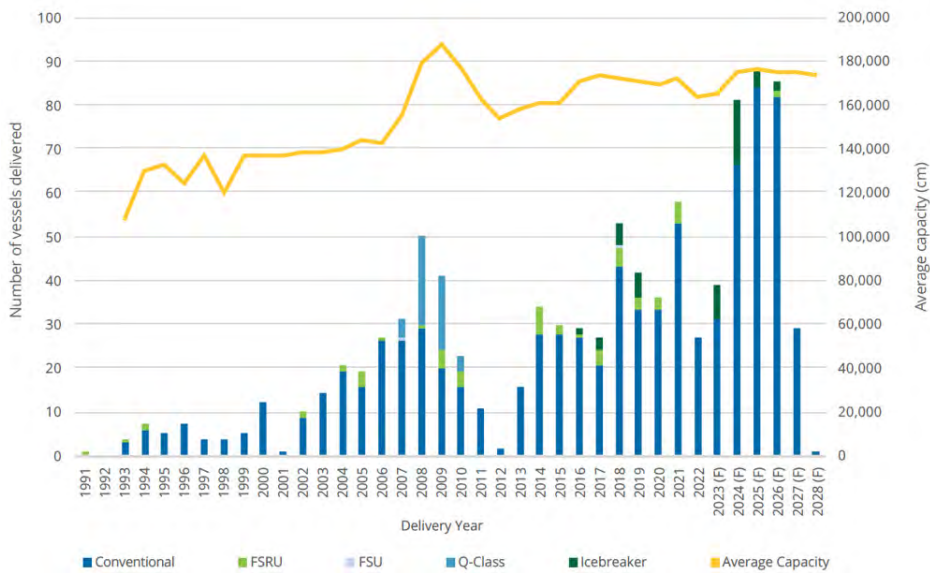


Figure 15: Liquefied gas tanker fleet (number of ships and average capacity),
source: Rystad Energy

⁴⁸ Lee, J. (April 2, 2024). [Russia's Seaborne Crude Exports Surge to the Highest This Year](#), *Bloomberg*.

Chokepoints and their vulnerabilities

Chokepoints are narrow strategic passages connecting two larger maritime areas. In the case of maritime trade, these are usually straits or canals through which high volumes of traffic pass due to their optimal strategic location (Figure 16). It is currently customary to name eight major chokepoints: 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). Over the past year, disruptions in the passage through the Bab-el-Mandeb Strait, the Turkish Straits, and the Panama Canal have negatively affected the global supply chain, and indirectly, the global economy. These vital chokepoints pose a number of risks to those navigating through them:

Structural risks: Such as the incident in which the ship *Ever Given* blocked the Suez Canal for six days in March 2021. If the ship is too large, it could ground along the coast and cause traffic jams that could last for days.

Geopolitical Risks: Deliberate blockages or disruptions during periods of political instability. An example of this was the closure of the Bosporus and Dardanelles Straits by Turkey during the war between Russia and Ukraine in the spring of 2022.

Maritime Terror and Piracy Risks: Piracy and maritime terrorism are closely related activities – both involve armed violence at sea that is not a legal act of war. However, there is a distinction between the two terms in that piracy is carried out for private purposes (robbery, ransom, etc.), while terrorism is usually politically motivated.

The importance of the above-mentioned chokepoints highlights the vulnerability of global supply chains. Accordingly, the importance of maintaining shipping lanes that pass through these chokepoints becomes even more important, requiring international cooperation with a multi-year perspective, to ensure that the arteries of global trade remain open, secure and efficient.⁴⁹ The type and degree of risk of each chokepoint varies, depending on its location and the available alternatives to transiting them. Dealing with risks of this type can be done through several courses of action: diversifying shipping routes and transportation options, securing essential shipping lanes (Secure Sea Lanes of Communication) in areas designated for piracy (such as joint task forces on the matter in the Gulf of Aden), prioritizing communications using advanced technologies to proactively manage risks, and finally – building and managing inventory and storing it appropriately, preparing contingency plans in advance for a chokepoint blockage.

⁴⁹ Kuehne and Nagel. (April 4, 2024). [Shipping's choke points at risk from cyber-attacks](#).

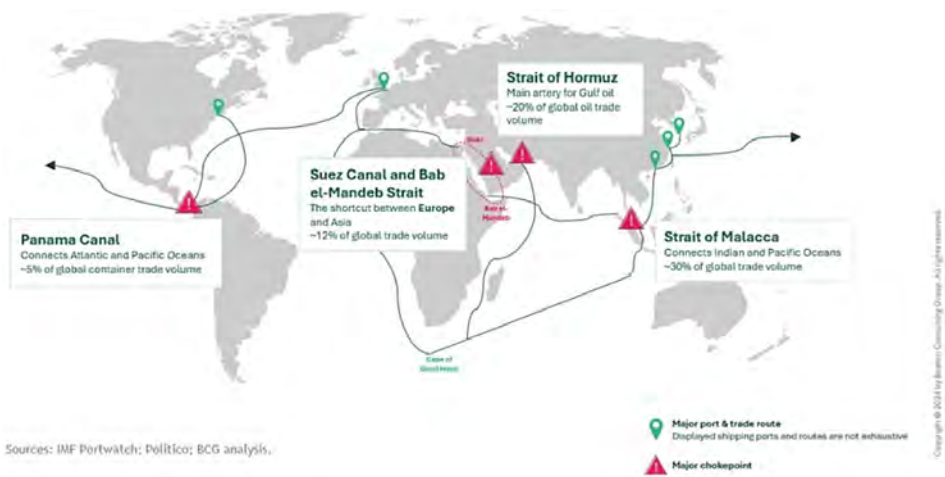


Figure 16: Four choke points that contribute to more than half of global trade⁵⁰

A number of events that have occurred in recent years at important chokepoints in the world, such as: the closure of the Bosphorus Strait to shipping traffic in May 2024 following the grounding of the bulk carrier *Alexis*, the blockage of the Suez Canal by the ship *Ever Given* in March 2021, the disruption to maritime trade in the southern Red Sea from the outbreak of the 'Israel-Hamas' war, and even the collision of a container ship in March 2024 at the Francis Scott Bridge in Baltimore, all demonstrate the importance of maritime chokepoints to global supply chains.

The G20 summit, held in August 2023 and hosted by Indian Prime Minister Narendra Modi, made it clear that India does not intend to cede global leadership to China. On the sidelines of the conference, the "Indian Maritime Economic Corridor (IMEC) Initiative" was signed by India, the United States, Saudi Arabia, the European Union, the United Arab Emirates, and other G20 members.⁵¹ The project also has the additional goal of promoting the establishment of joint digital infrastructure alongside a "green" pipeline for transporting energy sources. As far as is known, the idea was first significantly advanced in early May 2023 in Jeddah, at a meeting of national security advisors of the four initiating countries – the United States, India, Saudi Arabia, and the United Arab Emirates (Figure 17). Since that meeting, the European Union and three significant members of the Union – France, Germany, and Italy – have joined the project. The project, announced before the outbreak

⁵⁰ Boston Consulting Group. (February 12, 2024). [These Four Chokepoints Are Threatening Global Trade](#).
⁵¹ Schulz, A. (December 3, 2023). [Will the IMEC Survive after New Delhi G20 summit?](#) *Modern Diplomacy*.

of the 'Israel-Hamas' war, has become even more relevant because it proposes a "Houthi bypass" route between the Indian Ocean and the Mediterranean Sea.

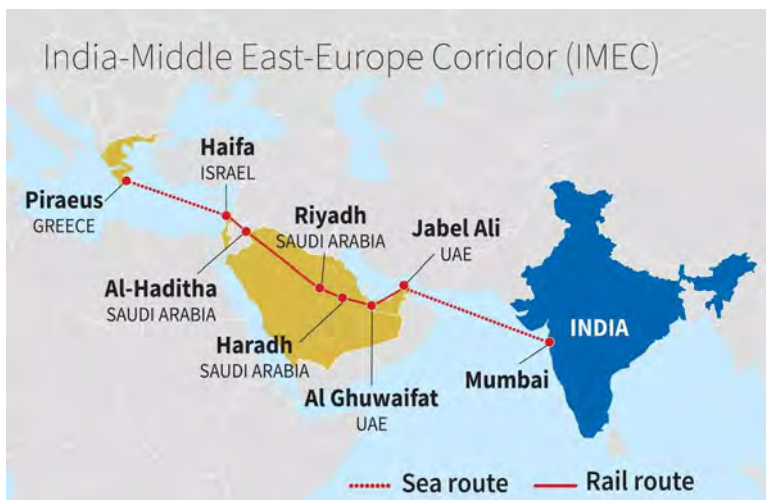


Figure 17: The India-Middle East-Europe Economic Corridor (IMEC)

Another aspect of the attempt to diversify shipping routes is the increasing use of the Northern Passages (in the Arctic region north of Russia) in trade between Asia and Europe. This route was first used in the summer of 2024 by the 'Flying Fish', the first Panamax container ship with a capacity of 4,890 containers (TEU) to transit the Arctic route, almost doubling its capacity compared to that of the Venta Maersk that transited this route in 2018.

Protection of underwater infrastructure

Submarine fiber optic cable networks carry about 95% of international communications and data traffic. These submarine cables are laid across the ocean floor for thousands of kilometers (Figure 18). The growth in this infrastructure is driven by the huge demand for data traffic such as cloud-based services, advanced communication networks for the "Internet of Things", and more. Accordingly, in recent years, there has been a sharp increase in the deployment of submarine cables around the world. Hundreds of these cables, operated by various entities (state and private), are the critical and core infrastructure of the digital age.⁵² Therefore, the resilience and security of the submarine cable system is an essential element in the governance and security of the current

⁵² Csernaton, R. (June 20, 2022). [The Geopolitics of Submarine Cables, the Infrastructure of the Digital Age](#), Italian Institute for International Political Studies – ISPI.

and future world order. This area includes key questions related to geopolitics, from connectivity, security, and regulation to technical problems. Most of these cables are not government-owned but are managed by corporations or private entities, with almost no international governance system or international agency controlling them.

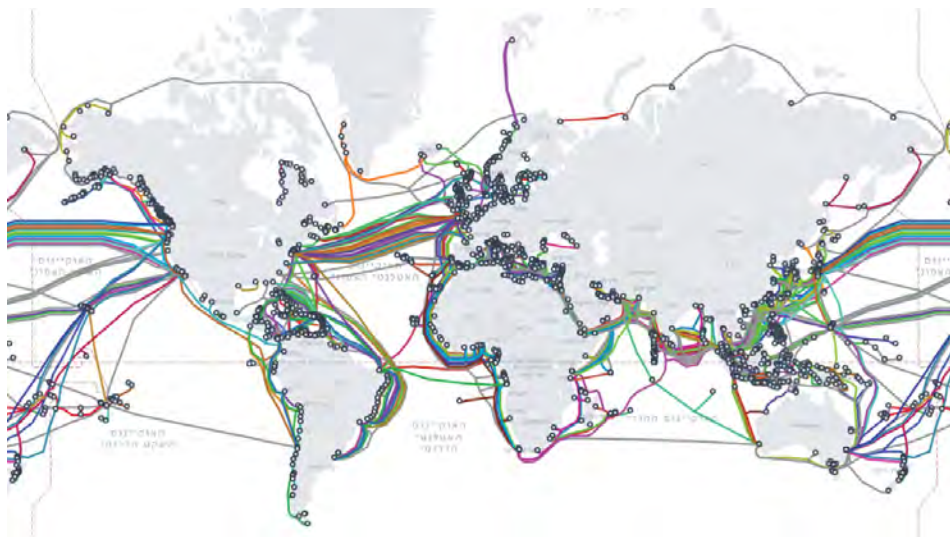


Figure 18: Underwater communication cables connect the world⁵³

Underwater communication cables laid on the open seabed are supposed to be legally protected by the rules established by the 1982 United Nations Convention on the Law of the Sea regarding the construction and maintenance of cables on the seabed, while restricting activities such as fishing or anchoring facilities that could damage these cables in any way.⁵⁴

Recently, threats to submarine cables have been increasing. It can be noted that Russia has the means to carry out attacks on submarine cables, for example using its intelligence ship, Yantar.⁵⁵ In February 2023, two Chinese ships in two separate incidents damaged submarine cables in the South China Sea. Although there is no direct evidence that the ships caused the disconnection intentionally, local officials in Taiwan have indicated that the cut cables are part of repeated cable disruptions in China's psychological warfare

⁵³ TeleGeography, CC BY-SA.

⁵⁴ Paik, A., and Counter, J. (January 25, 2024). [International law doesn't adequately protect undersea cables. That must change.](#) *Atlantic Council*,

⁵⁵ Sutton, H. I. (August 19, 2021). [Russian Spy Ship Yantar Loitering Near Trans-Atlantic Internet Cables](#), *Naval News*.

against Taiwan. Over the course of two months, more than thirteen thousand residents of the Taiwan-controlled Matsu Islands suffered internet outages. For China, understanding how the disconnection of submarine cables could affect Taiwan provides useful insights that can be leveraged in both conventional and hybrid warfare. These disruptions are particularly damaging to countries that do not have many connection points that allow for redundancy (as is the case with Israel, which does not have many connection points to the global network).

Sabotage or destruction of submarine cables can be a powerful tool in the hands of adversaries as states increasingly rely on digital communications and infrastructure, and such attacks can be a potential component of hybrid warfare. Sudden and unexpected disruptions in communications can undermine social resilience and cause political instability. Protecting submarine cables should be done in several ways: strategic routing to avoid geopolitically unstable areas, constructing cables from durable materials, including steel armor, to withstand the harsh environmental conditions of the oceans and seas, and declaring and marking areas where cables pass as "cable protection zones" to restrict high-risk activities near cables.⁵⁶ In addition, an international regime should be established to deter hostile states or organizations from harming cables. At the same time, it is necessary to expand the concept of Maritime Domain Awareness, so that the concept also includes underwater infrastructure and the way to maintain and protect it properly.

In the midst of the campaign underway in the southern Red Sea, a new concern is creeping in: the Houthis may expand their activities and act against the submarine cables that run through the southern Red Sea and carry almost all information and financial communications between Europe and Asia.⁵⁷

Lowering greenhouse emissions in the shipping sector (The implementation of a decarbonization strategy)

Many scientists estimate that the effects of climate change and continued environmental damage will create a combination of direct and indirect threats to many countries and societies. These include risks to the economy, political instability, an increase in the number of refugees and displaced people, and new sources of geopolitical competition that will occur in the coming decade and beyond. The World Bank estimates that 216

⁵⁶ Chataut, R. (April 1, 2024). [Undersea cables are the unseen backbone of the global internet](#), *The Conversation*.

⁵⁷ Johnson, K. (February 7, 2024). [The Houthis' Next Target May Be Underwater](#), *Foreign Policy*.

million people in six regions of the world will have to move from their homes by 2050 due to climate change.

The International Maritime Organization (IMO) has also committed to reducing greenhouse gas emissions from ships in a resolution aimed at aligning with the decisions of the 2021 United Nations Climate Change Conference in Glasgow. Keeping in mind that the global shipping industry is responsible for approximately 3% of all greenhouse gas emissions,⁵⁸ the organization recognizes that a rapid transition in the coming decade to clean marine fuels, zero-emission vessels, alternative propulsion systems and the global availability of land-based infrastructure to support these is essential for the transition to clean shipping to reduce pollution from ships under the International Convention for the Prevention of Pollution from Ships (MARPOL).

In light of the shipping industry's negative contribution to greenhouse gas emissions, maritime routes have been designed in which carbon dioxide emissions will be limited in the shipping area between two (or more) ports.⁵⁹ It is appropriate to consider this initiative more on its declarative level, as actual data does not show significant progress in the initiative. IMO is presenting additional technologies for energy efficiency using alternative fuels, but it is not expected that the shipping world, known as a conservative world, will soon undergo a paradigm shift on this issue, especially in light of other geostrategic challenges it is facing (such as the crisis in the Red Sea, which is causing the lengthening of maritime transport routes) that dictate less efficient use of existing fuels.⁶⁰

IMO Strategy Objectives:⁶¹

1. Reducing the level of carbon emissions from all types of shipping by increasing the energy efficiency of new ships.
2. Reducing the average carbon dioxide emissions of the global shipping sector by at least 40% by 2030, compared to the emission level in 2008.
3. Adopting new technologies that reduce greenhouse gas emissions to zero or near zero, as well as using fuels or energy sources to reduce the use of energy used by international shipping by 5% and, with an aspiration, 10% by 2030.

⁵⁸ IMO RESOLUTION MEPC.304(72) (adopted on 13 April 2018).

⁵⁹ Zero-Emission Shipping Mission (ZESM) Green Shipping Corridor Tracker.

⁶⁰ [Green Corridors](#), IMO future shipping.

⁶¹ It should be noted that calls on the subject were recently issued by both the Israeli Ministry of Science, Technology and Innovation, and by calls from the European Union, in which the Institute for Marine Policy and Strategy Research at the National Center for Blue Economy and Innovation also participated, see: First Cyprus-Israel Scientific Research Program, [CALL FOR JOINT PROJECT PROPOSALS For the Years 2024–2026](#)

4. Zero greenhouse gas emissions from global shipping as soon as possible and reach net zero emissions by 2050, in line with the long-term temperature goal set in Article 2 of the Paris Agreement.

The Israeli Ministry of Environmental Protection published in December 2023 the ministerial plan for preparing for the climate crisis, in accordance with the government decision "Israel's preparation for adapting to climate change" (1902).⁶² The purpose of the decision, led by the Ministry of Environmental Protection, is to impose an obligation on all Israeli government ministries to formulate a climate crisis preparation plan, which will be submitted by the end of 2023. This follows on from Government Decision 4079 "Israel's preparation for adapting to climate change" from July 2018. The section dealing with the marine sphere (only partially) is included in the chapter discussing the preservation of ecosystems and includes one section relating to long-term monitoring of ecosystems in Israel (terrestrial, marine, and wetlands), publishing a "State of Nature Report" every three years, and formulating plans for the restoration and preservation of ecosystems. There is no doubt that the 'Israel-Hamas' War diverted attention from dealing with this issue, and when it ends, it will need to be renewed and adapted to the new circumstances.

Cyberspace

The maritime supply chain is highly dependent on computer and control systems. More than 90% of all global trade is transported by sea, and a cyber-attack on seaports or vessels and shipping companies would have wide-ranging economic consequences.

There are currently no internationally accepted criteria for determining whether a cyber-attack by a state constitutes a use of force equivalent to an armed attack, which could provoke a military response. Furthermore, binding international instruments have not yet been explicitly formulated to regulate relations between states in cyberspace. Self-defense and countermeasures to armed attacks are permitted under international law when an actor violates international law in peacetime, or violates the Law of Armed Conflict (LOAC) in wartime. However, the term "armed attack" does not have an accepted definition with regard to cyber-attacks.⁶³ In addition to what constitutes an armed attack in cyberspace, questions remain as to which provisions of existing international law regulate the conduct of war in cyberspace.⁶⁴

⁶² Ministry of Environmental Protection. (December 31, 2023). [The Ministry of Environmental Protection publishes the ministerial plan for climate change preparedness according to government decision](#).

⁶³ In assessing the situation for 2022/23, we expanded the theoretical background and international organizational regulation by the International Maritime Organization (IMO).

⁶⁴ [Report to Congress on Use of Force in Cyberspace](#), June 26, 2024.

The Russian war against Ukraine saw extensive use of cyber warfare, although the assessment of the effectiveness of Russian and Ukrainian cyber operations is still ongoing. Nevertheless, this war was the first time that large-scale cyber operations were also launched by a major cyber power such as Russia. This provides insights into the types of challenges that Western countries may face in their future conflict with Russia. One of the lessons of this war is that naval force planners must consider the cyber resources required to conduct large-scale combat operations, which should include possibilities to enhance the force's offensive cyber capability while simultaneously defending against widespread threats to the state.⁶⁵

Of particular note is the combination of cyber warfare and the routing of global shipping traffic to straits and chokepoints. Researchers in the field of maritime cyber warfare point to the enormous potential for damage from cyber-attacks on vessels sailing through maritime chokepoints.

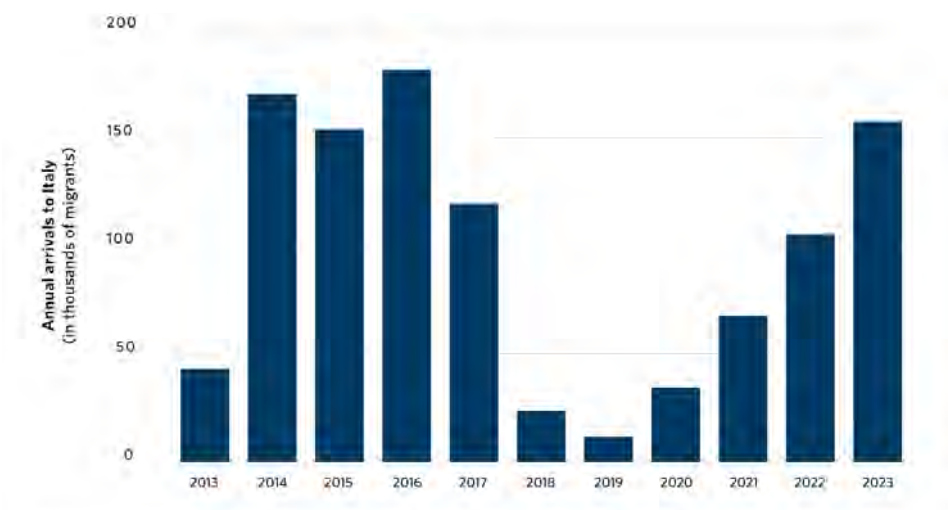
Mediterranean migration routes

The main Mediterranean migration route (the route from North African countries to Italy and Malta) has long become the most dangerous and deadly migration route in the world. According to the International Organization for Migration (IOM), 3,155 people died or went missing while trying to cross the Mediterranean in 2023. The number of people attempting this route (by boat) increased by about 50% compared to 2022, totaling about 158,000 migrants. Recent data show that Tunisia has overtaken Libya as the main departure point for migration to Europe, with more than 62% of migrants to Europe departing from Tunisian shores (Figure 21).⁶⁶ From 2014 to May 2024, 29,671 deaths and disappearances of refugees were recorded in the Mediterranean.

The poor economic situation in Egypt, the political instability in Libya, the large number of Syrian refugees residing in Turkey, the poor economic situation in Lebanon and the sub-Saharan Strip will continue to cause an influx of refugees making their way to the southern shores of Europe by sea. The growing resistance in southern European countries to absorbing migrants will negatively affect the number of those who die in these migration attempts. In addition to the southern route, there is also an eastern migration route in the Mediterranean leading to Greece, Cyprus, and Bulgaria, mainly via Turkey.

⁶⁵ Vogt, J., Kuo, K., and Grobarcik, D. (June 2024). [Preparing the U.S. Cyber Force for Extended Conflict](#), *Proceedings* Vol. 150/6/1,456.

⁶⁶ *Frontex* (January 26, 2024). [Significant rise in irregular border crossings in 2023, highest since 2016](#).



Source: Data collected by authors based on the UN Refugee Agency Operational Data portal.

Figure 19: [Migrants missing or lost their lives in the Mediterranean Sea in 2014–2024](#)



Figure 20: Immigrants arrived in Italy in 2013–2023⁶⁷

⁶⁷ Meddeb, H., and Louati, F. (March 27, 2024). [Tunisia's Transformation Into a Transit Hub: Illegal Migration and Policy Dilemmas](#), Malcolm H. Kerr Carnegie Middle East Center.



Figure 21: Migration routes from Tunisia to Italy

Terrorism and maritime terrorism

The 2023 Global Terrorism Index (GTI), which is produced through a comprehensive study analyzing the impact of terrorism on 163 countries, comprising 99.7% of the world's population, indicates that in 2023, deaths from terrorist incidents increased by 22% to 8,352. These incidents are now at their highest level since 2017, although they remain 23% lower than their peak in 2015.⁶⁸ All of the above still does not include the data from Hamas's attack on Israel on October 7, 2023. If the events of October 7, 2023 are included, Israel ranks second in the world (after Burkina Faso) on the list of countries that have suffered the highest death toll from terrorism (Figure 22). The State of Israel had the

⁶⁸ [Global Terrorism Index 2024](#), Institute for Economics & Peace Measuring the impact of terrorism, p. 4.

largest increase in deaths from terrorism (up from 24 to 1,210 deaths). The Hamas terrorist attack in October 2023 was the largest single terrorist attack since the establishment of the GTI, the largest since 9/11, and one of the largest terrorist attacks in history.

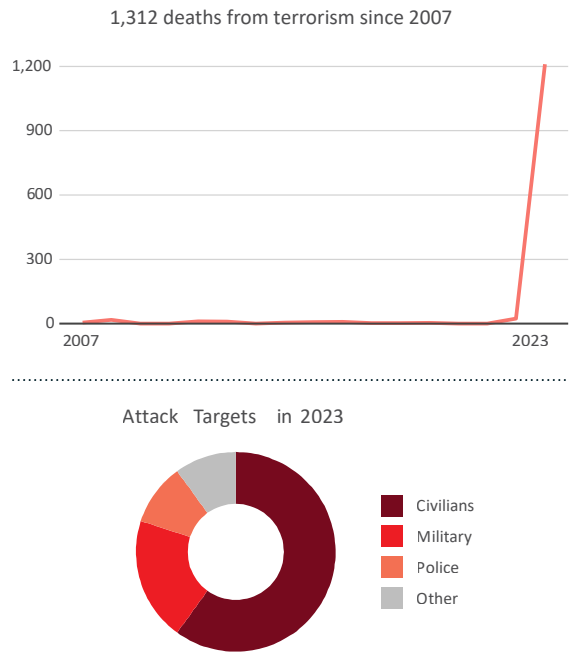


Figure 22: Casualties (deaths) in terrorist acts since 2007 in Israel⁶⁹

The report notes that terrorist attacks became deadlier in 2023 with 2.5 deaths per attack compared to 1.6 in 2022. Regional conflicts remain the primary driver of terrorist activity (90 percent of terrorist attacks in 2023 occurred within a regional conflict). As noted, the Hamas attack on October 7 is cited by the report as the most serious of the 20 terrorist events that occurred worldwide in 2023.

Hamas's use of the sea on October 7 to infiltrate Israeli territory was, admittedly, swallowed up in the totality of the terrorist acts that occurred that day, it had serious consequences compared to the Israeli Navy's success in securing Israel's maritime border to this type of activity over the past three decades. On the morning of October 7, naval commando squads of terrorists from the Izz ad-Din al-Qassam Brigades, Hamas' military wing, landed on Zikim Beach. The attempted landing on Zikim Beach was carried out using about 10 fast terrorist boats, each carrying 6 terrorists. Israeli Navy ships were able to thwart the

⁶⁹ Ibid. p. 22.

landing of some of the squads before they could reach Israeli shores, but several boats managed to evade them and landed on Zikim Beach. The terrorists shot at the bathers and fishermen who were on the beach and massacred them. Due to the alarms of rocket fire heard on the beach, some of them hid in a shelter that became a death trap for them, after the terrorists threw grenades inside and murdered all the Israelis who found shelter there. Others, including teenagers, who hid in the toilets, were also massacred by the terrorists. The terrorists continued from there to Kibbutz Zikim, but most of them were eliminated there by members of the kibbutz's emergency squad. In summary, it was determined that 41 civilians were murdered on Zikim Beach.⁷⁰ It should be noted that since the landing of two terrorist boats from the Abu al-Abbas organization on May 30, 1990 on Nitzanim Beach (an event in which there were no casualties), the Israeli Navy has succeeded in thwarting all attempts by terrorist organizations, whether from Lebanon or the Gaza Strip, to land on Israeli shores.⁷¹

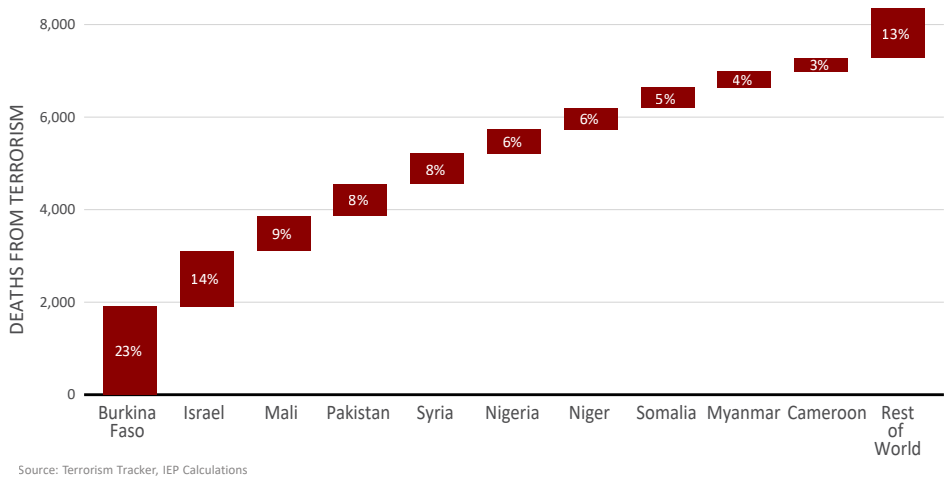


Figure 23: Distributions of deaths from terrorist acts in 2023⁷²

From a global perspective, in recent years, a trend has been observed whereby terrorist organizations are using more advanced technologies that are available for of shelf Purchase and that include, among others, drones, underwater diving vehicles, GPS systems, and encrypted messaging services. In order to warn seafarers of areas where the risk of maritime terrorist activity is high, a number of maritime areas have been

⁷⁰ [The Zikim Beach Massacre](#), Wikipedia.

⁷¹ See more about the Israeli Navy's activities in defending the country's coasts since the events of October 7 in the chapter 'Navy Activities in the Israel-Hamas War' by Dov Raz.

⁷² Global Terrorism Index 2024, p. 14.

declared as having a high risk of terrorist activity. High-risk areas are maritime areas in the world where warlike events occur and where there is a high level of exposure to safety and life risks due to war, military conflict, hostilities, maritime terrorism, piracy, and other circumstances that cause immediate danger to vessels sailing in those areas and their crews (Figure 24).⁷³ In such areas, vessels are required to be equipped with measures against pirate takeovers, such as barbed wire, water cannons, preventing access to the bridge, armed security, high sailing speed, and reporting the navigating route to the appropriate authorities. Vessels are also required to maintain regular safety procedures and increase bridge watch to reduce the risk of boarding and hijacking. Most captains are required to follow the guidelines provided for these areas, including recommended practices (Guidance on Maritime Security Transit Corridor – GMSAT). In contrast to the trend that existed until the outbreak of the 'Israel-Hamas' war (and presented in the previous situation assessment report), which was characterized by a decrease in such risks in the southern Red Sea, Gulf of Aden, and Horn of Africa, there has been a recent increase in such incidents, which has led to the issuance of strict instructions for vessels sailing in these areas. Figure 24 shows these areas in the Red Sea, Gulf of Aden, and the coast of Somalia.



Figure 24: Definition of dangerous areas for sailing in the coastal area of Somalia, the Arabian Sea and the Red Sea

⁷³ [Indian Ocean High Risk Area, Vessel hardening Minimum Operational Requirements.](#)

In this context, it is worth noting that in recent years the Gulf of Aden and the southern Red Sea have become an area through which Iran, using the naval force of the Revolutionary Guards, smuggles weapons and ammunition to terrorist organizations operating in Yemen and the western coast of Saudi Arabia. To deal with this threat, the United States Central Command established the Combined Maritime Forces Command (CTF 153) in 2022, in which 34 countries participate. The force focuses its activities on the Red Sea, the Bab-el-Mandeb Strait, and the Gulf of Aden. Most maritime smuggling originates from Iranian ports such as the Jask port in the Gulf of Oman and Bandar Abbas in the Strait of Hormuz and is carried out via the Arabian Sea and the Gulf of Aden to Yemen (or via a land route through countries bordering Yemen such as Oman). Since 2013, there have been 18 interdiction operations that have uncovered shipments of weapons from Iran, ranging from machine guns to anti-tank missiles. On January 11, 2024, the United States Navy lost two SEALs while attempting to board a ship suspected of smuggling weapons off Somalia. The SEALs, assisted by the U.S. Coast Guard, found an array of Iranian-made weapons, including missile components, on the smuggling vessel and arrested 14 crew members. In February 2024, the Coast Guard intercepted a vessel in the Arabian Sea and seized ballistic missile components, explosives, and other weapons parts that originated in Iran.⁷⁴

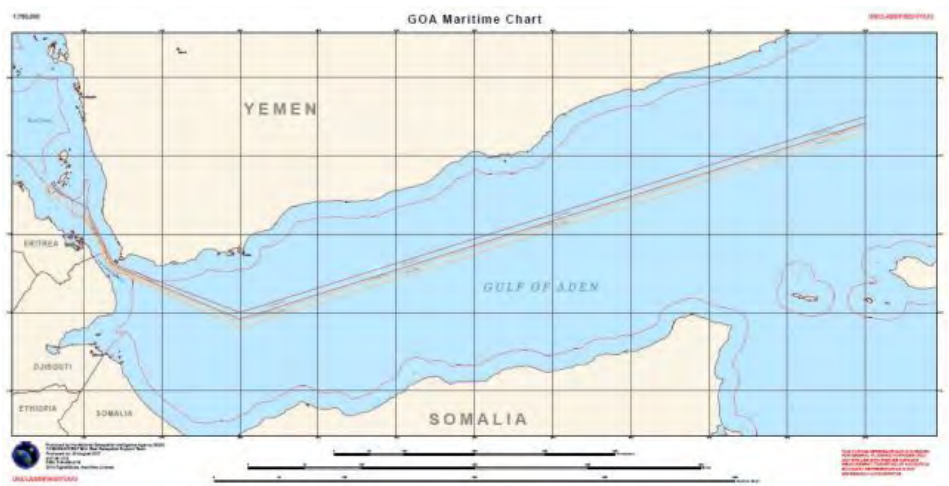


Figure 25: Maritime Security Transition Corridor (MSTC)

The recent attacks on shipping in the Gulf of Aden and the Bab-el-Mandeb have highlighted the risks involved in navigating in these areas and have led the Multinational

⁷⁴ Lamothe, D., and Ryan, M. (March 16, 2024). [U.S. attempts to stop arms smuggling to Yemen with limited resources](#), *The Washington Post*.

Force Command to direct vessels sailing in the area to sail in a "Maritime Security Transition Corridor" (MSTC), which includes fixed and marked routes so that naval forces can be used in the most effective way possible. The corridor includes the "International Recommended Transit Corridor" (IRTC), a two-way route and the separation of vessel traffic from the west of the Hanish Islands to the exit to the Indian Ocean (Figure 25). It is worth noting that choosing this course of action also indirectly helps the Houthi rebels because it makes it easier for them to locate and attack the vessels (in addition to the AIS system, which can be turned off).

Piracy and maritime robbery

In 2023, according to the International Maritime Board (IMB),⁷⁵ 120 incidents of maritime piracy and armed robbery against ships were recorded, compared to 115 in 2022. The report reveals that pirates managed to board 105 vessels during the reporting period. The number of incidents reported in 2023 increased slightly compared to 2022, the IMB calls on captains to ensure the safety of crew members and notes that there was an increase between 2022 and 2023 in the number of crew members kidnapped and taken hostage (from 41 to 73). The report for the first quarter of 2024 (Figure 26) highlights the continued threat of Somali pirate incidents.⁷⁶



Figure 26: Piracy and armed robbery incidents of all types between January–June 2024⁷⁷

⁷⁵ The International Maritime Board (IMB) is a specialized department of the International Chamber of Commerce that monitors crimes related to maritime trade and transport (piracy and commercial fraud, and the protection of the crews of vessels sailing at sea).

⁷⁶ ICC Commercial Crime Service. (April 10, 2023). [New report highlights continued threat of Somali piracy.](#)

⁷⁷ ICC Commercial Crime Service. (July 11, 2024). [No room for complacency: maritime piracy incidents fall but crew safety remains at risk.](#)

India, which fears that growing insecurity in the Indian Ocean could affect its economy, is taking action against piracy. An Indian naval warship has freed a tanker and 21 crew members that had been seized by pirates 450 miles east of the Somali coast. India launched a 40-hour operation in the Indian Ocean on March 15, 2024, which culminated in the capture of 35 Somali pirates and the release of a previously hijacked vessel and 17 crew members.⁷⁸ Also in late January 2024, the Seychelles Coast Guard intervened to protect a fishing vessel that had been hijacked with its six crew members. Three Somali pirates were captured in the operation.⁷⁹



Figure 27: Piracy and armed robbery against ships in January–June 2024, divided into regions

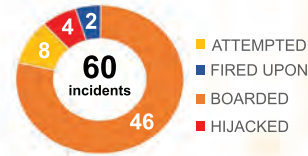
⁷⁸ For more on India's maritime policy in the Indian Ocean, see 'India's Maritime Resilience' by Vasu Sharma.

⁷⁹ ICC Commercial Crime Service. (2023).

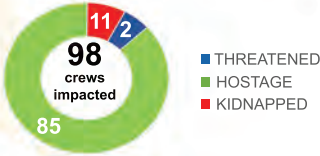
IMB PIRACY REPORT
JANUARY - JUNE 2024



Number of incidents reported:



Impact on crew:



Waters off Somalia
Reported Incidents



Two fishing vessels and a bulk carrier **hijacked**. Two merchant vessels **fired upon** and a further two **boarded**.

Naval forces commended for their timely and robust responses.

Bangladesh
Reported Incidents

'23 H1	'24 H1
1	10

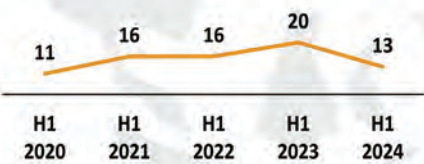
Increase In Low Level Incidents

Gulf of Guinea
Reported Incidents



Eleven crew **kidnapped** in two separate incidents.

Singapore Straits
Reported Incidents



Ten crew taken **hostage**. Guns and knives reported in 10 incidents.

@IMB_Piracy
#IMBpiracy

Figure 28: Maritime Piracy Terrorism Cases (ICC International Maritime Bureau)

Main Naval Forces – Trends and Changes

Shaul Chorev

This chapter will provide an overview of the changes and trends in the world's largest war navies and those of countries neighboring Israel in relation to the previous 2022-2023 Naval Strategic Assessment, focusing on the theaters of operation, operational strategy, and force-building plan of each of them. The review of each of the navies will also include a dedicated section dedicated to its activities in the Eastern Mediterranean and the Red Sea, an area in which the Institute for Maritime Policy and Strategy is primarily interested.

The World Directory of Modern Military Warships (WDMMW) annually ranks the world's navies. The directory's ranking methodology emphasizes the overall combat strength of a navy and incorporates a True Value Ranking (TVR) that considers both quantitative and qualitative aspects. The quantitative aspect evaluates factors such as the number of ships and naval personnel, while the qualitative aspect focuses on modernization, logistical support, defensive and offensive capabilities, training and readiness, as well as the variety of assets. For this article, we will present the 2024 ranking based on the WDMMW assessment.¹ The navies featured in the survey are distinguished by their naval capabilities, power projection, and regional influence. These navies combine fleet size, advanced technology, training, and operational readiness to operate in a complex maritime environment. As the global geopolitical landscape continues to change, the dynamics of naval power must adapt to these changes. It is estimated that the use of Emerging and Disruptive Technologies (EDT), adaptation to geopolitical changes, and security challenges will shape the future rankings. The lesson is that nations must continually invest in their naval forces to maintain a strategic advantage and adapt to new threats emerging in the maritime arena.

United States Navy

The US Navy is still in first place in the 2024 Warship Strength Index (TVR – 323.9), even though the Chinese Navy is larger than it in the number of watercrafts it operates.

On October 30, 2023, United States Secretary of the Navy (SECNAV) Carlos Del Toro issued an update to the strategic guidance first issued in October 2021. The updated document, One Navy-Marine Corps Team: Advancing Department of the Navy Priorities, provides information on activities within the Department of the Navy, including planning, investments, budgeting, and prioritizing personnel and resources.

¹ Defense Primer: Naval Forces, Congressional Research Service, November 14, 2023.

The Navy states its main objectives as follows:

- Strengthening maritime dominance: Strengthening industrial infrastructure, addressing climate change, developing and equipping unmanned surface vehicles, armament capabilities, refueling, and repairing malfunctions at sea.
- Building a culture of warfighting excellence: human resource management, education, research and development, science and technology.
- Enhancing strategic partnerships: maritime diplomacy, a security-economic system, liaison with Congress, and force building as a national mission.

Commands and areas of responsibility in the United States Navy

The US Navy currently has 293 watercrafts, including 233 surface vesselvehicles and 60 submarines. The US Navy's force building program is not meeting the goal the Navy set for itself in the previous decade of reaching a fleet of 335 watercrafts. At the current rate of construction (Table 1), the US Navy will not exceed the 300-ship mark by the end of the current decade (a plan the Navy committed to Congress in August 2003).² Figure 1 depicts the areas of responsibility of the US Naval Forces Regional Commands.

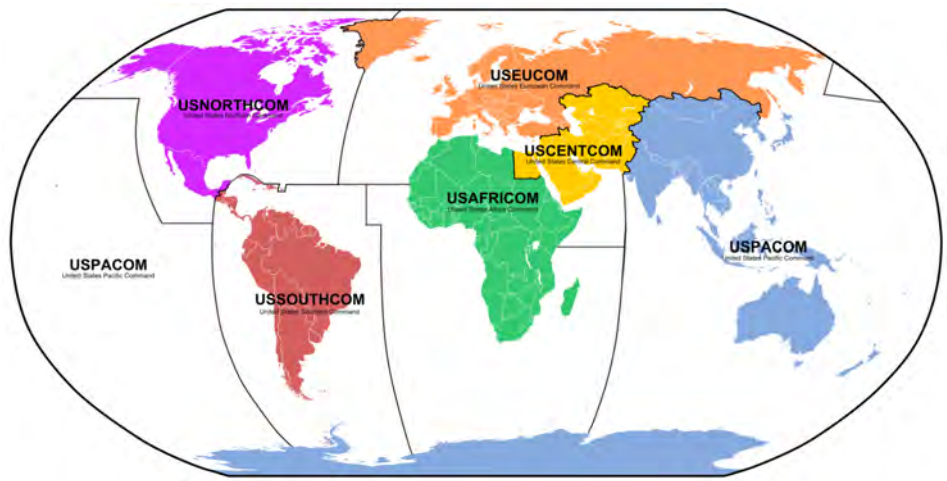


Figure 1: Areas of responsibility of the American operational commands

The 6th Fleet operates in the Mediterranean and Black Seas, administratively subordinate to U.S. Naval Forces Europe (NAVEUR), and operationally through the United States European Command (EUCOM). In early January 2024, U.S. Naval Forces Europe-Africa and

² Congressional Research Service – CRS. (August 6, 2024). [Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress](#).

the 6th Fleet were separated after 19 years of unified command. The reason for the organizational structure split was the need to respond to new and increasing operational requirements, including missile defense in the Baltic states and aircraft carrier operations in the eastern Mediterranean. The decision was made to create a better posture for day-to-day operations and future crises. The 6th Fleet headquarters is located in Naples, Italy.

In recent crises in both the Middle East and East Asia, the need for a greater presence of American watercrafts, especially aircraft carriers and command ships, has been felt. This has led to the extension of the duration of the deployment of the watercrafts beyond the usual period. Extended deployments outside the home port can last six to nine months, extensions are not granted for more than 90 days, and ships are generally deployed once every 8–24 months. In the crisis that erupted in the Middle East in October 2023, the aircraft carrier (hereinafter referred to as the USS Gerald R. Ford (CVN-78) returned to its home port of Norfolk, Virginia in January 2024 after a deployment to the Mediterranean, which included three extensions.³

Table 1: Five-Year Plan (2025–2029) for the United States Navy's Force Building

	FY25	FY26	FY27	FY28	FY29	Total
Columbia (SSBN-826) class ballistic missile submarine		1	1	1	1	4
Virginia (SSN-774) class attack submarine	1	2	2	2	2	9
Gerald R. Ford (CVN-78) class aircraft carrier						0
Arleigh Burke (DDG-51) class destroyer	2	2	2	2	2	10
FFG-62 frigate	1	2	1	2	1	7
LHA amphibious assault ship			1			1
LPD-17 Fight II amphibious ship	1		1		1	3
Medium Landing Ship (LSM)	1	1	2	2	2	8
John Lewis (TAO-205) class oiler		2	1	2	1	6
Light replenishment oiler (TAOL)			1	1	1	3
Submarine tender (AS[X])			1		1	2
TAGOS(X) ocean surveillance ship		1	1	1	1	4
TOTAL	6	11	14	13	13	57
Projected total size of Navy	287	283	280	286	291	n/a

Source: Table prepared by CRS based on FY2025 Navy budget submission.

The status of the reform in the U.S. Marine Corps

The modernization and reform efforts underway in the U.S. Marine Corps are largely designed to prepare the Marines to fight in the logistically challenging environment of the Pacific Ocean, where distances are measured in thousands of nautical miles. As part

³ Shelbourne, M. (January 17, 2024). [USS Gerald R. Ford Arrives Home from Maiden Deployment after 3 Extensions](#), *USNI*.

of the posture, dubbed Force Design 2030, the Corps has retired older tanks, bridge equipment, and logistics equipment, and plans to reduce towed artillery and many aircraft. Instead, the Corps is equipping itself with drones and missiles to provide Marines with the firepower needed to fight China, the United States' main enemy.⁴

The United States Navy in the 'Israel-Hamas' War

In the Israel-Hamas War, the United States came to the aid of Israel, and the main force component used in all matters related to power projection in the early days of the war was the US Navy, and especially the Carrier Strike Group. Initially, the Navy was used as part of the diplomatic – deterrent component of the grand strategy, and the arrival of a second Aircraft carrier to the region brought to light the warning that President Biden wanted to convey in the early days of the war to Iran and its proxies, lest they try to exploit the situation to attack Israel (the convergence of threats/multi-theater warfare). The warning echoed in public discourse with the word DON'T. In order to assemble a force of two aircraft carriers in the Middle East, US Secretary of Defense Lloyd Austin ordered the aircraft carrier Gerald R. Ford and the cruiser USS Normandy to remain in the Mediterranean Sea for several weeks longer than their original plan of operation, in order to maintain a presence of two aircraft carriers in the region of Israel while its war with Hamas progresses, and the danger that other actors in the Middle East will take advantage of this opportunity to attack Israel. In the months that have passed since the start of the war, armed militias supported by Iran in Iraq and Syria have taken advantage of the war to carry out regular attacks using rockets, drones and missiles on US military installations in the region. This reinforcement was made despite the ongoing policy of the United States favoring the South China Sea arena (Pivot to Asia, or Rebalancing).

This is the third time that the Ford aircraft carrier's mission has been extended, highlighting ongoing concerns about regional instability amid Israel's war in Gaza and against Hezbollah in the north. The presence of two American aircraft carriers in the region has been rare in recent years. The original plan was for the Eisenhower carrier strike group (USS Dwight D. Eisenhower) to replace the Ford aircraft carrier in the Mediterranean, but the US Secretary of Defense decided to extend the Ford's stay in the eastern Mediterranean, allowing both Eisenhower and Ford to "cover" the maritime domain from southern Europe to the Middle East.⁵ In early January 2024, the Ford aircraft carrier ended its eight-month mission in the Mediterranean. In place of the USS Ford, the Bataan Amphibious Ready Group, a multi-deck assault ship carrying amphibious armored

⁴ See more in the Maritime Strategic Evaluation for Israel 2022/23.

⁵ Associate Press. (December 15, 2023). [US Aircraft Carrier to Remain in Mediterranean Near Israel, Officials Say](#), VOA.

vehicles and vertical takeoff aircraft, and capable of landing craft directly at sea, joined the Mediterranean task force. The Bataan remained in the region until early March 2024, and at the end of its mission, it also navigated for its home port in Norfolk, Virginia.

In the missile and unmanned aerial vehicle (hereinafter referred to as UAV) attack carried out by Iran on Israel on the night of April 13–14, 2024, a large number of United States watercrafts and aircrafts played an important role in intercepting and destroying the missiles and UAVs. In the attack, more than 110 medium-range ballistic missiles, more than 30 land-attack cruise missiles, and more than 150 UAVs were launched towards Israel. Although the launches and attacks were east of Israel, watercrafts of the Sixth Fleet participated in intercepting the ballistic missiles launched towards it. The American destroyers Carney and Burke, which were in the eastern Mediterranean, were part of the American force (ships and aircraft) that helped repel Iran's attack on Israel, and intercepted more than 80 unmanned aerial vehicles and at least six of the ballistic missiles.⁶

As part of the lessons learned from Iran's missile and drone attacks, as well as Russian attacks on Ukrainian cities in the war waged by these two countries over the past two years, the Sixth Fleet, together with NATO countries, decided to prepare for similar scenarios by preparing a "Containerized Missile Launcher" that can be deployed in areas under threat. This concept was practiced in early May 2024 by US Naval Forces Europe and the Sixth Fleet on Bornholm Island in Denmark.⁷

The strike group led by the aircraft carrier Dwight D. Eisenhower, along with the destroyer USS Gravelly, transited the Suez Canal north to the eastern Mediterranean on May 10, following the Pentagon's announcement that construction of a humanitarian maritime corridor to the Gaza Strip was nearing completion. The floating port and pier components – which the US military began construction on in April 2024 and allocated a budget of \$320 million – are designed to increase the delivery of needed humanitarian assistance.⁸ Following the pier's poor performance, the inspectors general for the US Department of Defense and the US Agency for International Development (USAID) announced that they were reviewing the entire issue, including the humanitarian assistance being delivered through it to the civilian population in Gaza, the budget, its resilience in rough seas and other alternatives to solve the humanitarian assistance problem.⁹

⁶ Lopez, C. T. (April 16, 2024). [Israel, U.S., Partners Neutralize Iranian Airborne Attacks](#), *DoD News*.

⁷ *U.S. Naval Forces Europe Public Affairs*. (May 8, 2024). [U.S. Naval Forces Europe and U.S. Sixth Fleet conduct containerized missile launcher rehearsals on Bornholm Island, Denmark](#).

⁸ For more information on the American pier, see: Yossi Ashkenazi, *The American Floating Pier in Gaza – A Look on the Shipping Passage to the Gaza Strip*. This volume.

⁹ Knutson, J. (June 26, 2024). [Pentagon watchdog opens probe of Gaza humanitarian aid pier](#), *Axious*.

US Navy activity in the Red Sea and Gulf of Aden

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



Figure 2: Fifth fleet headquarters in Baharain. Source: [Sheik Isa Air Base and U.S. 5th Fleet headquarter, CNN.com](#)

US Navy activity in Operation Prosperity Guardian

After the outbreak of the Israel-Hamas War in October 2023, and beginning in the second half of November, the Houthi rebels in Yemen imposed a blockade on shipping to and from Israel in the Red Sea. On November 19, the Houthis seized the *Galaxy Leader*, a ship partly owned by Israeli businessman Rami Unger, and took it to the port of Hodeidah. By mid-May 2024, the Houthis had attacked more than 60 watercrafts and managed to sink several. The attacks were carried out using drones, cruise missiles, and ballistic missiles.

It was actually Israel that pressured the United States to carry out Operation Prosperity Guardian in order to maintain freedom of navigation in the southern Red Sea. The Americans asked Israel not to attack the Houthis in order to prevent the conflict from spreading to other areas. Israel's demand was based, among other things, on the American commitment from 1975 in the interim agreement signed with the American administration at the time, which stipulated that the United States "recognizes the Straits of Bab-el-Mandeb and Gibraltar as international passages, and will support its right to free and unimpeded passage through these passages".¹⁰ On December 18, 2023, US Secretary of Defense Lloyd Austin announced the establishment of an international maritime security force aimed at ending the blockade and dealing with threats by Houthi forces against international maritime commerce in the region. The United Nations Security

¹⁰ "The United States Government regards the Straits of Bab-el-Mandeb and the Strait of Gibraltar as international waterways and it will support Israel's right to free and unimpeded passage through such straits." [Memorandum of Agreement between the Government of Israel and the United States](#), Gerald Ford Presidential Library and Museum, Paragraph 14, September 1, 1975.

Council (UNSC) adopted a resolution demanding an end to Houthi attacks on merchant ships, a resolution that has not been implemented so far.

Despite the establishment of the 153 Maritime Task Force (CTF-153) in April 2022, whose mission was defined as conducting maritime patrols in the Red Sea, the Bab-el-Mandeb Strait, and the Gulf of Aden, this force did not take on the task of securing shipping in these areas (for mainly political reasons), forcing the United States to establish another international force to carry out this task. The US-led international maritime task force, Operation Prosperity Guardian, which began its mission in the Red Sea in mid-December 2023, was joined by navies from other countries. The coalition currently has more than 20 member states, 10 of which are anonymous. Egypt and Saudi Arabia, both of which are economically dependent on free trade in the region, are not participating in this force for political reasons. Despite the establishment of the force and the attacks initiated by the Americans with the help of Britain and France on some of the launch sites, this has not deterred the Houthis, who occasionally even err in their attacks and attack watercrafts that have no clear ties to Israeli ownership or trade. The United States has indicated that the naval force will use a defensive strategy to secure the waterway, while the Houthis have threatened to attack US Navy ships if the latter attack their launch sites in Yemen.

On January 11, 2024, the United States and Britain launched a series of airstrikes and missile strikes against 60 targets at 16 sites from which the Houthis were attacking maritime trade, and later carried out several more strikes. These strikes did not stop the Houthis' attacks, and they even improved their attack methods. The United States tried to apply additional pressure by deploying an aircraft carrier strike group in the Red Sea, but this action also failed to stop the Houthis' attacks. As the Houthis' attacks escalated, several European Union countries, including France, Italy, and Spain, decided to remain in the mission of securing the shipping lanes, and to refrain from the Houthis attacking infrastructure targets and launching on the coast . targets on the coast. To this end, the European Union established a new maritime framework, and operated another naval operation called 'Operation Aspides'. The name of the operation is rooted in the ancient Greek word meaning "Shield". According to a European Union spokesman, "Operation Aspides will not conduct any operations on land, but only at sea, and even then, in a purely defensive manner". While the countries that joined Operation 'Protector of Prosperity' also included in their mission the implementation of preventive operations, which were expressed in attacking infrastructure targets on the Yemeni coast, the Europeans feared that allowing such attacks on the coast would lead to escalation and drag them deeper into the regional conflict. These events in the Red Sea proved once again that there are limitations to the capabilities of navies to stop land attacks aimed at sea denial, even by a relatively weak force that relies on missiles and unmanned systems (air and sea).

The operation also emphasized the limitation of a joint force from several countries that would agree throughout the entire period of the operation with the evolving and changing objectives of the operation and adapt the response to these developments.¹¹

At one point, after the force began its operations, the Danish shipping company Maersk attempted to resume navigating its ships in the Red Sea, but after the container ship Maersk Hangzhou was attacked in late December 2023 by Houthi missiles and ships, the company decided, despite the assistance the ship received from American helicopters that sank the boats, to suspend navigating its ships through the Red Sea.¹² Tensions in the region increased when an Iranian warship called the Alborz entered the Red Sea in early January 2024, and the Iranian news agency stated that Iranian watercrafts would continue to navigate from time to time in the Red Sea "to secure shipping lanes to repel pirates".¹³ In addition, the Iranians used the MV Behshad for intelligence missions that included, among other things, transmitting intelligence on targets navigating in the southern Red Sea and the Gulf of Aden to the Houthi rebels, who later attacked them. In response to this activity, the Americans apparently launched a cyberattack on the ship in mid-February 2024,¹⁴ which, fearing an attack by Israel, left the area and returned to its home port in Iran on April 11, 2024.

According to the Hoover Institution, "The U.S. Navy has intercepted more than 70 drones fired at watercrafts in the Red Sea and Gulf of Aden by the Houthis. The cost of each drone to Iran (which provided these assets to the Houthis) is about \$2 million. In contrast, the cost of launching the U.S. Navy's SM-2 missiles against these drones is about \$140 million". In addition, the U.S. Navy and Israel have spent a combined \$1 billion to repel over 300 Iranian drones, which cost between \$80 million and \$100 million.¹⁵

The economic cost of using SM-2/6 surface-to-air missiles mounted on watercrafts in the Red Sea and Gulf of Aden to shoot down drones, cruise missiles, and ballistic missiles launched by the Houthis from the coast is very high for the US Navy, as well as for other navies (the cost of SM-2 missiles is more than two million dollars, and the cost of SM-6 missiles is over four million dollars).¹⁶ Table 2 illustrates this. The Chief of Naval Operations

¹¹ McCranie, K. D. (May 2024). [Lessons from the Red Sea: Considerations for Naval Strategy in the 21st Century](#), *U.S. Naval Institute, Proceedings*, vol. 150/5/1,455.

¹² Levine, J. (January 3, 2024). [Red Sea and Suez Canal Shipping News & Updates](#), *Freightos*.

¹³ Awadalla, N. (January 1, 2024). [Iranian warship Alborz enters the Red Sea – Tasnim](#), *Reuters*.

¹⁴ *NBC News*. (February 15, 2024). [U.S. conducted cyberattack on suspected Iranian spy ship](#).

¹⁵ Crawford, B. (May 12, 2024). [Cheap drones may dramatically change naval warfare](#), *The Meridian Star*.

¹⁶ [Missile Interceptors by Cost](#), Missile Defense Advisory Alliance, Updated February 2024.

of the United States Navy, Admiral Lisa Franchetti, reported to Congress on February 13, 2024, that as of the reporting date, five United States Navy destroyers operating in the southern Red Sea and Gulf of Aden region had collectively intercepted 14 Anti-Ship Ballistic Missiles (ASBMs), 7 cruise missiles, and more than 70 UAVs—a total of more than 91 targets, and that the ballistic missile interceptions were the first U.S. Navy interceptions of such missiles in an operational context (as opposed to development or testing). Many of these 91 interceptions may have been made using Surface Air Missiles (SAMs); some of which may have required more than one missile to be launched at a single target (to ensure its downing); and additional SAMs may have been used in addition to the 91 cases mentioned above, where the targets were not shot down.¹⁷

Table 2: Aspides forces and Operation Prosperity Guardian forces

	Aspides	Operation Prosperity Guardian
Organisation	Under the EU’s Common Security and Defence Policy.	Under CMF-CTF153.
Aim	Defensive: ensuring freedom of navigation for commercial vessels in close cooperation with like-minded maritime security providers.	Defensive: securing safe passage for commercial vessels.
Means	France, Germany, Italy, and Belgium provide warships. Greece has operational command and HQ. ^(a) Sweden is providing staff officers. ^(b)	US, ^(c) UK, and Denmark provide warships. Staff officers from Australia, ^(d) Canada, ^(e) the Netherlands, ^(f) Norway, ^(g) and Singapore. ^(h)
Participants	Belgium, France, Greece, Germany, Italy, and Sweden. ⁽ⁱ⁾	Australia, Bahrain, Canada, Denmark, the Netherlands, Norway, Seychelles, Singapore, UK, and US. ^(j)
Headquarters	Larissa, Greece	Bahrain

Remarks: (a) Al Jazeera (2024), “EU launches”. (b) Swedish Government (2024), Svenska stabsofficerare sickas till Röda havet, February 22. (c) These are the named contributors. It is unclear exactly how and when these states will contribute. (d) Australian Minister of Defence (2023), Radio interview, ABC RN Breakfast with Sally Sara, December 22. (e) Government of Canada (2023), Canada to participate in United States-led Operation PROSPERITY GUARDIAN, December 19. (f) Dutch News (20223), “Dutch provide two staff officers to Red Sea protection plan”, December 19. (g) Norwegian Government (2023), Norway increases support to Combined Maritime Forces in the Red Sea, December 21. (h) The Ministry of Defence Singapore (2024), Media Reply – SAF Not Involved in Strikes on Houthis in Yemen, January 13. (i) At the time of writing, states are still considering contributing to the operation. (j) As some contributors are unknown, this is not an exhaustive list.

Source: Karlsson, M. (April 2024). [A Preliminary Analysis of Naval Operations in the Red Sea: Aspides and Operation Prosperity Guardian](#), FOI Memo: 8486, International Military Missions.

Recognizing the high cost of using surface-to-air missiles for this type of mission, the US Navy completed initial development stages and installed on one of its watercrafts the first prototype of the Shipboard Solid State Lasers (SSSL) system capable of neutralizing drones. Since then, the US Navy has been developing and installing additional prototypes of a laser system with improved capability to intercept and shoot down cruise missiles and higher-powered drones. The current state (June 2024) where the US Navy is still

¹⁷ Congressional Research Service (CRS). (Updated July 1, 2024). [Navy Shipboard Lasers: Background and Issues for Congress](#), p. 4.

focused on the solid-state laser technology maturation effort is an addition also known as the High-energy laser with integrated optical dazzler and surveillance (HELIOS) and the High Energy Laser Counter (HELCAP) program. However, the three development efforts have not yet resulted in any of the systems being declared operational.¹⁸ The words of Rear Adm. Fred Pyle, Director of Surface Warfare, during a discussion at the Center for Strategic and International Studies in Washington in May 2024 make this clear. Pyle said that the cost of wasting expensive surface fleet weapons to take out cheap Houthi drones, anti-ship ballistic missiles and cruise missiles in the Red Sea has prompted the US Navy to accelerate its search for cheaper alternatives and "disruptive capabilities", such as drone swarms that the service hopes can accomplish the intended mission much more cheaply, a powerful laser system (such as the Israeli Iron Beam system) with an estimated cost of about four dollars to shoot down, or another microwave solution.¹⁹

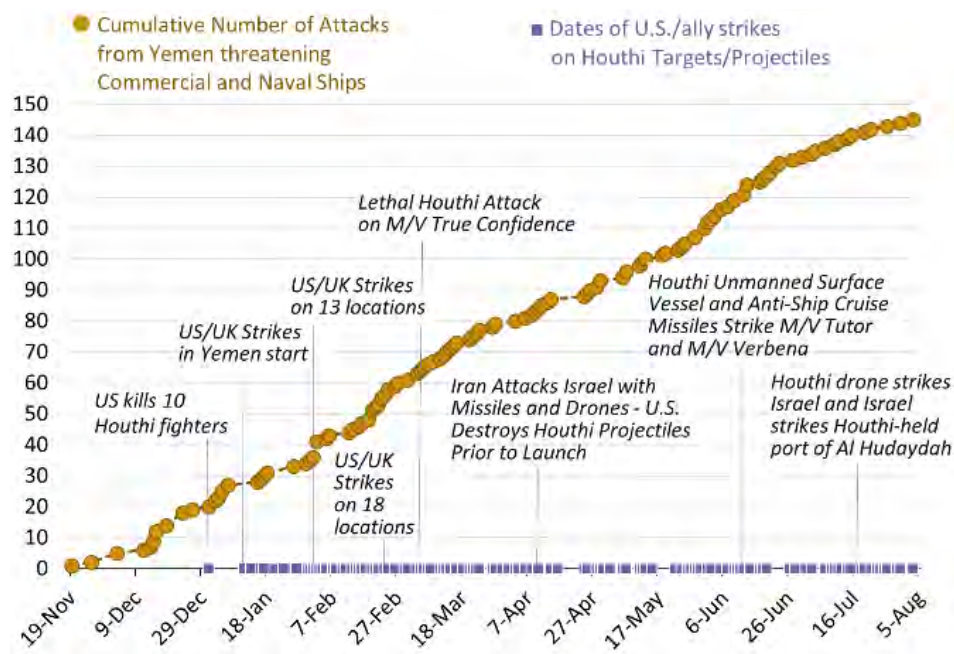


Figure 3: Missile interceptions, drones, Houthi watercrafts – as of December 31, 2023 CRS, using data from U.S. Department of Defense and media reports. Attack and response data subject to change

¹⁸ Ibid. p. 2

¹⁹ Martin, T. (May 15, 2024). [High price of Red Sea shootdowns speeds Navy's pursuit of 'cost-effective' solutions](#), *Breaking Defense*.

In March 2024, the US Department of Defense asked Congress for a budget of \$ 1 billion over the next two years for the Drone Swarm program, which aims to produce thousands of low-cost autonomous aircraft and platforms to shoot down adversary drones. The department has since announced that the first part of the Replicator systems will be designed to be installed on unmanned surface vehicles (USVs), unmanned aerial systems (UASs) of "various sizes and payloads".²⁰ In the opinion of the author of this article, the process of putting them into operational use takes too long, especially when the threats to US Navy ships are clear and tangible.

US Navy Cooperation with the Israeli Navy

Since Israel joined the US Central Command, and in light of the increasing Iranian threat to Israel's freedom of navigation in the southern Red Sea and the Gulf of Aden, the two navies of the United States and Israel have maintained close security coordination, as well as joint exercises on a variety of issues. The US Fifth Fleet's area of operations encompasses approximately 2.5 million square miles of water area, and includes the Arabian Gulf, the Gulf of Oman, the Red Sea, parts of the Indian Ocean, and the three critical choke points (the Strait of Hormuz, the Suez Canal, and the Strait of Bab-el-Mandeb).

In the Iranian attack on Israel on the night of April 13-14, Iran launched about 300 different means (such as UAVs, missiles, etc.), the vast majority of which were intercepted by defense systems. The joint missile interception operation was called Operation Iron Shield. The American force in the Red Sea and Gulf of Aden participated in intercepting some of the missiles using the defense systems on its watercrafts, aircraft launched from the Eisenhower aircraft carrier to intercept cruise missiles and UAVs. Various sources indicate that the Iranians used three types of ballistic missiles in their attack, one type of drone and two types of cruise missiles. The ballistic missiles were of the following types: "Ghader", "Emad" and "Kheibar".

In conclusion, the cooperation between the Israeli Navy and the US Navy, especially the Fifth Fleet, is very close, and in fact, in the Red Sea, the US Navy is carrying out (although so far without success) missions that are indeed against the maritime blockade imposed by the Houthis, but whose main target is Israel.

The People's Liberation Army Navy (PLAN)

The Chinese navy – The People's Liberation Army Navy (PLAN) is ranked second in the world in the 2024 Naval Strength Index (TVR 319.8). The growing importance of Chinese

²⁰ Roqu, A. (March 11, 2024). [Pentagon eyes \\$1 billion over 2 years for Replicator mass drone fleet concept](#), *Breaking Defense*.

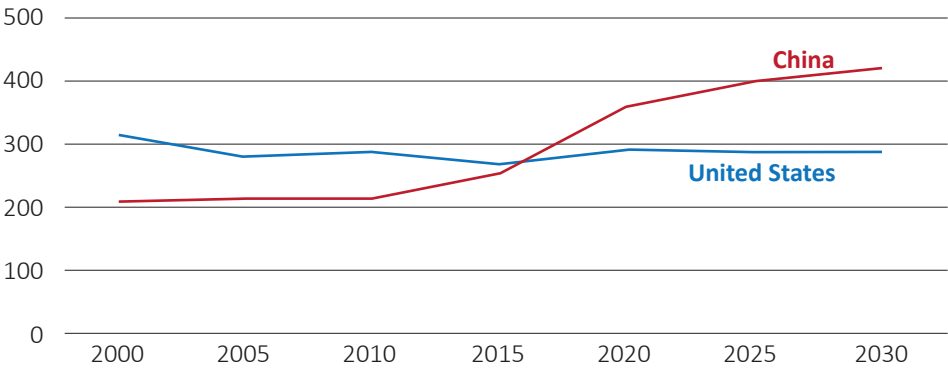
maritime interests, which we have already reported on in previous 'maritime assessments' publications, has led the Chinese Navy to continue to increase the frequency, duration, and range of its operations off China's coasts. This activity is consistent with the emphasis on their use for operations in the maritime domain, according to the strategic document published by China in May 2015 under the title "Defense in the High Seas".

The biggest surprise for the People's Liberation Army (PLA) in 2023 was the announcement at the end of the year that Admiral Dong Jun, the commander of the Chinese Navy, had been appointed China's Minister of Defense. This announcement was accompanied by the mystery surrounding the dismissal of his predecessor, General Li Shangfu. The significance of Admiral Dong's appointment cannot be underestimated, as the appointment represents the culmination of a 25-year process of modernization and growth of the Chinese Navy's naval buildup, from a state where the Navy was essentially a littoral force to a state where its top officer now leads China's entire military. The appointment is significant for two main reasons: First, Admiral Dong is one of the PLA's most experienced commanders, with deep expertise at the operational level of warfare in command of the eastern and southern China theater, giving him unique understanding and perspectives on China's disputed sovereignty claims—most of which are in the maritime domain. Second, Admiral Dong has the distinction of being the first commander of the Eastern China Joint Command Center, having served from July 2013 to November 2014 while serving as one of the deputy commanders of the East China Sea Fleet.²¹ The command was established in 2013 and is responsible for operational coordination of the PLA Air Force, the PLA Navy, and other forces—including the China Coast Guard and the Strategic Missile Force—against Taiwan. Dong's appointment should serve as a reminder of the importance China attaches to the plan and the overall capability of its military to conquer Taiwan by military means, if other efforts fail.

The Chinese Navy is the world's largest navy in terms of numbers, with a total combat force of more than 350 ships and submarines, of which more than 140 are major surface ships (cruisers, destroyers, and frigates). The total combat force of the Chinese Navy is expected to increase to 395 ships by 2025 and 435 ships by 2030. The fleet is largely composed of modern multi-mission ships and submarines. In 2022, China launched its third aircraft carrier, Fujian (CV-18). China is building its third YUSHEN-class amphibious assault ships (LHA) and began construction of the fourth in early 2023. The navy is particularly improving its "power projection capabilities". China continues to challenge foreign military activities in its exclusive economic zone in a manner inconsistent with

²¹ Erickson A. S., and Sharman, C. (December 30, 2023). Admiral Dong Jun Engages Friends and Foes: China's First Naval Defense Minister Brings Joint Operational Experience, *China Maritime Studies Institute*, p. 1.

accepted international rules, as reflected in the United Nations Convention on the Law of the Sea (UNCLOS). At the same time, China is conducting activities in the economic zones of other countries, including the United States, Australia, the Philippines, Vietnam, and Malaysia. China's naval ships, aircraft, and weapons systems are more modern and capable than they were in the early 1990s, and in many respects they are now comparable to those of modern Western navies. In the event of a military conflict between the countries, the Chinese navy is seen as a significant challenge to the US navy, especially in terms of gaining control of "blue waters" in the western Pacific Ocean—a challenge the US navy has not faced since the end of the Cold War. China wants its navy to continue to be built up, so that it can operate in an Anti-Access, Area Denial (A2/AD) strategy, and deter the United States from intervening in a conflict, should it occur, in the South China Sea, around Taiwan Island, or elsewhere.



Source: Congressional research service

Figure 4: Number of Chinese Navy battleships versus the American Navy in 2000–2030

Although China's naval modernization effort has significantly improved its naval capabilities, it is estimated that the Chinese navy is still limited in its capabilities in several areas, including anti-submarine warfare, long-range targeting, the ability to train a large number of crew members for its new ships, unity of command, and lack of combat experience. It should be noted that China is aware of these gaps and is working to reduce or overcome them.²²

²² Regarding China's multi-layered coastal defense concept, information can be found in: Chorev, S. (2022). Key Naval Fleets – Trends and Changes. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2021/22*, 55–98 (Maritime Policy & Strategy Research Center, University of Haifa)

In addition to modernizing the Chinese navy, China has significantly expanded its coast guard in recent years. China's coast guard is by far the largest in East Asia. China also operates a large maritime militia, including a large number of fishing boats, as was evident in the early stages of the dispute with the Philippines over its exclusive economic zone. With the navy acting as a potential backup force, China relies primarily on its maritime militia and coast guard to assert and defend its claims to maritime sovereignty.

The PLA Combat Strike Group (CWG) is significantly below the US Navy in terms of operational scale. It is worth noting that it has only been 11 years since the first PLAAF fighter jet landed on the deck of China's first aircraft carrier, the Liaoning, and in January 2023, China's second aircraft carrier, the Shandong, conducted a "live-fire strike exercise simulating a confrontation with an enemy fleet" in the South China Sea. The operational exercises included night takeoffs and landings, and the Shandong achieved the maximum number of days at sea of any other PLA aircraft carrier, and even longer than the US Navy's aircraft carriers in the Western Pacific.²³ The Shandong strike group, which included a Type 055 cruiser, a Type 052D destroyer, two Type 054A frigates and two refueling ships (Type 901 and Type 903), returned to the Bashi Channel and the waters east of Taiwan in April 2023. There, it participated in an exercise with the Strategic Rocket Forces and surface vehicles that surrounded the island of Taiwan from April 8 to 10. The Shandong navigated to an area 350 nautical miles west of Guam in the vicinity where the aircraft carrier Liaoning operated in January 2024.

A third aircraft carrier of the Chinese Navy, the Fujian, completed sea trials at anchor in November 2023 and open sea trials in the summer of 2024. Following the changing nature of contemporary naval warfare, several navies around the world are questioning the effectiveness of aircraft carriers in littoral combat roles, due to the proliferation of shore-to-sea missiles against them. On the other hand, China's buildup program is only doubling the number of aircraft carriers in its fleet's order of forces, apparently as part of its desire to project power in areas far from China in the Pacific Ocean.

In addition to the missions mentioned above, the Chinese Navy also serves as a diplomatic component for China as part of China's "smile diplomacy" towards third world countries. For such a mission, the Chinese Navy's hospital ship "Peace Ark" navigated from its base in Zhoushan, Zhejiang Province in eastern China, in mid-June 2024 for Mission Harmony-2024. During this mission, the ship will visit 13 countries such as Seychelles, Tanzania, Madagascar, Mozambique, South Africa, Angola, the Republic of Congo, Gabon, Cameroon, Benin, Mauritania, Djibouti and Sri Lanka, and provide medical services to

²³ Fanell, J. E. (May 2024). [Another Historic Year for the PLA Navy](#), *US Naval Institute, Proceedings*, Vol. 150/5/1,455.

the local residents. This is the tenth time the ship has carried out this mission since its operation in 2008, and in which citizens of the countries it visits will receive diagnosis and free treatment for common diseases on board the ship. The ship has more than 100 medical staff members on board, and has 22 medical departments.²⁴

The Power Development Plan of the PLAN

At the end of 2021, the Chinese Navy had 355 ships, and the US Department of Defense report estimates that by 2025 the Navy will increase its number of watercrafts to 420 ships, and that by 2030 the fleet is expected to reach 460 ships. The number 355 includes surface ships, submarines, aircraft carriers, ocean-going amphibious ships, minesweepers, and naval auxiliaries (Table 3). This number does not include 85 patrol ships and aircraft carrying anti-ship cruise missiles (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 (Figure 5).

Table 3: Types and quantities of watercrafts in the Chinese navy²⁵

Platform	2021	2026	2031
Aircraft Carriers	2	3	5 (1 CVN)
Cruisers	2	12	16
Destroyers	32	45	45
Frigates	47	54	63
Patrol/Coastal Combatants	206	196	194
SSBNs	6	8	10
SSNs	10	14	18
SSKs	46	44	49
Principal Amphibs	7	12	19

China is building a large number of additional Type 075 landing ships with the aim of establishing a large-scale delivery force capable of conducting "three-dimensional operations" involving the application of force by air, sea and land from multiple directions. The growing force will complement the rapidly expanding PLA Marine Corps, which has grown from two brigades less than a decade ago to six operational brigades. The Z-20 multi-role helicopter, similar in features to the American Blackhawk, has entered service with the PLA Navy, and its conversion to anti-submarine warfare and other roles is a significant addition, especially for China's landing force.

²⁴ CGTN. (June 16, 2024). [PLA Navy hospital ship sets sail for 2024 mission.](#)

²⁵ Bianchi, J., Creery, M., Schramm, H., and Yoshihara, T. (2022). [China's choices: A new tool for assessing, the PLA's modernization](#), The center for strategic and budgetary assessments, p. 72



Figure 5: Chinese Navy Deployment and Main Commands²⁶

China currently has two aircraft carriers that operate fixed-wing aircraft, and during takeoff, a ski ramp is used, the last 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 this decade, which will be similar in size to American aircraft carriers and equipped with catapults. All Chinese aircraft carriers are conventionally powered. Despite their importance, experts estimate that these aircraft carriers will

²⁶ Shelbourne, M. (November 3, 2021). [China Has World's Largest Navy with 355 Ships and Counting, Says Pentagon](#). *US Naval Institute News*.

not be a major force component in the event of a military operation against Taiwan, as Taiwan's proximity to the mainland allows Chinese air power to be deployed from land bases in China.

The PLAN launched its eighth Type 055/Renhai cruiser, eight additional Type 054A/Jiangkai II frigates, a rescue ship, two newer Type 054B frigates, and three nuclear-powered submarines. The total fleet in terms of displacement launched and commissioned in 2023 was about 170,000 tons, up from 110,000 tons in 2022,²⁷ although still slightly below the annual average of 200,000 tons before the COVID-19 pandemic. While China acknowledged this slight decline, it claims to have achieved a "significant increase in quality", particularly with the Type 054B frigates that began sea trials in January 2024.²⁸ Despite lower hull production and less displacement, the Chinese navy remains the world leader in new orders by displacement, as it has been for at least the past five years.

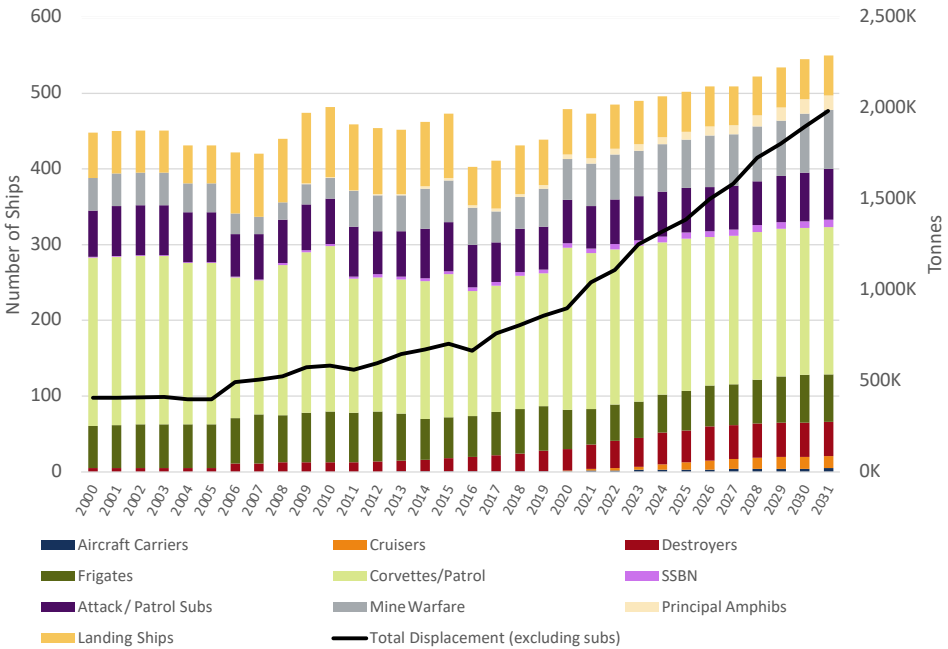


Figure 6: Forecast of Chinese power growth based on budget usage forecast²⁹

²⁷ Fanell (2024). [Another Historic Year for the PLA Navy](#).

²⁸ Yusheng, "2023 Review of the Chinese Navy's Equipment".

²⁹ Bianchi, et al. (2022). [China's choices](#), p. 45

China is using its "deep wallet" and technological capabilities to reward regional allies and gain a foothold for Chinese assets in their territory. For example, China offered Pakistan to build an infrastructure to manufacture four submarines at the Karachi shipyard in Pakistan, and to supply four frigates, including the construction of the infrastructure to receive the watercrafts once they are completed. China is able to compete with other Western entities with capabilities in this field (such as French shipyards, which were Pakistan's traditional suppliers of submarines) with the help of large subsidies that allow it to carry out the projects mentioned above. Furthermore, these resources are part of the soft power that China exercises in the Indo-Pacific region to expand its influence in the region.³⁰ On 26 April 2024, the Pakistan Navy launched the first Hangor-class submarine in a ceremony held by Wuchang Shipbuilding at Shuangliu Base in Wuhan, China. The Pakistani government signed an agreement with the Chinese company China Shipbuilding & offshore International Co – CSOC for the purchase of eight Hangor-class submarines during the visit of Chinese President Xi Jinping to Pakistan. According to the contract, four submarines will be built in China, while the other four will be built in Pakistan at Karachi Shipyard & Engineering Works Ltd under a technology transfer agreement. These submarines will be equipped with advanced weapons and sensors and stand-off weapons capabilities.³¹

China's activities during the 'Israel-Hamas' War

China's immediate response to the October 7 massacre was weak, calling on both sides to remain "calm" and resolve the dispute by "implementing a two-state solution and establishing an independent Palestinian state", all without mentioning the hostages held by Hamas or condemning its attack. Since then, the Chinese Foreign Ministry has expressed increasing support for the Palestinians while condemning Israel, calling for an investigation into Israel's "crimes", supporting ceasefire proposals on less favorable terms for Israel, and suggesting using its veto power against American ceasefire proposals. In UN Security Council discussions, Chinese rhetoric has become more harsh as the war continues. Since the outbreak of the war, the Chinese Foreign Ministry and President Xi Jinping have frequently mentioned the "right of return" as one of the Palestinians' fundamental rights. China did not condemn Iran's large-scale attack on Israel in mid-April 2024, in which more than 300 rockets and drones were launched against Israel. Chinese Foreign Minister Wang Yi even told his Iranian counterpart that "the action taken was limited and was an act of self-defense", without addressing the violation of

³⁰ *EurAsian*. (September 21, 2022). [Project 75 – As China Arms Pakistan with Lethal Submarines, Is Indian Navy 'On Backfoot' Despite Being A Global Naval Power?](#)

³¹ *Naval News*. (April 28, 2024). [Pakistan Navy Launches First Hangor-Class Submarine In China](#).

the sovereignty of Iraq, Jordan, and Saudi Arabia, whose airspace was violated by Iranian weapons, let alone addressing Israel's sovereignty.³² The strong rhetoric against Israel did not end with official government statements, as a wave of anti-Semitism swept through social media in China, which is subject to strict government censorship that could have prevented it if it had wanted to.³³

In the field of trade, in early January 2024, the Chinese shipping company COSCO officially announced that it was ceasing its trade activities between Israel and the Western Mediterranean, along with the termination of the partnership on this line with the company 'ZIM'. COSCO's move was announced by its subsidiary OOCL, which is headquartered in Hong Kong. The company announced that it was ceasing navigation to Israel due to "operational problems". It is possible that through this announcement the company thought to gain immunity for itself in navigating in the Red Sea without being harmed by the Houthis.³⁴

The rise in China-Taiwan tensions in the maritime domain

China claims under the 2005 Anti-Secession Law and the "One China Principle" that China's sovereignty and territorial integrity cannot be divided. Strategically, if China gains control of Taiwan, it will be able to expand its activities beyond the "first island chain", which includes a number of countries that have security agreements with the United States, including Japan and the Philippines, into the Pacific Ocean. In such a case, China will be able to ostensibly escape the detection and control arcs of the US Navy and its allies in the region. Currently, the first island chain provides a ring of protection for the United States and its allies, so if China gains control of Taiwan, it will open the western Pacific to Chinese military expansion.

On May 22, the Chinese navy initiated one of the most significant exercises of 2024, with Taiwan as its main target. The maneuvers, called Joint Sword 2024A, were conducted under the control of China's Eastern Theater Command and took place around the island and near the Taiwan Strait. The maneuvers mainly consisted of sea-air patrols. 42 Chinese aircraft were spotted flying near the island and 28 further away. 15 Chinese navy ships and 16 Chinese coast guard ships were also spotted. Some commentators attribute the holding of China's naval maneuvers to statements made by Taiwan's new president, Lai Ching-te, who took office a few days before the exercise, stating that "the Republic of

³² *Iran International*. (April 16, 2024). [China Supports Iran's Position After Attack on Israel](#).

³³ For more information, see: Benni Ben Ari, China's position in the "Israel-Hamas" war. This volume.

³⁴ Elmas, D. S. (January 7, 2024). [Chinese shipping giant COSCO to stop visiting Israeli ports](#), *Globes*.

China and the People's Republic of China are not subordinate to each other", using the official names of each entity.³⁵

In summary, the PLA Navy now boasts multiple types of warships, fifth-generation fighter jets, and a growing mixed submarine force. These measures, combined with methods of illegal, coercive, aggressive, and deceptive activity in the maritime "gray zone", seem to suggest that China's strategic goals are self-evident. However, upon closer examination, strategists are right to ask the question: "Does the United States—or the West more broadly—understand the extent to which China values naval power as an enabler of grand strategy?" And another question is, "Do we reflect or project our reasonable and rational expectations onto China's actions?"

The Russian Federation Navy

Since the beginning of the last wave of reforms in the Russian military in 2009, the Russian leadership has been conveying the message that the Russian Navy has ended the crisis period, is returning to its greatness, and is capable of fulfilling missions befitting the fleet of a major power. The priority given to the Russian Navy in renewing its watercrafts is reflected in the approximately 80 watercrafts that are in the final stages of construction at various Russian shipyards. The Navy of the Russian Federation ranks third in the world in the 2024 Naval Power Index with a score of 242.3, although by a large margin compared to the navies of the United States and China. The average age of the platforms in this fleet is 31 years, and its order of forces includes the watercrafts listed in Table 4.

Table 4: Types and quantity of watercrafts in the Russian Navy

Type of watercrafts		Number of watercrafts	Notes
1.	Aircraft carrier	1	operational status is uncertain
2.	Helicopter carrier	0	
3.	Cruisers	4	
4.	Destroyers	12	
5.	Frigates	11	
6.	Corvettes	83	
7.	Submarines (SSK, SSN, SBN)	58	
8.	Patrol boats	48	
9.	Minesweepers	48	

In light of the Russian military's failures in the campaign against Ukraine, both on land and, to a greater extent, at sea, Russian President Vladimir Putin decided on May 12, 2024, to

³⁵ Zona Militar. (May 23, 2024). [The Chinese Navy surrounds Taiwan in all directions as part of Exercise Joint Sword 2024A](#).

appoint former Deputy Prime Minister Andrey Belousov as Defense Minister under Sergei Shoigu, who was apparently dismissed from his post due to the "poor performance" of the Russian military in the war with Ukraine. Shoigu, a longtime ally of Putin who led Russia's invasion to Ukraine, suffered a series of failures in the war, and even a rebellion by Yevgeny Prigozhin, the leader of the Wagner Group mercenary unit, in the summer of 2023. Belousov served as Deputy Prime Minister before his new appointment. He is seen as someone who will be "more open to innovation" in rebuilding and modernizing the military. Belousov has focused on transforming the Russian economy from a peacetime to a wartime economy, manufacturing and purchasing new munitions and armaments, and developing and building weapons systems and technology. He has also used revenues from energy exports, especially to China, and from arms sales to Iran and North Korea to replace lost or destroyed stockpiles in the Kremlin's arsenals – from Tehran and Pyongyang. So far, the war has been estimated to have cost Russia more than \$220 billion, and Belousov could be seen as a choice that could bolster Russia's war effort by reducing the impact of economic and technological sanctions imposed by the United States and its allies and partners supporting Ukraine.³⁶

The dismissals did not go unnoticed by senior Russian naval officials. On August 17, 2022, following a series of setbacks that included the sinking of the cruiser Moskva, the flagship of the Russian Black Sea Fleet, by Ukraine, the withdrawal from the "Snake Island" and the recent attacks on bases in the Crimean Peninsula, President Putin dismissed the commander of the Black Sea Fleet, Igor Osipov, and appointed Vice Admiral Viktor Sokolov in his place, a move that was perceived as an expression of President Putin's dissatisfaction with the performance of his Black Sea Fleet, one of the most important in the Russian Navy. Sokolov had also previously headed the Russian Navy's naval force in the Syrian arena.³⁷ Despite the change of command, Russian warships continued to suffer damage from Ukrainian naval forces, and in February 2024, rumors spread that Admiral Sokolov had also been removed from his post.³⁸

Due to these losses, Russian shipyards were required to accelerate their construction plans to compensate the Russian Navy for the watercrafts lost in the war. On May 7, 2024, the Russian Navy launched a missile ship and patrol ship for the Black Sea Fleet at the Zelenodol'skiy shipyard of the model damaged in the war in Ukraine (in November 2023,

³⁶ Troianovski, A., and Kurmanaev, A. (May 13, 2024). [Putin's New War Weapon: An Economist Managing the Military](#), *The New York Times*.

³⁷ Beber, N. (August 17, 2022). [Report in Russia: Putin dismissed the commander of the Black Sea Fleet](#), *Israel Hayom*.

³⁸ *Reuters*. (February 15, 2024). [Russian bloggers say fleet commander fired after latest Ukrainian ship attack](#).

a ship of this type – the Askold – was severely damaged in a Ukrainian missile attack on the Kerch Strait). The Karakurt-class missile ships, classified in the West as corvettes, have been built for the Russian Navy since 2015 at three shipyards: Pele, Zhelnodol'skiy, and Amur, which emphasizes the importance that the Russian Navy attaches to this model. As of mid-2024, only four such ships are in service (three in the Baltic Sea and one in the Black Sea), and another 12 are in various stages of construction. The ships are 800 tons in displacement and 67 meters in length. Their main armament is an eight-cell 3S14-U1 universal vertical launcher (UKSK) for Kalibr missiles. It is worth noting that they are actually the smallest ships equipped with the Kalibr missile system.³⁹

The new Project 22160 patrol ship is identical to the Sergey Kotov patrol ship sunk by the Ukrainians in March 2024 using unmanned surface vehicles.⁴⁰ The designers of these ships were criticized from the beginning of the project for being unarmed, even though they were designed and built for auxiliary missions, and in the reality of a full-scale war with the use of new attack means (suicide drones) they found themselves lacking defense systems.

The naval battle between Russia and Ukraine

Since Russia's invasion of Ukraine in February 2022, an atmosphere of escalation has accompanied the war at all times. There have been many noteworthy milestones in the past year, but some of the most frightening escalation scenarios have fortunately not occurred. These scenarios include, among others, a large-scale conventional war between NATO and Russia and the use of nuclear weapons by the Russians. As you may recall, Russia announced on May 21, 2024, that it had begun tactical nuclear weapons exercises near Ukraine, noting that the exercise was intended "to ensure the territorial integrity and sovereignty of the Russian state in response to provocative statements and threats from various Western leaders". The forces of Russia's Southern Military District armed, among other things, the Iskander tactical-operational missile system and other advanced launchers in the exercise, and advanced them to areas designated for launch. Russian President Vladimir Putin issued vague nuclear threats to the West as early as the time he invaded Ukraine in February 2022. Russia clearly sees a number of benefits from this strategy, one of which is the creation of a nuclear deterrent and the strengthening of this deterrence through a "signaling" system. Russia is not paying for this dangerous policy and conduct, and the reactions from the wider international community are weak, with the exception of statements of reservations from the United States and some European

³⁹ Grotnik, T. (May 10, 2024). [Two New Ships for The Russian Black Sea Fleet](#), *Naval News*.

⁴⁰ Mackintosh, T. (March 5, 2024). [Ukraine war: Kyiv says seven dead as drone attack sinks Russian ship](#), *BBC News*.

countries.⁴¹ Even Russia's renewal of the blockade of Ukrainian grain exports in July 2023 – a kind of escalation in its own way – contains elements of restraint. So far, Russia has not openly attacked civilian grain shipments leaving Ukrainian ports. NATO countries' responses to the blockade have also been measured; for now, they have refrained from providing the armed watercrafts for grain shipments that Ukraine has requested. The lack of escalation in Ukraine serves as a reminder that in limited wars, patience is a virtue. This approach has allowed NATO countries to provide a level of military support that would have been unthinkable at the beginning of the war. Gradualism has allowed the West to learn, and in some ways, to stretch the boundaries of war.

Although Ukraine is not among the countries with a large and powerful navy, over the past two years since the outbreak of the war, the Ukrainians have managed to disable or destroy a third of Russia's Black Sea Fleet through attacks by USVs and coastal missiles, and have deprived it of control of the sea in a manner unprecedented in modern history. Despite Russia's success on the land battlefield since the beginning of 2024, Ukraine still continues to gain achievements in the Black Sea. According to the Ukrainians, they managed to hit the Crimean Peninsula in one day at the end of March 2024 with four Russian ships using home-made "Neptune" missiles: The Russian amphibious landing ship *Kostantin Olshansky*, two of Russia's largest landing ships, *Yamal* and *Azov*, and the Russian Navy's reconnaissance ship *Ivan Khurs*.⁴² Ukraine's impressive naval success has allowed maritime trade to continue: tens of millions of tons of cargo have arrived via the Black Sea in recent months, and exports from Odessa and other key ports are returning to pre-war levels.

Due to the frequent attacks on the port of Sevastopol, the Russian Navy has prepared the port of Feodosia, located just under 100 miles east of Sevastopol, as another important base for the Russian Navy. Satellite images from November 2023 show a significant presence of Russian naval ships further east, at the shipyard near the Kerch Bridge, and the entrances are protected by nets against the intrusion of USVs. A very large naval base for Russia is being built in Novorossiysk. Satellite images taken in April 2024 show a large number of warships anchored in the port.

International relations scholar Germond Basil argues that "while President Putin's ultimate goals in the campaign against Ukraine are still unclear, control of the northern coast of the Black Sea from the official border of the Russian Federation to the Russian-backed separatist republic of Transnistria is likely one of his geopolitical goals". He adds that "Russia's interest in controlling the Black Sea has been a recurring feature of its foreign

⁴¹ Williams, H. (May 20, 2024). [Why Russia Keeps Rattling the Nuclear Saber](#), CSIS.

⁴² *Newsweek*. (April 1, 2024). [Every Russian Black Sea Ship Sunk or Disabled by Ukraine](#).

policy since Tsar Peter the Great. Tsarist Russia, and then the Soviet Union, repeatedly tried to control the Black Sea and beyond the Turkish Straits in order to gain permanent access to "warm waters".⁴³ With this background, it is worth examining the naval campaign that took place in this region with Russia's invasion of Ukraine in February 2022.

In the February 2022 campaign against Ukraine, Russia's initial Black Sea strategy was to block Ukraine's shipping lanes from the sea. Such a move, if successful, would have given Russia the economic advantage, and begun to transform the Black Sea into what could be considered a "Russian sea". Instead, Ukraine's forces repelled Russia's forces, and apart from one early amphibious assault, the Russians did not use their ships to attempt to land their forces near coastal cities. Ukraine waged a highly effective asymmetric campaign, eliminating roughly a third of the Russian Black Sea fleet. Greater capabilities than these would allow Ukraine to further reduce the Russian naval presence and secure its ports for vital exports. In the long term, Ukraine could emerge as a significant regional player and a necessary pillar in containing Russian expansion.

Ukraine has demonstrated how unmanned surface vehicles can negate the capabilities of a naval power like Russia. The impressive thing about this type of naval strategy is that Ukraine – a country with a small navy and lacking significant capabilities – is developing an attack doctrine of USVs and coastal missiles, and is managing to deprive the Black Sea Fleet based in the port of Sevastopol in the Crimean peninsula of many of its capabilities. The Ukrainians' motives in developing this naval doctrine were more pragmatic than strategic. Many of the Russian warships attacked were capable of carrying out amphibious assaults, or launched cruise missiles that caused destruction and suffering in Ukrainian cities. The Ukrainian unit responsible for operating the USVs (Unit 13) launches small, fast, remotely operated USVs, known as Magura V5s, loaded with more than 200 kg of explosives. These highly maneuverable USVs navigate at speeds of more than 80 km/h and are capable of hitting frigates, corvettes, and landing ships more than 10 times their size.⁴⁴ On September 22, 2023, Ukraine hit the BSF headquarters with a Storm Shadow missile, killing at least six people. On February 1, 2024, Ukraine released a video showing the sinking of the Tarantul-class vessel *Ivanovets* by a submarine; on March 5, 2024, the patrol ship *Sergey Kotov* was sunk by a Magura V5 USV; on March 23, 2024, the Ukrainian Defense Forces hit the Russian Yamal Ropucha-class amphibious landing ships.

⁴³ Basil Germond, B. (May 10, 2022). [Ukraine War: The Limits of Traditional Naval Power and the Rise of Collective and Civilian Seapower](#), *E-International Relations*.

⁴⁴ Brewster, M. (May 9, 2024). [Drones and AI are rewriting the rulebook on naval warfare — with uncertain consequences](#), *CBC News*.



Figure 7: Russian Navy losses in the campaign between February 24 and May 3, 2022⁴⁵



Figure 8: Ukrainian Magura V5 type USV⁴⁶



Figure 9: Russia is now using the Sea of Azov to launch missiles to operate in Ukraine⁴⁷

As of mid-2024, the Russian Black Sea Fleet has moved its home port from Sevastopol to Novorossiysk, and has greatly reduced the number of its Black Sea voyages. The fleet's patrol areas tend to be far from the Ukrainian coast. Amphibious ships are increasingly kept in port, and offensive operations are limited to launching cruise missiles close to the entrances to its home ports.

Another mission of the Russian Navy was to carry out precision strikes on high-quality military and civilian targets deep inside Ukraine. The attacks were carried out using Kalibr

⁴⁵ Sutton H. I. (May 4, 2022). [Russian Navy's 5 significant losses in the Ukraine war so far](#), *NavalNews*.

⁴⁶ מקור: REUTERS/Valentyn Ogirenko.

⁴⁷ מקור: Altman H. (June 22, 2024). [Ukraine Situation Report: Russia Now Launching Kalibr Cruise Missiles From The Sea Of Azov](#), *Yahoo!News*.

(SS-N-30 Kalibr) missiles, which have a range of 1,500 miles and are highly accurate and carry a half-ton warhead. It is estimated that in the first days of the fighting, Russian submarines and surface ships fired more than 30 Kalibr missiles at targets on Ukrainian territory. Russian submarines are part of the launch system for cruise missiles launched against land targets in Ukraine, and their ability to launch cruise missiles while submerged allows them to get closer to the Ukrainian coast. Following the Ukrainian attacks on the port of Sevastopol and its infrastructure, Russian logistical capacity for preparing these missiles and transporting them to the watercrafts was somewhat compromised. The efforts the Russians made on the issue bore fruit, and starting in June 2024, they managed to establish a logistical capability capable of arming watercrafts in the Sea of Azov.

After the Ukrainian successes in hitting Russian naval watercrafts in the Black Sea, the Russians changed their operational doctrine and, starting in mid-June 2024, began launching Kalibr missiles at Ukraine from surface vehicles located in the Sea of Azov. Ukrainian military officials called the move a "significant turning point" because, as can be seen, the Russians see the Sea of Azov as a safer area than the Black Sea for operating their watercrafts. Accordingly, the Russians began to station their ships in the Sea of Azov instead of the Black Sea, although they left their Kilo submarines in the Black Sea. A Kilo submarine can carry and launch up to four Kalibr cruise missiles while submerged. In addition, three surface ships equipped with Kalibr missiles have been stationed in the Sea of Azov, capable of carrying up to 20 missiles. On June 22, the Russians launched 13 Shahad drones and 16 missiles of various types, including four Caliber missiles, at targets in Ukraine.⁴⁸

In recent months, Russia's efforts to circumvent oil sanctions imposed after its invasion to Ukraine by selling oil to Libya and then to other countries have been exposed. Russian oil revenues since 2022 have amounted to about \$5 billion, flowing to Russia with the blessing of Libyan Field Marshal Khalifa Haftar. Therefore, Russia decided to strengthen its presence in the Eastern Mediterranean. In mid-March 2024, a Russian task force was spotted crossing the Strait of Gibraltar on its way east. The force included two amphibious ships of the Russian Navy's Northern Fleet, BDK-031 'Otrakovsky' and BDK-010 'Ivan Gren', and the Baltic Fleet tanker 'Kola'. The destination of this force's voyage was the port of Tartus in Syria. This seems to mark the return of the so-called "Syrian Express", i.e. the sea route between Russia and Syria via the Mediterranean. The choice of this route probably stems from the fact that the Black Sea route is too dangerous for Russian special cargo due to the threat of Ukrainian Navy drones.⁴⁹

⁴⁸ Ibid.

⁴⁹ *Itamilradar*. (May 29, 2024). [Russian Flotilla Advances in the Mediterranean](#).

In June 2024, a Russian naval force visited the port of Tartus and held joint naval exercises with the Egyptian navy in the Alexandria port area. The group of ships, which includes the Guards Missile Cruiser Varyag and the frigate Marshal Shaposhnikov, also equipped with Kinzhal hypersonic missiles, conducted a joint exercise with Egyptian naval ships at the end of the visit. The Russian news agency TASS took the trouble to note that the arrival of Russian warships in Alexandria is an important step towards strengthening naval cooperation between Russia and Egypt.⁵⁰

Russia is also trying to maintain a presence in the Red Sea. In late May, Sudanese Army Assistant Commander-in-Chief Yasser al-Atta announced that Sudan and Russia would sign a number of military and economic agreements in the coming weeks. Russia's desire to sign an agreement with Sudanese representatives indicates a change in its policy. In the conflict that erupted in 2023 between the Sudanese army and the rebel Rapid Support Forces (RSF), Russia initially sided with the RSF, especially because the Wagner Group (which was run Semi-nationally) had previously received mining rights for Sudan's gold deposits from this group. These rights are a regular source of foreign currency for Russia, as it operates under Western sanctions imposed following its 2022 invasion of Ukraine. Sudan's anthill, Port Sudan, is located in an area controlled by the Sudanese army. If Russia wants a naval base in this port, it must negotiate with the Sudanese military, and it is unclear what impact this will have on the ongoing conflict.⁵¹

Russia is likely to gain a greater foothold in the Mediterranean, as well as the Red Sea, due to the West's unwillingness to stand in its way. Western countries appear unwilling to impose themselves in Africa to limit Russia's advances, and are failing to implement a containment strategy in countries like Libya, which are crucial for the trade in arms, oil, minerals, and migrants from the Sahel.⁵²

Geopolitical considerations of the Russian Federation Navy's activities

On July 31, 2022, on Russian Navy Day, Russian President Vladimir Putin approved a new naval doctrine for Russia. The new doctrine proposes a focus on the Arctic and the Northern Sea Route, as well as an increased naval presence in the Mediterranean and Red Seas, both through existing bases and the establishment of new bases in other territories in the region. Plans for the development of shipbuilding industries in the Crimean Peninsula were also mentioned, as well as the development of new LNG terminals and shipbuilding

⁵⁰ TASS. (June 19, 2024). [Russian, Egyptian warships to holds drills, practice maneuvering](#).

⁵¹ Knipp, K. (June 16, 2024). [Russia's military presence in Sudan boosts Africa strategy](#), DW.

⁵² Fasanotti, F. S. (June 25, 2024). [The Russian strategy in the Mediterranean](#), *Geopolitical Intelligence Services*.

industries in the Far East. While the United States and its allies were identified as the main maritime threat, cooperation with India and Russia's allies in the Middle East was emphasized. The doctrine notes the need for the Russian Navy to increase its visits to foreign ports.⁵³

Reference to the Mediterranean basin (which is referred to as a subregion of the Atlantic region) is updated and more detailed than in the 2015 doctrine. Among other things, it was determined that Russia would like to strengthen its partnership with Syria; would ensure its military presence in the Mediterranean Sea and would be based on the Russian military infrastructure in the port of Tartus (Syria); would work to establish additional techno-logistical outposts in the region; would work vigorously to ensure military-political stability in the Middle East and seek to deepen cooperation with Middle Eastern countries. Evidence of the importance that Russia attaches to this region in general and the importance of Egypt in this relationship is the exercise carried out in mid-June 2024 between warships of the Russian Navy and their Egyptian counterparts near the Suez Canal, in Vladimir Putin's latest show of force – this time at the gateway to southern Europe.⁵⁴

The Russian Defense Ministry reported in early June 2024 that a naval unit, including the missile cruiser Varyag and the frigate Marshal Shaposhnikov, made a port visit to Alexandria, and then conducted military exercises in the Mediterranean Sea. Although the visit was described as a "routine visit", officers from both navies met for talks, and the two navies later held a naval exercise off the coast of Egypt near the Suez Canal. Russia's bilateral relations with Egypt took off following the rise of former General al-Sisi to power in Cairo in 2014. Al-Sisi began to establish positive relations with Russia, and in 2015, Russian and Egyptian watercrafts conducted their first-ever cooperative exercises off the port of Alexandria. In 2018, Russia and Egypt signed a "groundbreaking" comprehensive partnership, and a year later, Egypt signed a deal to purchase billions of dollars worth of Russian military technology, marking a dramatic upgrade in Cairo's defense capabilities. According to the Stockholm International Peace Research Institute, even before that deal, Russian military equipment accounted for about 60% of Egypt's arms imports between 2014 and 2017. In addition to defense and security, Russia has made significant

⁵³ For a comprehensive overview of Russia's naval doctrine in 2022, see: Mirkin, T. (2023). Russia's New "Naval Doctrine" in the Context of the War in Ukraine. In: S. Chorev, and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23*, 250–254 (Maritime Policy & Strategy Research Center, University of Haifa).

⁵⁴ Averre, D. (June 10, 2024). [Putin's new threat on the gateway to the Med: Russia announces joint navy drills with Egypt near crucial Suez Canal trade route in menacing show of strength to southern Europe](#), *Mail Online News*.

investments in Egyptian infrastructure, most notably the construction of the El-Dabaa nuclear power plant.

In conclusion, it is difficult not to be impressed by the inconsistency between the goals set for itself by the Russian Naval Doctrine of 2022 in relation to the reality in the maritime arena, as occurred (and is still occurring) in the campaign between Russia and Ukraine. The performance of the Russian Black Sea Fleet does not correspond to the naval doctrine document, which is in fact part of Russia's national security concept. The naval doctrine document emphasizes the ongoing confrontation between Russia and the United States and NATO, and emphasizes a more central place for the use of force in protecting Russian global interests. It highlights Russia's tendency to turn international waters in the maritime domain into an arena of strategic competition and confrontation between the great powers. Since the document itself was approved by President Putin and published on Russian Navy Day, it may indicate the existing disconnect between Russian President Putin and his senior admirals on the one hand, and the low performance as manifested in the campaign between Russia and Ukraine in the Black Sea, on the other. However, Russia continues to expand its activities in various regions, including the Eastern Mediterranean, through its navy.

The Russian Federation Navy's Force Development Program

Since Putin came to power, he has invested heavily in rebuilding Russia's military, which was badly damaged by the collapse of the Soviet Union, and rebuilding the navy as part of that. At the same time, Russian commercial companies have increased their activities in offshore drilling, laying undersea gas pipelines, and developing the Arctic.

Despite ambitious national plans and considerable financial investment, many problems that limit Russia's development as a maritime power have remained, and in some cases have even worsened. Russian industries, both military and civilian, lack technological know-how, advanced production infrastructure, and manpower in many areas. For example, since the collapse of the Soviet Union, Russia has had one outdated aircraft carrier that it has difficulty maintaining. After the sinking of the cruiser "Moskva" in the war in Ukraine, it has only four cruiser/battlecruiser-sized ships and ten destroyers. All of these ships were launched, or construction began, during the Soviet era, without the ability to build new large ships.

In remarks made by Russian President Putin at the end of June 2024, he noted that one of Russia's goals is to "comprehensively upgrade the Navy, including its ship, aircraft, and coastal defense components, as well as the base infrastructure, in order to strengthen its positions in strategically vital areas of the global maritime domain, as well as drastically

improve its combat potential". Putin added that "a lot is being done in this area, as our fleet is receiving new ships", adding that "deep repairs and overhauls of the equipment are being carried out". The president noted that compared to 2022, when the Russian Navy integrated 24 new ships into its ranks, in 2023 the number was 33, while more than 40 ships and boats are planned to be delivered in 2024.⁵⁵

Nuclear-armed submarines are the main power base of the Russian Navy, and they allow Russia to pose a serious threat to other powers. Russia is successfully building new such submarines and promoting modernization projects for them. In recent years, Russia has introduced a unique array of supersonic missile submarines armed with a powerful nuclear warhead ('Poseidon'). In the conventional field, the Russians are successfully producing corvettes, frigates, and diesel submarines, and arming them with modern and accurate cruise missiles. 'Caliber', which has been widely used against Ukraine and Syria, and soon 'Zircon', a hypersonic missile with an estimated range of 1,000–1,500 km (Figure 10). Russia is the world leader in the production of nuclear-powered icebreakers, which are necessary for the development of the Arctic.

However, all of Russia's naval projects suffer from a multiplicity of models, which makes maintenance difficult; a lack of quality and sometimes negligence – leading to frequent fatal accidents; delays in the development and production schedule; and a high dependence on components from abroad. The Western sanctions regime that has made it difficult for Russian industries even before the current war in Ukraine is expected to pose significant challenges to the development of Russian naval power, which is the subject of the new naval doctrine.

Since the Russian navy is made up mainly of small ships – a "green water fleet" (as opposed to a "blue water fleet", watercrafts designed for the open sea/ocean) – most of its activity is focused on the water basins adjacent to Russia's borders, mainly 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 is an exceptional and unique area where the Russian navy has managed to establish a permanent presence in the post-Soviet era. The naval base in Syria, in the port of Tartus, has been leased to Moscow for decades, as has the air force base in Khmeimim, which provides Tartus with protection. The military importance of the eastern Mediterranean is illustrated these days: Russia has concentrated the bulk of its warships in it and the Black Sea in order to deter the NATO alliance from deepening its involvement in the war in Ukraine.

⁵⁵ TASS – Russian news agency. (June 27, 2024). [Russia's Navy to receive over 40 new ships in 2024 – Putin](#).

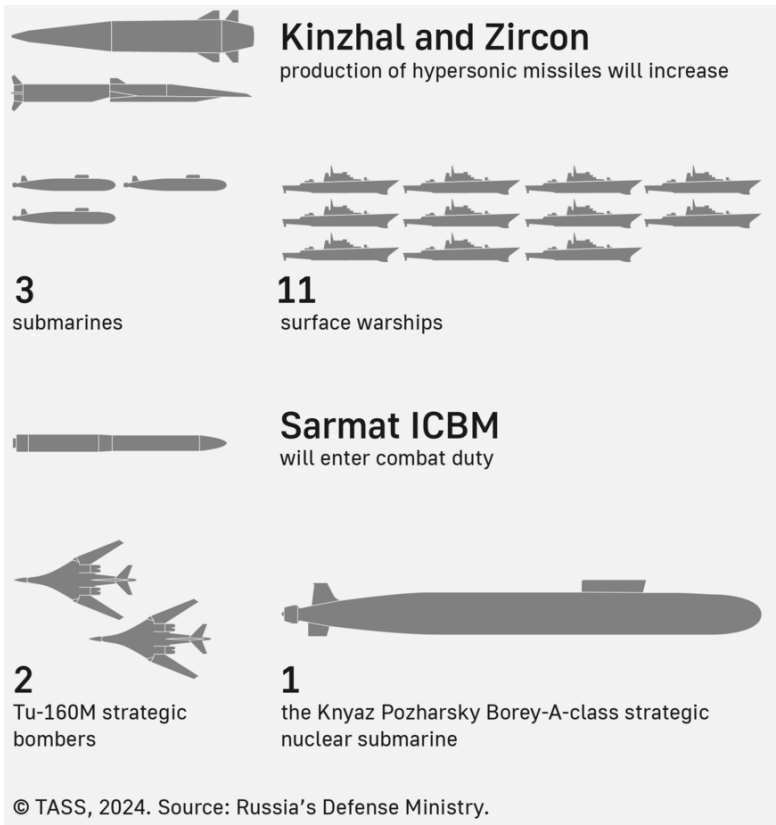


Figure 10: New platforms and weapons expected to enter service in the Russian Navy in 2024⁵⁶

Russian Navy activity in the Atlantic Ocean off the coast of the United States

Despite the defeat suffered by the Russian Navy in the Black Sea in the war with Ukraine, Russia is trying to send a message that its navy is still important in the inter-power struggle and is capable of projecting power against its main rival, the United States. In late May 2024, Russia deployed a Russian nuclear submarine, the *Kazan*, carrying guided missiles with a range of 1,000 nautical miles, for a patrol off the east coast of the United States as part of Russian missile exercises in the Atlantic Ocean.⁵⁷ The submarine is part of a naval task force that Russia has deployed in the Atlantic Ocean that is planned to navigate later to the Caribbean as part of military exercises that Russia ordered to be held in the context

⁵⁶ Tass. (January 10, 2024). [New Russian combat equipment in 2024](#).
⁵⁷ LaGrone, S. (June 11, 2024). [Russian Nuclear Sub, Frigate with Long Range Land Attack Missiles Operating Off East Coast](#), *USNI News*.

of the war in Ukraine. The submarine is accompanied by the advanced guided-missile frigate Admiral Gorshkov, and together they practiced (without live fire) attacking enemy warships at ranges greater than 350 miles. Both can launch the 1,000-mile-range Kalibr land-based cruise missile (3M-54 Kalibr NK), the Oniks P-800 anti-ship missile, and the 3M-22 Zircon hypersonic anti-ship cruise missile. The Kalibr, which is modeled after the American Tomahawk land-based attack missile, is a key weapon for this type of submarine. After completing the exercises, the ships made their way to a scheduled home visit to the port of Havana. U.S. Navy air and sea forces closely monitored the force that operated on June 11 east of Florida. The Russians are expected to continue such exercises, culminating in the annual final exercise in the fall of 2024, and are expected to make further port visits to Cuba and possibly Venezuela, both of which have close diplomatic ties with Russia. A U.S. official who responded said, "This is Russia showing that it is still capable of some level of global power projection".⁵⁸

The Naval Forces of the North Atlantic Treaty Organization – NATO

The second half of 2024 is shaping up to be a challenging period for the North Atlantic Treaty Organization (NATO), the US-led alliance of 32 member states across North America and Europe that aims to help protect each other from external threats. The Russian military continues its attack on Ukraine and its threat to countries bordering Russia, while Russia is already fighting a type of hybrid war against member states. Meanwhile, political challenges within the alliance are increasing on both sides of the Atlantic. In Europe, far-right parties appear to be gaining strength. In France, for example, President Emmanuel Macron has announced early parliamentary elections. Marine Le Pen, leader of the far-right National Assembly in France, has advocated for the withdrawal of French forces from the US-led NATO Joint Command and for a rapprochement between NATO and Russia, which she has openly praised in the past with its president, Vladimir Putin. The 2024 US presidential election poses a unique challenge for NATO. In 2024, the two presidential candidates hold starkly different views on the future of the alliance. While European member states continue to play frontline roles in the alliance and focus on increasing defense needs following Russia's invasion of Ukraine in 2022, the reality on the ground is that the United States remains the de facto mainstay of NATO's ability to deter external attack.

Following the Russian invasion of Ukraine, two additional countries applied to join NATO – Sweden and Finland. The two simultaneously submitted their official letters of application to join NATO on May 18, 2022. NATO heads of state and government extended an invitation to Finland and Sweden to join the alliance at the Madrid summit on June 29.

⁵⁸ Reuters. (June 11, 2024). [Russian warships en route to Cuba hold missile drills in Atlantic](#).

The process itself requires the approval of all 30 NATO member states. NATO members approved Finland's accession to the military alliance in April 2023. As for Sweden, Turkey completed its ratification by the end of January 2024, and on February 26, 2024, the Hungarian parliament ratified Sweden's accession to NATO, thus also becoming a NATO member.

The addition of Sweden and Finland to NATO will increase NATO's capabilities in two critical ways. One is geostrategic: the Baltic Sea will be under the control of NATO members, 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 in the north, but rather a border between Russia and NATO. The result will be a strengthening of NATO's security in the Nordic and Arctic regions at the expense of Russian security. Regarding influence in the maritime domain: Although the Swedish Navy is the smallest of the country's three military branches, the Swedish fleet is equipped with five submarines (3 Gotland, and 2 Södermanland), seven corvettes (5 Visby, and 2 Gävle), eight minesweepers (4 Koster, and 4 Styrsö), 13 larger patrol ships (2 Stockholm, and 11 Tapper), and nine auxiliary ships. The Swedish Navy is considered an advanced fleet based on locally built diesel-electric submarines, one of the most advanced submarines in the world, and the first non-nuclear submarine to have an autonomous air propulsion system that extends its ability to remain underwater from several days to weeks. Sweden has always been known as having an advanced surface fleet and submarine fleet, with advanced and innovative technology, but lacks other components of naval power such as amphibious capabilities, which is why it ranks 27th in the world in the True Value Ranking with a score of 37.8.⁵⁹ Senior officers in the Royal Swedish Navy have stated that upon joining NATO, their first priority for the fleet's area of operation within NATO will be in the Baltic Sea, which they also perceive as "our home turf", and especially in "the Skagerrak/Kattegat Straits, which are important choke points in entering/exiting the Baltic Sea".⁶⁰ The Swedish Navy can and must play an important role in the NATO alliance, and it should be encouraged to infuse its maritime professionalism and strategic culture into NATO, as well as to identify partners with whom it can continue to advance bilateral and multilateral programs, so as to strengthen the entire NATO system. Sebastian Bruns, a senior researcher at the German Institute for Security Studies in Kiel (ISPK), recommends that given the existing patterns of cooperation in NATO, the Swedish Navy could, for example, join the German-Dutch amphibious cooperation to make it trilateral, participating in the German-Danish-Polish (though for now land-focused) Multinational Command Eastern (MNC E) in Szczecin (Poland). Bruns suggests that the Swedes should not be too enthusiastic about expanding

⁵⁹ Swedish Navy (2024) [Current Active Inventory](#): 35 Fleet Units

⁶⁰ Willett, L. (May 30, 2024). [Sweden Builds Naval Outputs To Add Value For NATO](#), *Naval News*.

their missions too much, and avoid making the same mistakes as their close allies in terms of atrophying naval power in favor of a dispersed land force. The Swedish Navy should find the right balance between national defense and NATO commitments and international crisis management, which remains the main challenge for today's naval commanders.⁶¹ The Finnish Navy, which also joined NATO, has been working closely with the Swedish Navy for years, and in recent years has been upgrading its capabilities by refurbishing its Hamina-class fast surface combatants and equipping them with new weapons, including Variable Depth Sonar, and a combination of advanced torpedoes to strengthen Finland's underwater warfare capabilities. Furthermore, the Finnish government approved the construction of four Pohjanmaa-class multi-mission corvettes in 2015 to replace existing minesweepers and other older watercrafts. When completed, these corvettes will have much greater combat capabilities and ranges, and will be able to increase the combat capabilities and versatility of the Finnish Navy in the Baltic Sea region.⁶²

In a rare statement regarding NATO countries' nuclear arsenals, NATO Secretary General Jens Stoltenberg, in a speech he delivered on June 12, emphasized the alliance's efforts to adapt its nuclear capabilities to current security threats, while paying attention to Russia's recent nuclear rhetoric and exercises. In his remarks, he called nuclear weapons NATO's "ultimate security guarantee" and a means of maintaining peace. The NATO defense ministers' meeting held in mid-June in Brussels also included a meeting of the alliance's nuclear planning group. Although the United States is known to have deployed nuclear bombs during the Cold War at several military bases in Europe, NATO rarely talks about these weapons publicly. It is worth noting that in June 2024, the Netherlands announced that F-35 fighter jets are adapted to carry nuclear weapons, and said that the United States is upgrading its nuclear weapons arsenal in Europe.

Since Russia's invasion of Ukraine on February 24, 2022, Russian President Vladimir Putin has repeatedly stated that Russia can use nuclear weapons to defend itself in extreme situations. In early June 2024, Russia announced that its forces had begun the second phase of exercises to practice deploying tactical nuclear weapons alongside Belarusian troops after Russia claimed that it was being threatened by Western powers.⁶³ It is important to note that NATO forces holds nuclear capabilities, especially those defined as "second-strike capabilities" possessed by the submarines of the strategic fleets of the United States, Great Britain, and France.

⁶¹ Bruns, S. (2022). [Svenska marinen in NATO: Opportunities and Challenges](#), *The Royal Swedish Society of Naval Sciences*, No. 4, pp. 381–388.

⁶² [Pohjanmaa-class corvettes](#) (2004). The Finnish Defence Forces

⁶³ Siebold, S. (June 12, 2024). [NATO chief says the alliance is adapting its nuclear arsenal to security threats](#), *Reuters*.

In light of the changing nature of contemporary naval warfare, NATO initiated the Future Naval Warfare Symposium on 29–30 May 2024, which was attended by representatives from all 32 NATO member states, and researchers from NATO accredited Centers of Excellence. The 2024 symposium was opened by Vice Admiral Doug Perry and also included researchers from the Combined Joint Operations from the Sea Centre of Excellence, headed by Phil Nash. The conference sessions dealt with the strategic environment, opportunities, changes and threats. The various sessions and presenters, some of whom also came from academia, made the symposium a significant event that allows NATO, its member states and the maritime community at large to work together in cooperation to solve the array of problems facing the Alliance today and in the future.⁶⁴



Figure 11: NATO force deployment after Russia's invasion of Ukraine⁶⁵

Due to the nature of the fighting in the Black Sea and the success of the Ukrainian Navy in asymmetric warfare against the Russian Navy, the presence and involvement of NATO naval forces in the Black Sea are limited and are mainly concentrated in joint exercises with the Black Sea countries. For example, between April 8 and 21, 2024, Romanian air, naval, and land forces participated in the Sea Shield 24 exercise – a large multinational military exercise held in the Black Sea region, which was joined by 12 other Allied and partner countries. The participating countries are: Bulgaria, France, Georgia, Greece,

⁶⁴ NATO's Strategic Warfare Development Command. (May 30, 2024). [Future Maritime Warfare Symposium](#).
⁶⁵ A map of NATO's Eastern flank. Source: NATO. (June, 2022).

Italy, the United Kingdom, Moldova, the Netherlands, Poland, Portugal, Turkey and the United States. The naval exercise involved 27 surface vehicles (including ships operating on the Danube River), 17 aircraft and 91 vehicles and small boats. The exercise dealt with readiness for missions to combat illegal activities at sea and rivers, maritime control (including on the river), search and rescue at sea, rescue to watercrafts in distress and securing critical infrastructure. The Sea Shield series of military exercises began in 2015.⁶⁶

NATO has officially stressed that its support for Ukraine is unwavering, and the alliance is determined to stand by Ukraine indefinitely. This position is intended to send a strong message to Russia that NATO allies remain united and committed to helping Ukraine repel Russia's illegal invasion. Although some NATO members, particularly those in Eastern Europe, have pushed for Ukraine to join the alliance, it seems unlikely that this will be possible before the end of the crisis in Ukraine, due to the implications of NATO's direct involvement in a war with Russia if Ukraine were admitted as a member.

Considering the need to change NATO strategy

Both the war in Ukraine and the 'Israel-Hamas' war have led a number of analysts and researchers in Western Europe to point to the need for changes in NATO's strategy in all matters related to the maritime domain. The long-standing British think tank RUSI recently completed a comprehensive study on the question "How can NATO's naval power best contribute to the competition with Russia?"⁶⁷ The sources on which this article is based included research on the capabilities of NATO allies and the capabilities of the Russian Federation, as well as an examination of Russian military literature to identify areas where Russia perceives itself as vulnerable in the maritime domain. The researchers conclude that the use of NATO's naval power could contribute more strategically if three changes were made: First, by creating an environment that would force Russia to spend significant resources developing capabilities that would attempt to prevent NATO naval forces from controlling the high seas; second, operations could serve as a catalyst for ending a future war by increasing the costs of a protracted conflict for Russia in the short term, provided that NATO naval forces (in addition to land forces) are integrated into them; and finally, since many of the main watercrafts used by the Russian Navy for substrategic (or "tactical" in Russian parlance) nuclear operations are naval, such as submarines and strategic bombers, and can be countered by conventional NATO capabilities, such a threat to the bulk of Russia's substrategic nuclear-capable force could disrupt the launch capability of

⁶⁶ Marica, I. (April 8, 2024). [Sea Shield 24: Major Romania-led multinational military exercise starts in the Black Sea region](#), *Defense*.

⁶⁷ Kaushal, S., and Balletta, R. (February 1, 2024). [An Asymmetric Approach to the Use of NATO's Maritime Forces in Competing with Russia](#), *RUSI Occasional Paper*.

those watercrafts and significantly change the perception of "tactical" nuclear weapons operations. In addition, the researchers point out three main insights from their study: First, Russia sees the maritime domain as critical to strategic balance – in other words, the ability to both strike an adversary's homeland and deflect a blow from Russia itself. Its view of the Russian Navy's role emphasizes purely naval functions such as achieving maritime dominance. Second, the capabilities Russia needs to perform both roles are capabilities it has great difficulty building. Third, by investing in naval capabilities such as long-range precision strike and operating at a higher pace in Russia's extended periphery, NATO members can impose "opportunity costs" on it, which mean the loss of potential gains from other alternatives when one alternative is chosen by the Russian military.

Events in the maritime domain seem to have exposed the fragile nature of the "maritime order". Today, the prosperity of open economies and societies takes for granted the unrestricted use of sea lanes and the free flow of primary resources along with data, which together define "global connectivity", both physical and digital, as well as interdependence. Many events have clearly exposed the fragile nature of the current global maritime order in various arenas around the world in the past two years. From the damage caused by the explosion of the North Stream 2 pipeline in the Baltic Sea and the cutting of the submarine cables connecting the Matsu Islands to Taiwan to the disruption of grain exports from the Black Sea and the Houthi attacks on shipping in the Red Sea, the oceans are now clearly spaces where international strategic competition is taking place.⁶⁸ These trends mainly affect open and liberal economies such as NATO members.

To compensate for the lack of involvement of NATO fleets in the fight against the Russians, and to avoid a direct military confrontation between NATO members and Russia, the organization's members have sought help from the private maritime sector, which is undoubtedly a component of contemporary sea power. Thus, almost all major shipping companies (including MSC, Maersk, and ONE) have suspended their operations to and from Russian ports, which has affected the Russian economy. This move demonstrates the holistic nature of sea power, which is broader than that exercised by state entities through the use of military forces, and includes the private sector and corporations, whose interests and concerns in this case motivate them to act against Russia using other tools. In addition, the United States, Britain, and other European countries have banned ships flying the Russian flag or owned by Russians, or operated by Russian companies, from entering their ports. These steps are all part of a global, comprehensive diplomatic effort being conducted by public and private stakeholders to put pressure on President Putin's regime.

⁶⁸ Patalano, A., and Missiroli, A. (June 7, 2024). [Contested Seas: European Security and the Fragmentation of the Maritime Order](#), *ISPI – Italian Institute for International Political Studies*.

Naval exercises

In early June 2024, NATO allies held their annual Baltic Sea exercise. The exercise, which took place from June 7–20, 2024 and was called 'BALTOPS 24', involved more than 50 ships, over 85 aircraft, and approximately 9,000 military personnel. The countries participating in the exercise were Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Turkey, the United Kingdom, and the United States. It is worth noting that although Sweden has participated in BALTOPS for more than a decade, this year marks the first time that Sweden has participated in the exercise as a NATO member. The exercise also showcased capabilities and watercrafts assigned to the United States Indo-Pacific Command; This is the first time that forces and capabilities related to this arena have been integrated in the U.S. Navy's area of operations in Europe. The exercise itself was designed to demonstrate the importance of the ability to operate in a coordinated manner with allies in the Baltic Sea and its surrounding areas. The exercise practiced a wide range of capabilities, from amphibious operations, gunnery, anti-submarine warfare, air defense and mine clearance, as well as explosive ordnance disposal, underwater exercises, the operation of surface and underwater unmanned vehicles, and casualty recovery and evacuation.⁶⁹

In the Black Sea arena, the annual NATO naval exercise 'Sea Breeze 2023' took place from September 11–15, 2023, in Constanta, Romania. This is a combined land and sea exercise with multinational allies and partners, aimed at improving the capabilities of the Black Sea maritime security forces, including the gradual training and preparation of the Ukrainian naval command staff. The main objectives of Sea Breeze 2023 focused on mine countermeasures while supporting the participating countries' diving teams, unmanned underwater vehicles, and air crews of US Navy 'Poseidon' (P-8) aircraft.

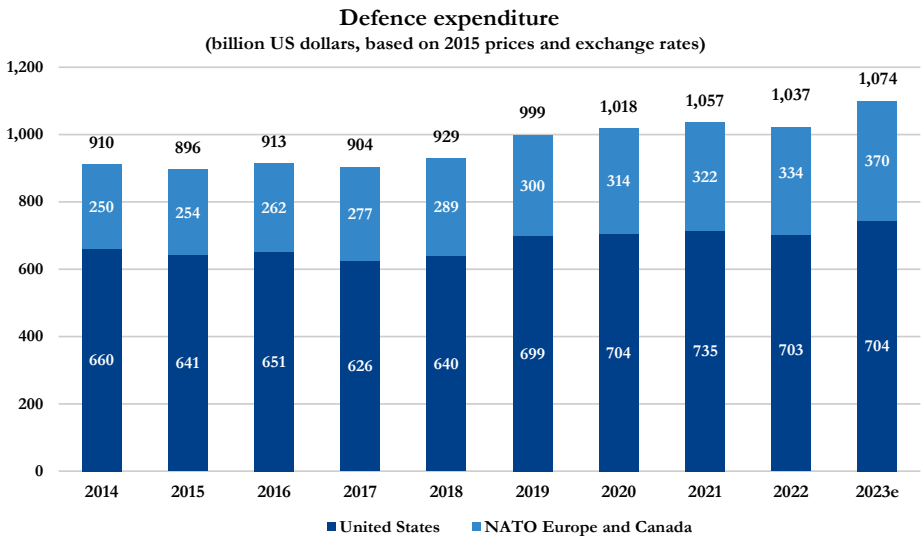
NATO's defense budget

Russia's invasion of Ukraine has led NATO members to recognize that they need to increase their defense spending in the face of what the NATO Secretary General has called "the most serious security crisis of our generation".⁷⁰ Despite the decision made at the Wales Summit in 2014 after Russia's invasion of Crimea to increase defense spending by all NATO members to 2% of each country's GNP by 2024, only 11 of the 30 NATO countries have so far completed the implementation of this decision. However, the rate of increase in defense spending in 2023 for NATO members in Europe and Canada increased by 11% compared

⁶⁹ NATO. (June 5, 2024). [BALTOPS 24 set to Demonstrate NATO agility in dynamic security environment](#).

⁷⁰ NATO website. (March 27, 2022). [Doorstep statement by NATO Secretary General Jens Stoltenberg at the start of the extraordinary Summit of NATO Heads of State and Government](#).

to 3.8% in 2022 (Figure 12).⁷¹ The official policy of the United Kingdom, considered one of the pillars of the North Atlantic Alliance, remains contradictory. It claims that the world is becoming increasingly dangerous, while emphasizing the immediate threat posed by entities such as Russia, international terrorism, and adopting a more hostile view of China, seeing it as a medium-term threat, but conditioning the increase in its defense budget to 2.5% of GDP only when its economic and monetary situation improves.⁷²



Notes: Figures for 2022 and 2023 are estimates. The NATO Europe and Canada aggregate from 2017 onwards includes Montenegro, which became an Ally on 5 June 2017, from 2020 onwards includes North Macedonia, which became an Ally on 27 March 2020 and from 2023 onwards includes Finland, which became an Ally on 4 April 2023.

Figure 12: Defense spending divided between the United States and other NATO members

The aggregate military spending of all 31 members of the organization in 2023 reached \$1,341 billion, an increase of 5.2% from 2022 and 19% from 2014. NATO's total military spending was 55% of global military spending in 2023. The increase over the decade 2014–2023 was partly due to new members joining NATO (Montenegro in 2017, North Macedonia in 2020, and Finland in 2023) and partly to a general upward trend in military spending. All but three NATO members increased their military spending in 2023. Spending decreased in Greece (17%), Italy (5.9%), and Romania (4.7%). European NATO members together accounted for 28% of total NATO spending in 2023, which was the highest level recorded in the 2013–2014 decade.

⁷¹ House of Commons Library. (August 11, 2022). [Defence spending pledges by NATO members since Russia invaded Ukraine](#).

⁷² Dorman, A. (March 26, 2024). [Britain must rearm to strengthen NATO and meet threats beyond Russia and terrorism](#), Chatham House.

In terms of procurement, a total of 28 NATO members met their 2023 procurement target, compared to just seven in 2014. Between 2014 and 2023, the average share of NATO members' military spending on major equipment more than doubled. Following Russia's invasion of Ukraine, Germany set out plans to increase defense spending to more than 2% of GDP through a special fund of 100 billion euros to be earmarked for the modernization of military equipment, spending that would be spread over several years. Germany has never met the 2% target. Germany is currently the third-largest spender in NATO after the United States and the United Kingdom. If Germany does spend this amount, it will surpass the United Kingdom's current defense spending in absolute terms, and become the second-largest defense spender in NATO.⁷³ Poland was one of the few countries that was already spending 2% of GDP on defense before Russia's invasion of Ukraine. Shortly after the invasion, Poland pledged to increase spending to 3% of GDP by 2023, and passed legislation to ensure that this commitment would be implemented. It is still unclear what portion of the additional budget will be allocated to naval reinforcement, whether in watercrafts or combat systems.

Since this report deals with maritime aspects, it will examine how this decision will affect NATO's naval force building. The NATO Naval Force Order Table indicates that there has not yet been an increase in the number of watercrafts in NATO's possession compared to 2023, which can be explained by the long time from issuing a procurement order for the construction of a watercraft to its completion. Many NATO countries have prioritized optimizing land forces for counterinsurgency in the post-9/11 era. It is only in the last decade that NATO navies have embarked on the costly process of budgeting and modernizing their fleets for advanced warfare at sea. It is estimated that this process will only mature in more than a decade, but it is required both for the maritime arena adjacent to Europe – and possibly also for the Indo-Pacific arena – in the conflict scenarios expected in the coming decades.

Table 5: Total number of military watercrafts under NATO jurisdiction as of 2024 (including)⁷⁴

Type of watercrafts	Number of watercrafts	Notes
Aircraft carriers	16	Including the United States
Submarines	139	
Destroyers	95	
Frigates	134	
Corvettes	57	
Minesweepers	151	
Patrol boats	323	

⁷³ Ibid.

⁷⁴ Data source: D. Clark (July 4, 2024). [Number of military ships in NATO 2024, by type](#), Statista.

Most major NATO navies are now engaged in the development and production of surface ships. Britain expects to launch eight anti-submarine frigates by the middle of the next decade, along with another five general-purpose frigates. The Royal Canadian Navy is due to begin receiving a modified version of the British Type 26 frigate in the early 2030s. Spain is due to build five frigates with the US-designed Aegis combat package. Italy already has one of the largest naval surface forces in Europe and will soon receive the final deliveries of its multi-mission frigates (FREMM). France has also reached the end of its last FREMM acquisition cycle, but is still in the early stages of producing smaller frigates. France is in the planning stages of a next-generation nuclear-powered aircraft carrier.⁷⁵ Many of NATO's larger navies require greater investment in air defense capabilities on their surface ships, given their experience in freedom of navigation operations in the southern Red Sea. The proliferation of drones and the ability of organizations such as the Houthis to launch cruise and ballistic missiles against watercrafts have led NATO's surface warfare officials to understand that a defense capability is required against "swarm" or "saturation" attacks in the coastal environment, including from terrorist organizations. The Dutch and German navies are collaborating on characterizing this type of defense for air defense on frigates that will enter the Navy in the 2030s. Capability improvements on existing platforms through upgraded missiles will improve air defense. The Netherlands, for example, is also set to renew the surface-to-air missile capabilities of two of its existing frigates. Germany, Denmark, the Netherlands, and Spain have installed SM-2 (Surface-to-air Standard Missile 2) systems on some of their watercrafts. As for unmanned surface vehicles (USVs), these are expected to take their place in supporting naval mine warfare in the Black and Baltic Seas. The campaign between Russia and Ukraine has reminded those involved in the subject that the threat of Russian forces landing from the sea on the Ukrainian coast, the attempted blockade of Ukrainian ports, and Ukraine's defenses through mines, make it clear that naval mine warfare still remains relevant. The Belgian-Dutch-French project to develop a mothership for remotely controlling and operating USVs is particularly vital as an investment in mine countermeasures. The Polish Navy is also equipping itself with new ships to detect and destroy mines.

In conclusion, it can be pointed out that there is an understanding among NATO partner countries that the nature of naval warfare has changed, which requires the development of new means, their budgeting, and their introduction into the force structure. Due to the long time constants of these processes, the results will only be visible in at least a decade.

⁷⁵ Tallis, J. (April 2024). [NATO's Navies at 75: Five Operational Imperatives to Watch](#), *U.S. Naval Institute, Proceedings* vol. 150/4/1,454.

Cooperation within NATO and NATO's cooperation with Ukraine

The inaugural meeting of the NATO-Ukraine Council was held on July 12, 2023 at the Vilnius Summit at the level of heads of state and government, including the participation of Ukrainian President Volodymyr Zelensky. The meeting decided to approve a three-part support package that brings Ukraine closer to NATO. The package also includes a multi-year plan to assist in rebuilding the Ukrainian security and defense sector, Ukraine's transition towards full interoperability with NATO, and reaffirmation that Ukraine will become a NATO member when the Allies agree and the conditions are met. The change from Commission to Council in 2023 demonstrates the strengthening of political ties and Ukraine's growing integration with NATO. In the Council format, Ukraine sits alongside all NATO member states as an equal participant (instead of NATO Allies meeting a partner, as was the case in the Commission format). It is worth noting that the NATO-Ukraine Council makes all its decisions by consensus, which sometimes affects the effectiveness of its actions.⁷⁶ The Council has a working group of military representatives, which exchanges views and discusses the practical implementation of NATO-Ukraine military cooperation, focusing on developing the capabilities and interoperability of Ukraine's armed forces.

Another aspect of the alliance's cooperation is Turkey's complex relationship with NATO, which has experienced many ups and downs in recent years. Turkey is a close partner of both Russia and Ukraine, actively trying to broker a peaceful solution to the Russian invasion of Ukraine in 2022, and has hosted several high-profile negotiation meetings between the two countries. Turkey is currently the only NATO member that is not on Russia's list of unfriendly countries. The Turkish government's friendly relationship with Russia is not to the liking of many NATO members; but this position allows Turkey to carry out activities such as brokering the Black Sea grain deal and the prisoner exchange between Ukraine and Russia. Turkey's decision at the end of January 2024 to allow Sweden to join NATO, a move that required unanimous approval by all 31 alliance members, somewhat improved relations between it and its allies, primarily the United States. Within hours of Turkey's decision, the United States approved a \$23 billion sale of F-16 fighter jets to Turkey that had been delayed since 2021. The US State Department announced that Turkey would immediately begin receiving upgrade kits for its F-16s, and that the United States would be "happy" to welcome Turkey back into the F-35 program (NATO's most advanced fighter jet) as soon as the issue of Turkey's purchase of the Russian S-400 weapons system is resolved. Despite the optimism that arose after this move by Turkey, researchers familiar with this relationship estimate that "despite the prospects for positive change, the improvement in bilateral ties does not indicate that

⁷⁶ [NATO-Ukraine Council](#). North Atlantic Organization, May 13, 2024.

relations between the United States and Turkey are returning to their starting point, nor that Turkey is returning to the bosom of the United States. The best way for American government officials to approach Turkey is to recognize that the latter is "not leaving" but also "not embracing" the West.⁷⁷

The delay in Congress approving the supply of weapons from the United States to Ukraine and the limitation of NATO countries' assistance to Ukraine to defensive purposes only have resulted in an asymmetry in the operational capabilities between Russia and Ukraine: while Russia does not hesitate to attack population centers and infrastructure (especially Ukraine's electricity infrastructure) deep inside Ukrainian territory, Ukraine is limited to responding in a similar manner against targets deep inside Russia. There has been criticism of the situation within NATO and the United States, and the head of NATO recently stated that Ukraine has the right to strike "legitimate targets in Russia... The right to self-defense also includes the right to strike legitimate military targets on the territory of the attacking, aggressor party – in this case Russia".⁷⁸

An interesting event related to the ongoing war between Israel and Hezbollah is the statement of Hezbollah leader Hassan Nasrallah regarding military cooperation between Israel and Cyprus. Nasrallah threatened Cyprus in the following terms: "We have information that Israel is using airports in Cyprus for training, they will use these fields in the event of war. If Cyprus allows this, it will be part of the war. We continue to support Gaza and are ready for all possibilities. Nothing scares us and will not stop us from this duty. The solution is one: stopping the fighting in Lebanon, Yemen and Iraq – only after stopping the war in Gaza".

The spokesman for the European Commission for Foreign Affairs and Security Policy, Peter Stano, responded from Brussels and declared that "Cyprus is a member state of the European Union. This means that the European Union is Cyprus – and Cyprus is the European Union", and "any threat to one of our member states is a threat to the European Union", he emphasized. It should be noted that Cyprus is a member of the European Union but not a member of the NATO alliance, which provides much more solid security guarantees.⁷⁹

⁷⁷ Cagaptay, S. (January 26, 2024). [The Future of U.S.-Turkish Ties: A New Relationship, Not a Reset](#), *The Washington Institute*.

⁷⁸ *Sky News*. (June 12, 2024). [Ukraine-Russia war: Latest updates](#).

⁷⁹ Ben Ari, L., and Eyal, N. (June 19, 2024). [Nasrallah threatens: "The invasion of the Galilee is still on the agenda, Cyprus is at risk"](#), *Ynet*.

In conclusion, despite the vital nature of the North Atlantic Treaty Organization, there are rivalries and conflicts of interest within it that are difficult to maintain, and the test of the alliance will be whether Russia attacks one of the alliance members and triggers Article "5", which requires the entire organization to mobilize to help the attacked party.

French Navy

The French Navy ranks eighth in the 2024 Fleet Strength Index (TVR – 92.9). The French Navy's main fleet consists of one aircraft carrier, nine submarines, 52 surface ships (destroyer and frigates) and three amphibious assault ships. The average age of the ships is 24 years. The current seven-year military program (Loi de Programmation militaire – LPM) covers the period 2024–2030 and is tailored to meet France's strategic priorities: strengthening deterrence assets; preparing for high-intensity warfare; defending national interests in all French territories, common spaces and key areas. This budget plan will allow the French military to significantly increase its budget, which will reach €413.3 billion over the next seven years.

In the *Maritime Strategic Evaluation for Israel 2022/23*, we noted the negative impact that the cancellation of the Australian submarine procurement deal in France, and the transition to the program known as AUKUS, had on relations with the United States and Great Britain, and its impact on relations within NATO. In this context, it is worth noting that many studies have been conducted to examine the impact of the issue on the complex alliance between the Anglo-Saxon countries and France.⁸⁰

France's involvement in the war between Russia and Ukraine

In 2024, tensions between France and Russia increased, heightened by France's announcement in June 2024 that France would deliver Mirage-2000 fighter jets to Ukraine, train Ukrainian pilots who would be trained in France, and also train soldiers from the Ukrainian army. In response, Russian Foreign Minister Sergei Lavrov issued a stern warning, stating that French soldiers in Ukraine would be considered "legitimate targets". This statement came after Ukraine asked France to help train its soldiers. Ukrainian President Volodymyr Zelensky visited France as part of events marking the 80th anniversary of the Allied invasion of Normandy, and used this visit to reinforce France's support for Ukraine. Since this report focuses on the maritime arena, France's actions in the war between Russia and Ukraine related to the maritime domain will be highlighted.

⁸⁰ Holland, J. (March 2024). [Eglantine Staunton, BrOthers in Arms France, the Anglosphere and AUKUS](#), *International Affairs*, 100(2), 712–729.

The French Navy's aircraft carrier 'Charles de Gaulle' left its home port of Toulon on April 24, 2024 to participate in NATO's 'Neptune Strike 2024' exercise in the Mediterranean Sea, which lasted until May 10. The exercise was designed to demonstrate the synergy between the various NATO forces working together in several areas to protect Allied countries from any threat. During the operation, and for the first time, the French Battle Group (CSG) is under NATO command. As part of this exercise, a French E2C Hawkeye airborne control aircraft carried out an operational mission in defense of the alliance's eastern flank. The aircraft took off from the deck of the aircraft carrier "Charles de Gaulle" on April 30, 2024, conducted a patrol in the western part of the Black Sea, and returned to refuel at the Romanian Air Force base in Borcea Air Base. It is worth noting that the war in Ukraine caused NATO members to pool resources from all participating countries in the alliance, and to increase the level of cooperation (interoperability) in a way that was unprecedented in the past.

French naval activity in the southern Red Sea and the Gulf of Aden

In previous years, the annual **Maritime Strategic Evaluation for Israel** noted the growing importance of the Indian Ocean to France and the allocation of naval forces to operate in this region. Therefore, with the beginning of the Houthi naval blockade operations in the southern Red Sea, France naturally shifted its naval activity in the Indian Ocean to the Gulf of Aden and the southern Red Sea. These ships were for a short time part of the international task force led by the United States in Operation Prosperity Guardian (OPG), which was launched in December 2023 at the initiative of the United States to combat the Houthi threat to commercial shipping in these areas, following a UN Security Council resolution on the matter. However, France later announced that it would not operate with the American task force because the force was carrying out preventive strikes on littoral sites under the control of the Houthis, which, according to French President Macron, could lead to a deterioration of the situation in the region.⁸¹ These tensions may have led to the establishment of the European Union task force, of which France is a part, along with Germany, Greece, and Italy. In February 2024, the European Union decided to deploy a defensive force in the southern Red Sea and the Gulf of Aden, which would include at least four watercrafts in a mission called 'Aspides', which means "shield" in Greek (EUNAVFOR Aspides). France has sent two warships to this region: the frigate Alsace, which has air defense capabilities, and the Languedoc, which is an anti-submarine warfare frigate. The Languedoc has already begun its operations in the southern Red Sea in December 2023, during which it shot down several drones using Aster missiles. The

⁸¹ TheSun. (January 17, 2024). [France will not carry out prevention strikes on Houthi positions to avoid escalation in the region.](#)

cost of the shootdowns (which security analysts estimate amounted to around one million euros per missile) raised the question of the cost-effectiveness of this type of weapon, and the need to find cheaper technological solutions such as laser systems or microwave jamming systems.⁸² This task force was less trained and equipped than the American and British forces, and one of the incidents that indicated this was the mistaken launch of two SM-2 missiles from the German frigate Sachsen at an American MQ-9 Reaper drone. The Reaper survived the incident, but only because the missiles launched from the German frigate failed to function as expected for reasons that are still unclear. These issues raise questions about the preparedness of many European navies and armed forces, which have little operational experience in this type of asymmetric warfare and little ability to deal with threats with high frequency and in difficult theater conditions. This is a situation that European forces have not encountered for many decades.

The mandate of the ASPIDES task force is based on Security Council Resolution 2722, which condemns attacks by the Houthis on merchant ships operating in areas where freedom of navigation is allowed. The resolution "takes note of the right of Member States, in accordance with international law, to defend their watercrafts against attacks, including those aimed at violating the right to freedom of navigation". The term "self-defense" has been interpreted differently by the countries participating in the operations. For example, the United Kingdom and the United States justify their preventive attacks as part of Operation Prosperity Guardian against the Houthis as a means of self-defense in accordance with this Security Council resolution. In contrast, the interpretation of the resolution by the European Union countries is that the ASPIDES task force will not engage in similar preventive measures.⁸³ The issue can be summarized in a number of strategic questions regarding the continued conduct of these two operations:

- How can the EU and the United States establish maritime security in the region without escalating their involvement and prolonging the conflict with the Houthis?
- How can the operations find the synergy to continue their existence in the face of political fragmentation?
- How can the operations promote further coordination with governments in the region?
- How long can the operations last and maintain deterrence against the Houthis?
- How will the separate activities of two operations in the same region (with a common overarching goal) affect the level of operational cohesion?

⁸² Rutenberg, R. (January 11, 2024). [French Navy defends use of million-euro missiles to down Houthi drones](#), *Defense News*.

⁸³ Karlsson (2024). p. 7.

With all of the above, it is worth noting that at the time of the Iranian attack on Israel on the night of April 13–14, 2024, French aircraft deployed at Jordan's request to the Jordanian Air Force base successfully intercepted Iranian drones and missiles fired from Iran at Israel over Jordanian airspace.

The French Navy sets goals for achieving seabed warfare capability

After the sabotage of the Nord Stream 1 and Nord Stream 2 natural gas pipelines (on September 26, 2022) and reports of possible damage to underwater communication cables in the Red Sea by the Houthi rebels in Yemen, security officials in the West began to assess that, following the increase in underwater infrastructure (such as communications, energy, and others), the potential for damage to this infrastructure could be very high. The high damage could cause these targets to serve as a lure for a state attack, or by terrorist organizations. Against the backdrop of the developing threat on the seabed, the French Navy decided to build a seabed warfare capability to secure critical underwater infrastructure to enable its naval operations around the world.⁸⁴ The Navy determined that the first goal in achieving this capability is to create continuous maritime surveillance in order to secure equipment such as pipelines and cables on the seabed. The second objective is to explore and monitor areas of interest – that is, areas where France intends to deploy naval forces to ensure that there are no threats from sensors or explosive devices. This is to allow the navy to deploy its own sensors or weapons to support operational maneuvers, or to retrieve objects from the seabed. These are sea areas beyond France's territorial waters and its Exclusive Economic Zones. In an operational exercise conducted by the French navy in early 2023, various means of remotely operated or autonomous underwater vehicles (ROVs, AUVs), artificial intelligence, microelectronics and improved batteries were tested to enable operations and actions on the seabed. The French navy aims to operate robotic systems that can descend to depths of 6,000 meters below the sea surface, and when this capability is achieved, the French navy will be able to operate on 97% of the world's seabed. Reaching these depths is undoubtedly a technologically challenging task, requiring dedicated platforms capable of carrying large and heavy underwater vehicles. The French Navy is preparing to reach initial operational capability (IOC) in early 2026.

In conclusion, the French Navy undoubtedly has impressive capabilities and serves as one of the foundations of NATO's naval power. Despite the crises of recent years with various NATO members, the Russia-Ukraine war brought it closer to the core of NATO's activities in general, and in the maritime domain in particular.

⁸⁴ Villette, L. (April 5, 2024). [French Navy Sets Out Steps to Reach Seabed Warfare Goals](#), *Naval News*.

The Royal Navy

The British Royal Navy is ranked ninth in the 2024 Fleet Strength Index (TVR – 88.3). The Royal Navy has 66 ships, including two aircraft carriers, two amphibious transport docks, four nuclear-powered ballistic missile submarines (SSBMs), six nuclear-powered attack submarines (SSNs), six guided missile destroyers, nine frigates, seven mine countermeasures ships and 26 patrol ships. The Royal Navy has been reducing the number of warships over the past three decades, mainly following the end of the Cold War. The average age of the ships is 18.7 years.

As you may recall, Britain withdrew from the European Union on January 31, 2020, but remained a member of the NATO alliance. Britain was the most determined of the NATO countries in its opposition to Russia's invasion of Ukraine, and it provides a variety of military, economic, humanitarian, and defense assistance to Ukraine, as well as imposing additional sanctions on Russia and Belarus.

A New UK Maritime Strategy and Lessons from the Russia-Ukraine War

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. The new strategy redefines maritime security as upholding the laws, regulations and norms to enable a free, fair and open maritime domain. In this new approach, the government (rightly) recognizes all illegal, unreported and unregulated fishing, and environmental damage to the sea as a concern for maritime security.⁸⁵ The authors of the strategy document are the heads of five government departments 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 provided the United Kingdom with the ability to develop policies and strategies that represent the priorities and values most important to the British people.

Meanwhile, and in light of the time that has passed since the start of the war between Russia and Ukraine, British researchers and research institutes are trying to formulate insights and lessons from this war, and to examine their applicability to the British Navy, its strategy and the force-building process. Alessio Patalano, Professor of War and Strategy in the Department of War Studies (DWS) at King's College London, and Co-Director of the

⁸⁵ UK Government. (August 15, 2022). [New maritime security strategy to target latest physical and cyber threats](#).

Centre for Grand Strategy (CGS), argues that three main insights can already be drawn from the war.⁸⁶

The first – the geographical component of a grand strategy – is still very important: the Russian Navy has failed to exploit its presence in the Crimean Peninsula, to "translate" it into naval control of the entire Black Sea and to protect its ships whether in ports or while they are on the high seas. The lesson for Britain, which maintains a strong military presence in the North Sea, Gibraltar and Cyprus, is that it is important to find innovative doctrines and appropriate weapons that will allow British forces to stay safe and protected in these bases. This emphasizes the need to find more innovative ways to protect the fleet. Britain is actually currently debating the extent to which mobile and long-range land weapons systems can free up some of the watercrafts that are currently supposed to play the role of protecting the bases, and mainly destroyers with defensive capabilities. Land systems with such capabilities can free up some of the British Navy's forces from protecting its bases, and allow them to carry out more significant missions on the high seas.

The second – how to use drone technology to increase their destructive lethality, or to put it slightly differently: increasing the size and power of the British Navy by combining unmanned and autonomous capabilities, both on the surface, under the sea and in the air. An example of the use of this type of technology is the use made in late May 2024 by Ukrainian forces, who managed to hit the Russian landing ship 'The Caesar Kunikov' belonging to the Black Sea Fleet using unmanned surface vehicles .

Third – one of the questions that arises from the war between Russia and Ukraine and the ability of the Ukrainians to neutralize the Black Sea Fleet is "Is the British Navy obsolete? Are the aircraft carriers obsolete?" It is possible that in these questions we are missing the bigger picture, which is how much the era in which we live is changing. The change can be made through the detection systems and weapons systems installed on watercrafts. It seems that "the fleets will remain absolutely central because without a fleet and the crew members serving on it, it is not possible to project naval power and represent the countries and institutions that those crew members represent and work for across the ocean, far from the shores of the homeland". While the war between Ukraine and Russia is primarily a land and air war, it has highlighted how significant naval technology can be against an unprepared enemy – a lesson that the British Navy must learn and understand before it spends large budgets on the acquisition of the watercrafts and weapons it will need to use in the 21st century.

⁸⁶ Newton, S. (February 19, 2024). [Ukraine war shows Royal Navy how to strike unprepared enemy with maritime tech, expert says](#), *Forces Net*.

Royal Navy Order of battle and Force Building Plan

The 2010 Strategic Defense Review found that the total number of destroyers and frigates, which stood at 23 at the end of the Cold War, would continue to fall to just 19 if the force-building plan was not changed. As part of the increase in defence spending announced in November 2021, then-Prime Minister Boris Johnson said he wanted Britain to be "the leading naval power in Europe".⁸⁷ This ambition implicitly included the intention to halt the decline in the fleet and increase it to at least 24 ships by the first half of the 2030s. The new watercrafts entering service will include the new Type-26 and Type-31 frigates, and the recently announced initial design for the Type-32. The Royal Navy is not the only navy facing the challenge of trying to rebuild a larger number of watercrafts, deliver and introduce new technologies and capabilities while the industrial capacity to do so is dwindling. Therefore, there is a concern that before the number of watercrafts increases, the Royal Navy will be forced to decommission aging watercrafts and reduce its order of battle.

Britain is nearing the end of an ambitious force-building program, the highlight of which is the entry into operational service of two aircraft carriers: HMS Queen Elizabeth and HMS Prince of Wales. Due to a mechanical problem with the propulsion system, the participation of the aircraft carrier "Queen Elizabeth" in the 2024 Nato Steadfast Defender exercise, which began in mid-February 2024, was canceled. While American aircraft carriers are a very important element of the operational activities of the United States Navy in both the Middle East and East Asia, and in addition to fulfilling their role as "gunship diplomacy" and platforms for attacking enemy infrastructure on the coast (as in the case of the Houthis in the southern Red Sea), the two aircraft carriers of the British Navy suffer from long period of preparing for operational readiness, and so far have not made any contribution to the security missions of the British Royal Navy.

The Royal Navy is in the process of characterizing six new, state-of-the-art amphibious ships to demonstrate the Royal Marines' capabilities ashore wherever the world may require them. The new Multi Role Support Ships (MRSS) will replace HMS Albion and HMS Bulwark, the Royal Navy's current amphibious flagships which will remain in service until 2033–2034. The ships will be multi-role in their missions, capable of operating in a wider range of missions, and will be able to carry vehicles, aircraft, drones and a wide range of complex unmanned systems. They will also be able to act as first casualty recovery ships, providing emergency medical care to British forces wherever they are deployed. The UK Ministry of Defense has entered the first phase, Concept Design, of the MRSS program

⁸⁷ IISS. (August 5, 2022). [UK Royal Navy fleet numbers: More or less?](#)

and will work with industry as part of early market engagement to develop the watercraft design.⁸⁸

The submarine fleet is in the process of being strengthened: In total, the submarine fleet is planned to include seven Astute fleet submarines. As of May 2024, the first six submarines are in use and in service, while submarine number seven is in the final stages of construction.

The UK Royal Navy's involvement in Operation Prosperity Guardian

Between January 11 and February 24, 2024, the United States and the United Kingdom conducted four joint naval and air strikes against the Houthis in response to their continued attacks on shipping. The United States also conducted a series of separate operations. The British strikes in 2024 followed warnings from the British Defense Secretary that the United Kingdom was prepared to use military force to stop the Houthi attacks, following a January 2024 UN Security Council resolution demanding an end to them.⁸⁹ To date, US and British forces have conducted six air strikes against targets in Yemen.

Regarding the mission of keeping shipping lanes open in the southern Red Sea and the Gulf of Aden, and even before the British decision to join Operation Prosperity Guardian, in mid-December 2023 the British destroyer HMS Diamond intercepted a Model 45 Houthi drone. The extent to which this combat description was new to the British Navy can be learned from the words of British Defense Secretary Grant Shapps, who said, "This is the first downing of a watercraft of this type in recent decades for the British Navy".⁹⁰

Britain operated between 2–3 watercrafts (frigates and destroyers) in the Red Sea region, and it seems that continuously operating three watercrafts on this mission was a heavy burden for the British Navy, which over time reduced it. The destroyer HMS Diamond previously operated in the region from December 2023 and throughout January 2024, maintaining an almost constant presence in the "high threat area" of the Red Sea. The destroyer operated under Houthi attacks in three separate attacks, successfully destroying nine drones using the Sea Viper missile system, Vulcan Phalanx guns, and 30 mm cannons installed on it. In March 2024, the frigate HMS Richmond replaced HMS Diamond, and during its deployment it managed to shoot down two drones launched by

⁸⁸ Royal Navy. (May 14, 2024). [Six new amphibious warships to be built for Royal Marines operations.](#)

⁸⁹ UN Meeting Coverage & Press release. (January 10, 2024). [Adopting Resolution 2722 \(2024\) by Recorded Vote, Security Council Demands Houthis Immediately Stop Attacks on Merchant, Commercial Vessels in Red Sea.](#)

⁹⁰ Atkinson, E. (December 16, 2023). [HMS Diamond: British warship shoots down suspected attack drone in Red Sea, BBC News.](#)

the Houthis using Sea Ceptor missiles. At the end of May 2024, the Royal Navy warship HMS Duncan left Portsmouth on its journey to the Red Sea. HMS Duncan is also armed with the same Sea Viper missile system and is equipped with the same radar systems capable of accurately identifying distant threats. In contrast, surface vehicles in the British Navy lack the ability to attack targets on shore, as the Tomahawk missiles received from the Americans were installed in their underwater version on the British Astute-class submarines, but not on the Navy's surface vehicles. The Naval Strike Missile is a sea-to-sea and sea-to-land missile, developed by the Norwegian company Kongsberg Defence & Aerospace for ranges of more than 100 nautical miles.⁹¹ The missile is scheduled to receive initial operational capability in the British Navy in mid-2024. This capability is needed today more than ever in asymmetric warfare scenarios in littoral waters.

The British Navy's activities in the Red Sea provided a painful reminder of the need to balance the size of the fleet with its operational commitments, in terms of the type of watercrafts it possesses and the size of the force, in order to meet the fleet's current missions and those that will be required in the future, all in a changing international environment with multiple threats.

Indian Navy

The Indian Navy is one of the largest navies in the world, and is ranked seventh in the world in the 2024 Fleet Strength Index (TVR – 99.1). It is preceded by the Japanese Navy with a score of 121.3, while the British and French navies are ranked 8th and 9th respectively.⁹² Its main combatant fleet includes 102 watercrafts, (one aircraft carrier, 17 submarines, 75 major surface vehicles and nine amphibious ships). India is expected to launch a second Arihant-class submarine (SSHN Arihant) for its strategic fleet, as well as a second aircraft carrier (designed and built in India), but there are currently delays in this plan.

India emphasizes the mission of the Indian Navy in protecting India's resources, maintaining open trade routes to support economic development, and maintaining its international standing in the world. India has a very long coastline of 7,516 km, and therefore India is required to build and operate a large and strong navy that is always at a high level of readiness. So that in the event of a security crisis, or natural disasters such as floods, droughts, cyclones, earthquakes, and other disasters, it can fulfill its missions effectively and safely. India's soft power has always been ahead of its hard power, but in the last decade it has tried to strike a balance by expanding its naval power, albeit without threatening its neighbors, but out of protecting its interests. Many factors are influencing

⁹¹ Kongsberg. [NSM™ Naval Strike Missile \(NSM\)](#).

⁹² [Indian Navy](#) (2024).

the paradigm shift in India's maritime security strategy. First, its bordering countries are nuclear-capable, such as China and Pakistan; the United States, which since the early 2000s has seen India as an important power worth harnessing in its struggle against China in the Indo-Pacific region; and other non-state actors, who also play a vital role. India is concerned about China, which is clearly moving toward becoming a global superpower by directing its resources toward the sea in general, and the geopolitical importance it attributes to the Indian Ocean through its Belt and Road Initiative in particular.

However, despite the United States' attempts mentioned above to harness India as one of its allies in the Indo-Pacific region, India continues to maintain its ties with the countries of the revisionist bloc, primarily Russia and Iran. Thus, in an unprecedented move, ships of the American, Iranian, and Russian navies participated in February 2024 in the 12th joint naval exercise called 'MILAN', which took place in India in the port city of Visakhapatnam from February 19–27. This is despite the ongoing tensions and conflicts between the participating countries, including the United States' involvement in Ukraine, which is at war with Russia, and the United States' opposition to Iran's support for the Houthis and their activities in the Red Sea. The US Navy represented by the destroyer USS Halsey, while the frigate IRIS Dena will represent Iran, and the cruiser Varyag of the Slava series will represent Russia – all alongside other navies. Through this type of exercise, India is emphasizing its view that establishing a platform where naval forces from countries with adversarial relations are willing to participate in an exercise with a common goal and to encourage dialogue and cooperation on a neutral basis is a testament to India's ability and unique status as a country capable of navigating complex international relations.⁹³

India's interests as a prominent naval power in the Indian Ocean have been affected by China's expanding influence in the region, leading India to review its naval missions and regional maritime engagement. India is seeking to overcome its capacity limitations in regional cooperation, leveraging its geographical advantages and operational experience by improving its regional footprint. In addition, the Indo-Pacific presents new opportunities for India's power aspirations, allowing India to expand its influence beyond its immediate region, and affirming India's status as a security provider and protector of the maritime domain.

India Navy Naval Power Development

To address the existing imbalance between the Indian Navy and the Chinese Navy (which India uses as a reference fleet), the Indian Navy plans to acquire a number of new and

⁹³ Naval News Navy 2024. (February 19, 2024). [US Navy trains alongside Russian & Iranian ships at India's Milan 2024 exercise.](#)

advanced watercrafts, especially submarines (both nuclear and conventionally powered). The second submarine, INS Arighat, will become operational in 2024. Two more Arihant-class submarines are in various stages of construction and are scheduled to join the Indian Navy by 2025. Three submarines larger than Arihant (S-5 model) are planned to be built in the second half of the decade. The Indian Navy is preparing to build six nuclear attack submarines, and to replace the leased SSN INS Chakrat with a newer Russian Akula-class submarine by 2025, underscoring its special relationship with Russia.

To ensure the survivability of India's strategic submarines while in port, India launched a project called the Varsha Project, which is designed to build a strategic naval base that will enable the survivability of about 12 nuclear-powered ballistic missile submarines (SSBNs). The base is located 50 km from Visakhapatnam – the headquarters of the Indian Navy's Eastern Naval Command. The most striking feature of the base is that it is built as a vast underground complex, revealed through satellite imagery, which includes tunnels that are apparently intended to enable the survivability of the strategic submarines when they are not at sea.⁹⁴

The underground base is designed to protect the Indian Navy's strategic submarines (SSBNs) from air threats and also to conceal the submarines anchored there from any means of observation, and includes logistical support facilities designed to support the submarines and prepare them for their mission at sea. The geographical location of the base allows for strategic control of India's vital shipping lanes in the Indo-Pacific region. The base's location also allows for a rapid response to regional threats as well as cooperation with India's Bhabha Atomic Research Centre (BARC), which is responsible for developing nuclear warheads.

The nuclear threat to India comes from two main rivals – Pakistan and China. The strengthening military relations between China and Pakistan are not anchored in an institutional alliance, but in recent years the two countries have increasingly found overlapping interests in their cooperation. For example, in May 2024, it was reported that Pakistan launched its first Chinese-built Hangor submarine. This is an export version of the Type 039B Yuan conventional submarine (SSK). In April 2015, Pakistan signed a contract with China to build eight submarines – four of which are being built in China and the rest in Pakistan. Pakistan would gain significant underwater strike capability from these submarines if it armed its submarines with Chinese Babur-3 cruise missiles (SLCM) with a range of 450 kilometers. There is a lower probability that Pakistan will arm these missiles with a (tactical) nuclear warhead, which could help it counter India's superior conventional military power while making its nuclear weapons survivable from possible

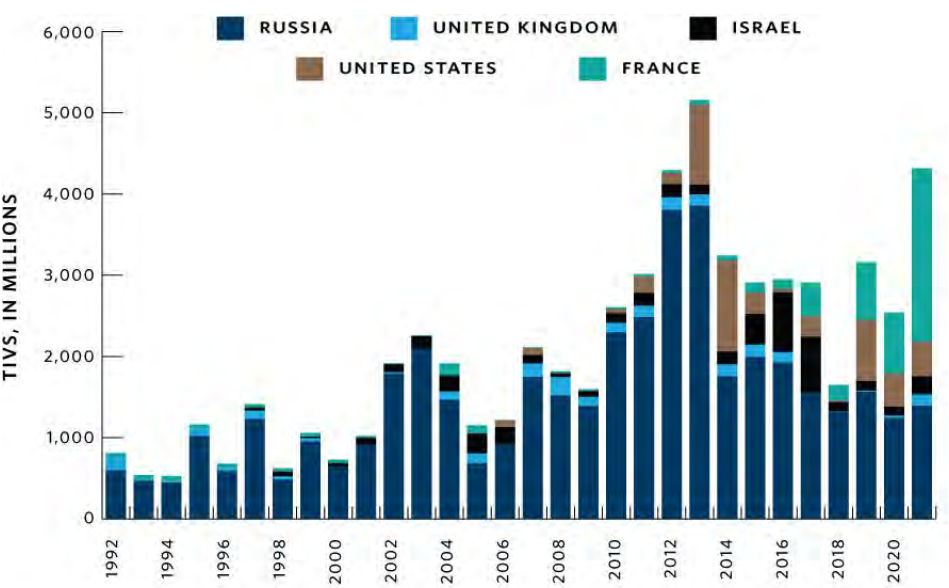
⁹⁴ Honrada, G. (June 4, 2024). [India making Bay of Bengal into a nuclear launchpad](#), *Asia Time*.

preemptive strikes, and would also allow Pakistan to maintain a credible Second Strike Capability. While China is currently the primary enabler of Pakistan's nuclear weapons program, in reality it may choose to keep a safe distance from Pakistan's ambitions given that Pakistan is not a signatory to the Nuclear Non-Proliferation Treaty.

By the end of the decade, the Indian Navy is preparing to complete the construction of seven Radar cross section stealth frigates (RCS), and four Admiral Grigorovich-class frigates, two being built by Russian shipyards and two in India.

The goals of the naval power building program

Russia remains the main supplier to the Indian military, but its share of Indian arms imports has declined from 76% in 2009–2013 to 58% in 2014–2018, and then to 36% in 2019–2023. Instead, India has turned to Western suppliers, mainly France and the United States, and its own arms industry to satisfy its large demand for arms (Figure 13). Reliance on India's own development and production of equipment, platforms, and systems has become a strategic goal.



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 13: Distribution of India's procurement sources by country⁹⁵

⁹⁵ Source: Rajan Menon and Eugene Rumer. (September 20, 2022). [Russia and India: A New Chapter](#), Carnegie Endowment for International Peace.

In contrast, its rival Pakistan is expanding its arms purchases from China, and in 2019–2023, 82% of its arms imports will come from China. This is an increase from 69% in 2014–2018 and 51% in 2009–2013.⁹⁶ The trend towards self-development and production in India has already found expression in "Indigenization" and "Make in India". Accordingly, a 10-year Integrated Capability Development Plan has been adopted, replacing the previous 15-year Maritime Perspective Command (MPCC). The major change in planning will provide a response to the development of the Maritime Theatre Command and provide greater flexibility in modernization in light of rapid changes in technology.

The Indian Institute of Technology (IIT) Kharagpur and the Indian Navy have signed a cooperation agreement to promote innovation in the Indian Navy through joint research. According to the agreement, the areas of study will include areas of interest to the Indian Navy.⁹⁷

Future projects

The Vikran aircraft carrier being built in India will consume a major share of the total budget allocated for procurement within India. In the field of anti-submarine warfare, the Indian Navy is preparing to build the new ships at the Garden Reach Shipbuilders & Engineers Ltd (GRSE) shipyard in Calcutta, and they are planned to replace Russian Abhay-class corvettes.

The Indian Navy is preparing to complete the procurement of seven Nilgiri-class Advanced Stealth Frigates from Mazagon Dock Shipbuilders Ltd (MDSL) and Garden Reach and Shipbuilders Ltd (GRSE). The local content in this project is expected to be about 75% of its total cost. The Indian Navy has also allocated an initial budget for the development of eight New Generation Corvettes (NGC).

Indian Navy commanders are eager to continue with the long-term modernization program of acquiring a twin-engine fighter aircraft that can operate from its aircraft carriers (a naval version of Tejas) that is being developed in collaboration with several Indian research organizations. This is undoubtedly a challenging program that will require the Indian industry to undergo a cultural change in terms of competition (the Indian shipbuilding industry is monopolized by public companies), production quality, and meeting delivery deadlines for watercrafts and weapons – all of which have proven to be problematic in the past.

⁹⁶ Ray, K. (March 11, 2024). [India again tops global arms imports, Russia main supplier: SIPRI](#), *Deccan Herald*.

⁹⁷ *The Hindu*, (March 20, 2024). [IIT Kharagpur, Navy join forces for technology development](#).

Indian Navy activities

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

With the increasing importance of the Red Sea for international trade, the Indian Navy's activities in the western Indian Ocean and the Red Sea have expanded. The unexpected and dramatic resurgence of piracy off the east coast of Africa has led the Indian Navy to increase its activities in the area east of the coast of Somalia, and it has deployed the largest naval force ever in its history to the region since the beginning of 2024 to secure shipping activities against the piracy threat.⁹⁸

The Indian Navy frigate INS Talwar, operating as part of the Canadian-led Combined Task Force (CTF) 150, conducted patrol for Interdiction of Illicit Narcotics in the spring of 2024 as part of this task force, and on April 13, succeeded in capturing a boat smuggling 940 kg of drugs in the Arabian Sea. The frigate operated as part of a targeted operation, 'Crimson Barracuda'.⁹⁹ Operation Crimson Barracuda, which concluded on April 15, focused on combating the use of the high seas by terrorist and criminal organizations to conduct smuggling operations in the Western Indian Ocean region. Combined Task Force 150 (CTF 150) is one of five combined maritime task forces tasked with deterring and disrupting the ability of non-state actors to transport weapons, narcotics, and other illicit substances in the Indian Ocean, Arabian Sea, and Gulf of Oman. The force, which includes 42 nations, upholds international order by maintaining and promoting security and stability across 3.2 million square miles of waters surrounding some of the world's most important shipping lanes.¹⁰⁰

India is a member of the Quad, a group committed to supporting a free and open, inclusive and resilient Indo-Pacific region. Prime Minister Narendra Modi attended the second Quad Leaders' Summit in Tokyo on 24 May 2022, along with Japanese Prime Minister Fumio Kishida, US President Joe Biden and Australian Prime Minister Anthony Albanese.

At the same time, India continues to maintain a close relationship with Russia.¹⁰¹ The Russian and Indian navies held a two-day naval exercise, PASSEX, in the Bay of Bengal in

⁹⁸ Johnson, K. (February 14, 2024). [How Pirates Kick-Started India's Navy Into Action](#), *Foreign Policy*.

⁹⁹ *Combined Maritime Forces*. (April 16, 2024). [Indian Navy Carries Out First Drug Interdiction as CMF Member](#).

¹⁰⁰ For more on India's maritime policy, see: Vaasu Sharma, *Nautical Resilience: India's Ongoing Maritime Security Evolution*. This Volume.

¹⁰¹ Sehgal, M. (January 16, 2022). [The Indian Navy's indigenous INS Kochi takes part in joint exercise with Russian warships](#), *India Today*.

November 2023, which was described as "strengthening maritime cooperation". The joint exercise was held to help "both navies jointly address global threats and ensure the safety of civil shipping in the Asia-Pacific region".

In conclusion, the Indian Navy will continue to try to position itself as having strategic capabilities and naval power in order to deter India's traditional rival, China, from exerting influence in the Indian Ocean region. Despite the ongoing attempts by the United States to make India a close ally and to sever it from its traditional ties with Russia, India, in the spirit of the Non-Alignment Movement, will try to continue to maintain the diversity of its procurement sources and its cooperation with countries such as Russia. In the wake of the Russian invasion of Ukraine and the annexation of the separatist territories to Russia, India has expressed its position against the Ukraine war more firmly in order to counter criticism that India is demonstrating a weak policy towards Russia, but it has not yet presented Russia as responsible for the invasion, and it is unlikely to change its policy regarding imports of cheap Russian oil and coal.¹⁰² India will also maintain its membership in the Quad Security Dialogue, a strategic dialogue between the United States, Japan, Australia, and India, which takes place through talks between the member states on the one hand, and the strategic relationship it has developed in recent years with the United States, on the other. The issue will also be reflected in India's maritime strategy, which is updated from time to time. In August 2023, the navies of Australia, India, Japan, and the United States held the 27th edition of the Malabar Exercise off the coast of Sydney, Australia. This is the first time that Australia has hosted the exercise, which began in 1992 as a bilateral naval exercise between the Indian Navy and the United States. The number of such exercises has grown significantly over the past three decades in terms of the scope, complexity, and sophistication of the maneuvers carried out by the partner navies, reflecting the self-confidence and sense of common purpose among the four participating nations. The four partners appear to share a similar strategic vision that translates into a deeper understanding of the strategic purpose of their interactions and how they will improve operational effectiveness through military cooperation such as these naval exercises.¹⁰³

India's position on the 'Israel-Hamas' war and its implications for maritime domain

India, which officially maintained a neutral position regarding the Israel-Hamas War, was dragged into the crisis when a commercial ship navigating towards Pipavav, in the Indian

¹⁰² Das, K. N. (September 28, 2022). [Devijot Ghoshal, Analysis: India sharpens stand on Ukraine war but business as usual with Russia](#), *Reuters*.

¹⁰³ Rajagopalan, R. P. (August 21, 2023). [Malabar Exercise Brings Quad Navies Together in Australia](#), *The Diplomat*.

state of Gujarat, was allegedly hijacked by the Houthis. In another case, a ship called Chem Pluto was attacked by a missile launched by the Houthi rebels. Just a day later, a Gabonese-flagged ship with an Indian crew on board was hit by a drone just 200 nautical miles off the Indian coast¹⁰⁴. In response, the Indian Navy sent watercrafts and aircrafts, including surveillance drones, patrol aircrafts, a guided missile destroyer, and frigates. To improve its performance in this area, the Indian Navy conducted one of the largest exercises in the region in recent years in the Arabian Sea in mid-January 2024, which included a coordinated deployment of over 35 aircraft. The Indian Navy also responded to a distress call from a Marshall Islands-flagged ship and assisted it to ensure the safety of the ship and its crew.

On the international front, India has refrained from joining the multinational Operation Prosperity Guardian despite an invitation from the United States. As such, India must act more decisively in the diplomatic arena, including working with the United States and other countries, to effectively address safe shipping lanes, especially in light of its goals of providing secure and safe shipping in the Indian Ocean. India's relatively minor response to attacks on ships bound for India can only be explained by India's desire to use the time and space to respond in a way that maximizes its interests.

Turkish Navy

The Turkish Navy is ranked 10th in the world in the 2024 Fleet Strength Index (TVR – 80.5), and consists of one aircraft carrier, 12 submarines, 72 surface vehicles (destroyer, frigates and corvettes) and five amphibious landing ships. The average age of the fleet's platforms is 19.6 years, reflecting the ambitious force-building program it is undertaking.

The impact of Russia's invasion of Ukraine on Turkish policy

The Russian invasion of Ukraine made Turkey a major 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 its support for Ukraine's sovereignty and territorial integrity. Turkey provided Ukraine with armed drones and closed the Bosphorus and Dardanelles Straits to the passage of warships of the warring parties. In late July 2022, its diplomatic efforts to ease the blockade of grain from Black Sea ports were welcomed, and an agreement was reached under the auspices of the UN and with the consent of the parties.

¹⁰⁴ Saha, R. (January 26, 2024). [Making Sense of India's Muted Response to the Red Sea Crisis](#), *The Diplomat*.

Russia's withdrawal from the Black Sea Grain Initiative (BSGI) in July 2023 was met with an international storm. Ukraine's allies and food import trading partners feared the worst-case scenario for global food security and for Ukraine's economy. However, the worst-case scenarios that were predicted did not materialize: global food prices, including grain prices, continued to decline steadily throughout 2024, partly due to increased agricultural exports from Ukraine. In mid-August 2023, following the termination of the BSGI, Ukraine announced the new Ukrainian Corridor, a route passing through the territorial waters of NATO member states, Romania, Bulgaria, and Turkey, which allowed Ukraine to resume large-scale shipments of agricultural products since October 2023.

Following Erdogan's re-election as Turkish President in May 2023, Turkey's "relations pendulum" swung back in favor of the West at the expense of Russia. Russian-Turkish relations became strained after the Turkish government expressed its support for Sweden's NATO membership and transferred five commanders from the Azov battalion in Ukraine to Kiev. These commanders were in Turkey as part of a prisoner exchange agreement between Russia and Ukraine. Following these developments, Russia refrained from renewing the grain agreement brokered by Turkey. The deal had previously allowed Ukraine to export almost 33 million tons of grain, thereby alleviating the global food crisis. Russia argued that there was no reason to extend the deal, and demanded an improvement in its grain and fertilizer exports (which had been hit by international sanctions). On the western front, Turkey not only normalized its relations with Greece and various Western partners, but also with Europe, with the EU Commission and the Turkish representative adopting a forward-looking strategy aimed at strengthening long-term relations with Turkey. The joint statement issued on November 29, 2023, includes calls for the restoration of high-level dialogue – China, the EU and Turkey – on economy, energy and transport, the resumption of meetings of the Joint Committee Council and political dialogue at ministerial level, the revival of discussions on the modernization of the EU-Turkey Customs Union, and the easing of visa restrictions. This strategic move by the EU was welcomed by the Turkish government.¹⁰⁵

Turkish companies are emerging as significant suppliers of arms to Ukraine and are supporting US efforts to solve Ukraine's ammunition shortage. However, this support poses a challenge to Ankara's efforts to balance its relations with Moscow against its Western allies. At the same time, Turkey has improved its relations with the United States and even coordinated with it the production of weapons to help Ukraine. The new US ammunition factory in Texas uses equipment from the Turkish company Repkon.

¹⁰⁵ Musil, P. A. (March 28, 2024). [How Türkiye's balancing strategy between Russia and the West matters](#), *Institute of International Relations Prague*.

At the same time, Turkey is increasing its presence in the Black Sea. On January 11, 2024, Turkish Defense Minister Yaşar Güler inaugurated a joint naval force with Romania and Bulgaria, in which the three countries will deploy minesweeping ships (Mine Countermeasures Group), patrol ships, helicopters, and drones to conduct scans and clear shipping lanes in the Black Sea of drifting mines that were laid during the Russia-Ukraine war, which could endanger watercrafts navigating in these lanes. The established mine detection and neutralization force is theoretically open to the joining of other NATO members, but it should be remembered that at the beginning of the war, Turkey was careful to enforce the international convention prohibiting military ships from non-Black Sea countries from passing through the Bosphorus.¹⁰⁶

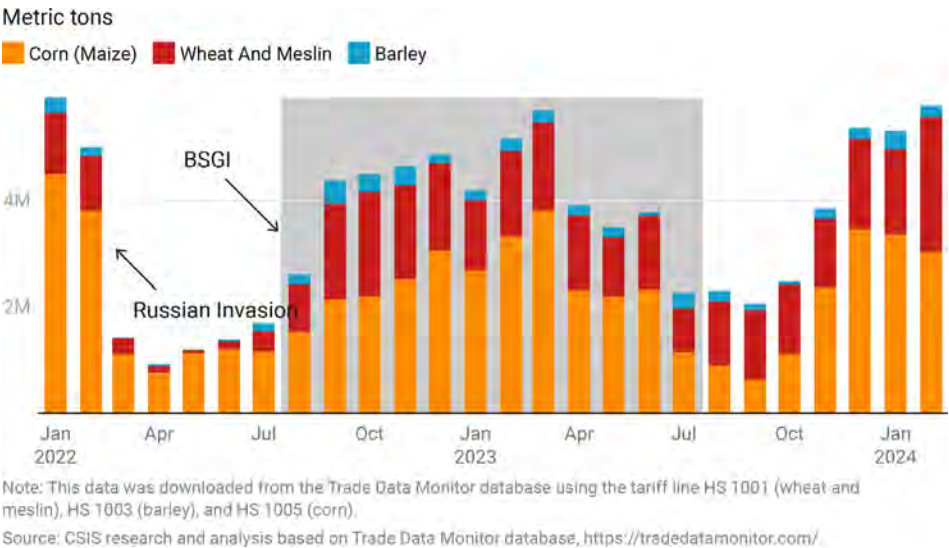


Figure 14: Ukraine's grain exports from January 2022 to February¹⁰⁷

Researchers at the Center for Strategic International Studies in Washington point out that recognizing the success of the Ukrainian government, its military, diplomats, and international partners in securing the Ukrainian corridor is an important and deserved show of confidence by U.S. policymakers. However, overestimating Ukraine's grain exports, even unintentionally, could imply that Ukraine's agricultural sector is recovering to pre-war levels of activity, and underestimate the ongoing threat of the war to

¹⁰⁶ Bechev, D. (February 7, 2024). [Closer Ties to the West Don't Mean Turkey Will Give Up On Russia](#), *Carnegie Politika*.

¹⁰⁷ Dodd, E., Welsh, C., and Glauber, J. (May 12, 2024). [Setting the Record Straight on Ukraine's Grain Exports](#), CSIS.

Ukraine's economy and global food security. Revitalizing Ukraine's agricultural economy and restoring its role as a major global food supplier requires increased investment in all aspects of Ukraine's agricultural sector in order to maintain pre-war export and production capacity. This has proven to be a much greater and more complex challenge than securing a vital, but single, trade route in the Black Sea.¹⁰⁸

Turkey's ambition to become a gas supply hub for Europe

Turkey's efforts to become a natural gas supply hub began two decades ago when large gas deposits were discovered in the Eastern Mediterranean. Due to strained relations with Israel, Egypt and Cyprus and the establishment of the Middle East Gas Forum, this description no longer seems relevant to the Turks.

Turkey, which has not abandoned its ambitions on the subject, has examined other options, one of which is with Russia, a global gas power. In September 2023, during a meeting between Putin and Erdogan in the city of Sochi, a roadmap was mentioned between the Russian energy company Gazprom and the Turkish oil pipeline corporation BOTAS, for the establishment of a gas hub in Turkey, and the two sides agreed to establish a joint working group. In the opinion of both countries, a regional natural gas hub would contribute to Turkey's security as well as to the energy supply of Europe, which is heavily dependent on natural gas imports, mainly from Russia. News published in the international media on the subject noted the fact that Russia and Turkey disagree about who should be responsible for the hub if and when it is established. Furthermore, it is worth remembering that after the outbreak of the Russia-Ukraine war, the EU decided to stop all imports of Russian fossil fuels by 2027.¹⁰⁹ Therefore, with the termination of Gazprom's transit agreement with Ukraine at the end of this year, it seems likely that the TurkStream pipeline will become Russia's only export route to the EU. BOTAS has already signed contracts for supplies for Hungary's MVM and Moldovagaz of Moldova. The Turkish company has also secured access to the Bulgarian grid, including the (so far underused) Trans-Balkan pipeline, which was the main route for Russian gas entering Turkey before the completion of the undersea TurkStream. In other words, Turkey could buy Russian gas from Gazprom, blend it with gas from other sources, and resell it to European countries seeking to diversify their energy supplies. It seems that even without a formal deal between Russia and Turkey, Turkey is in a good position to benefit from Russia's isolation from the European gas market, because before the Russia-Ukraine war, it absorbed the bulk of Gazprom's supplies to Ukraine.

¹⁰⁸ Ibid.

¹⁰⁹ Kennedy, C. (Sep 15, 2023). [Turkey And Russia Restart Talks On Gas Hub](#), OILPRICE.com.

Deterioration in Turkey-Israel relations and its impact on trade between the countries

Since the beginning of the 'Israel-Hamas' war against Hamas in the Gaza Strip, Turkey has become one of the most prominent countries in its rhetoric and criticism of Israel. Initially, this pattern of behavior could be associated with what could be seen in previous rounds of flare-ups between Israel and the Palestinians. Although this extreme rhetoric was accompanied by certain practical steps on the part of Turkey – such as canceling jointly planned events and returning the ambassador for consultations, they were still at a level that Israel was able to accommodate. However, in April 2024, there was a turn for the worse and some of the steps taken by the Turks indicated that there was a real change in the pattern of relations between the two countries. The most dramatic step was the announcement in early May 2024 of a complete cessation of Turkey's trade with Israel. This decision is a continuation of the April ban on exports to Israel of 54 categories of products. The decision to completely cease hostilities, which took effect immediately, is also unusual when compared to other conflicts around the world, and certainly not in relation to Turkey's conduct towards other countries. Other Turkish steps against Israel included the announcement that Turkey would join the lawsuit filed by South Africa against Israel at the International Court of Justice and the accusation of Israel of genocide.

Alongside these steps, the Turkish government allowed the continuation of preparations for a new planned flotilla to the Gaza coast, which could have been an extremely difficult event, if we recall the results of the 2010 Mavi Marmara flotilla, which was also driven out of Turkey by the IHH. The flotilla was supposed to set off in late April, but diplomatic efforts, led by the United States, apparently led Guinea-Bissau to not allow two of the flotilla's ships (including a cargo ship) to fly its flag.

Turkey's decision to stop trade with Israel in particular, and Turkey's stance on the 'Israel-Hamas' War in general, do not serve Turkey's economic interests, as with the cessation of trade with Israel, the Turkish economy loses a significant source of foreign currency. The volume of trade between the countries was \$6.8 billion in 2023, of which 76% were goods exported from Turkey, according to the Turkish Statistical Institute. Israel's imports from Turkey reached \$4.6 billion in 2023, making it Israel's sixth largest source of imports, according to the Central Bureau of Statistics of Israel. The main goods imported from Turkey to Israel last year were steel, machinery, minerals and fuel, along with fresh food products. Unilaterally and immediately violating the free trade agreement exposes Turkey to Israeli prosecution in international organizations and also undermines its credibility in the eyes of all its partners. In addition, Turkey's extreme pro-Hamas position isolates it.

Turkey's willingness to risk such a step against Israel most likely indicates the return of provocative Turkish policy to the forefront, as experienced in 2019-2020, and the strengthening of ideological and domestic-Turkish considerations in shaping Turkish foreign policy at the expense of considerations of economic benefit. In the short term, losing Israel as a trading partner, especially given that the trade balance between the two countries is positive for Turkey, will have a negative impact on the state of the Turkish economy. This will be reflected not only in a decline in trade, but also indirectly in a decline in the revenues earned by Turkish container ports from the transit of Israeli goods. The trade halt will likely prevent the launch of energy cooperation between the two countries that was announced in 2023 (i.e. before the outbreak of the war between Israel and Hamas), as it undermines their plans for joint initiatives to produce gas from Israel and transport it to Western markets through the Turkish gas pipeline network.¹¹⁰

Another link to the unstable relationship with Turkey over the past decade is the Israeli government's decision that in retrospect proved to be correct. The government announced in 2022 that "for security reasons and reasons related to Israel's foreign relations", it had decided to disqualify the participation of the Turkish terminal operator Yilport in the tender to purchase shares in the Haifa Port Company. The Turkish company Yilport, whose president is businessman Robert Yildirim, manages 29 ports in Turkey, Sweden, Norway, Portugal, Spain, Peru, and Ecuador. In retrospect, the Israeli government's decision regarding control of the country's vital infrastructure (in contrast to the Gulf port, which was transferred to the operation of the Chinese company SIPG), reflects a sound strategic policy, as the Institute for Maritime Policy and Strategy had previously recommended.

Turkish-Libyan relations as a tool to boost Turkey's influence in the Eastern Mediterranean

As a reminder, Turkey and the Libyan Government of National Accord (GNA) signed a maritime boundary agreement in November 2019, with the aim of establishing an exclusive economic zone in the Mediterranean Sea, which means that they will be able to claim rights to seabed resources in the economic waters between the countries. Turkish military involvement in Libya is mainly interpreted as an attempt to secure access to resources and maritime borders in the Eastern Mediterranean as part of Turkey's "Blue Homeland" doctrine (in Turkish: Mavi Vatan). The importance of this agreement for Turkey can be seen from the fact that the Turkish Ministry of Education decided to include the Turkish-Libyan maritime agreement in the new educational curriculum for schoolchildren,

¹¹⁰ Michalski, A., and Matusiak, M. (July 5, 2024). [Turkey severs its trade relations with Israel](#), *Center for eastern Studies, ANALYSES*.

along with the "Blue Homeland" strategy that expresses Turkey's ambitions in the Aegean Sea and the Eastern Mediterranean.¹¹¹

Until October 23, 2020, a civil war was raging in Libya, at the end of which the parties decided to cease fire and open negotiations. The situation in Libya is unstable, and Turkey, which recognizes the importance of the agreement with Libya, is trying to help restore its economy. Thus, after a break that lasted about ten years, the Turkish airline launched its flights to Mitiga International Airport in the Libyan capital Tripoli at the end of March 2024, following the signing of two memoranda of understanding between the Libyan Civil Aviation Authority and Turkish Airlines. In early January 2024, the Turkish parliament approved extending the stay of the Turkish military task force in Libya for another two years, a decision that provoked cold reactions from the authorities in Benghazi, which traditionally has maintained closer relations with Russia. In exchange for maintaining peace in Libya, Russia and Turkey could use their proxies in Libya to strengthen and expand their presence by providing their forces with access to Libyan military bases and supporting official government forces alongside mercenary forces. This would allow Russia to increase its naval presence in the Mediterranean and further threaten European security.

Defense/security spending and the strengthening of the Turkish navy

The Turkish government's defense spending is set to increase in 2025, reflecting the priority the Turkish government places on the Turkish defense industry, especially the maritime defense industry. In 2024, Turkey allocated more than \$40 billion to its defense and security budget, an increase of 150% from the 2023 budget of about \$16 billion for defense and security. Turkey attaches great importance to its self-sufficiency and has invested billions of dollars in its defense industry in recent years. The Turkish government also aims to double its defense exports, and the target in 2024 is \$11 billion compared to \$6 billion in 2023. The Turkish defense industry has also set itself the goal of increasing its self-production capacity to 85% compared to 80% in 2023.¹¹²

The **Maritime Strategic Evaluation for Israel 2022/23** provided a detailed overview of the Turkish Navy's equipment and reinforcement trends over the next two years, and since no major changes have occurred on the subject, this review will not expand on the subject. The Turkish Navy's development plan also includes a prototype of a locally developed (AUSV) unmanned surface vehicle (ULAQ).

¹¹¹ Kostidis, M. (May 25, 2024). [Libya maritime deal also in Turkish schools](#), *Ekathimerini.com*.

¹¹² Reuters. (October 17, 2023). [Turkey to allocate 150% more to defense budget in 2024 – minister](#).

The move to rely on Turkish industrial developments is intended to make the Turkish Navy a navy on the scale of naval powers such as Britain and France. This is reflected in the construction of the amphibious assault ship and helicopter carrier 'Anadolu' (TCG Anadolu), whose construction began in 2016. The ship began sea trials in 2021, and was delivered to the Turkish Navy in mid-April 2023 in a ceremony also attended by Turkish President Erdogan. A military advisor to President Erdogan said that the ship's main missions will include military and humanitarian operations overseas, such as those Turkey has been carrying out in recent years in Libya and Somalia.¹¹³ The 'Anadolu' is a multi-purpose amphibious assault ship that can, to some extent, be defined as a miniature aircraft carrier that is supposed to operate at the head of a Turkish task force in the Aegean, Black and Mediterranean Seas, as well as in the Indian and Atlantic Oceans. The ship has the ability to carry drones. The ship will also serve as a command center, and will be protected by autonomous USVs. Estimates indicate that the Anadolu will be able to carry up to 50 Baykar TB-3 and MIUS drones on board. The Turkish Navy's ability to rely on redundant command and control capabilities (satellite communications, drone relays, fixed and mobile command centers) allows the use of watercrafts like the Anadolu as a command and control center for the Turkish Navy.¹¹⁴ It should be remembered that the Turkish Navy was the "main victim" of the sanctions imposed by the United States on Turkey following Turkey's acquisition of the Russian S-400 air defense systems. The Navy planned to operate the F-35B variant (with vertical takeoff and landing capability) from its new attack ship Anadolu, thereby transforming it into a light aircraft carrier. After Turkey lifted its opposition to Sweden's NATO membership, the US government released funds that had been frozen for Lockheed Martin, and the Americans allowed the Turks to acquire F-16s, but not the short-takeoff F-35s. Accordingly, Turkey switched the aircraft intended to operate from the Anadolu from F-35s to Kizilelma.

New agreement between Turkey and Somalia – a foothold for the Turkish Navy in the Indian Ocean

In February 2024, President Erdogan submitted a request to the Turkish Parliament to extend the Turkish Navy's participation in the task force in the Gulf of Aden, the Arabian Sea and adjacent waters for another year. Since 2009, the Turkish Navy has been part of the Multinational Counter-Piracy Task Force CTF-151 and its ships have been operating against piracy and conducting patrols, stopping ships suspected of piracy, escorting merchant ships navigating in the area, and assisting them in the event of a pirate attack,

¹¹³ Bekdil, B. E. (May 3, 2023). [The operational — and political — benefits of Turkey's new warship](https://www.defensenews.com/middle-east/2023/05/03/turkey-new-warship/), *DefenseNews.com*.

¹¹⁴ Husain, A. (June 30, 2022). [Turkey Builds A Hyperwar Capable Military](https://www.forbes.com/sites/ahmedhusain/2022/06/30/turkey-builds-a-hyperwar-capable-military/), *Forbes*.

interdicting, stopping, neutralizing and confiscating watercrafts used by pirates, and using force if necessary to stop pirates and armed men on these watercrafts.

In recent years, the Turkish Navy has expanded its operations in the region, and on February 22, 2024, the Somali legislature overwhelmingly approved a ten-year defense and economic cooperation agreement with Turkey. Although the issue has not received public attention, the deal significantly strengthens the bilateral relationship between the two countries, integrating their security interests. For Turkey, Somalia represents a gateway to Africa, as well as access to seaports that it hopes to leverage into future economic benefits. Somalia, on the other hand, stands to gain a lot by developing its international partnerships, especially in the midst of the country's decades-long security crisis.

The maritime agreement between Turkey and Somalia allows the Turkish navy to operate in a strategically vital area, and highlights Turkey's growing ambition to act as a power in the maritime domain. The agreement indicates the importance that Turkey attaches to Somalia, and the assistance it is providing to rebuild it as a key state in the Horn of Africa, and making Somalia's future success part of Turkey's broader strategic goals in East Africa and the Red Sea region. Turkey has also signed an energy exploration agreement with Somalia. The East African country is believed to have large oil and gas reserves both on land and within its waters. Experts see the deepening ties with Somalia as part of the growing international competition for influence in this strategically vital region – the Horn of Africa. It will be recalled that several naval powers have bases in nearby Djibouti, all competing to increase their development and influence in the region, especially for economic purposes. The Somali deal comes as Turkey is rapidly expanding its naval capabilities as a "blue water" fleet capable of operating in the open oceans far from the country's home ports.¹¹⁵

On its way to Japan to mark the centenary of relations between the two countries, the Turkish Navy warship TCG Kinaliada visited Somalia as one of the 20 countries on its itinerary. The ship arrived in Mogadishu on April 23, and was welcomed by Somali President Hassan Sheikh Mohamud. TCG Kinaliada's arrival comes two months after the signing of the aforementioned ten-year cooperation agreement between the two countries.

¹¹⁵ Jones, D. (March 23, 2024). [With Somalia naval deal, Turkey steers into strategic but volatile region](#), *RFI*.

Summary

The Turkish Navy is seen by Turkish authorities as a key tool in the geopolitical game, and in recent years it has been strengthened by a large number of watercrafts, its operational capabilities, and the country's infrastructure that allows it to upgrade its capabilities and independence in developing advanced domestically produced weapons. The navy will continue to be part of NATO forces, but will also operate independently in the Eastern Mediterranean and the Black Sea to safeguard Turkey's maritime interests. Beyond this region, the most accessible means today for advancing Turkey's foreign policy in the Indian Ocean is the Turkish Navy, which has undergone significant modernization and expansion since the beginning of the century. While prioritizing the navy is driven by greater investments, it was also part of Turkey's foreign policy moves aimed at creating greater connectivity and influence in areas – maritime and land – to the south and east of Turkey. This trend is based, among other things, on Turkey's "Blue Homeland" doctrine, a maritime strategy that provides the legal, diplomatic, financial, and political basis for Turkey's claim to expanded maritime jurisdiction, a doctrine that has become increasingly popular among Turkey's political elite and the strategic community. Despite the above, scholars who deal with the influence of powers in the Indo-Pacific region are skeptical about the ability of Turkey in general and the Turkish Navy in particular to achieve this goal. In their opinion, "Turkey's current turn and ambitions in the Indian Ocean may be welcomed by some and supported by others, but they stem largely from opportunistic considerations and not part of any grand strategy. In the near term, Turkey will play a limited role in the Indian Ocean, as a series of larger power players operate there".¹¹⁶

Russia's campaign in Ukraine could geopolitically affect Turkey's positioning in the international system: While discontent with the West and anti-Westernism have facilitated Russian-Turkish relations and cooperation, Russian geopolitical revisionism has almost always pushed Turkey closer to the West because it poses a direct security threat to Turkey. Historically, the center of gravity of the Turkish-Russian rivalry has been the Black Sea. From the Turkish perspective, Russia's actions—from the war in Georgia, to the annexation of Crimea, to the invasion of Ukraine—all decisively tip the balance of power in this region in Russia's favor. Although Russia's policy in each of these cases may have contextual and local details and nuances, together they point to one unmistakable outcome: Russian revisionism in the post-Soviet domain, and a desire to make the region a sphere of Russian control, which experts say could exacerbate Turkey's threat perception

¹¹⁶ Saha, R., and Cannon, B. J. (April 18, 2024). [Answering big questions about Türkiye in the Indian Ocean](#), *Observer Research Foundation – ORF*.

against Moscow.¹¹⁷ The recent crises are broadening the common ground between Turkey and the West, although the West's "geopolitical revival" will not change Turkey's perception that a multipolar world better serves its interests. It is therefore unlikely that it will give up its pursuit of autonomy in its foreign policy.

Egyptian Navy

General background

According to the 2024 World Fleet Strength Index, the Egyptian Navy is ranked as the thirteenth most powerful navy in the world (TVR – 72.4).¹¹⁸ This ranking reflects Egypt's desire to become the most powerful navy in the Eastern Mediterranean and the Red Sea basin, and reflects the Egyptian government's significant investment of resources in the navy, as part of its understanding of its importance in the emerging geopolitical and geostrategic challenges in the Middle East.

This **Maritime Strategic Evaluation for Israel** includes an article on the implications of the Red Sea War for Egypt, Jordan, and Saudi Arabia. The article extensively reviews the economic effects of Houthi activity in the southern Red Sea on the Egyptian economy,¹¹⁹ and ostensibly justifies Egypt's aforementioned investment, although ultimately Egypt has not yet deployed this force. The Houthi attacks have significantly reduced profits from ship transit through the Suez Canal: in January 2024, revenues from transit through the Suez Canal decreased by 40% compared to the same period in 2023. Instead of 777 ships transiting the Suez Canal in January 2023, only 544 ships transited the canal in early 2024.

Combined Task Force 153 was established in April 2022 as one of five Combined Maritime Forces (CMF) task forces responsible for conducting maritime security and training operations throughout the Middle East. The multinational team supporting CTF 153 focuses specifically on international maritime security efforts in the Red Sea, Bab el-Mandab, and the Gulf of Aden. The first commander of CTF 153 was Egyptian Rear Adm. Mahmoud Abdelsattar, who noted at the handover ceremony that "over the past six months, we have worked closely with partner nations, maintained stability in the Red Sea, Bab-el-Mandeb, and the Gulf of Aden, and demonstrated once again that Egypt

¹¹⁷ Dalay, G. (May 20, 2022). [Deciphering Turkey's Geopolitical Balancing and Anti-Westernism in Its Relations with Russia](#), *SWP Comment*.

¹¹⁸ [Egyptian Navy](#) (2024). *Wdmmw*.

¹¹⁹ See: Moshe Terdiman, *The impact of the Houthi maritime blockade of the southern Red Sea and the Gulf of Aden on Egypt, Jordan, and Saudi Arabia*. This volume.

is committed to maintaining maritime security and enhancing our capabilities through trust, training, and working together".¹²⁰

While the United States has been leading an international coalition based, among other things, on the Combined Maritime Task Force (CTF) and American warships, and later British and French ships, since December 2023, in the Gulf of Aden and the southern Red Sea to protect merchant ships from attacks by the Houthis, the other partners of the combined maritime forces, led by Egypt, have been absent. Media sources have reported a reluctance across the region to confront the Houthi rebels because of the risk of angering their Iranian sponsors, or perhaps dragging Iran into active intervention in the Israel-Hamas conflict, or damaging the rapprochement that has developed between Iran and Saudi Arabia. In fact, the list of ten participants included the United States, Britain, Bahrain, Canada, France, Italy, the Netherlands, Norway, Seychelles, and Spain. 29 other countries that are members of the combined maritime forces have been absent. Egypt, the largest maritime power in the Middle East and the biggest loser from the diversion of shipping lines from the Red Sea and the Suez Canal – was also conspicuously absent.

Alongside Egypt's losses in the Suez Canal, stemming from the Houthi threat to trade in the Red Sea, it should be remembered that there is an even more significant source of income for the Egyptian economy, which is remittances from Egyptian workers in Saudi Arabia and the United Arab Emirates. Data from the Central Agency for Public Mobilization and Statistics, cited in an economic report on the Al Arabiya website, shows that Saudi Arabia tops the list of remittances from Egyptians working in Arab countries, which in 2023 were worth \$8.3 billion, and they were more than 58% of the total remittances from Egyptians working in the Arab region.

Egyptian Navy Power Building

Egypt, which in the 1980s and 1990s began to acquire American weapons systems (and in the case of the Egyptian Navy, Oliver Hazard Perry-class frigates) to replace its order of forces that relied on the Soviet arsenal, has changed direction and, for political reasons, has begun to diversify its defense procurement, including the Egyptian Navy, as will be described below. The Egyptian Navy's ranking in 13th place in the world in the 2024 Naval Power Index reflects the impressive force-building program that this navy has undergone in recent years and the diverse watercrafts it operates.

The **Maritime Strategic Evaluation for Israel 2022/23** provided a comprehensive overview of the procurement and acquisition processes, and this review will therefore focus on

¹²⁰ U.S. Naval Forces Central Command Public Affairs. (June 12, 2023). [Egypt Turns Over Command of Multinational Red Sea Task Force](#).

the changes that have occurred since then. Egypt marked the launch of its first modern frigate built at the Alexandria shipyard as a significant milestone for the Egyptian Navy, which is undergoing an extensive modernization process to enable it to fulfill its missions in all matters related to Egypt's regional maritime security.

In early December 2023, the launching ceremony of the MEKO A 200 frigate named 'Al-Jabbar' was held at the Alexandria Shipyard. Among the dignitaries present was Egyptian President Abdel Fattah al-Sisi. Although this is the fourth watercraft in the series and is manufactured according to a German design adapted for the Egyptian Navy, this was the first time that Egypt had built a modern warship in a local Egyptian shipyard. The signing of the contract between the Egyptian shipyard and ThyssenKrupp for the order for 'Al-Jabbar' was completed in September 2018 and the German government approved the export license in February 2019. It should be noted that the construction of the first two frigates of this model was completed at ThyssenKrupp shipyards in Germany, and the third will be delivered to the Egyptian Navy during 2024.¹²¹

The Egyptians attach importance to increasing their submarine fleet beyond the four Type 209 submarines that they have received from Germany in recent years. An explanation for Egypt's desire is provided by Muhammad al-Kanani, who heads the military studies unit at the Cairo-based Arab Forum for Analyzing Iranian Policies. Al-Kanani said that "Egypt is developing its submarine fleet to maintain its position in the balance of naval forces in the region". He added that this is not the last word on the acquisition process, and that "since many countries in the region are increasing their underwater capabilities ... Egypt will not be satisfied with four submarines from Germany". The explanation for this, according to El-Kanani, lies in the fact that it operates two fleets: the Northern Fleet in the Mediterranean Sea and the Southern Fleet in the Red Sea, as well as the growing challenges and threats to freedom of navigation [as well as] against terrorism and arms smuggling and terrorists". As a reminder, the current contract between Egypt and the German shipyards includes an option to order two additional submarines.¹²²

In March 2024, it was reported that the German shipyard ThyssenKrupp had completed the evaluation phase of the Egyptian Navy's requirements regarding the transfer of technology (TOT) and the licensing agreement for the continuation contract for the Type 209/1400 submarines. In addition, Egypt continued to negotiate with Naval Group regarding the acquisition of Scorpene submarines and the technology transfer contract

¹²¹ *The Maritime Executive*. (December 7, 2023). [Egypt Launches First Domestically Built Frigate in Navy Modernization](#).

¹²² Helou, A. (August 3, 2021). [Egypt receives fourth German S-44 submarine at Alexandria base](#), *Defense News*.

that the shipyard is offering to Egypt. The matter was raised as one of the main issues during the visit of Egyptian Defense Minister Mohamed Zaki to France in November 2023. Egypt's desire to continue acquiring new submarines illustrates two aspects: recognition of the importance of submarines on the naval battlefield, as well as Egypt's determination to establish its own production capabilities for submarines – an issue that requires a higher level of skill than that required for building surface ships.

Another area in which Egypt is expanding its navy is patrol ships that will enable the security of Egypt's shipping and facilities near its coasts and the Suez Canal. In early March 2024, the US State Department approved additional funding of \$129 million from FMS sources for Swift Ships to continue producing patrol ships for the Egyptian Navy, which are 28 meters long and reach a maximum speed of 25 knots and a range of 900 nautical miles. In total, Swift Ships will complete the construction of 55 patrol ships for the Egyptian Navy from the mid-1980s.¹²³

Organization of the Egyptian Navy for its missions

In January 2017, the Egyptians decided to split the Egyptian Navy into two: the Northern Fleet and the Southern Fleet. The Northern Fleet's area of operation provides a response to the Mediterranean region, and its mission is to secure Egypt's northern and western strategic fronts. The Southern Fleet is in charge of the Suez Canal and the Red Sea region, and is responsible for securing the eastern and southern fronts. The split of the fleet improved the performance and flexibility of the number of naval commands, and provided a new perspective on Egyptian force building, based on the nature of the operations assigned to each fleet, and defined by the geopolitical context of the area of operation.¹²⁴

The Northern Fleet is designed to deal with the growing geopolitical conflicts in the Eastern Mediterranean region over maritime areas and energy resources extracted from the sea. Its main mission is to protect Egypt's economic interests, especially the newly developed gas fields. In addition, the Northern Fleet is also tasked with controlling the flow of illegal immigration from North Africa to Europe. Turkish President Erdogan's visit to Egypt in February last year was the first in 12 years. Following this visit, in April 2024, Egyptian Foreign Minister Sameh Shoukry paid a visit to his Turkish counterpart Hakan Fidan, a visit during which the two sides discussed, among other things, tensions on Egypt's border with Libya. At the end of the discussions, the two foreign ministers noted

¹²³ *Swiftships*. (March 3, 2024). [Swiftships Secures New Award: US Government Approves Funding for Egyptian Navy Patrol Craft Kits](#).

¹²⁴ For more on the subject, see Chorev, S. (2022). Global Developments in the Maritime Domain. In: S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23*, 23–102 (Maritime Policy & Strategy Research Center, University of Haifa).

in a joint statement that the discussions covered the Libyan issue among other regional issues discussed in their meeting, which reduced tensions between Turkey and Egypt, and also led to a reduction in security tensions on Egypt's western border with its neighbor Libya.¹²⁵

Of note is the continued influx of refugees and migrants from Egypt, coinciding with Egypt's worst economic recession in decades. Dramatic price increases for food and services are making living conditions worse for the population. The European Commission has signed a new agreement with Egypt that aims to reduce migration to Europe, but this initiative is unlikely to succeed.¹²⁶ Egyptians are increasingly seeking to migrate to Europe (including illegally). The International Organization for Migration counted almost 22,000 Egyptian migrants arriving in Europe last year, mostly by sea, a significant jump from previous years, and Egyptians were not among the leading nationalities seeking asylum in EU countries. The 2023 figure put Egypt at the top of the list, with more illegal migrants than any other country, including those from war-torn Afghanistan and Syria. Since migration from Egypt is primarily to other North African countries via land routes (such as Libya) and only from there by sea to Europe, the Egyptian navy is irrelevant in addressing this issue.

In the previous report, we already noted that the Egyptian Navy uses the diplomatic dimension of naval strategy, conducting joint exercises with different navies without identifying itself with any of the blocs. In June 2024, the Navy held joint naval exercises between the Russian and Egyptian naval forces in the port of Alexandria.¹²⁷

When the Americans presented the idea of Operation Prosperity Guardian in December 2023, and its purpose was set to protect the freedom of navigation of merchant ships in the Red Sea, it was only natural that the Egyptian navy would join it. But that was not the case, and Egypt decided that the Egyptian navy would not join this operation, despite being one of the main victims of the violation of freedom of navigation in the Red Sea. Furthermore, apart from Bahrain, none of the United States' allies in the Middle East joined the task force, even though several countries, such as Egypt, had much to lose economically from trade disruptions. Apparently, the absence of Egypt, which previously assumed command of Task Force 153, which is one of its objectives, greatly surprised some observers, as the country loses millions of dollars every day due to the reduction

¹²⁵ *The Libya Observer*. (April 21, 2024). [Safaalharathy, Stability of Libya key focus in Turkish-Egyptian diplomatic talks.](#)

¹²⁶ Schwarz, A. (March 26, 2024). [Migration agreement with Egypt: EU backing the wrong horse](#), *The Heinrich-Böll-Stiftung European Union*.

¹²⁷ TASS. (June 19, 2024). [Russian, Egyptian warships to holds drills, practice maneuvering.](#)

in the volume of shipping in the Red Sea. As is known, the Suez Canal is one of the main sources of foreign exchange reserves and income for Egypt, and last year revenues reached \$9.4 billion. Now revenues are down by tens of percent. But despite the revenue losses, Egypt was cautious in its statements against the Houthis due to its proximity to the two conflicts in Gaza and Yemen, and concluded that geopolitically its losses, if it joined this force, would be greater than its gains. Giuseppe Dentice, head of the Middle East and North Africa desk at the Center for International Studies based in Italy, argues that "the choice of the Arab states not to join [Operation] 'Prosperity Guardian' is a clear message sent to the United States, but also to Israel, and in this sense the military dynamics in Gaza have their own weight".¹²⁸

Despite the above, Egypt was careful to allow the Israeli Navy to transit between the Mediterranean and Red Sea theaters as stipulated in the peace treaty between the two countries, and even approved transit requests within shorter timeframes than required according to the procedures stipulated in the agreements.

Iranian Navy

Iranian Navy and Iranian Revolutionary Guards Navy

The Iranian navy ranks 19th in the world fleet strength index with a score of 50.9. Its platforms are about 33 years old, indicating the relative effectiveness of the sanctions imposed on Iran, its inability to acquire Western-made watercrafts, and its need to rely on watercrafts of its own production, or from countries with similar political views such as Russia or China.¹²⁹

Iran ranked fourth in the Middle East in terms of military spending in 2023. Its spending increased marginally by 0.6% to \$10.3 billion. According to available data, the share of total military spending allocated to the Islamic Revolutionary Guard Corps (IRGC) increased from 27% of Iran's total military spending in 2019 to 37% in 2023. In addition, spending related to the purchase of aircraft from the Iran Aircraft Manufacturing Industrial Company (HESA) increased by 27% over the same period, and the Iranian aircraft industry is responsible for the production of unmanned aerial vehicles (UAVs) used by the Revolutionary Guards.¹³⁰

¹²⁸ Salacanian, S. (January 16, 2024). [Why Arab states didn't join the US-led Red Sea task force](#), *The New Arab*.

¹²⁹ For more information, see Alex Grinberg, *Iran as an Active and Open Party in the conflict with the State of Israel Iranian Ideology and Doctrine in the Context of the 'Israel–Hamas' War*. This volume.

¹³⁰ Tian, N., da Silva, D. L., Liang, X. and Scarazzat, L. (April 2024). [Trends in World's Military Expenditure, 2023](#), *SIPRI Fact Sheets*, p. 11.

Iran has two navies: the Islamic Republic of Iran Navy and the Revolutionary Guards Navy (IRGC-N), which was founded in 1982. The Iranian Navy has three frigates, three corvettes, 19 fast attack ships, 49 patrol ships, 31 amphibious ships, 17 auxiliary ships, 19 submarines, and 54 aircrafts.

Iran recently launched two patrol ships for the Revolutionary Guards Navy (Shahid Seyed Shirazi and Shahid Hassan Bagheri). The hulls of the ships are catamaran-type, and the design is apparently based on the design of the Chinese Type 22 missile ship. The Iranian ships are 67 meters long and 20 meters wide. Their maximum speed is 45 knots. The watercrafts are equipped with a missile defense system, vertical launch capabilities for the Noor missile, and a Sayad cruise missile with a range of 700 km. They are also capable of carrying three light missile launchers and an armed attack helicopter. This indicates the growing importance that the Iranian authorities attribute to the Revolutionary Guards Navy in particular as a tool in implementing their policy, and to Iran's maritime interests both in the Persian Gulf and beyond.¹³¹

The Iranian Revolutionary Guards Navy (IRGC-N) has 100,000 military personnel, including 20,000 active duty sailors. It is located in Bandar Abbas, at Shahid Bhonar Square, the headquarters of the city's Marine Corps. The IRGC-N is commanded by Admiral Alireza Tangsiri. The fleet operates from five provinces, most of which are located in the Persian Gulf.

In the international arena, Iran is no longer as isolated or vulnerable as it once was. The war in Ukraine has changed the geopolitical system, and as a result, perhaps for the first time since the 1979 revolution, Iran can count on powers like Russia and China to provide it with at least diplomatic protection. Its role in providing Russia with UAVs to attack its invasion of Ukraine, and its supply of oil to China also creates a similar obligation. Iran has become a senior member of the revisionist bloc of countries in the international system that challenge the United States and Western European countries.

As mentioned, as part of its naval activities over the past decade, Iran has operated from several floating bases disguised as civilian merchant ships. The conversion of civilian cargo ships and tankers for military use is driven, among other things, by Iran's immediate military needs and the nature of its naval activities, as well as the fact that building and designing a new ship is more expensive and time-consuming. These are multi-dimensional IRGC-N combat platforms that can be rapidly deployed internationally with a variety of capabilities including air (UAVs), sea (ships/boats), and land (special forces). These combat platforms

¹³¹ Frantzman, S. J. (February 19, 2024). [Iran claims to add two new 'stealth' ships to IRGC Navy](#), *The Jerusalem Post*.

can also conduct intelligence operations. Due to economic sanctions that prevent the Revolutionary Guards from purchasing new ships, tankers at the Bandar Abbas shipyard were converted into "bazaar ships" – an Iranian term that refers to the wide range of weapons and equipment that can be placed on board: missiles, UAVs, anti-aircraft guns, speedboats, and helicopters. During the conversion process, significant changes were made to the ships. The forward deck of a container ship (formerly the converted Panamax-sized Sarvin, renamed Shahid Mahdavi) was redesigned to accommodate a UAV takeoff and landing strip. The Iranian Navy also deployed two intelligence-gathering ships, the Sabiz and the Bashad, to the southern Red Sea, helping the Houthis identify Israeli-owned ships (or those navigating to/from Israel) as targets for attacks.¹³² In the coming years, the Iranian Revolutionary Guard Navy is expected to continue operating under a doctrine of asymmetric warfare in which they conduct harassment, electromagnetic jamming, and espionage. For a long time, Iran has preferred to develop small, fast, and maneuverable watercrafts to carry out spot or swarm attacks against Western targets. Its arsenal is now moving toward larger watercrafts than before to become a full-fledged naval force capable of supporting its allies (the Houthis) or acting as a deterrent.¹³³

In September 2023, the Iranian Moudge-class frigate Jamaran captured two U.S. Navy drone Explorers in the Red Sea and removed them from the water. The intention was probably to study their operating system. U.S. guided missile destroyers in the area were forced to send MH-60R Sea Hawk helicopters to put pressure on the Iranians when they refused to hand them over.

In early February 2024, the Iranian Revolutionary Guards announced that they had launched long-range ballistic missiles for the first time from the warship Shahid Mahdavi. The IRGC claims that the missiles can hit targets up to 1,700 km (1,050 mi) from the launch point, which in this case was in the Gulf of Oman, but using a ship as a vehicle to launch the missiles expands the operational envelope of these missiles.¹³⁴

In early April 2024, the Revolutionary Guards Navy warship Shahid Mahdavi crossed the equator into the southern hemisphere for the first time.¹³⁵ This voyage reflects a political

¹³² For more information on this topic, see the Alma Center document [Islamic Revolutionary Guard Corps – Navy \(IRGC-N\)](#).

¹³³ Boussel, P. (May 6, 2024). [The IRGC Navy's long-term strategy of asymmetrical warfare](#), Note de la FRS n°14/2024, *Fondation pour la recherche stratégique*.

¹³⁴ *Iran International*. (February 13, 2024). [Iran Launches First Long-Range Ballistic Missiles from Warship](#).

¹³⁵ *Iran International News Room*. (April 5, 2024). [Iran Says Its 'Advanced Warship' Crossed Into Southern Hemisphere](#).

rather than operational statement, concerning the expansion of Iran's influence beyond the borders of the Middle East, and should be treated as such. Iran's ultimate goal is the creation of a pan-Shiite state under the authority of Ayatollah Ali Khamenei. Although they began a process of normalization last year, the Sunni Arab-majority Gulf states are the main target of this expansion strategy, which, if achieved, could dramatically change the entire Middle East and jeopardize international stability. The threat to trade in the Red Sea through the Houthis was only the latest evidence of a broader project that could even reach countries on the coast of North Africa, such as Algeria.

The Revolutionary Guards Navy is already expanding its ties with revisionist countries on the South American continent through the transfer and sale of naval weapons: In the naval flotilla held in Venezuela on July 24, 2023, the navy displayed Iranian-made Zulfagar missile boats armed with Nasr-1 anti-ship missiles that entered service with the Venezuelan Navy (Armada Bolivariana). These boats are also known as Peykaap III and are based on the North Korean-made IPS-16 ships that Iran purchased in 2002. Equipping itself with Iranian-made weapons allows the Revolutionary Guards to gain a foothold on the American continent, and challenge the United States in its "backyard" operations.¹³⁶

Iran's involvement in the 'Israel-Hamas' war in the maritime arena

Some link the timing of Hamas's attack on Israel to Iran's desire to sabotage attempts at rapprochement between Saudi Arabia and Israel as part of the process of normalizing relations between Israel and the Arab world, which has been promoted with the mediation of the United States since the Abraham Accords in 2020. These normalization moves have left the Palestinian issue in a more secondary light. On October 3, 2023, four days before the attack, Iranian President Ali Khamenei warned Saudi Arabia against normalizing with Israel and praised the young Palestinians who oppose Israel.

Although opinions are still divided regarding the possible coordination of the timing of Hamas' attack with Iran, Iranian involvement in the "Israel-Hamas" War has become overt (in contrast to the "shadow war" that existed in the years preceding the war), and was expressed in both direct and indirect fighting between the two countries. Although Iranian involvement began through Iranian proxies in Lebanon, Syria, Iraq, and Yemen, it culminated in the Iranian attack on Israel on the night of April 13/14, 2024, in which hundreds of missiles and UAVs were launched from Iran toward Israel.

Regarding the maritime arena: Since the beginning of the Israel-Hamas War, Iran has rejected calls from the United States and Britain to end its support for attacks by Houthis

¹³⁶ Bush, J., and Roule, N. (June 11, 2024). [Iran's foothold in Venezuela requires a tougher response](#), *The Hill*.

rebels on Israeli-affiliated watercrafts in the Red Sea, claiming that the accusations are baseless interference.¹³⁷ In addition, Iran announced that an Iranian naval frigate would escort Iranian merchant ships navigating through the Red Sea.¹³⁸ The destroyer Alborz, operating as a military watercraft of the Iranian Navy's 94th Fleet, crossed the Bab-el-Mandeb Strait and entered the Red Sea. The crossing of the Strait coincided with a meeting between Ali Akbar Ahmadian, secretary of the Supreme National Security Council (SNSC), and Mohammed Abdulsalam, spokesman for the Houthi movement, praising the "courageous actions" of the rebel fighters against "Zionist aggression".

British Foreign Secretary David Cameron warned his Iranian counterpart, Hossein Amir-Abdollahian, that Britain held Iran responsible, even if only partially, for the attacks. An Iranian foreign ministry spokesman said there was no reason to blame Iran, but added that Iran supports "Palestinian resistance movements". "Iran proudly announces that it supports Palestinian resistance movements to liberate their land", he said, condemning Cameron's intervention.

Of particular interest in this regard is China's position that the main trade route between it and its main export market in Europe runs through the Red Sea. It is also the route of the Belt and Road Initiative, a Chinese government-led economic initiative that has been a cornerstone of Chinese foreign policy for the past decade. China may have indeed pressured Iran in early January 2024 to influence the Houthis to cease their activities, and indeed Chinese Foreign Minister Wang Yi told reporters, "China has made active efforts to defuse tensions in the Red Sea from the very beginning". It should be emphasized that China's efforts have focused solely on extracting guarantees to protect China's direct interests. An Iranian official confirmed these talks and claimed, "Basically, China is saying: 'If our interests are harmed in any way, it will affect our business with Tehran.'" But while China is important to Iran, Iran also has proxies in Gaza, Lebanon, Syria, and Iraq, in addition to the Houthis in Yemen, and its regional alliances and priorities have played a major role in its decision-making. There is no evidence to suggest that Beijing was in any way willing to risk its credibility to prevent a full-scale escalation in the Red Sea. It did not take long for China's threats to bear fruit. The Houthis granted immunity to Chinese and Russian ships. Mohammed al-Bukhaiti, a member of the Houthi political leadership, told the Russian Izvestia news agency that the shipping lanes around Yemen were safe for Chinese and Russian ships as long as the watercrafts were not affiliated with

¹³⁷ For more information on the Houthi threat to the Red Sea trade routes, weapons, and operating methods, see: Shlomo Guetta (2024). The fighting and threat of the Houthi in the maritime domain since the outbreak of the 'Israel-Hamas' war.

¹³⁸ *The Times of Israel*. (April 17, 2024). [Iran navy escorting Iranian commercial ships to Red Sea, commander says](#).

Israel.¹³⁹ Chinese officials know that any attempt to make too high demands on Iran and the Houthis to stop their attacks in the Red Sea or elsewhere would be unrealistic and could damage and put further strain on Sino-Iranian relations. It should be estimated that China will not follow this path.¹⁴⁰

In an attempt to establish an outpost in the Red Sea, Iran unsuccessfully pressured Sudan to allow it to build a permanent naval base in the country, which would have allowed it to monitor maritime traffic to the Suez Canal and the port of Eilat. Iran tried to leverage the supply of explosive-laden UAVs used by the current ruler, Abdel Fattah al-Burhan, who used them in fighting the rebels, and even offered to provide him with a helicopter gunship if Sudan granted permission to establish a base. The Iranians indicated that they were interested in using the base that Sudan would grant them for intelligence gathering. The assessment was that if the Sudanese had complied with Iran's request, sooner or later it would have stationed Iranian naval ships there. If the Sudanese had agreed to the Iranian request, a naval base in the Red Sea would have allowed Iran to tighten its grip on one of the world's most important shipping lanes and help the Houthi rebels continue to attack watercrafts.¹⁴¹

Iran, Russia, and China held a joint naval exercise in March 2024. The Chinese Navy's Escort Task Force 43 participated in the trilateral "Security Belt" exercise with the Russian and Iranian navies. The joint exercise has been held annually since 2019 and is intended, according to Iranian sources, to address threats that could disrupt freedom of navigation in this important region. In a statement about the exercise before it began, Iran noted that the three countries participating in the exercise have expanded their diplomatic and economic relations in the past year. This event is another reminder of similar events noted in this year's Strategic Maritime Assessment, which points to the alternative international order that China, Russia, and Iran want to lead, and which includes many components but certainly does not increase the level of security of free maritime navigation and trade.

In conclusion, the Iranian Navy and the Revolutionary Guards Navy continued to expand their activities over the past year, succeeded through their proxies such as the Houthis in expanding their influence over the maritime domain, challenged Western navies through asymmetric warfare methods and the use of unique weapons (either directly or through

¹³⁹ VOA News. (January 19, 2024). [Houthis Won't Target Chinese, Russian Ships in Red Sea](#).

¹⁴⁰ Aboudouh, A. (February 6, 2024). [Yes, China pressured Iran on Red Sea attacks – but only to protect its own ships](#), *Chatham House*.

¹⁴¹ Bariyo, N., and Faucon, B. (March 3, 2024). [Iran Tried to Persuade Sudan to Allow Naval Base on Its Red Sea Coast](#), *The Wall street Journal*.

their proxies), and continued to challenge naval powers such as the United States and Britain and achieve achievements on both the geo-economic and geopolitical levels.

Royal Saudi Navy

The Royal Saudi Navy (RSNF) was founded in 1960 and began to grow significantly with the help of the United States, along with the Iranian Navy under the Shah. Following the Iranian Revolution (1979), Saudi Arabia initiated a further expansion program of its navy, which was carried out with the help of France. Additional watercrafts were purchased from Britain and France in the 1980s and 1990s. In 1980, an American contractor built its command, control, and communications centers for the Saudi Navy. The navy is ranked 36th in the world in the 2024 Naval Power Index, and based on the ambitious force-building program it is leading and the resources invested in it, it appears that it will be ranked higher by the end of the decade. Against the backdrop of regional tensions in both the Red Sea and the Persian Gulf, Saudi Arabia is vigorously promoting a multibillion-dollar modernization process for its navy.¹⁴²

A 2024 study by the Washington-based Gulf International Forum examined the evolving capabilities of the Saudi Arabian and United Arab Emirates navies. The report describes the competing strategic priorities and constraints that have driven the development paths of the Royal Saudi Navy and the United Arab Emirates Navy (UAEN). The report discusses Saudi Arabia's larger manpower pool, its need to cover a much longer coastline than the UAE's, and the Saudis' less developed naval industrial base, which has forced Saudi Arabia to expand its fleet quantitatively at the expense of necessary qualitative factors.¹⁴³ These two countries were chosen because they are the two most influential Gulf Arab states, and the largest defense budgets within the Gulf Cooperation Council (GCC).

The report notes that the first significant qualitative factor to consider when assessing a country's naval power is the age of its watercrafts, which in the Saudi case is very high, requiring longer maintenance periods. The report highlights four qualitative factors: two "technological force multipliers" that are watercraft modernization and expertise in unmanned systems; and two "naval capability enablers" that are shipbuilding capacity and the availability of training opportunities. Throughout the history of the Saudi Navy, Saudi Arabia has never prioritized modernization or naval readiness, and has instead historically chosen to prioritize other arms such as the Royal Saudi Air Force. This strategic

¹⁴² For more on Saudi Arabia, see Alexander Bligh, *The new Saudi Red Sea strategy: The search for alternatives to maritime independence*. This volume.

¹⁴³ *Gulf international Forum*. (2004). [Securing the Seas: Examining Changing Saudi & Emirati Naval Capabilities](#), p. 4.

calculation stems largely from Saudi Arabia's non-involvement in major conventional conflicts, as well as the presence of the US Navy in the Gulf. The report recommends that Saudi Arabia develop independent warship construction and maintenance capabilities in Saudi Arabia, develop modern training and simulation facilities for the navy, prioritize investments in training and modernization, and embrace the development and use of unmanned vehicles technology.

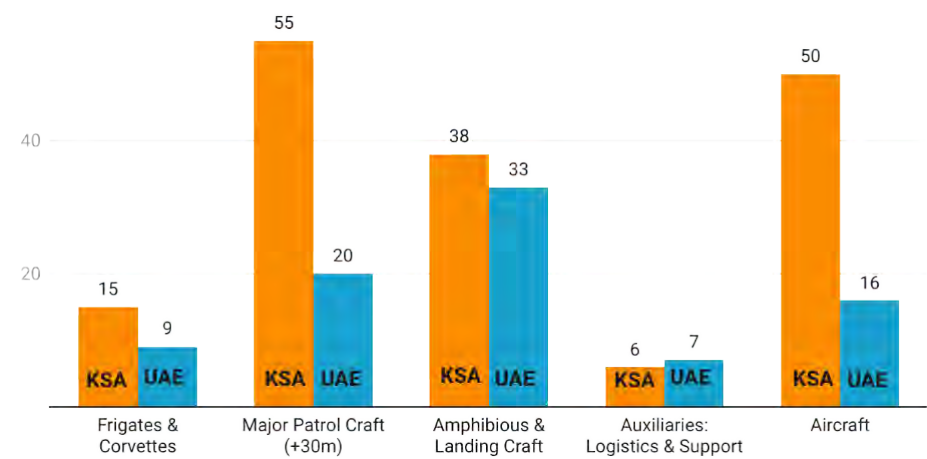


Figure 15: Comparison between the age of watercrafts in the Royal Saudi Navy and the UAE Navy¹⁴⁴

The Saudi Navy operates from several bases along the 2,500 km (1,600 mi) of Saudi coastline in the Red Sea and the Persian Gulf. To this end, the Saudi Navy operates 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 a full military capability including warships, support ships, administrative and technical support, naval aviation, marines, and special security units. The Saudi Navy has seven frigates, four corvettes, 39 patrol ships, and three minesweepers. In early March 2024, the Spanish shipyard 'Navantia' delivered the fifth Avante 2200-series corvette to the Saudi Navy.¹⁴⁵

Saudi Arabia currently operates four Al-Riyadh-class (F3000S) multi-role anti-air warfare frigates, which were built by the French shipyard DCN for the Royal Saudi Navy and ordered in 2002.

¹⁴⁴ Ibid, p. 8.

¹⁴⁵ Bahtić, F. (March 11, 2024). [Navantia hands over fifth Avante 2200 corvette to Royal Saudi Navy](#), *NavalToday*.

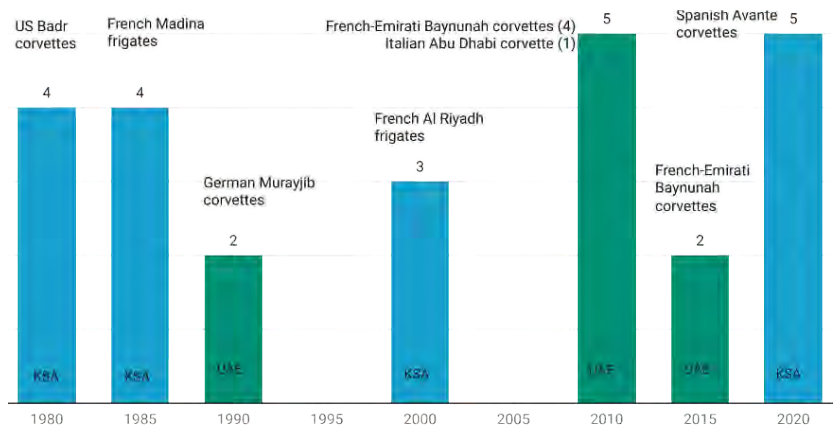


Figure 16: Age of major watercrafts in the Saudi and UAE navies¹⁴⁶

In May 2024, the "Red Waves" exercise was held in Saudi Arabia with the participation of countries located on the coasts of the Red Sea. The exercise included exchanging experience, increasing the ability to plan and conduct naval battles, as well as dealing with common challenges. Forces from Jordan, Egypt, Djibouti, and Yemen participated in the exercise, and observers from Algeria, Somalia, and Japan. During the six-day exercise, the participating forces conducted a number of combat exercises, including ground warfare, air warfare, electronic warfare, repelling fast boat attacks, protecting shipping lanes, combating smuggling, terrorism, piracy, and immigration. The exercise ended at the King Faisal Base in Jeddah, Saudi Arabia. The "Red Waves" exercises were first launched in 2018 and are held annually.¹⁴⁷

The Saudi Western Fleet began operating for the first time in late September 2022 as part of the International Maritime Security Construct (IMSC) in the Red Sea. This activity marks an expanded partnership between the multinational coalition and the Royal Saudi Navy. The Western Fleet, which is based in the Red Sea, is currently contributing to IMSC missions in the Bab-el-Mandeb Strait, and the corvette HMS Al Jubail is conducting patrols in this context. The Saudi Eastern Fleet has been operating with IMSC since 2019.¹⁴⁸

¹⁴⁶ *Gulf international Forum*. (2004), p. 9.

¹⁴⁷ *Yemen Monitor*. (May 10, 2024). [Red Wave 7 Naval Exercise Concludes with Yemeni Participation](#).

¹⁴⁸ *NAVCENT Public Affairs*. (September 28, 2022). [Saudi Arabia Expands Maritime Partnership with International Coalition](#).

Establishing a maritime technological infrastructure in Saudi Arabia

Saudi Arabia has no naval heritage, and so the establishment of the Saudi Navy was made following the understanding and internalization that Saudi Arabia's maritime domain in both the Persian Gulf and the Red Sea is essential to its development and prosperity. Saudi Arabia is undoubtedly a country that imports naval technology, and so part of the joint technology transfer between Saudi Arabia and Spain led to the production of Saudi Arabia's first naval combat system called 'Hazem'. This system has now been integrated onto the first corvette Jubail. 'Hazem' includes a combat management system, an integrated communications system, combat systems integration, an integrated platform management system, a fire control system and an operator training system. The Saudis believe that local production can help develop the Saudi manufacturing sector and create employment for Saudi citizens, which are two central objectives of the Saudi policy "Vision 2030".

Royal Saudi Navy Activities in the 'Israel-Hamas' War

As you may recall, in 2017, the Saudi-led coalition forces and their allies fought in Yemen under the banner of President Mansour Hadi, succeeded in capturing several strategic ports in the Red Sea, and tried unsuccessfully to gain control of the port of Hodeidah in Yemen. The fighting against the Houthis took a heavy economic and military toll on Saudi Arabia, halted its planned political and economic reforms, and caused it to begin negotiations for a ceasefire agreement. The UN envoy for peace talks in Yemen announced in late December 2023 that representatives of the Houthis and Saudi Arabia had reached an agreement on a roadmap to end the war that has been going on between them since 2015. The terms of the emerging agreement are largely a victory for the Houthis, as they will retain most of the territories under their control, which include the majority of the population, the capital Sana'a, and access to the Red Sea, while Saudi Arabia has pledged to lift the air and naval blockade it imposed on these areas, and has pledged to finance the reconstruction of Yemen and its governing mechanisms.

With this view, Saudi Arabia would have appreciated the opportunity for a joint US-UK strike against Houthi strongholds, as after all, Saudi Arabia has been fighting a brutal war against the Houthi rebels for almost a decade. But during the Israel-Hamas War, Saudi Arabia has refrained from joining the Western force as part of the US-led Operation Prosperity Guardian, or the EU-led operations against the Houthis to allow freedom of navigation in the southern Red Sea.

The reason for this is the negotiations that Saudi Arabia is conducting with the Houthi leadership to extricate itself from Yemen, through which it hopes to permanently protect

itself from cross-border attacks.¹⁴⁹ For Saudi Arabia and other Arab states, there are many reasons to allow US and NATO allies to shoulder the burden of defending the Red Sea: they do not have to commit their resources, they do not have to appear to be working for Israel in any way, they do not have to seemingly anger Iran, or risk reopening the long and bloody conflict in Yemen. In their view, the United States and a handful of other countries are already doing this for them. In the opinion of this writer, this is a short-sighted view that will ultimately harm their countries, but the fact that they are not participating in this task is a striking indication of the changing geopolitical reality in the Middle East.¹⁵⁰

¹⁴⁹ Ali-Khan, V. (January 16, 2024). [Why Saudi Arabia Is Staying on the Sidelines in the Red Sea Conflict](#), *Foreign Policy*.

¹⁵⁰ For more on Saudi policy, see Bligh (2024).

The Israeli navy activity in the 'Israel-Hamas' War

Dov Raz¹

The article is dedicated to the memory of all the Israeli Navy's fallen in the 'Israel-Hamas' War, and especially to the late Lt. Col. Eli Ginsberg. A soldier, friend, colleague, and former graduate student at the Center for Naval Policy and Strategy Research, under whose wing this publication is being published.

Introduction

Hamas's attack on Israel and the war against it have a maritime aspect. Hamas's attack on October 7 also included infiltration of the Zikim coast using boats, attempted attacks on naval infrastructure facilities, and attempted infiltration by divers and swimmers. On the other hand, the Israeli Navy fought in Gaza at sea, from the sea, and on land alongside the Air Force and the forces maneuvering in defense and offense. The Navy defended the country's maritime borders and maritime infrastructure, and actively participated in the maneuver in the Gaza Strip, both as a fire support and observation effort for the ground forces, and in land operations through the naval commando fighters (13th Flotilla). In addition to the main war effort in Gaza, the Israeli Navy operates on the northern front and in the Red Sea, mainly in defensive operations to prevent enemy attacks.

In contrast to the operations and wars that took place in recent decades, including the Second Lebanon War (2006), and many operations in Gaza such as "Cast Lead" (2008) and "Protective Edge" (2013), which were all in one arena, the Israeli Navy in the current campaign was required to deal with three different arenas. In fact, the last time the Israeli Navy fought in such a multi-arena scenario, was exactly 50 years earlier in the "Yom Kippur" War in 1973 (although the Yom Kippur War also involved naval combat of ships against ships). As then, this wide deployment was clearly felt in the activities of the Israeli Navy, and it seems that despite the processes of force buildup that the Israeli Navy

1 The author wishes to emphasize that this article was written after his discharge from active reserve service, and is based solely on open-source materials, and not on information that was disclosed to him during his service. It is worth noting that the information presented was written on the basis of open information that was published in various media channels or official publications by the IDF and Israeli Navy spokespersons (as of April 2024), and therefore it is certainly possible that some of the information is partial or inaccurate. The author wishes to emphasize that he does not intend to present in this article an operational investigation into the Israeli Navy's performance in the war. Operational investigations are being carried out and will be carried out in the future by the Corps, as part of the General Staff investigation process. Furthermore, the article does not claim to encompass all events in a chronological and precise manner, but rather to shed light on the main efforts of the Israeli Navy in combat in the various arenas.

has experienced in recent years, when the State of Israel is facing a real challenge in the maritime domain, the Israeli Navy is still too small to face the broad spectrum challenges.

This chapter will describe the naval domain of the 'Israel-Hamas' War. First, the first days of the war, the defensive effort, and the stabilization of the maritime domain will be described. The second part will describe the Israeli Navy's participation in the ground maneuver in the Gaza Strip. The third part will discuss the additional arenas of combat: in the north against Hezbollah and in the Red Sea arena against the Houthi threat. At the end of the chapter, conclusions and recommendations will be presented.

The October 7th and the first days of the war – protecting and stabilizing the maritime domain opposite the Gaza Strip

The weekend of October 7th began like any other regular weekend in the Ashdod area's ongoing security system, which is responsible for the Gaza Strip's maritime domain. During Friday and Saturday night, the system handled several routine incidents that vessels are trained to handle, such as Gazan fishing boats that stray outside permitted fishing zones.

The next morning, on Simchat Torah, with the outbreak of events on the border fence at 6:30, the attempted infiltration by sea also began. Seven boats left one after the other from the northern Gaza Strip coast at high speed, which in such a case leaves the IDF's response time of just a few minutes. Of the seven boats that attempted to reach the Europe-Asia Oil Pipeline (EAPC) facilities, the coasts of Ashkelon and the Zikim beach, three boats were sunk at sea, two were destroyed right on the shoreline, but two managed to penetrate and land on the Zikim beach, about two kilometers north of the Gaza Strip border.²

The terrorist boats were sunk by the Navy patrol boats – the Dvora³ and the Hornet,⁴ which were at sea and were designed to provide a response to exactly such an event. The Dvora focused on stopping the watercrafts, and the Hornet to kill the terrorists who jumped or fell from those boats. The terrorists from the two boats that managed to land on the Zikim beach were shot by the Dvora, which, in the absence of a response from ground forces, also fired towards the beach and managed to neutralize some of them. Unfortunately, the limited number of terrorists that managed to land on the beach carried out a killing spree on the Zikim beach of civilians who were there during the night and

² Shoval, L (November 7, 2023). [Depth charges and quick eliminations: Israel Hayom's report on the Navy ships that prevent terrorist infiltration from the coast](#). *Israel Hayom*.

³ A patrol ship about 30 meters long.

⁴ A light and fast patrol boat about 10 meters long.

morning, and from there they advanced towards the western settlements in the Ashkelon Beach Regional Council, such as Zikim and Yad Mordechai.⁵ In total, more than 30 Israeli civilians were killed in the Zikim beach area.

Later in the day, after numerous reinforcements were deployed to the Gaza Strip, the naval forces closed off the Strip and imposed a full naval blockade against the departure of watercrafts. This was to prevent further attempts at infiltration, or to prevent terrorists from swimming or diving back into the Gaza Strip, and to provide fire support along the coastal route against vehicles attempting to enter or return to Israel.⁶ In addition, the first Navy missile ship, which arrived a few hours later from the Haifa base, began to provide fire support at various targets, including headquarters, weapons depots, Hamas watercrafts in the Gaza anchorage, observation posts, and more.⁷

In the following days, the IDF's missile ships, mainly the 'Saar-6', were deployed to protect the strategic gas infrastructure of the State of Israel in the exclusive economic zone in both the south and the north. Those ships⁸ have been received into the Navy since 2021 and became operational in the past year, following a long systems integration process enabling operational capability. The concern was that Hamas and Hezbollah would attempt to attack the Tamar and Karish Gas production platforms using a variety of different threats – rockets, sea skimming cruise missiles, unmanned aerial vehicles (UAVs) or unmanned underwater vehicles (UUVs). Despite the effort to protect the platforms, it was reported that the Tamar platform was proactively shut down when the fighting began,⁹ and that it took about a month before it was decided to resume gas production from it.¹⁰

Immediately after the outbreak of events in the south, the regular and reserve forces of the 13th Flotilla were also deployed to fight in the settlements around the Gaza strip perimeter. The Navy commando fought during the first few days of the war in many arenas, the most central of which were the "Sufa" outpost, Kibbutz Be'eri, Kfar Aza,

⁵ Buhbut, A. (December 12, 2023). [This is how the Navy lost the war in the first minutes](#). *Walla! News*.

⁶ Buenos, M. (November 16, 2023). [When the waves grow stronger: Navy fighters fight for the borders](#). *Maariv*.

⁷ Blumenthal, A. (May 16, 2024). [Israel at war: More than 50 terrorists eliminated, Navy activity during the attack](#). *Kan news*.

⁸ The defense ships are missile ships about 90 meters long.

⁹ Mustaki, A. E., and Ashkenazi, S. (November 2, 2023). [3 billion shekels invested in protecting the sea did not prevent the shutdown of gas platforms](#). *Calcalist*.

¹⁰ ICE. (November 12, 2023). [Tamar platform returns to normal: "Gas production will begin within a few days"](#).

and Nir Oz. During the battles, the fighters killed dozens of terrorists and rescued many hostages. They also captured several dozen terrorists, including the deputy commander of Hamas's naval commando unit.¹¹ For example, at the IDF's Sufa outpost, which was captured by Hamas, the Navy commando fought with a numerical disadvantage against many terrorists, who had managed to barricade themselves inside. The fighters, with the assistance of armored and air forces, fought for long hours, managed to eliminate about forty terrorists, and freed soldiers who were besieged in a bunker at the base.

Gaza Strip – Preliminary Fire Effort Phase (October 7–27, 2023)

Leading the fire mission to achieve "naval superiority" in the maritime domain of the Gaza Strip

From the first day of fighting and for many months, the Israeli Navy was a full partner in the IDF's firepower effort, and its role was to plan and execute the attack operations required to achieve "naval superiority".¹² In recent years, the Navy established a command and control center for firepower – the "Fire Center", which is staffed primarily by reservists from the Navy, artillery and the Air Force, whose role is to independently complete the "closing the circle for the attack": From intelligence research, through target identification, mission analysis, approval of targets for attack, and transfer to the various attack elements. These attacks were carried out with the help of Israeli Navy watercrafts using cannons and missiles, but also with the help of directing various attack means from the air and the ground, including attacks by fighter jets. Various press publications revealed that the Israeli Navy's "fire center" has actually been operating since the "Guardian of the Walls" (2021) period, during which it managed to successfully thwart a UUV before it was launched into the water. As part of the fire effort, it was reported that the Israeli Navy attacked a wide variety of targets – Hamas watercrafts, operational headquarters, warehouses containing various weapons used by the naval force, communication and observation means, divers who were on their way to carry out a diving attack, and more.

In addition, through the intelligence guidance of the fire center in cooperation with the Military Intelligence and Shin Bet, many senior Hamas and Islamic Jihad naval forces were eliminated (Figure 1),¹³ some of them in underground strikes and at challenging timings

¹¹ Lev Ram, T. (October 12, 2023). [Operation Iron Swords: Dramatic Documentation from the Battle of Sufa Outpost](#). *Maariv News*.

¹² This article uses the term "naval superiority" because that is how the Navy defined the mission. While some may dispute the correctness of the terminology in this case, the use of the term in this article is not intended to express a negative or positive opinion on this issue.

¹³ Shion, Y (October 26, 2023). [The tip of the operational iceberg](#). Israeli navy website.

that required meticulous intelligence gathering to understand the exact location of those seniors on the one hand, and to minimize collateral damage and harm to uninvolved civilians on the other.¹⁴ For example, during the night of October 12, Muhammad Abu Shamala, a senior Hamas naval commando who had stored weapons and diving equipment in his home, was eliminated in his home. Additional senior members of the formation, such as Abu Shamala, were eliminated during the fighting under the direction of the Navy fire center.¹⁵



Figure 1: Hamas naval force operatives who were eliminated by the IDF¹⁶

Naval activity – defense and attack

As the war in the Gaza Strip continued, naval activity consisting of missile ships, Dvora patrol boats, and watercrafts of the 13th flotilla continued to focus on the defense effort at the border and national infrastructure, and on thwarting diving attacks into Israeli territory. On October 24, it was reported that another diving infiltration attempt had been thwarted by the IDF forces, after Hamas divers used underground infrastructure and an approach tunnel that allowed them to reach the waterline without being detected.¹⁷

¹⁴ Manala, N. (October 2023). [When the waves get stronger](#). Israeli navy website.

¹⁵ [IDF Spokesperson's Statement](#). (October 12, 2023). IDF Spokesperson's website.

¹⁶ Buhbut (2023). This is how the Navy lost the war.

¹⁷ Buhbut, A. (October 24, 2023). [How did they not identify them? Harsh criticism of the IDF after the infiltration of Hamas divers on Zikim Beach](#). Walla! News.

Also, even before the main ground maneuver began, the 13th flotilla carried out raids from the sea on Hamas camps and military sites in various locations along the coast, as part of the preparation for the maneuver. The aim was destroying terrorist infrastructure and harming the organization's activities along the entire coast.¹⁸

A noteworthy event is the first artillery attack carried out by the defense ships 'INS OZ' and 'INS Magen' towards the coast. These ships, whose main role is to protect the economic waters and strategic sites of the State of Israel at sea, operated armed with a modern 76 mm cannon manufactured by 'Leonardo', which is a significant technological leap compared to the outdated cannons installed on the 'Nirit' missile class missile boat, some of which are already more than 50 years old. The ships, which, as mentioned, completed operational training a few months before the fighting, demonstrated their offensive capabilities in addition to their defensive capabilities.¹⁹

The underwater threat exposed

One of the main threats that was prominently exposed in the 'Israel-Hamas' war, and it is likely that much effort was invested in defending against and neutralizing it, is the underwater threat posed by the UUVs independently developed by Hamas (Figure 2).

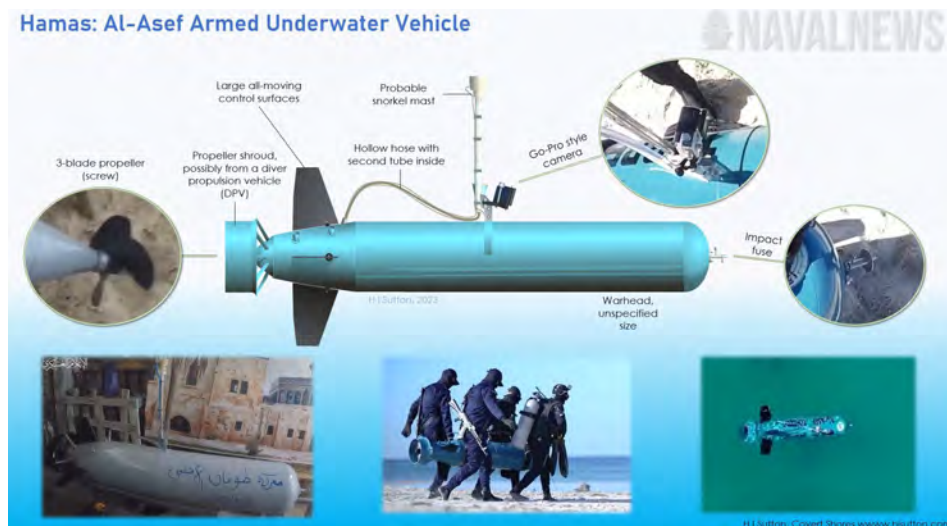


Figure 2: Analysis of HAMAS UUV (Sutton 2023)

¹⁸ [Fighters from Shayetet 13 raided from the sea and destroyed terrorist infrastructure in Gaza.](#) (2023). YouTube.

¹⁹ Lev Ram, T. (October 16, 2023). [Iron Swords: The Navy's New Missile Ships Attacked in Gaza.](#) Maariv.

In a video filmed before and during the fighting, published by the organization, a torpedo-like underwater vehicle called the EL-Assef²⁰ (Figure 3) is seen autonomously guided to the target using GPS. Analysis by independent analysts online indicates that the UUV, which is apparently powered by a small internal combustion engine and uses a "snorkel" for air supply, cruises close to the surface of the water, thus making it very difficult to detect using radar systems or electro-optical observation systems. When it reaches the target, it homes in on it using a simple "GoPro" camera, and hitting the target is what initiates the explosion of the explosives weighing about 50 kg.²¹

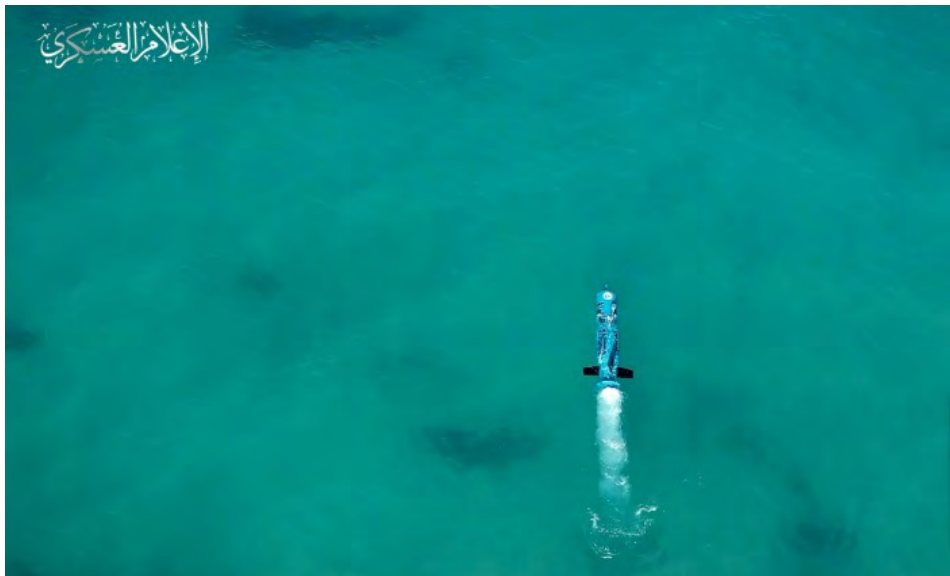


Figure 3: A Hamas UUV during a voyage

In later stages of the fighting, it was announced that the Israeli Navy had thwarted several such watercrafts UUV's intended to attack strategic sites and the country's coasts.²²

Gaza Strip – Maneuver Phase (Starting October 28)

With the start of the ground maneuvers in the northern Gaza Strip and Gaza City, the Israeli Navy provided support and cover for the maneuvering forces through fire support strikes

²⁰ Sutton, H. I. (December 13, 2023). [Hamas Al-Asef Armed Underwater Vehicle](#). *Covert Shores*.

²¹ Boguslavsky, A. (November 2, 2023). ["EL-Assef" – Hamas' unmanned underwater vehicle](#). Israel Defense.

²² Caro, A. (December 12, 2023). [IDF foiled unmanned submarines intended to attack Israel](#). *Channel 14*.

and attacks on targets directed by the ground forces. It was reported that in order to improve the common language between the various forces, officers from "ground" units were stationed at the Navy's control posts in the Ashdod arena, and especially in the "Fire support cell", which is responsible for the fire support mission. Also, Israeli Navy reserve officers were stationed at the headquarters of the maneuvering divisions and brigades. The close cooperation in many cases allowed the naval forces to assist in observation and to alert the maneuvering forces to the presence of an enemy, as the angle of view from west to east (from the sea to the shore) opens up additional observation possibilities, of which the terrorists may sometimes be unaware. In addition, many reports indicated closer cooperation than ever before in the field of fire support. The naval ships fired thousands of shells and many precise missiles under the guidance of the maneuvering forces, and while there was ongoing mutual reporting, sometimes in direct contact between the ship and the company or battalion commander in the line of fire.²³

From the harbor to Shifaa – 13th Flotilla as a special force in the ground combat effort

From the beginning of the maneuver phase, the strengthening of a relatively new trend was evident, the main focus of which was the integration of special forces, including the regular and reserve forces of the 13th flotilla, at the forefront of the maneuver effort on land and in complex spaces where special operations and capabilities was required, such as Hamas underground compounds or inside hospitals.

In the fighting so far, the unit has operated in some of the most complex places to operate, including the Shifaa Hospital, the Al-Rantisi Hospital, underground complexes and Hamas war rooms in Jabaliya, schools where Hamas terrorists were staying alongside many civilians in Gaza City, and more. The advantages of a superior fighting force such as 13th flotilla in complex scenarios are clearly expressed. The unit's range of capabilities from the lone fighter to the battalion allows the force high flexibility and a built-in advantage in these situations over other infantry forces.²⁴

²³ Arkin, D. (February 8, 2024). [The missile ship fleet in the Israel-Hamas War](#). *Israel Defense*; Peleg, A. (December 27, 2023). [The tailwind of the maneuver: Think fire and water don't mix? This place proves otherwise](#). Israeli navy website; Dvori, N. (November 7, 2023). ["Golani Peak, Here's the Navy, I'm Eyes on the Ground": In fire and water off the coast of Gaza – this is what naval assistance to the ground forces looks like](#). *N12*.

²⁴ Naval Forces website system (March 25, 2024). [Finding weapons and terrorist prisoners: Shayetet 13 deepens the achievement in Shifa'](#). Israeli navy website; Naval Forces website system (March 24, 2024). [SCM: Activity in Shifa' is in full swing and assistance for the maneuver continues](#). IDF, Naval Forces website.

A special closure for the unit occurred with the occupation of the Gaza Fishing marina, and the demolition of the memorial commemorating the Mavi Marmara events that stood at the Marina entrance (Figure 4). As you may recall, in the events of the takeover of the Mavi Marmara in 2010, several fighters were seriously injured, and some were even kidnapped into the ship for a few hours and held by IHH terrorists, before being rediscovered by their unit members.²⁵



Figure 4: The Mavi Marmara monument at the entrance to the Gaza harbor before and after

The Northern Area – Vigilance and Increased Readiness

Alongside the extensive activity of the force in the southern area, and in light of the fear of opening another front in the north, the navy has significantly increased its activity on the northern border. As part of Hezbollah's attacks on the Line of Contact posts, various assets were also attacked at the naval base in Rosh Hanikra, and a significant part of the detection system installed on a high mast at the site was damaged. The Israeli Navy reinforced the IDF forces stationed on the northern border, carry out preventive actions to disrupt the possibility of UUV infiltration as occurred on the Gaza border, and declare the entire northern border area in Rosh Hanikra a closed maritime area.

²⁵ Shoval, L. (November 16, 2023). [With fighters from Shayetet 13 and the 188th Brigade: The IDF took control of Gaza's central harbor](#). *Israel Today*.

Along with the reinforcement of forces at the border, it can be assumed that the Israeli submarine fleet was also deployed for intelligence-gathering missions in the Mediterranean. Naturally, they do not receive much publicity, but there is no doubt that the advanced submarine capabilities of the force greatly assisted in understanding the intelligence picture in the Mediterranean.

During the period, no unusual maritime incidents were reported on the Lebanese border, and it appears that the maritime domain near the coast remained outside the "equation" in the ongoing fighting against Hezbollah. On the other hand, Hezbollah UAVs sorties were recorded towards the "Karish" gas platform in Israel's EEZs, and these were intercepted by the Israeli Navy ships.

Gulf of Eilat, Red Sea – International Coalition First Operational Interception of Magen Ship

The naval forces permanently stationed in the Red Sea include a number of small watercrafts – Dvora and Hornet ships, whose mission is to guard the small maritime domain off the coast of Eilat. Therefore, when the initial statements by the Iranian proxy organization operating in Yemen – the Houthis, began about their intention to enter the fighting as part of "Tofan al-Aqsa", it was clear that if the Israeli Navy was forced to deal with this threat, significant reinforcements would be required for the area.

With the increasing threat of air strikes using ballistic missiles and UAVs, and their implementation by the Houthis in the Eilat region and other areas in the south of the country, on November 1, the first two missile ships were sent through the Suez Canal to the Red Sea arena, one of which is a Saar-5 model and has improved air defense capabilities. The weapons were integrated into operational capability, and especially were implemented as part of the IAF air defense efforts, while on the political and strategic levels, the State of Israel carefully emphasized that the Houthi threat to disrupt trade in the Red Sea region is not a threat to Israel, but to the principle of freedom of navigation and freedom of passage in international straits. Therefore, the problem must be addressed with appropriate measures by the international community, led by the United States.²⁶

Indeed, a large portion of the Anti-ship cruise missiles and UAVs launched by the Houthis were shot down by the coalition formed under the leadership of the United States, as well as by other countries bordering the Red Sea. Although it has not been openly reported what Israel's role is in that coalition, and whether it takes an active part in it, there is no

²⁶ Shoval, L. (December 12, 2023). [Following the Houthi threat: The Israeli Navy's missile ship arrived in the Red Sea area](#). *Israel Today*.

doubt that the close relationship built in recent years between the Israeli Navy and the US Fifth Fleet. Located in Bahrain responsible, the 5th fleet is responsible for the Red Sea and Arabian Gulf arenas, and therefore played a critical role in cooperation between the countries in those regions.

Two additional historical milestones were recorded in the Israeli Navy's activities in the Red Sea arena. In mid-December, a Magen Clas (Saar 6) corvette entered the red sea area for the first time (Figure 5), thereby significantly increasing the Israeli Navy's defense capabilities in the Gulf of Eilat and the Red Sea. The Israeli Navy base in Eilat served as a strategic target for various proxy elements directed by Iran, and thus in early April 2024, a UAV launched by an Iraqi militia hit the base, causing minor damage to a structure.²⁷ A week later, the first operational interception of the "C-Dome" system was recorded, which completed the process of entering operational service only a year ago, and a Magen ship shot down two UAVs that were launched towards the city of Eilat, and were discovered when they penetrated from Jordanian territory into the Gulf of Eilat.



Figure 5: The 'Magen' defense ship arrives for the first time in the Red Sea area (documentation from the IDF website)

Summary

On October 6, 1973, the Israeli Navy was the only branch of the IDF who was not surprised by the attack conducted by Egypt and Syria on the State of Israel. To a large extent, it is customary to attribute the Israeli Navy's success in the Yom Kippur War to the lack of

²⁷ Zeitoun, Y., and Ben Ari, L. (April 1, 2024). [A UAV launched from Iraq hit the naval base in Eilat](#). *Ynet*.

surprise. The truth is that the Israeli Navy's success in the war stemmed not from the lack of surprise, but rather from a high level of readiness to implement a combat concept that had been developed and practiced many years earlier, and from its adaptation to the operational challenge that the Israeli Navy faced in those years – the concept of the 'Saar' fast missile ships.

On October 7, 2023, Hamas' surprise attack surprised the Israeli Navy, as it did surprised the entire IDF. In this case, the Israeli Navy did not have the advantage of early warning, which would certainly have dramatically tipped the scales in the opening events that occurred on "Black Saturday". But in this case too, just like fifty years ago, the Israeli Navy was prepared with the combat concepts appropriate to the current challenges – providing assistance from the sea to the shore, leading the fire effort from the sea and the air to thwart Hamas' naval forces, and protecting the maritime strategic assets of the State of Israel. With the exception of the infiltration of the IDF formation on the morning of October 7th, which ended in a terrible disaster on the Zikim coast, it can be said that the Israeli Navy fulfilled its responsibility to protect territorial waters and strategic assets, which faced risk from the various means that Hamas had developed over the years, and on the other hand, it led the effort to neutralize and destroy Hamas' naval force.

The activity in the two additional arenas in the north and the Red Sea has not faced any significant challenges so far, but it appears that over the past time, the Israeli Navy has carried out the processes required to increase the level of readiness to carry out the necessary operations in defense and attack.

The 'Magen' class corvettes, which received full operational capability only a very short time ago, through a technological effort and a precedent-setting period of time, participated in combat and gained operational experience in a number of operational scenarios, thus proving that they are necessary for the Navy, especially when it is required to fight in three arenas simultaneously.

The Houthis and the maritime domain since the outbreak of the Israel-Hamas war

Shlomo Guetta

Introduction

The involvement of the Houthis in the war against Israel or against Israeli interests was not a surprise to intelligence officials and researchers at research institutes specializing in political and military studies of the Middle East. The common interest and cooperation between Iran and the Houthis since the break of the civil war in Yemen (2014) is also not a surprise, since the former saw the Houthis as a worthy partner in the "axis of resistance" given their hold on the southern Red Sea and strategic proximity to the Bab-el-Mandeb Strait.

In recent years, and especially since the Houthi movement established its position during the civil war in Yemen, and took control of a region in the northwest of the country (bordering the Red Sea coast) at the end of 2014, several articles have been published in Israel and around the world that shed light on their accumulation of military power and their audacity towards Yemen's neighboring countries, primarily Saudi Arabia and the United Arab Emirates. The articles expressed the assessment that it will not be long before the Houthis' military capability will be directed towards Israel and its allies in the West, especially the United States.¹ This is in light of the spirit of the slogan inscribed on the flag of the Houthi movement: "Allahu Akbar, death to America, death to Israel, curse on the Jews, victory for Islam".

Other foreign researchers have praised the Houthis' cumulative military power, which draws its capabilities to conduct an asymmetric campaign inspired and



Figure 1: The Houthi symbol with the inscription "Allahu Akbar, Death to America, Death to Israel, Curse on the Jews, Victory to Islam"

¹ Rubin, A. (October 7, 2019). [The Missile War in Southern Arabia: Lessons for Israel](#), JISS; Heistein, A., and Stoin, E. (April 27, 2021) [Out of Sight, Out of Mind? Understanding the Houthi Threat to Israel](#), INSS.

manufactured by Iran.² Following the Houthis' attacks on strategic targets in Saudi Arabia in 2019,³ the well-known Egyptian historian Abbas El-Tarabili warned in an article he published in November 2017 that: "The missiles that Iran supplies to the Houthis also threaten the Suez Canal".⁴ It can be stated that for the experts and research centers that specialized in studying Iran and the Houthi movement, as mentioned, the Houthi involvement in the 'Iron Swords' war was not a surprise.

Who are the Houthis and what is the source of their power?

The Houthi movement, known as the "Ansar Allah" (Supporters of God) organization, was established in Yemen in the early 1990s, and was based on the Muslim minority, the Zaydi Shiites, who make up about 42% of the population in Yemen, while the Houthis themselves (a group within this minority) make up about 30% of the country's total population. In 2004, the movement began a rebellion against the central government in Yemen, claiming that it had become too closely identified with the United States and Israel. By 2009, there were several rounds of fighting between the parties, at the end of which the Houthis established autonomy in northwestern Yemen, and they currently control large parts of the country, including the capital Sana'a and the area of Al-Hudaydah province and its important port cities. The Houthis managed to increase their power and the area of their control, and in 2015 they ousted Yemeni President Abd Rabbuh Mansour Hadi, which led to the establishment of a coalition of Arab countries against them in March 2015, led by Saudi Arabia and the United Arab Emirates.⁵

The Houthis built their power in the civil war in Yemen, and especially in their activities against the Arab coalition countries: Saudi Arabia and the United Arab Emirates, which supported the central government in Yemen. During the years of this war, they gained experience and operational capabilities, including, and perhaps especially, in the maritime dimension. This is due to their control of northwestern Yemen and the Yemeni coast, to the north of them the Saudi coast on the Red Sea, and to the south of them the proximity to the Bab-el-Mandeb Strait, one of the most important arteries of shipping in the world, connecting the Far East and the Indian Ocean with the Mediterranean Sea and European

² CSIS. (December 21, 2021). [The Iranian and Houthi War against Saudi Arabia](#). a joint paper by several analysts.

³ The attack on Saudi Aramco's Abqaiq and Khurais oil production facilities occurred on September 14, 2019, leading to their shutdown and a dramatic reduction in Saudi oil production. After the attack, the Houthis in Yemen claimed responsibility for the attack.

⁴ *Middle East Media Research Institute*. (November 19, 2017). [Senior Egyptian writer warns: The missiles Iran supplies to the Houthis also threaten the Suez Canal](#).

⁵ Nissim-Lovton, I. (July 5, 2021). [Yemen's North-South War](#), *the Crossroads of the Middle East*.

countries. During that civil war, the Houthis attacked the territories of Saudi Arabia and the United Arab Emirates, and in the process used advanced weapons supplied to them, mainly from Iran, which had supported them over the years, especially since the end of the first decade of the 21st century because it saw them as partners in the "axis of resistance". Iran recognized the geopolitical advantage in aiding and supporting the Houthis, both because they are enemies of Saudi Arabia and the United Arab Emirates, because of their burning hostility to the United States, Israel, and the Jews, and, as mentioned, also because of their geographical proximity to a strategically important maritime chokepoint – the Bab-el-Mandeb Strait.

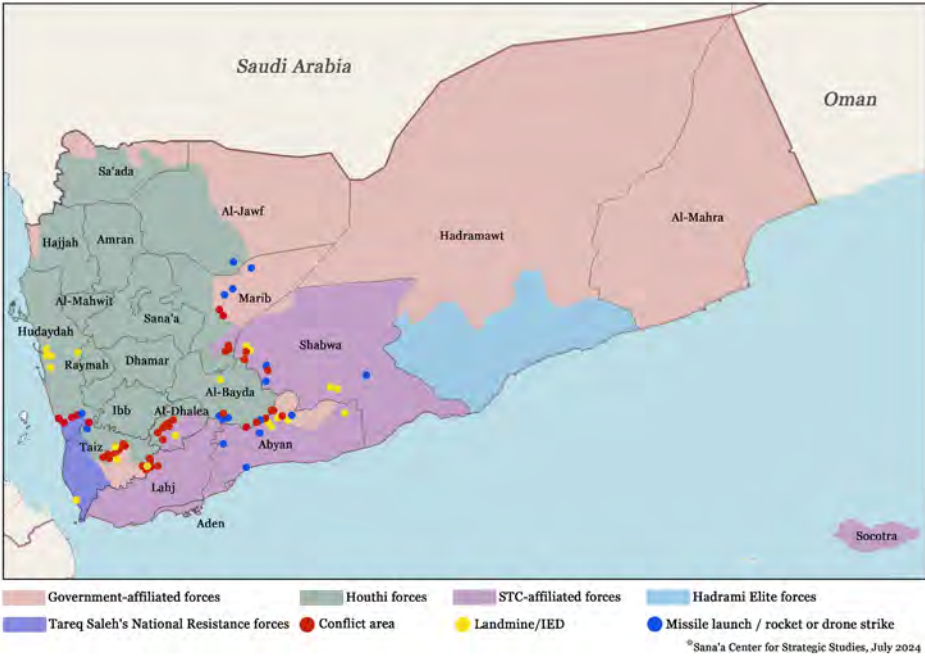


Figure 2: Control of territories in Yemen, April-June 2024

The offensive activity of the Houthis, with Iranian support and assistance, was carried out with great boldness using a wide variety of weapons (hereinafter referred to as weapons), mainly Iranian, but also weapons that had previously been used by the Yemeni army, after they had fallen into their possession. The offensive activity was carried out against targets of the central government and against Saudi and Emirati targets, including in the maritime sector, in the southern Red Sea, using naval mines, explosive boats, shore-to-sea missiles, unmanned aerial vehicles (hereinafter referred to as UAVs), and more. The activity in the maritime domain at that time also included attacking Saudi warships using

missiles and explosive boats, as well as infiltration by explosive boat into the Saudi port of Jizan (the southern Saudi port near the Yemeni border) in 2017.

In late 2016 (at the end of Obama's presidency), the Houthis also launched coast-to-sea missiles at a US Navy destroyer and amphibious transport ship, an action that received a relatively minor response. The US destroyer launched several cruise missiles at military targets (apparently radar stations) in Houthi-controlled territory.

Apart from the maritime area, the Houthis carried out attacks on strategic land targets in Saudi Arabia, the highlight of which was the missile attack on the capital Riyadh in November 2017, and the attack on Aramco oil facilities in September 2019 and March 2021.

Through the "Quds Force" and the Revolutionary Guards Navy, the Iranians were involved in the civil war in Yemen, an involvement that continues and intensifies even today, and is expressed in the massive supply of weapons of various types and models, the supply of facilities for the self-production of weapons, and weapons parts that were assembled in Yemen. In addition to assisting in building the Houthi force, members of the Iranian Revolutionary Guards and "Quds Force", as well as operatives of the Lebanese Hezbollah organization, are involved in many aspects of the Houthi exercise of power in the areas of guidance, training, initiation, and direction.

In addition, the Iranians also assisted the Houthis in building an intelligence posts, including through the permanent presence of an Iranian intelligence/command ship since 2016 off the coast of Yemen in the southern Red Sea. Until April 2021, this was the Iranian ship named Saviz, and after it was damaged and returned to Iran, it was replaced in July 2021 by a sister ship named Behshad, which, as will be described below, continued to remain in the southern Red Sea until early January 2024.



Figure 3: Iranian intelligence ships off the coast of Yemen in the Red Sea

In addition to that intelligence/command ship, the Iranians periodically dispatched a naval task force of the Iranian Navy that demonstrated a presence in the Gulf of Aden and the southern Red Sea, and usually included a frigate escorted by auxiliary ships. In April 2022, a loose ceasefire was reached between the Arab coalition and the Houthis, mediated and sponsored by the UN, to Iran's displeasure. This fact serves to illustrate that the Houthis, unlike other Iranian "proxy" such as Hezbollah in Lebanon and the Shiite militias in Iraq, are not the absolute agents of Iran. In this context, it should be noted that the Houthis belong to the Shiite-Zaydi sect, and not to the mainstream Shiite sect to which Iran belongs, and therefore their degree of loyalty and affiliation with Iran is not unambiguous or absolute.

Indeed, the years of the civil war in Yemen and the subsequent war against the Arab coalition, which lasted almost a decade, have strengthened the Houthis' power in the field of power building and operational use. In September 2023, a large-scale military parade was held in the capital, Sana'a, which brought to light an impressive and powerful display of diverse military equipment, including special weapons, ballistic missiles, cruise missiles, unmanned aerial vehicles, explosive boats, naval mines, and more.



Figure 4: Images from the Houthi military parade in 2023⁶

In short, during the years of the civil war, the Houthis established an equipped and trained army of more than 250,000 fighters, including a naval arm. Although this arm is not a navy in the classic sense of a navy, which includes missile ships and large watercrafts, it is certainly a force capable of asymmetric warfare in the maritime domain, created by the Revolutionary Guards and the Iranian Quds Force.

The Houthis' involvement in the 'Israel-Hamas' war

With the outbreak of the war on October 7, 2023, the Houthis began to declare and threaten that they would join the campaign if Israel's actions in the Gaza Strip did not cease. This was as an expression of their hostile approach to Israel, and out of an expression of

⁶ Link to a video reviewing the military parade that took place in the capital city of Sana'a, *MEMRY TV* (September 21, 2023). [Houthis Showcase Large Arsenal Of Missiles, Drones At Sana'a Military Parade.](#)

solidarity with the Palestinians in general, and with the Hamas movement in particular. A few days later (on October 19), the Houthis began to carry out their threats and launch UAVs, cruise missiles, and long-range ballistic missiles towards Israeli territory in the Eilat area. The Yemeni Houthi Prime Minister accepted responsibility for the shooting and threatened in the last week of October and in mid-November 2023 that if Israel's actions against the Gaza Strip continued, Israeli watercrafts in the Red Sea and off the coast of Yemen would be attacked.⁷

The threats in the maritime domain did indeed begin to materialize on November 19, 2023, and a Houthi commando force landed on board the *Galaxy Leader* (a ship with Israeli ties that, according to publications, is partially owned by Israeli businessman Rami Unger), and took control of it as it sailed in the Red Sea off the coast of Yemen on its way south. The Houthi commando force captured its crew, led it to the port of Hodeidah, and there the Houthis conducted propaganda campaigns and victory celebrations on it, and since then it has served as a center of tourism and pilgrimage.



Figure 5: Images from the Houthi takeover of the ship *Galaxy Leader*

An analysis of the characteristics of the helicopter commando operation indicates similar characteristics of a takeover at sea to those carried out by an Iranian commando force in similar cases in the past, which indicates combat methods and tactics resulting from guidance and training that the Houthis acquired from the Iranians.

The capture of the *Galaxy Leader* was the opening signal for the continuation of the Houthis' hostile activity in the maritime domain of the southern Red Sea, and later in

⁷ Kleiman, S. (November 14, 2023). [Houthi leader threatens: "We will attack Israeli ships in the Red Sea"](#), *Israel Hayom*.

the Gulf of Aden and the Indian Ocean, against shipping targets allegedly linked to Israel or owned by Israel and were on their way to and from it. Subsequently, after the United States and Britain began attacking targets in Yemen on January 12, 2024, the Houthis' hostile activity was also expanded against shipping targets linked to the United States and Britain. By the end of June 2024, there were approximately 150 incidents of ship attack activity, the vast majority of them by the Houthis in the southern Red Sea and in the Gulf of Aden and Oman, and to this must be added the incidents of firing at watercrafts of Western navies.

The leader of the Houthi movement in Yemen, Abdul-Malik al-Houthi, claimed in one of his last speeches in the second half of June 2024 that 153 ships affiliated with Israel, the United States, and Britain had been attacked since the beginning of the war. In his speech, al-Houthi also boasted of another alleged attack against the American aircraft carrier Eisenhower. On the other hand, the Pentagon recorded more than 190 attacks by the Houthi against ships since the beginning of the war.⁸

The hostile activity against shipping targets was taken seriously by insurance companies, shipping companies, and merchant ship owners, and in order not to take any risks, they decided to bypass the Bab-el-Mandeb Strait and sail a longer route around West Africa, which increased costs, extended the duration of the various trade routes, and of course affected the volume of traffic in the Suez Canal (see chapters dealing with the economic effects of the Houthi attacks).

The shooting and attempts to hit the various watercrafts were carried out with a variety of weapons from the Houthi arsenal. Most often, using cruise missiles, UAVs, and ballistic missiles against naval targets. In a few cases, armed boats or explosive boats were used, as well as unmanned underwater vehicles (hereinafter referred to as UAVs). It should be noted that the Houthis make frequent use of UAVs, including the saturation method, i.e. launching a large number of vessels simultaneously.

Figure 7 below depicts the vast quantities of weapons launched by the Houthis or destroyed by Western navies.⁹ As can be seen, this amounts to almost 200 anti-ship ballistic missiles (ASBM), about 90 anti-ship cruise missiles (ASCM), about 430 UAVs, about 40 USVs (unmanned surface vehicles) or gunboats/explosives, and at least one

⁸ Ben-Ari, L. (June 24, 2024). [The Houthis' new weapons - not afraid of the United States: "For Gaza". Ynet.](#)

⁹ [Updated Infographic of Houthi Missiles, Drones, USV's, Manned boat launches, interceptions.](#) June 23, 2024

UUV attack. During June 2024, an USV attack was successfully used, which resulted in the sinking of the ship TUTOR.

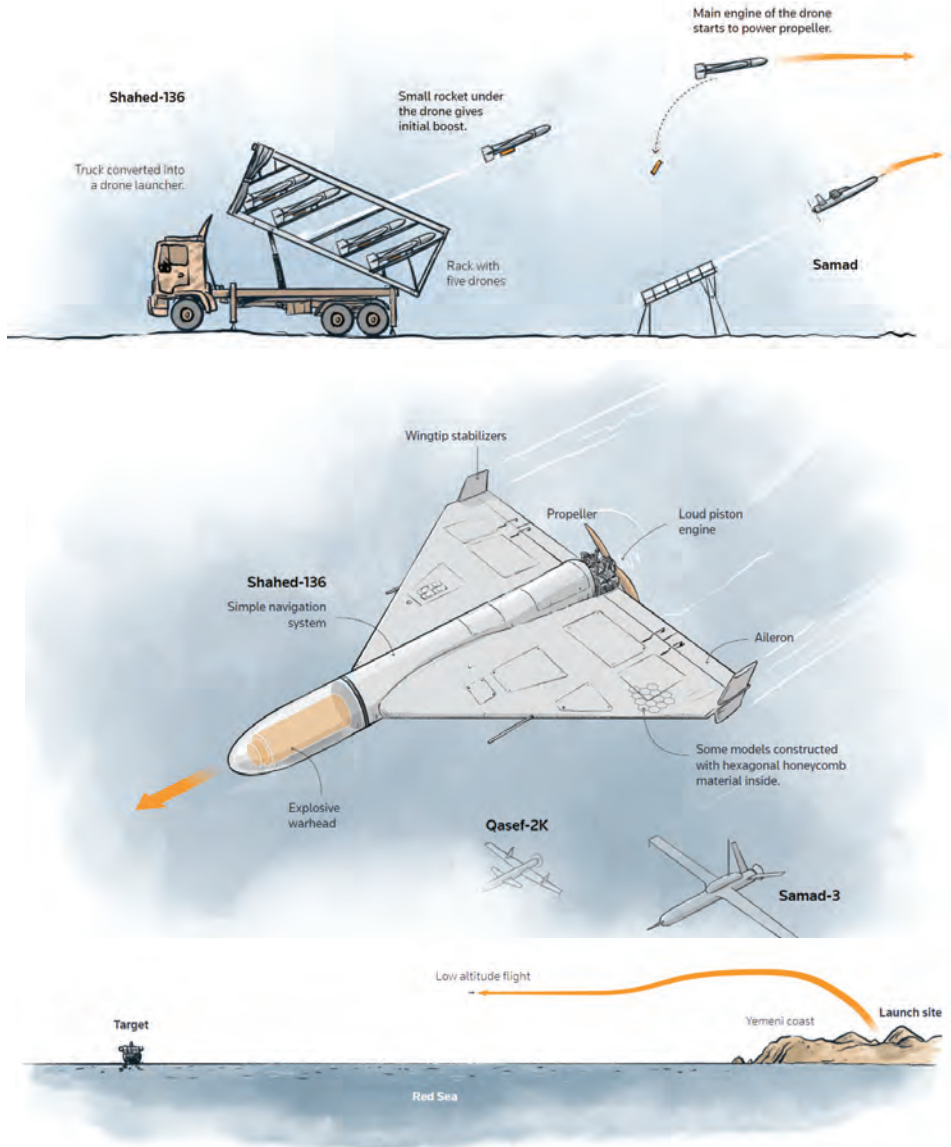


Figure 6: Use of UAVs, including simultaneous saturation¹⁰

¹⁰ Simon Scarr, Adolfo Arranz, Jonathan Saul, Han Huang, Jitesh Chowdhury and Vijdan Mohammad Kawoosa. (February 2, 2024). [Red Sea attacks— How Houthi militants in Yemen are attacking ships in one of the world's busiest maritime trade routes](#), *reuters*.

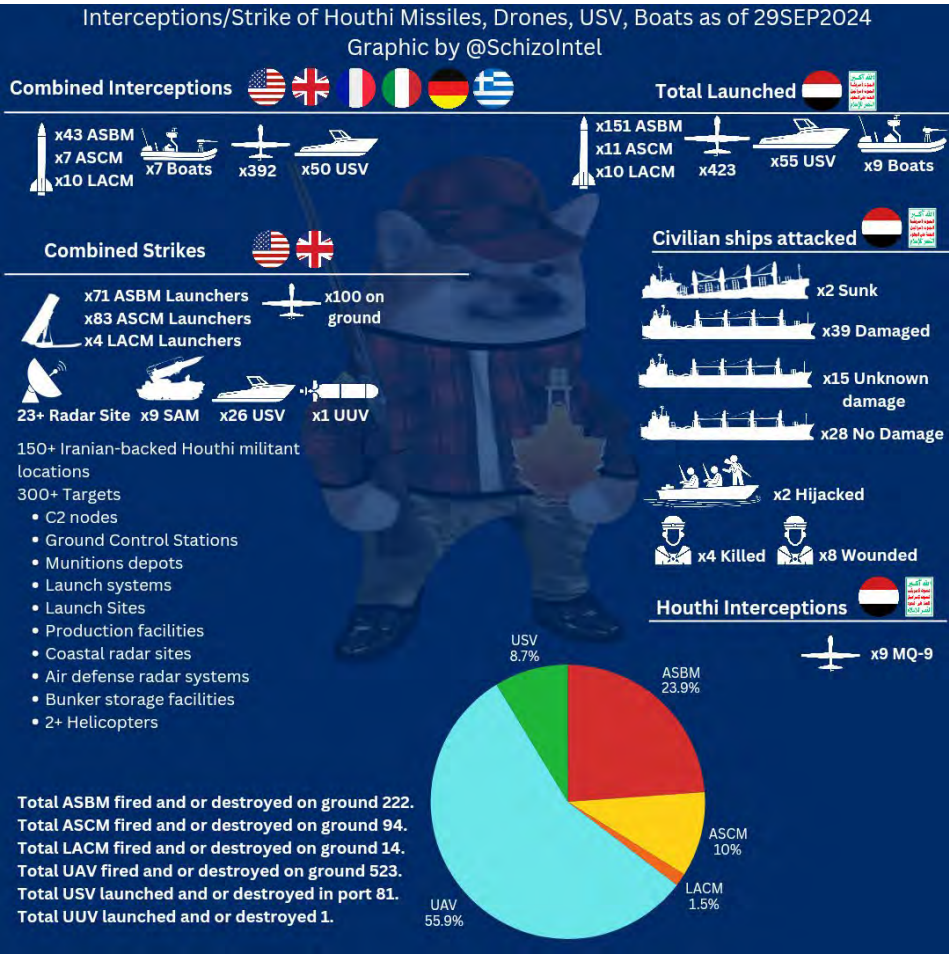


Figure 7: Total weapons fired by the Houthis or destroyed by the West

As can be seen, the most common means is the use of UAV, followed by the frequent use of ballistic missiles against watercrafts. In the context of the use of ballistic missiles against naval targets, Admiral Brad Cooper's statement is noteworthy: "The Houthis are the first party in world history to use ballistic missiles against ships".¹¹ As mentioned, for

¹¹ See in this connection an interview with Admiral Brad Cooper, until recently the commander of the US Fifth Fleet and now the deputy commander of US Central Command. "The Houthis are the first entity in the history of the world to use anti-ship ballistic missiles ever". These words of Admiral Cooper were spoken on the program "[Inside look at U.S. Navy response to Houthi Red Sea attacks](#) | 60 Minutes", which was dedicated to the crisis in the Red Sea. This program extensively reviews the events and consequences of the activities of the Houthis in the Red Sea. It is recommended to watch it.

the first time in the history of naval warfare, it is evident that the Houthis, based on Iranian developments that probably originated in China and North Korea, are increasingly operating using ballistic missiles capable of hitting naval targets. The homing method chosen by the Iranians, and followed by the Houthis, is electro-optical. The ballistic missile is launched towards a location where the naval target is expected to be during the time it takes the missile to reach it (3 to 6 minutes). At an appropriate range from the target, the attacking missile activates its sensors and continues to homing in on it using the optical sensor.

In those cases where the launches were carried out against military watercrafts of the United States and British navies, or in cases where those watercrafts were operating in close proximity to merchant ships that were the target of the attack, the weapons fired at them were intercepted by the defenses of the military fleet watercrafts, such as anti-aircraft guns or anti-missile missiles. The efforts to defend against Houthi attacks in the maritime domain were joined by the navies of Western countries, including France, Germany, and even the Indian Navy in the Indian Ocean and the Gulf of Aden. A significant portion of the attacked merchant ships escaped without significant damage and continued to sail on their way.

The ship Genco Picardy (Marshall Islands flag, owned by an American shipping company) was hit on January 17, 2024, in the Gulf of Aden by a Houthi UAV.¹²

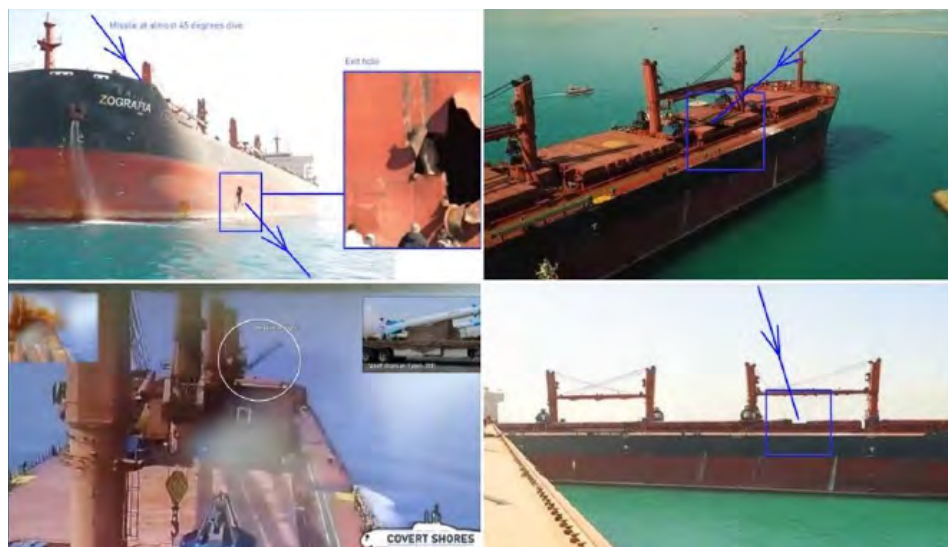


Figure 8: Ships that were not significantly damaged and continued on their way

¹² Roy, R. (January 25, 2024). [Red Sea Conflict Prompts India's Navy to Flex Its Muscles](#), *The Wall Street Journal*.



Figure 9: The ship Zografia (Maltese flag, Greek-owned) at which a Houthi ballistic missile was launched on January 16, 2024. The missile appears to have penetrated it and failed to explode (courtesy of the [Alma Research Center](#))

However, in a few cases the damage was significant and led to the decision to abandon the ship. As in the case of the Rubymar tanker, whose crew was forced to abandon it and was picked up by a French frigate. An attempt was later made to tow her, but it failed, and it eventually sank.



Figure 10: The ship RUBYMAR (Belize flag, British owned) was hit on February 18, 2024 by a Houthi ballistic missile and subsequently sank¹³

Another ship that was severely damaged and its crew was forced to abandon ship was the TUTOR, which was attacked in the southern Red Sea in mid-June 2024 by one or two explosive boats carrying a payload of approximately 150 tons of explosives each. According to the Houthis, this was an explosive boat known as a "Toophan", which means "flood" in Hebrew.¹⁴ In the Houthi propaganda films, it is shown that the "Toophan" USV

¹³ Parker, A. (February 27, 2024). [Ship sinking in Red Sea after Houthi attack drifts north - as US Navy offer help](#), Sky News.

¹⁴ Ben Ari (2024).

hit the ship. However, from a different angle, taken seconds before the impact, it appears that this was a fishing boat converted into a bomb boat. In any case, it appears that the Houthis also use small vessels that serve as bomb boats.



Figure 11: The "Toophan 1" destroyer boats as displayed at the military parade in September 2023



Figure 12: One of the two explosion sites on the Tutor ship in a photograph published by Al Jazeera¹⁵

Iranian involvement in the Houthi maritime blockade

Western intelligence sources are convinced that the Iranians are behind the Houthis' activities and are assisting them in transmitting intelligence and continuing to supply

¹⁵ [The Houthis via Al-Jazeera published documentation of two unmanned surface vehicles targeting the Greek-owned commercial vessel Tutor](#). June 6, 2024.

weapons, mainly by sea using large fishing vessels. The transfer of Iranian weapons along this route has continued in the months since the outbreak of the "Iron Swords" war, during which the Houthis have continued to fire at ships and military watercrafts in the maritime domain of the southern Red Sea and the Gulf of Aden. The smuggling activity, some of which has been thwarted by the United States Navy, is carried out using large "dhow" fishing vessels that are common in the Gulf of Oman and the Arabian Sea.

Also in January 2024, it was learned from British sources that 200 Houthi fighters were receiving special naval training at the Khamenei Academy in the Caspian Sea.¹⁶



An example of the capture of a DHOW fishing vessel by the US Navy on January 11, 2012. Weapons with missile parts smuggled from Iran for the Houthis



An Iranian ship that smuggled weapons to the Houthis and the weapons seized on board; the ship was seized by the United States Navy

Figure 13: Smuggling weapons from Iran to the Houthis using local ships

¹⁶ ynet. (January 11, 2024). "[Khamenei personally involved in Red Sea blockade, Houthis trained at elite Iranian academy](#)", quoted from the British Telegraph; *Iranwire* (January 11, 2024). [Report: 200 Houthi Rebels Were Trained at Iranian Naval Academy](#).

In the first quarter of 2024, information was published, the reliability of which is unclear, according to which the United States, through the mediation of the Sultanate of Oman, is conducting secret talks with the Iranians so that the latter will act to restrain the Houthis and stop their activities against shipping targets in the region. According to the British daily "Financial Times" from "American and Iranian sources":¹⁷ The United States has been conducting secret talks with Iran throughout the year with the aim of convincing it to use its influence over the Houthis to end the attacks in the Red Sea. According to the daily, the negotiations began in January 2024 and were conducted indirectly through Oman. The negotiations on behalf of the United States were led by Brett McGurk, the US President's envoy to the Middle East, and the talks on behalf of Iran were led by Ali Bagheri Kani, Deputy Foreign Minister.¹⁸

In light of the Houthis' continued massive activity in the second quarter of the year, and even more so in expanding their activity to additional circles in the Indian Ocean, it is clearly evident that the talks in this area have come to nothing. It should be noted that experts in the field cast doubt on the Iranians' ability to impose authority on the Houthis and force them to end the maritime blockade. This is in contrast to Iran's ability to influence its other sponsored organizations in Iraq, Syria, and Lebanon. What's more, it is evident that the Houthis are very pleased with the drama they are creating and causing and its impact on the shipping world and the global economy, and will not soon abandon the role that, in their view, Allah has assigned to them at this time.

In this context, it is worth quoting a somewhat self-righteous statement by the commander of the Iranian Revolutionary Guards Navy, Alireza Tangsiri, according to which the Houthis "are an independent force that does not take orders from us". He also claimed that the Houthis "produce missiles and USVs themselves and have built their own naval force despite the sanctions".¹⁹

Despite this, elements such as the United States and Britain continued to declare during the war that Iran was directly involved in the campaign and was assisting the Houthis operationally and with intelligence by helping to plan Houthi operations, transferring

¹⁷ Schwartz, F., and England, A. (March 14, 2024). [US held secret talks with Iran over Red Sea attacks](#). *Financial Times*.

¹⁸ Ibid.; Information cited in a publication by the Intelligence and Terrorism Information Center named after Major General Meir Amit (March 25). [Expansion of Houthi activity in the Red Sea region](#).

¹⁹ *Al-Monitor* (April 9, 2024). [Iran naval chief calls Israeli presence in UAE 'threat,' seeks Islamic army coalition](#).

advanced weapons to Yemen, training Houthi forces, and providing intelligence assistance for attacking ships in the region.²⁰

As you may recall, since July 2021, the Iranian intelligence ship 'Behshad' has been regularly present off the coast of Yemen, providing the Houthis with an intelligence and command & control services. When the Houthis' offensive activity began on November 19, 2023 in the southern Red Sea, the 'Behshad' was in the same area, and during that period, approximately 30 attacks were indeed carried out.²¹ In early January 2024, the Iranian intelligence ship left the Red Sea, began operating in the Gulf of Aden, and spent several days in the port of Djibouti. It seems that the Iranians decided to keep it away from the Red Sea in light of their awareness of an upcoming American attack against Houthi targets in Yemen, an attack that did indeed materialize on January 12, 2024.

It should be noted that while the Behshad was in the Arabian Sea and the Gulf of Aden from January to early April 2024, the Houthis carried out more than 60 attacks on naval targets, including those operating in the Arabian Sea and the Gulf of Aden. Since the Houthis do not have control or hold on the Yemeni coast in the Gulf of Aden, it is likely that they used the Iranian ship to build an intelligence picture of maritime targets. However, after the ship returned to its home port of Bandar Abbas in Iran, as stated in early April 2024, there was a decrease in the number of Houthis' attacks. It is unclear whether the Iranians sent another platform to the region as an alternative to the Behshad.

In mid-June 2024, the Houthis launched a ballistic missile that hit a Ukrainian-owned ship called Verbena, causing extensive damage that forced its abandonment.²² The United States Central Command (CENTCOM) reported that the Iranian naval vessel Jamaran was approximately 15 kilometers away from the cargo ship Verbena, and did not respond to the crew's distress call.²³

Beyond the ethical issue concerning the maritime tradition of providing assistance in times of need, the question arises as to what the Iranian frigate was doing in the Gulf of Aden at that time? Could it have served as an alternative to a reconnaissance ship for the Houthis, such as the ship "Behshad" that returned to its home port in Bandar Abbas? In the opinion of the author of this article, this possibility cannot be ruled out, since a

²⁰ Farber, Y. (January 31, 2024). [Iran's deep involvement in the Red Sea arena](#), *bhol.co.il*.

²¹ Polak Kanarik, D., and Shapira, B. (April 24, 2024). [How Did the Return of the "Behshad" to Iran Influence the Houthi Attacks Against Ships in the Red Sea?](#) *Alma Research and Education Center*.

²² *Abu Ali Express*. (June 18, 2024). [The hole that was made in the Ukrainian ship Verbena after it was hit by a Houthi missile a few days ago](#).

²³ *Ynet*. (June 16, 2024) [US military: Iranian ship ignored call from ship attacked by Houthis](#).

frigate of this model certainly has detection and intelligence means that could be used for reconnaissance missions and building a maritime intelligence picture.



Figure 14: The damage to the Verben ship



Figure 15: The Iranian frigate Jarman did not respond to the distress calls of the ship's crew.

Summary

The Houthi movement, which until October 7 was "out of sight and mind", has managed to reach the forefront of global affairs in the months since October 2023 and now stands out as a powerful factor supported by the Iranians and greatly influences the world of shipping and the global economy. The amount of weapons deployed by the Houthis in the months of October 2023 - June 2024 is very large by any standard, and to this must be added an equally large amount of weapons that have been destroyed by the fleets of the Western coalition since January 2024.

A Middle East researcher specializing in Yemen was asked the question, "Why do the Houthis go out of their way to demonstrate solidarity and partnership with Hamas against Israel?" In her answer, she explains that the Houthis see themselves as committed to the Palestinians regardless of Iran. This has been going on for years and is becoming more radical with anti-Israel and anti-American sentiments that are only getting stronger. The pro-Palestinian stance gives the Houthis a status not only in Yemen, where they are supported, but throughout the region. This is solidarity across camps in Islam, from the Shiite movement to the Sunni movement.²⁴

As for the Houthis, it is clear that the repeated American and British attacks since January 12, 2024, are not letting up, and they continue to operate and even threaten to expand their offensive activity against shipping targets in the Indian Ocean region, as well as in the

²⁴ Shani, A. (November 8, 2023). [Why are the Houthis intervening in the Israeli-Palestinian conflict? Not just because of Iran](#), Haaretz.

"Cape of Good Hope" route in the Atlantic Ocean, near the southern African continent, which serves as an alternative shipping route to the Bab-el-Mandeb Strait. Whether they will carry out this threat and how they will do so at such long ranges is unclear.

Meanwhile, the Houthis began to declare their plan to expand the range of attacks to include merchant ships on route to and from the ports of Haifa and Ashdod, and in the process, they established themselves and enlisted the help of Shiite militias in Iraq. On June 22, 2024, the spokesman for the Houthi armed forces, Yahya Saria, and the Islamic resistance elements in Iraq announced the continuation of joint attacks against Israel. It was claimed that two attacks were carried out: against four ships in the port of Haifa using UAVs. It was reported that two ships were carrying general cargo and the other two were carrying concrete shipments, and that they were attacked for violating the ban on entry to Israeli ports (allegedly imposed by the Houthis); an attack using UAVs against the ship Shorthorn Express, which was on its way to the port of Haifa - no verification was found on the ground for these attacks.²⁵

As for the shipping targets and vessels of Western countries, it is likely that even Iran, which has strong ties to the Houthis, will not be able to restrain them. It seems that the Iranians will also have a hard time putting the "genie back in the bottle". Was it the reverse of what was planned?

Meanwhile, those trying to respond to the Houthi maritime threat are the navies of Western countries and the Indian Navy. The US Central Command and the 5th Fleet have long established several naval task forces in the area surrounding the Arabian Peninsula and the Horn of Africa, including Naval Task Force 153, under Egyptian command. This task force is intended to secure maritime activity in the Suez Canal and the Red Sea, but since the outbreak of the "Israel-Hamas" war, it does not appear to be active in accordance with its purpose. The Arab countries that are partners in this force, such as Egypt, Saudi Arabia, and the United Arab Emirates, prefer that the response to the Houthi threat be provided by the Western navies rather than by them, so as not to be portrayed as standing on the side opposite to identification with the Palestinian side.

Analysts believe that even if the Houthis' maritime threat may gradually fade if a ceasefire is achieved in Gaza, it will not disappear - it is expected that the effectiveness it has had in disrupting global trade will only continue to encourage the Houthis.²⁶

²⁵ Zimet, R. (June 19–26, 2024). [A Look at Iran and the Shiite Axis](#), Maj. Gen. Meir Amit Intelligence and Terrorism Information Center.

²⁶ Raydan, N. (June 28, 2024). [Red Sea Update + My Latest Article](#).

From Israel's perspective, the Houthi threat in general and the threat to shipping traffic connected to Israel in particular have materialized as many experts have assessed and predicted in the past.²⁷ Even after the "Israel-Hamas" war ends, the Houthis are not going to disappear, but it is expected that Iran will continue to see them as partners and part of the "ring of fire" around Israel. Therefore, it is appropriate in the "day after" framework that the United States, through Central Command and the 5th Fleet, integrate the Israeli Navy into a naval task force in the region together with the moderate Arab states.

On the morning of July 19, a long-range UAV launched from Yemen succeeded in crossing the Red Sea, the Gulf of Suez, and the Sinai Peninsula. It then continued its flight to the Mediterranean Sea, made a turn eastward, and hit a building in Tel Aviv. This attack caused one casualty and about ten injuries. In response, Israel vigorously attacked, through the Air Force, the port of Hodeidah and energy and infrastructure facilities in its vicinity at dawn on July 20. This was Israel's first response to the Houthis, although since October 2023, about 200 munitions of various types have been launched at it. Following this attack, the Houthis hastened to declare that their response will come against vital targets of the "Zionist enemy", including hitting naval targets in the area off Israel's coasts and ports in the eastern Mediterranean. Even after Israel's second powerful airstrike in the Hodeidah area, the Houthis continue armed activity in the southern Red Sea and are threatening even more strongly to pose a real threat against Israeli and American naval targets in the eastern Mediterranean, with the possibility of cooperation, they say, with the militias in Iraq and Hezbollah in Lebanon.²⁸

It appears that a war has been brewing between the Houthis and Israel for many years without an end mechanism. It is estimated that their damage to Israel's maritime domain, and especially to the freedom of navigation to the port of Eilat, will continue even after the war in Gaza ends. It must be assumed that the Iranians and Hezbollah in Lebanon, who have contributed greatly to the building and operation of the Houthis' power, have closely monitored the Houthis' activity in the southern Red Sea and the Gulf of Aden and analyzed the effectiveness of the various means of warfare used against naval targets. Furthermore, it must be estimated with a high degree of probability that Hezbollah in Lebanon possesses identical or similar types of weapons, including UAVs and medium-range ballistic missiles against naval targets, which could pose a threat to Israeli targets in the Mediterranean Sea (watercrafts, infrastructure facilities, and ports).

²⁷ See for example Chorev, S. (2023). Summary of Maritime Strategic Evaluation for Israel and Policy Recommendations, in S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa), 483–520, Second Recommendation; and Heistein and Stoin (2021).

²⁸ Ben Ari, L. (October 13, 2024). [Report: The Houthis are preparing for direct naval battle with Israel and the US](#), *Ynet*.

Unmanned Vehicles – Changing the landscape of Maritime Security

Sharon Erlichman

The development of unmanned aerial and land vehicles in recent decades has led to far-reaching changes in various fields such as security, economics, agriculture, logistics, transportation, and more. However, the nature and the unique challenges of the maritime environment have meant that unmanned vehicles in the maritime domain have been developed at a slower pace. Nevertheless, recent developments in naval warfare arenas around the world have led to an acceleration of the development and use of unmanned maritime vehicles.

In light of the recent events between Ukraine and Russia in the Black Sea, the fighting in the Red Sea, and the expansion of the use of unmanned vehicles in the field of maritime security, a brief overview of the current situation in the field of unmanned maritime vehicles, the challenges they pose, and a proposal for relevant recommendations for the security and civilian maritime domain in Israel is presented.

The main recommendations will focus on readiness to deal with new threats (development of a training plan, changing the training outline), building a force capable of dealing with swarms of unmanned maritime vehicles (surface and underwater), assistance in guiding and creating tools for protecting merchant fleets without military assistance, and new thinking about security strategies.

Introduction – The Aspiration to be Unmanned

Many companies have developed unmanned surface vehicles (USVs) and unmanned underwater vehicles (UUVs), including those for deep sea, for various purposes such as scientific and applied research, environmental surveys,¹ and more. For example, companies in the oil sector have succeeded in developing highly capable unmanned vehicles.

In the last two decades, a growing number of articles have been written on the subject of USVs, analyzing the various challenges in matching the various naval missions and the vehicles relevant to performing these missions, including the development of new vehicles.² While the field of aerial vehicles has developed considerably in recent decades

¹ Survey – A systematic process of collecting and analyzing information. There are different types of maritime surveys that focus on diverse areas such as soil survey, water quality, marine plants and animals, currents, and more.

² Manley, J. E. (2008). Unmanned surface vehicles, 15 years of development, *OCEANS*, Quebec City, Canada, pp. 1–4, doi: 10.1109/OCEANS.2008.5152052; Wu, G., Li, D., Ding, H. Shi, D., and Han, B. (2004). An overview of developments and challenges for unmanned surface vehicle autonomous berthing. *Complex & Intelligent Systems*. 10, 981–1003.

and has become integrated into everyday life in many aspects (security, logistics, research assistance, etc.), the field of maritime vehicles has progressed at a slower pace. Despite development efforts by scientific and industrial groups, unmanned vehicles have not become widespread worldwide but have mainly been purchased specifically and targeted for specific missions on a limited scale. The reasons for this may be various limitations (technological and regulatory) that have prevented the widespread use of unmanned vehicles, or in the military sector previous operating concepts that have delayed the entry of unmanned maritime vehicles into operation. In recent years, and especially since 2022, with the outbreak of the Russia-Ukraine war in the Black Sea and the Houthi attacks on shipping in the Red Sea, USVs began to take a greater part in attack missions, intelligence gathering, and more. This fact shows that the field of operating concepts and the technologies that support it have developed and overcome certain barriers significantly. Additional barriers have also been removed in recent years in the areas of regulation. For example, the way in which global regulation is closing the gap can be seen in the way in which the International Maritime Organization (IMO), an organization considered conservative, has been working in recent years to regulate regulatory issues for the operation of autonomous merchant ships³ and other watercrafts.



Figure 1: "Aluma" – "Snake Robot" capable of repairing pipes on the ocean floor⁴

The transition to multi-dimensional warfare around the world naturally removed many of the regulatory restrictions, both global and national, which were intended to ensure, among other things, the safety of shipping.

In addition, asymmetric warfare is being waged in the aforementioned arenas, for example the Russia-Ukraine war, which is expressed not only in differences in firepower

³ IMO policy document, [Autonomous shipping](#).

⁴ Lydon, A. (March 4, 2021). [This 'snake robot' can fix pipelines on the ocean floor](#), *CNN Business*.

and military power between Russia and Ukraine, but also in differences in the economic means that allow for the development of doctrines, combat methods, and the capabilities that support them, which led the Ukrainians to seek additional ways to cope, and even to achieve superiority in battle against the Russians, using limited resources and strict time constraints while fighting.

The naval warfare areas have accelerated processes in the various navies, and some are promoting processes that had already begun to mature before the outbreak of combat in these areas, for the significant integration of USVs in the fleets. An example can be seen in the US Congressional report, which presents the Navy's plan and a budget request for the procurement of USVs to establish combined fleets of manned and unmanned vehicles.⁵

From wooden ships to autonomous submarines – the evolution of unmanned vehicles

USVs and UUVs are part of the military and naval technological developments that gained momentum during the 20th and 21st centuries. The idea of USVs arose as early as the 19th century, but their modern development occurred mainly in the 20th century.

Early Developments (19th and early 20th centuries) – The idea of a USV has existed since early inventions such as Agamemnon (1906) – a battleship of the British Navy, which at the end of its lifetime was converted into a remotely controlled target ship, and was used for vulnerability research of ships (exposure to toxic gases, shells, etc.), when it was maneuvered in experiments by remote control using radio control.

During World War I, there were attempts to use unmanned radar (Radio Detection and Ranging) aircrafts (which later evolved into USVs), as well as simple vehicles sent on espionage missions.

World War II saw the introduction of early unmanned vehicles, such as the German Luftwaffe's V1, an unmanned cruise missile whose guidance system, which included an autopilot, relied on feedback from rudders, gyroscopes, pendulums, and a magnetic compass.⁶ Unmanned maritime vehicles began to develop significantly only after the war.

⁵ Congressional Research Service. (August 6, 2024). [Navy Large Unmanned Surface and Undersea Vehicles: Background and Issues for Congress](#).

⁶ The V1 missile was fitted with a mechanical propeller, and as the missile sailed through the air on its way to the target, the airflow rotated the propeller so that every 30 rotations of the propeller reduced the distance meter installed in the missile by one unit, measuring the distance to the target area. When the desired distance was reached, the distance meter caused the missile's warhead to be armed at a distance of about 60 kilometers from the target area. The accuracy of the strike was improved during the war to a radius of 3.5 miles.

Current
Near/Mid
Mid/Far



USV systems vision

Key Enablers: Endurance, Autonomy & Precision Navigation, Command, Control, & Communications, Payloads & Sensors, Platform Integration (L&R, etc.)

Very Small (Class 1; Length 57m)

- ISR
- Comm Relay
- GARC Optionally Manned
- ADARO/MUSCL

Small (Class 2; Length 7m and 12m)

- Mine Hunt
- Mine Sweep
- Mine Neutralization
- MHU 1-4 w/ AN/AQS-24
- USV w/ Sweep Payload
- USV w/ Hunt Payload
- USV w/ Mine Neutralization Payload
- Armed Coastal Patrol

Medium (Class 3; Length 12m and 59m)

- ASW
- Autonomy
- Multi-Mission
- MDUSV/ Sea Hunter (SH 1)
- Sea Hunter (SH 2)
- Comm Relay
- ASW
- ISR
- MUSV
- Counter Swarm
- Armed Escort
- Medium USV TBD Hull Form(s)
- Leach on Remote USV Launch
- MCM
- Mining
- Counter Swarm
- ISR
- ASW
- EW
- MCM

Large (Class 4; Length 50m)

- ISR
- Technology Maturity, CONOPs, & Payloads
- SUW
- ASUW
- ASW
- EW
- ASW
- ASUW
- Logistics
- Large USV TBD Hull Form(s)
- Fully Autonomous
- Coordinated Ops
- Operates OTH

Efficient, Executable Progression of Capabilities onto Common USV Hull Forms

Figure 2: The US Navy's vision for possible uses of the USVs and UUVs⁷

⁷ [Navy Large Unmanned Surface and Undersea Vehicles: Background and Issues for Congress](#), September 18, 2019 (R45757).

In the 1960s and 1970s, as technology advanced, the development of more advanced USVs began. During this period, they were used primarily for research purposes, maritime surveys, and collecting ecological data.

In the 1980s and 1990s, unmanned vehicles began to develop in military and strategic directions. Navies around the world began to use autonomous submarines for maritime surveying and maintenance of maritime infrastructure. The United States developed the "REMUS" and "ALVIN" which included advanced technologies for littoral and underwater research. From the 2000s onwards, technological advances allowed the production of unmanned maritime vehicles on a larger scale. GPS-based navigation, optical sensors, radars, and satellite communications have led to the development of even more advanced vehicles, manufactured for military use to perform complex and precise missions, such as attacks on enemy ships, maritime surveys, and infrastructure maintenance. Today, unmanned surface vehicles are widely used for both military and civilian purposes. They are used for maritime patrol, precision strikes, intelligence, anti-submarine warfare, mine warfare, port surveillance, shipping, ocean exploration, and scientific research.

Power Without a Presence: A Technology Review of Unmanned Surface Vehicles

An unmanned surface vehicle, as its name suggests, is a vehicle that operates without a crew on board, that is, operated remotely (some say remotely manned) by a human team that directs the vehicle, and receives indications and information from the field from the vehicle. There are additional independence levels for unmanned vehicles, for example an automatic vehicle, that is, a vehicle pre-programmed to perform a specific task (pre-determined route, cameras scanning and recording, etc.), and the vehicle has little influence over decision-making during the execution of the mission. There are also autonomous vehicles that are built in such a way that they can make decisions independently during the mission according to a predetermined priority - changing course, monitoring areas of interest in light of data that the vehicle has collected during the mission and deciding on responses to various events that occur during the mission.

Many published scientific articles have emphasized the removal of significant technological barriers that were an obstacle to the development of the vehicles such as algorithms for independent navigation and trajectory control, long-range communication technologies, improvements in subassemblies that emphasize propulsion, trajectory planning, improved sensors for various naval missions, and more.⁸ Today, there are vehicles of all

⁸ Liu, Z, Zhang, Y, Yu, X. and Yuan, C. (2016). Unmanned surface vehicles: An overview of developments and challenges, *Annual Reviews in Control*, 41, 71–93.

the above types deployed for various missions, with innovative technological capabilities. This fact indicates a significant change in the way these types of vehicles operate and are designated, leading to a development that is causing a fundamental change in the field of seamanship and maritime defense, and bringing with it a number of significant advantages alongside technological challenges.

Technological and algorithmic improvements

One of the most notable developments in the field of USVs is the constant improvement of algorithms for autonomous navigation and course control. The ability to manage a course autonomously requires the constant development of smart algorithms that can deal with dynamic and complex situations at sea. These algorithms allow the autonomous navigation system to plan and adjust its course according to changes in the environment while using pre-entered data.

In addition, significant progress has been made in the field of sensors installed on unmanned vehicles. Advanced sensors such as sonar, radar, thermal means for detecting heat signatures, and lasers for various uses (such as measuring distances, communications, measuring wave heights, and more) allow the USV to accurately identify objects in the environment, which allows it to perform various tasks such as maritime surveying, infrastructure monitoring, and precision strikes. Additional improvements in this area concern image quality: higher resolution and the ability to operate in difficult conditions such as those that cause blurred vision in low light or stormy weather.

Dealing with technological challenges

Despite the impressive progress, significant challenges still exist in the field of USVs. One of them is the ability to navigate accurately in changing conditions. The sea is a changing and challenging environment, including currents, changes in weather, and water pressure, which makes precise navigation difficult. Solving these problems requires the development of new technologies to improve navigational capabilities and cope with unexpected conditions.

Another challenge is long-range communication technologies. When the vehicle operates at great distances from its control position, stable and reliable communication is required to continuously transmit and transfer data. The development of communication technologies such as satellite communications and dedicated maritime communication networks makes it possible to maintain continuous contact with the USV even when located at great distances.

Implementation and performance

The process of integrating unmanned vehicles into fleets and naval systems requires significant investment in supporting systems such as command centers and control stations. This integration includes the development of combat doctrine (CDT) and supporting capabilities that will allow for optimal utilization of the capabilities of the USV. These vehicles need to be coordinated for joint operation with existing systems, and their operational capabilities need to be tailored to the various missions for which they are intended.

Ukraine and Yemen 2022–2024

Over the past few years, USVs have become an integral part of dealing with military and logistical challenges in Ukraine and Yemen, two complex combat zones.

Ukraine: Unmanned Vehicles as a Strategy in Military Warfare

Ukraine's activity in the Black Sea maritime domain reached new heights in March 2024 with unprecedented success in repelling the Russian fleet. The Ukrainian navy lost about 80% of its ships following the annexation of the Crimean Peninsula in 2014.⁹ As a result, Ukraine has developed an integrated and advanced naval strategy focused on the use of unmanned vehicles, mainly unmanned boats and guided missiles.

In the Ukrainian war, the use of unmanned vehicles added a new dimension to naval combat. These vehicles, which include autonomous submarines and unmanned explosive boats, were used not only for espionage but also as assault vehicles. One of the most prominent effects is gaining a technological advantage over the adversary. For example, unmanned vehicles were used by Ukraine to carry out attacks on Russian ships in the Black Sea, which turned the waters around Ukraine into a dynamic battlefield in which USVs play a central role. The use of these vehicles allowed the Ukrainian military to carry out operations with reduced risk to human life, while maintaining high operational capability and innovative use of technological capabilities. Moreover, USVs allowed Ukraine to improve its ability to defend its coasts and strategic maritime infrastructure.

Ukraine's USVs carry up to 800 kilograms of explosives, and they have played a key role in destroying or neutralizing about a third of the Russian fleet. The ability to place explosives on speedboats without the need for a human crew on board is a significant advantage on the battlefield, especially when the enemy is faced with new technological challenges.

⁹ ockenos, P. (April 2, 2024). [Ukraine Is Winning the War's Other Front, Against all odds, Ukrainians have been dominating Russia in the Black Sea](#), *Foreign Policy Magazine*.

The vehicles are composed of existing technologies ("off-the-shelf" technologies) in several fields such as maritime transportation, recreation, agriculture, water sports, and of course security, a fact that facilitates the use of common and relatively inexpensive technologies such as the vehicles' hull, propulsion, steering, communications, and various types of sensors. The fact that navigation, computer control, and wireless communication technologies (cellular or satellite) are currently available on the civilian market in a variety of prices and sizes for everyone, helps in rapid development that adapts to the rapidly changing needs of the battlefield during war.

The continuous attacks by the USVs, combined with attacks by cruise missiles fired from the coast (provided by Britain and France), resulted in the sinking or damage of 26 Russian ships.¹⁰ Ukraine continued to carry out additional attacks on Russian ships, laying naval mines, and achieving other strategic goals, such as keeping shipping lanes open for the transport of agricultural goods (after the collapse of the "wheat agreement" signed with Russia on this issue),¹¹ threatening the Russian fleet and pushing it eastward, i.e. limiting the freedom of navigation of the Russian fleet.

Ukraine's unexpected success in the Black Sea, resulting from the innovative use of USVs and new tactics, is a significant shift in modern naval warfare. This case highlights the potential of technology and creativity to overcome traditional military challenges and influence the balance of power at sea. As the conflict continues, the world will continue to watch and see how these developments will affect future naval strategies and the maritime balance of power.

Yemen: Unmanned vehicles as a means of attack, deterrence, and control disruption

The ongoing conflict in Yemen, since 2015, between the Saudi-led coalition and the Houthi rebels has also involved the use of unmanned vehicles in various situations. The Houthi rebels used unmanned booby-trapped boats to attack coalition ships in the Bab el-Mandeb Strait as early as early 2017. These attacks caused growing concern among the coalition and led to the adoption of enhanced protection measures for their ships.

¹⁰ Williams, B. G. (July 19, 2024). [How the Ukrainians – with no navy – defeated Russia's Black Sea Fleet](#), *The Conversation*.

¹¹ BBC. (April 2, 2024). [How much grain is Ukraine exporting and how is it leaving the country?](#)



Figure 3: Image from a video released by the Houthis of an attack on a commercial watercraft¹²

The Houthis have demonstrated innovative capabilities in attacks on merchant ships using unmanned explosive boats and littoral missile systems that have also been programmed for combined attacks with manned and unmanned explosive boats, indicating improved capabilities and continued operational support, particularly from Iran. In the first half of 2024, they have improved their strategies, indicating significant progress in their attacks.

Recent reports show:

1. Increasing attacks: Between December 2023 and March 2024, the Houthis attacked at least 19 merchant ships, mostly using missiles and sometimes using unmanned boats. The pace of their attacks slowed slightly after an Iranian ship, which had been providing them with information and intelligence on targets,¹³ left the area, but picked up in June with increased effectiveness.
2. New Tactics: The Houthis began using new tactics, including unmanned boats that resemble fishing boats, which allowed them to evade detection and carry out successful attacks. For example, an attack on the MV Tutor involved an unmanned boat as a pre-emptive strike followed by a shore-based missile attack that sank the ship.
3. Learning and Adaptation: The Houthis are learning from their previous attacks and updating their methods to counter the defenses deployed against them. The increasing success of their attacks indicates that they have improved their tactics and are increasing the number of unmanned vehicles.

¹² [Exocet de los Pobres, Lanchas Explosivas en Yemen](#). Youtube.

¹³ For more on Iranian involvement, see Shlomo Guetta, *The Houthis and the maritime domain since the outbreak of the Israel-Hamas war*. This volume.

4. Ongoing support: There is ample evidence that Iran continues to support the Houthis with military, intelligence, and financial assistance, which contributes to their advanced capability.

Despite ongoing efforts by U.S. and coalition forces to counter these threats, including destroying missiles, USVs, and submarines, and destroying littoral stations to monitor and control them, the Houthis remain a significant threat to shipping due to their evolving innovative tactics and continued support from Iran.

In conclusion, unmanned surface vehicles have significantly impacted the maritime dimension of warfare in both the Ukraine and Yemen wars, highlighting their development as a "reality-changing" force in military situations. Their increasing use reflects a fundamental shift in modern combat strategies, and presents the challenges and opportunities that arise from the integration of advanced technology with war operations.

Qualitative change that leads to a strategic change in decision-making

The rapid change in the use of unmanned surface vehicles (as mentioned mainly from 2022) has meant that most of the world's militaries are unprepared to deal with the threat and do not have an appropriate response.

The concept of "threat and retaliation" is not limited to dealing with the stopping of a vehicle on its way to an attack, but is broader. According to testimonies published by members of the international force established to deal with the Houthi threat, the naval personnel who returned from the scene¹⁴ faced significant psychological difficulties that sowed terror among the crews on the warships.¹⁵ Some of the testimonies mentioned that the crew members wanted to end the mission and return to their base. The night-time confrontation with the anti-submarine warfare (ASW) drones that could not be identified by conventional detection means, and could not be intercepted by the means available on the ship, made the crew members feel helpless, and did not allow them to protect themselves, shipping lanes and merchant ships, as they were supposed to protect according to their mission.

In addition, the ability to deter civilian and military vehicles can lead to economic exhaustion, similar to other terrorist organizations that reignite terror on land. The fact

¹⁴ Maltezou, R., and Saul, J. (June 19, 2024). [Trauma from Red Sea attacks adds to seafarer shortage](#), *ekathimerini.com*.

¹⁵ *Defense Mirror*. (June 2, 2024). [Greek Frigate HYDRA Crew Describe Hellish Red Sea Mission Highlights Urgent Need for Modernization](#).

that civilian ships are threatened without the ability to defend themselves could resurface the phenomenon of piracy and payment for passage through threatened (not necessarily controlled) territory. The ability of countries to send fleets on long missions in order to escort merchant ships in distant arenas also imposes significant costs on fleets, costs that are added to changes in navigation routes, delays in logistical supply chains, and more.

Combining the aforementioned methods of using unmanned vehicles in a combined attack with remotely controlled shore-based missiles is causing a significant change in the understanding of navies around the world on how they should adapt combat doctrines, methods of operation, and force building.

The threats mentioned above have existed for more than a decade. However, because they have not materialized in practice and due to various considerations such as: prioritization in the face of other threats, a desire to establish a "perfect solution" in the face of terrorist organizations that seek means to cause some kind of damage (and sometimes the attack itself, even if it fails, achieves the desired results on the part of the terrorist organization), naval training fixed on past threats – preventing understanding of the potential of the threat, placing barriers in the training of commanders in the maritime world for the use of unmanned vehicles, no decisions have been made in the world's major navies on dealing with the aforementioned threats. The evolution of the threat, which is already taking shape, will be directed in the future towards the operation of swarms of USVs. Swarms of this type will be able to overcome common defense methods, and in addition, they will be able to perform tasks similar to those of large vehicles (blocking/guarding shipping lanes, border patrols, etc.) and even pose a significant threat to the force of warships.

At the same time, it is appropriate to mention ways of dealing with the threat that have been developed, but at this stage, based on an analysis of the results in the arenas in Ukraine and Yemen, they are extremely limited. In recent months, certain successes have been reported in dealing with these threats, but most of the successes have been through firing (mainly with small arms) by sailors/soldiers from the attacked ship at the USV and destroying it very close to their ship. It appears that existing vehicles have not yet been developed or have not yet been adapted to optimally deal with combined attacks by unmanned vehicles and remotely controlled missiles or larger swarms of explosive USVs.

In the two naval combat arenas currently being fought in the world (the Black Sea and the Red Sea), it appears that the innovative, flexible, and evolving side, initially perceived as less threatening, is the one adopting asymmetric warfare methods and operating unmanned vehicles. On the other hand, the other side continues to use existing tools it developed for "standard" naval warfare in order to deal with the new methods.

Conclusions and recommendations for the maritime domain in Israel

Unmanned surface vehicles are the product of technological developments that have transformed the naval arena into a dynamic and advanced domain. From their early beginnings over a century ago to modern developments, these vehicles represent fundamental changes in the approach to using technology for research and military purposes. As technological developments continue, it is likely that we will see new applications and significant improvements in this field.

In order to prepare for the type of threats mentioned above, it is advisable to prepare on several levels.

1. Developing combat doctrine and capabilities to deal with USVs and UUVs swarms:
 - In the short term – combining coping with various training and exercises (similar to dealing with GPS jamming) – the readiness of teams, military and civilian, for the sudden appearance of such a threat must be part of the teams' training and exercises.
 - In the short term – examining the interception of unmanned vehicles using existing solutions that integrate humans in the loop, for example, training and equipping watercrafts crews with explosive drones and solutions for intercepting enemy drones.
 - For the medium term – combining force building and finding solutions to reduce the damage from the threat (for example, reviving an old network solution for dealing with a torpedo threat that could now help deal with USVs or integrating autonomous interception solutions). The solutions are also required for military vehicles as well as civilian ones that will have difficulty defending themselves.
 - For the medium term – defining levels for dealing with different swarms based on "implementation capability" from the moment a decision is made to attack, and not based on the actual existence of the threat (which can materialize very quickly).
 - Maturing and promoting regulation of autonomous vehicles at sea (surface and underwater). Providing impetus for civilian use (for example, using vehicles to streamline transportation) will help develop monitoring capabilities and deal with threats on the military side.
2. Assistance in directing and creating tools for protecting merchant fleets without military assistance:
 - To avoid a naval blockade and disruption of shipping lanes, it is necessary to understand that it is not possible to protect shipping lanes all over the world simultaneously, even in an international coalition.
 - After this understanding, similar to the assistance provided to airlines in dealing with various threats, it is appropriate to also assist companies in the maritime world in protecting their ships themselves.

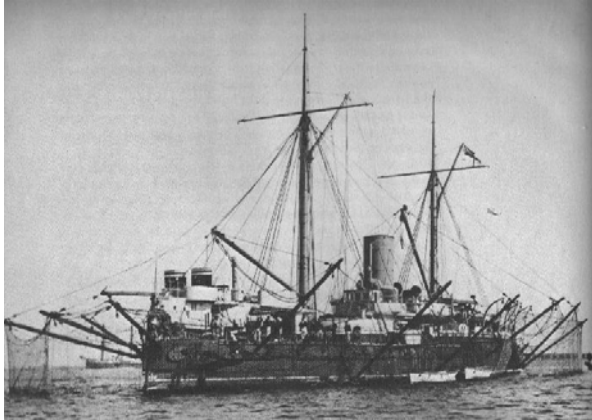


Figure 4: Torpedo nets spread around HMS Hotspur, probably late 19th century¹⁶

3. Developing combat doctrine and tools to deal with additional available capabilities with significant damage potential
 - Naval mines – in the same way that a decision was made in Ukraine and by the Houthis to use anti-ship missiles, naval mining has so far been avoided dealing with by many countries. The field of naval mining is also available for use if the enemy decides to use it, and the potential for damage is similar.
 - Maritime attacks – from explosives on maritime infrastructure to environmental attacks (with similar consequences to the maritime pollution hazard on the Mediterranean coast of Israel in 2021, the "Tar in the Storm" event).
 - Additional maritime scenarios that the IDF and the Israeli Navy in particular are not responsible for dealing with, but are instead associated with civilian entities such as maritime policing, government entities, and more.

Continuous improvements in algorithms, sensors, and communications have led to a situation where unmanned vehicles are at the forefront of technological innovation in the maritime sector. USVs bring with them many advantages in the areas of performance and flexibility. While the existing technological challenges require advanced solutions, the investment in this area reflects the great potential of USVs to change the face of the maritime and military industry. The ongoing development in this area indicates a field with a promising future and a wide-ranging impact on a variety of research, maritime, and military fields.

¹⁶ Wikipedia, [torpedo](#).

Iran as an Active and Open Party in the conflict with the State of Israel

Iranian Ideology and Doctrine in the Context of the 'Israel–Hamás' War

Alex Grinberg

Since the massacre committed by Hamas on October 7, 2023 and the beginning of the Israel-Hamas War, the Islamic Republic of Iran has been an active party in the conflict with Israel. The extent of Iran's influence on Hamas' decision-making is unknown, nor is it currently known whether the Iranian leadership was a secret partner in Hamas's attack plan. However, this does not detract from the fact that Iran is an active party (military, organizational, and diplomatic) in the current war. Members of the senior Iranian leadership, from Leader Ali Khamenei to Iran's senior military command, continue to support Hamas and praise the massacre it committed against Israeli citizens.

Even if the actual extent of Iran's involvement in Hamas's combat planning is not known for certain, there is no doubt that Iran has assisted Hamas in many areas, especially in supplying weapons such as Kornet anti-tank missiles. In this case, it is not a missile manufactured in Russia, but a missile manufactured in Iran under a Russian production license.

Iran's behavior toward Israel since October 2023 is not a coincidence, but a direct result of the Iranian ideology that determines and establishes the rules of behavior of the Iranian regime in all areas of life, both within Iran and in the international arena. Iran is implementing the strategy of the Axis of Resistance (*Mehvar-e Moqawamat*) against its rivals, primarily the State of Israel. This strategy presents Iran's emissaries as freedom-seeking movements fighting against global injustice and oppression, and according to which Zionism and Israel embody the "most heinous injustice". This strategy not only expresses the ideological preferences of the Iranian regime but also seeks to maximize its advantages against the backdrop of Iran's conventional weaknesses. The main advantage of the axis of resistance for Iran is that the "resistance movements" carry out kinetic attacks against rivals that Iran itself – as a state – refrains from carrying out.

Although the Axis of Resistance is the most important Iranian strategic principle, other principles can be listed that are expressed during the Israel-Hamas War:

1. *Defensive Diplomacy (Diplomacy-ye Defa'i)*: According to this principle, activity against Iran's rivals should be carried out on all levels. In other words, the enemy should be harmed in every possible way, and the damage should not be limited to be on just a superficial military level. The term "diplomacy" is used in the broadest sense,

meaning it refers to all types of activities that are not actual military operations. Far beyond official Iranian diplomacy.

2. *Hybrid/Soft War (Jang-e Tarkibi/Naram)*: A concept often associated with the term "defensive diplomacy". The concept describes a variety of operations in various areas, most of which are ostensibly entirely civilian, that serve Iranian combat operations. Leader Ali Khamenei coined this concept.¹
3. *Iranian Naval Strategy*: Iran is working hard to develop a naval strategy that is in line with its regional ambitions. The Islamic Republic's naval strategy integrates with the other strategic principles mentioned above. It is intended to serve Iran's asymmetric effort through the Axis of Resistance.²

The influence of Iranian history and culture on the principles of strategy

The principles of the current Iranian strategy draw inspiration from both Iran's history and the ideology of the Islamic regime.

Iranian military history, including the Iran-Iraq War (1980–1988), simultaneously illustrated both Iran's weaknesses and its strengths. On the one hand, Iran is a country with a vast territory and a porous border that is difficult to secure. Throughout its history, Iran has often been subject to raids by hostile tribes as well as attempts at takeover by foreign powers, especially Britain and Russia. However, Iran was never conquered or colonized by a Western power. In the Iran-Iraq War, Iran managed to repel the Iraqi attack and find a solution to most of its security challenges. The combination of opposing feelings was created by a contradiction between the classical Shiite tradition and Iran's current status. In other words, the classical Shiite tradition is that of a persecuted minority awaiting salvation. However, modern Iran is not a tiny persecuted minority but a regional power with geopolitical ambitions. This feeling intensifies feelings of vulnerability and increases anger, which increases the danger emanating from Iran. The historical experience of Germany and Russia illustrates the danger of a sense of victimhood gripping a large country.

This combination of weaknesses and strengths results in two trends in Iranian behavior:

1. A combination of feelings of superiority with feelings of inferiority, or in other words, the "community complex". A feeling that Iran does indeed have reasons to fear for

¹ *Mashreq News*. (April 20, 2024). [Rahbord-e Jaryan Enqelab dar Barabar-e Jang-e Tarkibi Shenakhti Chist?](#)

² *Farikhteh Daily*. (May 20, 2023). [Dastavard-haye Diplomasi-ye Defa'i Daryayi Artesh-e Iran dar Abha-ye Azad](#).

its security because of its history and geographical data, but at the same time, Iran has always been too big for a foreign power to "swallow" it, or to disregard it at all.³

2. Historical and military experience has led Iran to avoid direct military conflict as much as possible, and instead to invest in developing its capabilities within the framework of the asymmetric warfare strategy.⁴

Ideology as a starting point for formulating strategy

An examination of Iranian strategic writing shows that it is decisively influenced by Khomeini's ideology (the thought of the founder of the Islamic Republic of Iran, Ruhollah Khomeini, as interpreted by Iranian leader Ali Khamenei). For example, the article entitled "Analysis of the Supreme Leader's Military and Defense Doctrine in the National and International Environment" relies on Khamenei's assertion that the strength and deterrence of the armed forces must be integrated with a religious perspective. "They must oppose the regime of regional hegemony, defend the rights of Islamic countries, protect the oppressed, and serve as an inspiration to the peoples of the Islamic world".⁵ It is worth noting that when official Iranian writing uses Shia terminology, we should understand it only according to the official Iranian interpretation. There is no point in complicating this statement by wondering whether traditional Shia Islam might differ from the modern Iranian interpretation. It is also worth understanding that religion, namely Shia Islam, in this interpretation is a cultural-historical framework for a rigid political ideology. There is nothing in official Iranian religiosity that suggests mysticism or anything else that goes beyond the interpretive framework of sociological and historical analysis. In other words, Iranian strategy and behavior are completely rational, but they do not conform to the standards of Western logic.

Israel's place in Iranian strategy

Iranian writing often refers to the State of Israel and the Jewish people. Since Israel occupies a central negative place in the Iranian perception, it is impossible to understand Iranian strategy without understanding Israel's place in it. Also, Iranian writing about

³ Pahlavi, P. (2018). [Understanding the resilience of the Islamic Republic of Iran](#), (French) *Politique étrangère*, 3, 63–74.

⁴ Pahlavi, P., and Ouellet, E. (2020). Iran: Asymmetric Strategy and Mass Diplomacy. *Journal of Strategic Security*, 13(2), 94–106.

⁵ Danesh Ashtiani, Mohammad Baqer; Rostami, Ali. "[Tahlili bar Daktarinhay-e Nezami-Defa'i Maqam-e Moazzam-e Farmandehi Kol-e Quva dar Mohit-e Melli va Beyn-ol-Melali](#)", *Faslnameh Olum-e Nezami va Fanni*, *Journal of Military Science and Technology*, Doreh 12, Shomareh 36, Shahrivar 1395 (August 2016), pp. 5–27.

Israel excels in a clarity that does not tolerate "twisted" interpretations for the reader, as is often the case in Western writing.

The attitude towards Israel stems predominantly from the Khomeini ideology and much less from the anti-Jewish sediments in classical Shia. Monographs on Iranian foreign policy usually don't elaborate much on the reasons behind the conflict between Iran and Israel, and for good reason. Apparently, this stems from an unwillingness to look at an issue that contradicts the usual geopolitical thesis, namely that Iran and its rivals are competing for power in the region, since it is clear that Israel has no aspirations for regional hegemony, and this lack of aspirations conflicts with the Iranian thesis of geopolitical struggle.

The fact that Iran and Israel have never had a conflict or historical enmity is obvious and well-known. Khomeini began preaching against Israel as early as 1963. An Islamist terrorist movement "*Fadaiyan-e Eslam*" that preceded Khomeini's movement also preached the fight against Jews and Zionism. The claim that Iran opposes certain Israeli policies while being free from anti-Semitism cannot withstand initial critical examination. The statements of Ruhollah Khomeini, Ali Shariati, and Morteza Motahhari are replete with explicit anti-Semitic statements about "Jews" and not "Zionists".

Iranian researchers are examining scenarios of a large-scale Israeli attack on the Islamic Republic. They are required to explain why Israel would attack Iran and what its goals are. Among the reasons given in the Iranian writing is the argument that after the Islamic Revolution, the Zionist regime became convinced that the Islamic Republic was a threat because of its accumulation of regional power. In recent years, this threat has become existential in Israel's eyes.

As for the reasons for the conflict between Israel and Iran, there are two reasons:

- A "A legitimate state is occupied by an illegitimate state". It is the duty of all freedom-loving peoples to mobilize to end the occupation, and we, as the Islamic Republic, are a party to this struggle, "we extend aid to the peoples of the region".
- B "This regime must disappear". According to the principles of the Islamic Revolution, this regime is illegitimate and must be eliminated.⁶

A number of Iranian sources emphasize that the disappearance or elimination of the Zionist regime is one of the ideals of the Islamic Revolution. However, it is worth noting that the use of the Persian words for "elimination" or "disappearance" leaves room for

⁶ Sha'bani, Hassan. "[Rahbordi Ehtemali-ye Jang-e Rezhim-e Sahyounisti Alayh-e Jomhouri-ye Eslami-ye Iran](#)", *Faslnameh Modiriyat-e Nezami, Military Management Quarterly*, Imam Ali University, 23(92), 4, Asfand 1402 (March 2024), pp. 37–56.

deliberate ambiguity. In other words, on the one hand, the disappearance or elimination of Israel is one of the foundations of Iranian ideology that cannot be compromised on the other hand, Iran does not commit itself to immediately and independently carrying out this ideological mandate. This duality allows the Islamic Republic a certain flexibility. This also has practical implications for strategic decision-making in Israel:

The conflict with Israel stems from the very Khomeini ideology that guides the Iranian regime. Because of the revolutionary doctrinal structure, the regime cannot flex or give up this ideology, even if it means tacitly giving up. Giving up ideology would automatically be interpreted as a loss of credibility and deterrence, first and foremost in the eyes of Iran's citizens, and would be tantamount to political suicide for the regime.

An ideology of conflict with Israel must be expressed in practice and cannot be reduced to mere sloganeering. A conflict with Israel, in Iran's eyes, must have the aspect of real kinetic friction with the consequences that result from it.

Despite the above, Iran will not choose the path of direct confrontation with Israel from the outset and will prefer to act against it through its agents and proxies from among the "Axis of Resistance". It should be emphasized that Iranian action against Israel through the Axis of Resistance is kinetic in nature (in simple words, harming Israeli and Jewish civilians), so Israel cannot allow itself to "ignore" this activity and focus on more "strategic" aspects. Iran may also choose the path of direct action against Israel due to geopolitical constraints, as happened on April 15, 2024.

In light of all this, Iran prefers to rely on the "Axis of Resistance" to impose on it the risks involved in a conflict with Israel.

It is worth noting that no Iranian strategic article discussing the conflict with Israel makes any attempt to understand Israel's motives. The authors of the articles are not aware that their description justifies aggression against Israel on purely ideological grounds. Thus, the authors of the articles confirm the assumption that the only reason for hostility towards Israel is ideological, not geopolitical.

Inherent failures of Iranian strategy

A study of Iranian strategic writings reveals a great deal of similarity between them and Russian strategic thinking. Iranian strategic decision-making differs from its counterparts in the West and Israel.

In Iran and Russia, there is no grand strategy or military strategy in the sense accepted in the West. Any military doctrine or strategy in a democratic country is the result of

transparent discussions (with varying degrees of transparency between different countries) between different institutions and centers of power. Different entities or different people may offer different proposals in different areas. A similar process does not exist in Russia and Iran. Therefore, the Iranian strategy encounters inherent failures.

1. The Iranian strategy or doctrine (as well as the Russian one) is always derived from the dominant ideology. Therefore, it must be subordinate to the principles of that ideology. As a result, Iranian strategic writing appears as a kind of ideological contrast despite the existence of significant differences between the former and the latter recently. A review of Iranian strategic documents indicates a great similarity between Khamenei's speeches and strategic documents. This aspect indicates a difference in the interpretation of the term "strategy" between the West, Russia, and Iran. It is clear that Israel and Western countries also have fundamental values, but strategy in these countries is perceived as a variety of possible methods to achieve the overarching goals of that country. Israeli or American strategic documents do not constantly refer to the speeches of the leaders, and there is no need to provide ideological references for one military strategic step or another.
2. The Iranian strategy leaves no room for a Plan B in the event that Plan A fails (again, very similar to the lack of Russian planning). This uniqueness may stem from cultural characteristics. For example, the very idea that an alternative plan to the original plan is needed is considered defiance and an expression of doubt in the commanders' ability to carry out the original plan, and is therefore interpreted as casting doubt on their legitimacy.⁷
3. Intelligence assessment of the enemy is always flawed, as an intelligence analyst in regimes such as Iran or Russia will never dare to challenge the assessments that the leadership wants to hear. If an analyst dares to contradict the existing assessments according to his own perspective, he will be perceived as offending official ideology.
4. Iranian analysts have proven their ability to identify the weaknesses of Israel and Israeli society. However, because of demonization and the dichotomous view, they fail to identify Israel's strengths. Iranian assumptions about Israel are often based too much on an arbitrary interpretation (to Israel's detriment) that Israel will not dare or will not be able to take a certain step. When the truly unexpected occurs, the Iranians have no plan in place, and they do not know how to act. The Iranian conduct after the assassination of Hamas leader Ismail Haniyeh in Tehran on July 31, 2024, illustrates this.

⁷ Andrew, C. (June 1, 2004). [Intelligence analysis needs to look backwards before looking forward](#), *History & Policy*.

5. Under "normal" conditions, the correctness or incorrectness of any doctrine is somewhat similar to the criteria of a scientific theory: to what extent does the doctrine justify its starting assumptions? However, unlike a successful scientific theory, whose correctness is determined by its ability to explain a particular recurring phenomenon, the correctness of a strategy is determined after the fact and in retrospect. Many Iranian scholars emphasize that Iranian goals are simultaneously idealistic and realistic. The Islamic Republic is certainly aware of various constraints, but this means that the inability to achieve a goal now does not mean giving up on achieving it in the future. The flaw inherent in this view stems not from a lack of realism but from the inability to distinguish between defense and offense. In other words, since Iran supports "justice", everything it does is just and is a just defense against the plots of its enemies.

Combining the Axis of Resistance doctrine with other doctrines

On the international level, Iran is showing a willingness to combine the doctrine of the Axis of Resistance with other strategies. For example, Iran and Qatar are apparently behind the lawsuit filed by South Africa at the International Criminal Court in The Hague.⁸ In addition, Iranian leader Ali Khamenei addressed a personal letter to "American youth supporting Palestine", in which he shows that Khamenei avoids using Islamic terminology and prefers the use of progressive rhetoric out of awareness of American sensitivities.⁹ Iran explicitly emphasizes that global solidarity with justice for the Palestinian people should help the Axis of Resistance.¹⁰

Iranian naval Doctrine

The Iranian naval doctrine is influenced by both the objective Iranian geopolitical perception (i.e., it stems from objective geographical data regardless of the nature of the Iranian regime) and by Islamist ideology. Iranian professional articles explain the importance of the Indian Ocean and the Persian Gulf to Iran's naval power while citing concepts from the field of Western naval geopolitics. The main point of these articles is to explain the importance of the naval component in the power of a state.¹¹

⁸ Prinseley, J. (May 22, 2024). [Was South Africa bribed by Iran to bring 'genocide' case against Israel?](#) *The Jewish Chronicle*.

⁹ "Leader's letter to American University Students with a Conscience", the Supreme Leader Office, May, 2024.

¹⁰ "Mafhoom-e Sazi-ye Jadid az Jabeha-ye Mqawamat dar Shat'h-e Jahani", Alef, March 2024

¹¹ Asham Manfred, "Naksheh Rahbordi Daryayi dar To'deh-ye Kadrat Daryayi Jomhuri-ye Islami-ye Iran", Olin-e Mashahed Melli Tose'e-ye Suahali Maharan va Iqtadar Daryayi Jomhuri-ye Islami-ye Iran, 28 Bahman 1391.

However, the rigid ideological aspect is evident in all areas of professional Iranian writing, so that it is impossible to separate purely professional writing from ideological one. Iranian scholars emphasize the influence of Leader Ali Khamenei on Iranian naval doctrine, and are careful to note that it is defensive and for peaceful purposes only.¹²

Iran has two navies: the Army Navy (*Artesh*) and the Revolutionary Guards Navy. These two naval forces are also integrated into the Iranian naval doctrine since each has a different purpose. The Army Navy is intended for classical strategic use and its role is expressed in securing Iran's coasts and its commercial sea routes. While the Revolutionary Guards Navy focuses on asymmetric naval warfare and performs offensive missions.¹³

In the Second Lebanon War (2006), Hezbollah hit the "INS Hanit" with a sea-to-sea missile. This incident became a turning point for the Revolutionary Guards fleet, and it seems that following it, Quds Force commander Ghassem Soleimani understood the importance of asymmetric warfare at sea.¹⁴

According to Iran, all activities of the Revolutionary Guards fleet are intended to create deterrence. The Revolutionary Guards use several strategies to achieve this goal:

1. Establishing proxies for asymmetric naval warfare. According to various reports, the Quds Force established a proxies organization for naval warfare in 2022 consisting of fighters of different origins.¹⁵
2. Investment is increasing in the capacity building of both the Revolutionary Guards Navy and the army. The capacity building includes the construction of new ships and the expansion of the network of strategic ports, in addition to the port of Bandar Abbas.
3. Increasing use of speedboats and unmanned surface vehicle and "swarm attack" tactics.

The last aspect, namely the use of proxies for naval warfare, was expressed at its peak in the Israel-Hamas war and is completely integrated, both with the Iranian naval doctrine and with the concept of the "Axis of Resistance". The Houthis in Yemen attack ships using Iranian weapons and disrupt global trade. In this way, they implement the goals of the "Axis of Resistance" that were set in Tehran. Therefore, not only is Israel's naval trade

¹² Rezaei, A., and Torabi, G. (2021). [Iran's Naval Defense Strategy](#). *Journal of Political Strategy*, 4(15), 15–25.

¹³ Thibault, R. (2013). [La stratégie navale asymétrique Iranienne ou la Jeune École Iranienne](#), *Centre d'études stratégiques de la Marine* (CESM).

¹⁴ Sherko, F. (2024). [Iran's four tactics to deter threats at sea](#). *Orbis*, 68(1), 47–57.

¹⁵ Ibid.

being harmed, but the Houthi's attacks constitute a global problem. However, the Israeli leadership must remember that the Iranian overarching goal is not to harm the global economy but to "duplicate the emphasis". In other words, Iran aims to make world public opinion see Israel as the source of the problem in relation with the Houthi's activity in the Red Sea: since the Houthi's declare their solidarity with the Palestinians, they condition the cessation of their attacks on the cessation of "Zionist aggression against Gaza". Another Iranian goal is to cut off Israel from its naval supply lines, in accordance with the directive of Iranian leader Ali Khamenei. The Iranians see the Houthi's activity as evidence of the success of "defensive naval diplomacy".¹⁶

Identifying Israeli weaknesses against the Axis of Resistance

The Iranians are well aware of Israel's weaknesses in dealing with the Axis of Resistance:

Loss of legitimacy: The Iranians are well aware of Israel's sensitivity to Western public opinion. Iran operates an anti-Semitic and anti-Israel propaganda machine in many languages. The main characteristic of this propaganda is that it adapts itself to the nuances of the target audience. For example, Iran broadcasts in Spanish in Latin America through the channel Hispan TV, and the Iranian rhetoric on this channel is tailored to the perceptions of the anti-American left.

Another example is the judicious use of overt anti-Semitism. Official Iranian media outlets avoid overt anti-Semitic statements. For example, the official term used to refer to the Jewish people is "world Zionism" (*Zionism Jahani*).¹⁷ This term is Soviet in origin and was prevalent in the Soviet Union for similar reasons. Despite anti-Jewish discrimination in all Soviet institutions and despite its open hostility to Israel, the Soviet Union was careful not to be perceived by world public opinion as openly anti-Semitic.

In contrast, in the informal channels identified with the regime and the Revolutionary Guards, such as the Telegram network, such "state" considerations do not exist. Crude anti-Semitic expressions and Holocaust denial abound. Anti-Semitism serves the geopolitical missions of the Islamic Republic.¹⁸

¹⁶ *Farikhteh Daily*. (12 February 2024). "Dastavard-haye Diplomasi-ye Defa'i Daryayi Artesh-e Iran dar Abha-ye Azad".

¹⁷ Mahdad Mahmoodi. (February 2020). "Rahbord-e Daryayi Jomhuri-ye Islami-ye Iran", *Faslnameh Olum va Fanun-e Nezami, Military Science Quarterly*, Issue 2(4) (Command and Objective College of the Islamic Republic of Iran Army).

¹⁸ Telegram is an instant messaging system and social network that is characterized by almost complete anonymity of its users and is therefore an acceptable platform for criminal organizations, terrorism, and other extremist content.

The Internet is full of examples of Jews and Israel being blamed for the death of Imam Hussein in the Battle of Karbala¹⁹ and even for the murder of his infant son, Ali Asghar. A closer look shows why Iranian propaganda is promoting the most absurd anti-Semitic accusation, even though it is known that the Al-Umayyad dynasty was behind the killing of Imam Hussein. The reason for this lies in Iran's aspiration to lead the Muslim nation, which is overwhelmingly Sunni. Thus, Iran's Persian and Shia identity is hampered by a built-in contradiction between the Sunni Muslim nation and Shia religious practices that express contempt and hatred for the Sunnis. In light of all this, it is more "profitable" to blame the Jews for the Karbala massacre in order to defuse the already tense relations with the Sunnis.

Iran also operates propaganda in the Azeri language and engages in subversion against the Republic of Azerbaijan. The Azeri channels repeat the same anti-Semitic message with a different version: the word "Jews" that appears in the Persian version does not appear in the Azeri version. Instead, the wording is "Your enemies murdered Ali Asghar in Karbala, and now they are murdering the children of Gaza".

Attrition: The Iranians are well aware of Israel's weakness in terms of attrition. That is, they know that Israel is not used to long wars, and suffers from objective limitations in terms of its ability to wage a long war of attrition. Iranian analysts explicitly state "that the Zionist regime lacks the ability to withstand prolonged attrition".²⁰

Lack of strategic depth: The Iranians understand that Israel does not have the strategic depth that would allow for better defense and breathing space in the struggle against the "Axis of Resistance". It seems that the importance of strategic depth has been forgotten in Israel, even though Aharon Yariv has analyzed its vital importance in depth. Because of the lack of strategic depth and because of the numerical inferiority, Israel depends on a reserve army. Therefore, advance intelligence warning for its mobilization has become of enormous importance.²¹

Dependence on the United States: Iranians see Israel as completely dependent on the United States. This attitude is also anti-Semitic because it coexists with conspiracies about Jewish control of the United States Administration. It is difficult to determine

¹⁹ The Battle of Karbala took place in October 680 between the camp of Hussein, grandson of the Prophet Muhammad, and "Yazid I", the Al-Umayyad caliph. The battle symbolizes the split in Islam between the Sunni and Shia sects.

²⁰ *INN*. (15 May 2024). "[Asra'il Natuan bar Jang Farsayishi](#)"; "Goshtareh Halaqe-ye Atash, va Khoei Rahbord-e Jadid-e Mqawamat Alayh-e Rezhim-e Sahyounisti", *Maher*, Ma'a 7, 2024.

²¹ Yariv, A. (1998). Strategic Depth – An Israeli Perspective. In: A. Yariv, A Cautious Assessment, 67–79, Collection of Articles, Ministry of Defense, Publishing House.

with certainty to what extent the view of Israel as completely dependent is lip service to the ruling ideology, or to what extent it is an honest assessment of the situation. The difference in motivations for this assessment may prove to be very significant: the Iranian leadership is very sensitive to any change in mood among the American administration in light of the upcoming elections there in the fall of 2024.

There is a high level of Iranian awareness that the United States is not interested in a direct confrontation with Iran. This awareness allows the Iranians greater leeway and greater boldness in their dealings with the proxies. In other words, the Iranians are confident that no attack by their proxies on American forces or Israel will result in the outbreak of a direct war. If this assessment strengthens, the Iranians will have no objective reason to revise their strategy, since it is working as planned and is bringing strategic benefits to Iran. On the other hand, if the Iranians become convinced that the United States' influence on Israel is limited, and that Israel can act against Iran or its proxies even in a manner contrary to the will of the American administration, the Iranians may be forced to make some immediate adjustments to their strategic approach.

Examining Iranian assumptions about Israel's capabilities is complicated due to the difficulties noted above, including the Iranian reluctance to document Israel's strengths. Another difficulty stems from the fact that official Iranian writing never refers to the "Axis of Resistance" elements as Iranian "proxies". As a result, it is not easy to determine whether the Iranians are sincerely expressing their ideological preferences, or whether there is a gap between official statements and more "practical" verbal understandings.

How does Iran view the 'Israel-Hamas' war so far (August 2024)?

An Iranian research institute close to the regime has published a summary of "Operation Al-Aqsa Storm". This institute's publications deserve special attention because there is no doubt that its people are close to the regime and express its messages. However, unlike other institutional media outlets, there is a clear investment in theoretical, concise writing, far from the propaganda trope that characterizes most Iranian writing.

The article titled "The Strategic Implications of October 7 as a Historical Turning Point", published on March 6, 2024, serves as an example of the analytical ability of Iranian scholars. The author of the article, Mansour Barati, interprets several implications of Hamas' attack on Israel. The following are the main points of his remarks:

The Hamas attack on October 7 is a historical event that is no less important and powerful than "the establishment of Israel" [quotations in the original], the 1967 war, or the surprise of the Yom Kippur War in 1973.

[...] The war that has unfolded symbolizes the end of the Netanyahu era. The attack is seen as a loss and translates into a loss of trust in Netanyahu's leadership, according to the Israel Democracy Institute survey.

[...] The attack caused changes that do not allow a return to the previous situation. Hamas will not be able to remain in power in Gaza. This does not mean that it will cease to exist, or that the resistance in Gaza will disappear completely. This means that Hamas will not be able to control Gaza exclusively.

[...] There is a risk that the war will become regional. Hezbollah opened fire on Israel immediately on October 7. The fact that between 60 and 80 thousand Israelis were evacuated from the northern region is a serious blow to the security of Israelis.²²

In conclusion, it can be stated that Iran sees the Hamas attack as an achievement by any standard. The vulnerabilities in Israel that the authors of the article list are indeed real, so it is difficult to deny most of them. In short, Iran will continue to adhere to the strategy of the "Axis of Resistance" because this strategy pays off for Iran.

In Iran's balance sheet so far, the war has brought the Islamic Republic regime many achievements, so there is no reason to conduct a comprehensive revision of this strategy. Even in terms of unleashing Iran's proxies, Iran has not yet had to pay a "direct" price for this strategy. The doctrine of the "Axis of Resistance" is intended to serve two overarching goals: continuing the "outcome of the revolution" and avoiding dragging Iran itself into direct conflict with any adversary.²³

Conclusions and recommendations

The situation created requires Israel to take a number of measures and steps in order to improve its strategic position in order to defeat the Iranian regime. In this case, "victory" should have a clear definition that includes the following essential aspects:

1. Thwarting the effort of the Axis of Resistance and Iran to harm Israel, combining kinetic and non-military measures.
2. Imposing a price for aggression. The price should, of course, be determined based on complex operational considerations, but also according to the enemy's intentions and not just following the damage assessment of its realized attacks.
3. Israel's ultimate goal should be to eliminate the Iranian regime through a variety of methods, and in such a way that the regime itself realizes that continued aggression toward Israel could cause kinetic damage to the regime's leadership and its strategic assets.

²² Mansour Barati. (6 March 2024). "[Peyamadhaye Estrategic-e Haftom October beh Masabeh Noghte-ye Ghosast-e Tarikhi](#)", *Andishkadeh Jaryan*.

²³ This term includes support for terrorism, attacks on Israel, and shifting the risk of war away from Iran's borders.

As explained above, the Iranian regime sees the State of Israel as an out and out enemy regardless of its actions. Put simply, Iran sees Israel's mere existence incompatible with its ideology. Proceeding from that, Iran's stance on Israel will not change if Israel alternates its policies. It is impossible to reach this regime with understandings because from the beginning, the conflict revolved around ideological foundations only, without any disputed territory on which compromises or understandings could be reached. As mentioned, the Iranian regime is completely rational, and one of the reasons for its persistence in this policy towards the State of Israel lies in the fact that so far it has not been forced to pay a real price for its positions. The regime suspects Israel, in one way or another, that it is behind conspiracies to overthrow the regime, meaning that this Israeli decision (of course, it is not supposed to be a public declarative one) will not change anything and will not exacerbate the conflict or cause escalation on Iran's part.

An enemy must be aware of the possibility of losing in such a way that continuing the current policy will not be worthwhile in light of the risks arising from it. One can wonder what is the existential risk to the Iranian regime? It's very physical and political survival. On the other hand, if the enemy knows that Israel's goal is merely to end the conflict, to put down the flames, or to prevent regional escalation, he may become more enduring (which, in any case, is more developed in Israel than in Israeli society, which is not built for a long war of attrition). The goal of overthrowing the regime should not be seen as synonymous with American neocon aspirations to establish democracy in the Middle East or to "nation building". Under no circumstances is this about occupying Iran and changing the regime. It is about finding new ways and methods to harm the Iranian regime. It should be mentioned that this regime funds and plans the murder of innocent Israeli and Jewish citizens. Therefore, any kinetic action against this regime is morally justified.

Refreshing the strategic lexicon

Iran's practical implementation of the "Axis of Resistance" doctrine illustrated the irrelevance of many Israeli strategic concepts.

The triangle of Israeli strategic terms "deterrence", "alert", and "decision" has lost its meaning. Even before, the use of all three terms was lacking due to the inherent lack of clarity.²⁴ The problem with these terms stems from the lack of precise framing in the Israeli context. A simple search will show that the English term "deterrence" or the French term "dissuasion" comes up in most cases in the context of nuclear deterrence. Although the use of terminology related to conventional deterrence certainly exists, it is

²⁴ Yariv, A. (1998). 30 Years of Security. In: A. Yariv, *A Cautious Assessment*. Collection of Articles, 117–127, Ministry of Defense, Publishing House.

not primary. In any case, there is no parallel in terms of the frequency of use of this term in Hebrew and Western languages. Thus, due to excessive use, the term "deterrence" has lost its precise meaning, and has begun to be used interchangeably to express completely different terms. Hence, the path for those who frequently use this term has accelerated to state that Hamas or Hezbollah are "deterred". The assertions that they were deterred were received not as an indication requiring detailed explanation (including emphasizing the difference between facts and evaluation), but as a statement of a fact that does not require critical consideration.

An intelligence "alert" is extremely difficult to define under current conditions when it is not involved maneuvers of large forces of a regular army. In conditions of conflict between regular armies, the accumulation of indicative signs would constitute an intelligence alert. These conditions are missing today when there is no organized military force in the sense of a regular army, while the kinetic conflict is a hybrid world in accordance with the Iranian description above. It is also impossible in practice to completely separate Hezbollah's civilian infrastructure from its military infrastructure. In addition, an alert regarding the Houthi's preparations to launch missiles at Israel will always be spot-on and not for all the Houthi's.

"Decision" is an Israeli Hebrew neologism that is not known in foreign military literature. It is possible that Israel preferred to use this vague term because of its reluctance to use the term "annihilation" (Vernichtung) coined by Clausewitz. Aversion to the use of this term is misplaced, since Clausewitz himself emphasized that his intention was to take away the opponent's will to resist. In any case, Israel's decision in battle of any organization from the "Axis of Resistance" is not possible. In other words, Israel can and should harm the leadership of every unit in the "Axis of Resistance", but it does not have the physical ability to destroy all the Houthi's forces, or to put all the Iraqi militias out of action. In any case, even in the case of a proven Israeli ability to defeat organizations from the "Axis of Resistance", it is difficult to apply Clausewitz's principles such as the center of gravity, etc. to those organizations. Therefore, Israel's goal in the concept of decision must be discussed again.

An understanding that the Iranian regime is an enemy that must be defeated

An examination of the actions and verbal statements of the Iranian regime leaves no doubt that this regime has been a bitter enemy of the State of Israel from the very beginning. Its hostility does not stem from any geopolitical conflict that can be resolved through diplomacy. If the Iranian regime were to separate itself from the aspiration to fight the State of Israel, it would be a different regime. The Islamic regime as it is today is not amenable to any substantial change. This is the reason for the Iranian leader's insistence

on opposing any internal reform. This situation determines that the conflict with Iran, that is, the regime's aspiration to harm the State of Israel, will continue as long as this regime exists.

The Iranian regime does not intend to consciously endanger itself or prioritize the destruction of Israel over other considerations. The current situation in which the "Axis of Resistance" can continue to attack Israel for a long time is unacceptable to Israel for many reasons. Israel is not built for a long war of attrition that the enemy is trying to impose on it. In order to win the war, the enemy must be forced to operate under conditions that are favorable to Israel. The Iranians are successfully implementing this principle: they excel in endurance in a war of attrition while being aware of their weaknesses in the field of conventional warfare. Therefore, Israel must exploit its strengths and strive to impose on the enemy the rules of the game that are more favorable to it. In the absence of decisive action against the Iranian regime, nothing will prevent the "Axis of Resistance" and the regime that heads it from waging a war of attrition for at least a few more years. It is unnecessary to expand on the economic and social costs of such warfare for Israeli society.

However, this regime has lost the support of a significant portion of the Iranian people, if not most of them. It suffers from many problems and is certainly not omnipotent. The Israeli intelligence community needs to identify weaknesses in this regime in many areas, and not just in certain areas as the need for specific intelligence prior to a specific operation.

Even if the one-time decision of the "Axis of Resistance" is not possible, it is worth looking for ways to harm the Axis' nerve centers. However, the regime will not change its behavior if it is not forced to pay a direct personal price for its actions. Therefore, Israel must seek ways to harm the Iranian regime using a variety of methods and in all areas, both on the political and tactical-military levels. The need to thwart the Iranian nuclear program must be separated from another immediate plan, which is to harm the Iranian regime. The assassination of Haniyeh in Tehran and the assassination of Hezbollah Chief of Staff Fuad Sakr demonstrated that the Iranian regime and the "Axis of Resistance" are vulnerable. Israel can rely on another factor in this conflict, which is the Iranian people. Israeli or other harm to the regime's assets and people will not cause the Iranian people to unite around the Iranian leadership, contrary to what was commonly thought a few years ago.²⁵

25 According to the precedents that have already been established in practice, significant parts of the Iranian people express spontaneous joy over the elimination of members of the regime or its allies. Nor was there any special trait evident in Iran that would increase identification with the regime. The three cases are the elimination of seven IRGC officers in Damascus, the death of

The Israeli civilian and military leadership is wary of a prolonged and widespread war and fears being perceived as causing a "regional war". This desire is understandable and clear. It is true that the Iranians are not interested in war either, but the leadership must be aware that it must not allow a situation in which a smart and intelligent enemy like the Iranian regime manages to read Israel's intentions like an open book.

The Iranian leadership carried out an unprecedented missile attack against Israel, and it can be said that this risk-taking paid off thanks to the fact that an attack of this magnitude did not lead to war. If Iran or the "Axis of Resistance" in the form of Hezbollah and the Houthis carry out missile fire on a similar scale in response to the assassination of Haniyeh and Fuad Sakr, it will be possible to learn that the Iranian leadership is not afraid of an all-out war. Or, unfortunately, its fear of the lack of a response outweighs the fear of an all-out war with Israel. This Iranian assessment, like other Iranian assessments, is not irrational or illogical. It has something to rely on. Hence, Israel must convey that it is not afraid of an all-out war and that the Iranian regime must understand that expanding the war could seriously harm itself.

Our firm determination regarding the need to convey a threat to the regime's survival stems from the understanding that the primary strategic issue for the Iranian regime is the regime's survival. However, it is worth being aware that the regime's survival includes both physical and political survival. The term "political survival" requires explanation. Every regime strives for legitimacy, and no regime intends to be cynical from the start in the sense that everyone is aware of the vast gap between ideological slogans and reality. If this situation prevails, then a regime (any regime) is in danger, because it loses credibility not only in the eyes of its opponents but also in the eyes of its citizens.

Khamenei has learned lessons from the fall of the Soviet Union, which is why he proclaims himself "I am not Gorbachev, I am a revolutionary". He is aware that the Islamic regime as he wishes to exist is not amenable to any reform. Therefore, he is forced to navigate and maneuver between the needs of ideology (whose fixation and lack of change are supposed to ensure the political survival of the regime), and the constraints of reality (which are supposed to ensure the physical survival of the regime). Israel's mission is supposed to be expressed in making the tension between preserving ideology and physical survival unbearable for the regime.

President Ebrahim Raisi, and the elimination of Haniyeh. The hashtag #qatlat (kebab) in Persian could be seen, expressing joy over their elimination, even though Raisi crashed in a helicopter and was not eliminated.

The impact of the Houthi maritime blockade of the southern Red Sea and the Gulf of Aden on Egypt, Jordan, and Saudi Arabia

Moshe Terdiman¹

Introduction

Since the end of October 2023, the Houthis have been attacking Israel using unmanned aerial vehicles (UAVs), cruise missiles, and ballistic missiles, attempting to impose a maritime blockade on Israel, and attacking international shipping in the Bab-el-Mandeb Strait as well as the multinational force stationed to protect freedom of navigation in a strait. Their activities are directed against Israel and against shipping with 'affiliations' with Israel, but in practice the attacks also harm other countries located on the coasts of the Red Sea and their interests.

The country most affected economically by Houthi activity against international shipping and Israel is Egypt, as traffic in the Suez Canal has decreased significantly due to the increasing number of shipping companies preferring to circumnavigate Africa via the Cape of Good Hope instead of sailing through the Red Sea. Jordan is also being severely affected by Houthi activity, as its only outlet to the sea is through the port of Aqaba. Missiles and UAVs have hit the territory of both countries.

In the context of these countries, the war in the Red Sea can be divided into two. The first part, which lasted until January 2024, these countries negotiated and agreed with the Houthis not to launch missiles and UAVs into their territory and to allow international shipping not affiliated with Israel to continue sailing in the Red Sea. At the same time, they negotiated and agreed with the United States to establish a multinational force to protect shipping in the Red Sea, but did not join it when it was established. The second part, which lasted until the time of writing, focused on dealing with the economic damage and the political consequences at the local and regional levels that they suffered as a result of the war in the Red Sea.

The purpose of this article is to light the dealings of Egypt, Jordan, and Saudi Arabia with the war in the Red Sea.

¹ The author's gratitude goes to Iman Safdie, who generously provided advice and material, which was of great help in writing the article.

The economic consequences of the Red Sea War

The Red Sea accounts for approximately 10% to 13% of global trade each year. Houthi attacks on international shipping in the Gulf of Aden and the Red Sea led to the announcement by 13 shipping companies, representing at least 70% of global container shipping, that they would suspend their ships' sailings through the Red Sea. In addition, between December 15 and 19, 2023, some shipping companies announced the suspension of services to and from Israel. The consequences of the sharp decline in international shipping in the Red Sea affected Egypt, Jordan, and even Saudi Arabia² to varying degrees.

When the Red Sea War began, Egypt, Jordan, and Saudi Arabia were reluctant to release data on the extent of their economic damage as a result of the Houthi attacks on international shipping in the Red Sea. Over time, the economic losses accumulated and the severe damage to their economies became clear.

The economic consequences for Egypt

Over 20,000 ships pass through the Suez Canal each year and are the main source of foreign exchange for Egypt, accounting for 2% of Egypt's GDP. In the 2022–2023 fiscal year, the Suez Canal brought Egypt \$9.4 billion in transit fees.³ However, Houthi attacks on international shipping in the southern Red Sea and the Gulf of Aden have reduced international shipping traffic through the Red Sea and, as a result, revenue from the Suez Canal.

The Suez Canal Authority initially downplayed the impact of the reduction in international shipping traffic in the Red Sea, stating that between November 19 and December 17, 2023, only 55 ships sailed through the Cape of Good Hope compared to 2,128 ships that passed through the Suez Canal.⁴ In mid-December 2023, it was reported that 2,264 ships passed through the Suez Canal during November, compared to 2,345 ships in October 2023, a decrease of 3.5%. The decrease in the number of ships passing through the canal also hurts Egypt's revenues from the Suez Canal, which amounted to \$854.7 million in November 2023, compared to \$880.1 million in October, a decrease of about 3%. The

² Anderson G., (December 21, 2023). [Troubled waters: Impact of the Red Sea crisis on the economies of Egypt, Israel and Jordan](#). *Jane's Intelligence Review*.

³ Knipp, K., and Hussein, M. (January 27, 2024). [Red Sea: Houthi attacks put pressure on Cairo](#). *Deutsche Welle*.

⁴ Anderson, 2024.

impact on revenue in November 2023 was relatively limited since the Houthi attacks on international shipping only began in the second half of the month.⁵

However, as the Houthi attacks continued, profits from shipping through the Suez Canal declined further. Osama Rabie, chairman of the Suez Canal Authority, said in January 2024 that revenues from the Suez Canal had fallen by 40% compared to the same period last year. He added that ship traffic between January 1 and 11 had decreased by 30% compared to the same period last year. Instead of 777 ships passing through the Suez Canal in January 2023, only 544 ships passed through the canal in early 2024. In response, in January 2024, Egypt raised canal transit fees by 5%–15% to cover the losses⁶. In February 2024, Osama Rabie said that in January, revenue from the Suez Canal fell to \$428 million compared to \$804 million in January 2023. He said that the total number of ships that sailed through the Suez Canal fell to 1,362 vessels in January, 36% less compared to 2,155 vessels that sailed through the canal during January 2023. In the same month, the International Monetary Fund reported that shipping volumes passing through the Suez Canal decreased by 55% in the week ending February 13, compared to the same period last year.⁷

Finally, on February 19, 2024, Egyptian President Abdel Fattah El-Sisi admitted that Houthi attacks on international shipping in the Red Sea and Gulf of Aden were hurting profits from ships passing through the Suez Canal, which had declined by 40–50%.⁸ On April 29, 2024, Egyptian Planning Minister Hala Helmy el-Said told the World Economic Forum in Riyadh that profits from the Suez Canal had declined by 50% due to disruptions to shipping related to the tensions in the Red Sea.⁹

Today, in addition to the biggest economic crises in Egypt's history, there is the added challenge of lost revenue due to the decline in ship traffic through the Suez Canal. On February 19, 2024, the Egyptian President said that these challenges began in the two years of the COVID-19 pandemic, in the aftermath of the war between Russia and Ukraine, and in the aftermath of the conflicts in Libya, Sudan, and the war in the Gaza Strip.¹⁰

⁵ Peskin, D. (December 14, 2023). [The additional victims of the Houthis: Arab countries remain silent and lose](#). *Calcalist*.

⁶ Knipp and Hussein, 2024.

⁷ Kamel, D. (February 13, 2024). [Suez Canal shipping volumes drop 55% in a week as Red Sea crisis continues](#). *The National News*.

⁸ Yeranian, E. (February 21, 2024). [Red Sea Conflict Hits Egypt, Other Parts of the Region](#). *VOA News*.

⁹ *The Arab Weekly*. (April 29, 2024). [Egypt's planning minister says Suez Canal revenues down 50 percent](#).

¹⁰ Yeranian, 2024.

Although, after the outbreak of the war in Ukraine and the rise in prices,¹¹ Egypt received a half-billion-dollar loan from the World Bank to help it purchase wheat. The decline in Suez Canal revenues could exacerbate Egypt's shortage of foreign currency, which it urgently needs to import wheat and other goods and pay off its external debt, which reached \$164.5 billion in September 2023, with Egypt due to repay \$29 billion this year. The tourism sector, one of Egypt's main sources of foreign currency, has been hit hard by the ongoing war in the Gaza Strip. The US credit rating agency Standard & Poor's (S&P) predicts that Egypt's tourism sector could suffer the most from the war, holding back GDP growth and weakening Egypt's external position. Egypt's gas exports have also suffered over the past year. Gas production decreased by 10% in the first eight months of 2023, in contrast to 2022, when Egypt exported 80% of its liquefied gas to Europe.

To meet the high domestic demand during the summer months, Egyptian gas was used for domestic consumption with no surplus for export. The outbreak of the war in Gaza on October 7, 2023 exacerbated the problem. Israel's gas exports to Egypt decreased by 70–80% in the first weeks after the outbreak of the war – Israel closed the Tamar gas field to protect it against potential attacks by Hamas – compared to the first eight months of 2023. Gas production at the Tamar gas field resumed in mid-November 2023, and as a result, Egypt resumed natural gas exports to Europe. In December 2023, Egyptian gas imports from Israel returned to what they were before the outbreak of the war. Also, according to the Central Bank of Egypt, remittances from Egyptians working abroad decreased by about 30% during the third quarter of 2023 (July–September) due to lack of confidence in the Egyptian economy and the existing exchange rate.¹²

Moreover, annual inflation reached a new high of 39.7% in August 2023. Since then, inflation has declined and in December its rate was 35.2%. The Egyptian Central Bank has devalued the Egyptian pound three times since the beginning of 2022 in order to receive an aid package from the International Monetary Fund in the amount of \$ 3 billion. One condition for receiving the aid is a transition to a more flexible exchange rate. Today, one dollar is worth 31 Egyptian pounds. S&P predicted in January 2024 that Egypt would further devalue its currency to bring the official exchange rate closer to the black market rate of 60 Egyptian pounds to the dollar.¹³

¹¹ *Ynet*. (June 30, 2022). [World food crisis: Egypt will receive a half-billion-dollar loan to purchase wheat](#).

¹² Amin, S. (February 8, 2024). [Houthi attacks on ships in the Red Sea add to Egypt's economic troubles](#). *Atlantic Council*.

¹³ Lucente A., (February 20, 2024). [Egypt's Sisi: Suez Canal revenue down as much as 50% over Red Sea attacks](#). *Al-Monitor*.

These factors have led to Egypt's external debt more than tripling over the past decade to \$164.7 billion.¹⁴ Foreign exchange reserves have also declined from \$45 billion in 2019 to \$35 billion in October 2023.¹⁵ As a result, on January 18, 2024, Moody's changed Egypt's credit rating from stable to negative.¹⁶ On March 6, 2024, Egypt raised interest rates and devalued its currency by more than 38%. Hours later, the International Monetary Fund agreed to provide Egypt with an \$8 billion bailout.¹⁷

The economic implications for Jordan

Like Egypt, Jordan is also suffering heavy losses as a result of Houthi attacks on international shipping in the southern Red Sea. Jordan, which was also in a delicate economic situation before the Houthi attacks, has in recent years placed emphasis on developing the port of Aqaba, its only outlet to the sea, and the surrounding economic zone as a national project that can drive growth and attract foreign investment. Jordan is the world's second largest exporter of potash and fertilizers, accounting for about 17% of national exports and about 3% of GDP. The Jordan Industrial Ports Company handles all of the country's seaborne exports through the port of Aqaba, with 76% of the potash moving from Jordan by ship to customers in Asia. In addition to exporting goods, Aqaba hosts the only tanker port in Jordan, from which crude oil is also transported as well as other goods to other countries such as Iraq, Syria, and the Palestinian Authority. Therefore, the continued suspension of international shipping activities in the Red Sea has worsened Jordan's balance of payments and increased inflation in the country.¹⁸

Although, initially, Jordanian officials tried to downplay the implications of the Houthi attacks in the Red Sea. For example, on December 25, 2023, a spokesman for the Ministry of Industry, Trade and Supply said that over 90% of wheat and barley imports are not affected by the Houthi attacks in the Red Sea since they arrive by sea from several Eastern

¹⁴ *Middle East Monitor*. (February 20, 2024). [Egypt says Suez Canal revenues down 40%-50% amid Red Sea tensions](#).

¹⁵ Anderson, 2024.

¹⁶ Uddin R., (January 19, 2024). [Egypt's credit outlook revised to 'negative', as Red Sea attacks hit Suez Canal revenues](#). *Middle East Eye*.

¹⁷ Magdy M., (March 7, 2024). [Multi-Billion Gulf Power Play Focuses on Egypt as Mideast War Rages](#). *Financial Post*.

¹⁸ Anderson, 2024; Al-Khalidi S. (May 31, 2022). [Jordan's Container Port Sees Pickup in Syria – and Israel – Bound Traffic](#). *Maritime Logistics Professional*. The world's first phosphate exporter and the world's fifth largest phosphate producer.

European countries, including Romania and Montenegro, and arrive at the port of Aqaba via the Suez Canal.¹⁹

However, as of mid-December 2023, according to data published in Jordan, cargo handling at the Port of Aqaba fell by 16% in November 2023. The number of ships arriving at the Port of Aqaba, which is Jordan's only outlet to the sea, fell by 14% in that month, and there was a 33% drop in ships carrying vehicles.²⁰ Therefore, the head of the Jordanian Chamber of Commerce, Khalil Tawfiq, said on January 3, 2024, that the challenge for the commercial sector in Jordan is great, especially with regard to the flow of goods into the country and the shortage of goods in local markets.²¹ On January 16, 2024, Jordanian Prime Minister Bisher Khasawneh said that Houthi attacks on international shipping in the Red Sea had led to an increase in freight rates. The costs of cargo arriving in Aqaba from Southeast Asia increased by about 160%, while the costs of cargo departing from Aqaba to Europe and the United States increased between 60% and 100%.²² On March 5, 2024, the Jordanian Minister of Industry, Trade and Supply, Yousef Shamali, revealed that the number of containers entering Jordan each month had decreased by more than 10,000 containers due to Houthi attacks in the Red Sea.

Shamali said that on a monthly average, more than 38,000 containers arrived in Jordan before the Red Sea crisis. In contrast, in January 2024, only 22,000 containers loaded with goods arrived in Jordan, and in February the number of containers arriving in Jordan rose to 24,000.²³

In April 2024, the International Monetary Fund published a report on economic projections for the Middle East and North Africa. According to this report, from November 2023 to the end of February 2024, Jordanian exports and imports through the port of Aqaba fell by half due to Houthi attacks in the Red Sea. All this led to a shift of some trade to land transport routes.²⁴

¹⁹ Weldali, M. (December 25, 2023). [Jordan insures uninterrupted wheat, barley imports despite Red Sea tensions](#). *Jordan Times*.

²⁰ Peskin, 2023.

²¹ *Asharq al-Awsat*. (January 3, 2024). [Attacks on Red Sea Ships Disrupt Jordan's Commercial Sector](#).

²² *World Economic Magazine*. (January 17, 2024). [Jordan's Economy Faces Setback, Prime Minister Highlights Impact of Gaza Conflict](#).

²³ *Ammon News*. (March 5, 2024). [Due to Red Sea crisis: Goods imported into Jordan drop by about 10,000 containers per month](#).

²⁴ Al-Lubani, (April 18, 2024). [Tsanduk al-Naqd: Achtrabat al-Bahr al-Ahmar 'Hafzat' Sadrat Wardat al-Ardan Abr al-Aqaba ala al-Nasf](#). *Al-Mamalka*.

The loss of revenue from the port of Aqaba adds to the significant economic challenges facing Jordan. Unemployment is high, reaching more than 20%, the country is almost entirely dependent on food and energy imports due to a lack of domestic resources, and the subsidies provided by the state to protect the population from global inflation have brought public debt to 92% of GDP. Tourism, a major source of foreign exchange earnings and employment, has suffered high losses due to the war in Gaza, with car rental companies reporting cancellations of 90% for December 2023.²⁵

The economic implications for Saudi Arabia

Saudi Arabia is another victim of the deteriorating security situation in the Red Sea, although much less so than Jordan or Egypt. In the Saudi perspective, the Red Sea region is a significant component of "Vision 2030"²⁶ in both the logistical and tourist sectors, and the Houthi attacks could harm the realization of this vision.²⁷

Over the past decade, Saudi Arabia has already faced Houthi attacks. On March 26, 2015, Saudi Arabia launched Operation Decisive Storm to repel the Houthi rebels who had seized large parts of Yemen and to help the ousted Yemeni president, Abdrabbuh Mansur Hadi, regain control of the country. Saudi Arabia was joined by a coalition of Arab and Muslim countries, including Sudan, Egypt, Morocco, Jordan, Qatar, Bahrain, Kuwait, and the United Arab Emirates. About a month later, on April 21, 2015, Saudi Arabia announced the end of Operation Decisive Storm and announced the start of Operation Restoring Hope, which would focus on finding a diplomatic solution to the crisis. Coalition strikes against the Houthis have continued, and in response, the Houthis have attacked targets in Saudi Arabia and the United Arab Emirates. Now, Saudi authorities fear that Houthi attacks on Israel and international shipping could drive away investors and visitors to the commercial and tourist hub of Jeddah, a major port city on the Red Sea coast. The goal of the Jeddah Master Plan, launched by Saudi Crown Prince Mohammed bin Salman in 2021, is to transform Jeddah into a top-tier tourist destination and strengthen the city's economic power. The Jeddah development project, which covers 5.7 million cubic meters in the heart of Jeddah, is worth \$19.9 billion. It includes an opera house,

²⁵ Anderson, 2024.

²⁶ Saudi Vision 2030 is a vision initiated and presented by Saudi Crown Prince Mohammed bin Salman on April 25. This plan for the next 15 years focuses on trying to break away from the economic dependence on oil revenues through diversification of income sources, investment in various sectors, including tourism and technology, and efficiency. The flagship plan within this vision is the future city of Neom on the Red Sea coast in the northwest of the country, which will spread across three countries: Saudi Arabia, Jordan, and Egypt.

²⁷ Peskin, 2023.

a museum, a sports stadium, an aquarium, a marina, resorts, modern residential areas, and embodies a contemporary interpretation of Jeddah's historical and cultural Hejazi essence. The project is scheduled to be completed in 2030 and will offer tens of thousands of accommodation and residential spaces, as well as create 70,000 direct and indirect jobs. The project is expected to bring \$5.3 billion to the Saudi economy annually starting in 2030. In addition, the Houthi attacks also threaten the rapidly growing commercial port of Jeddah. In October 2023, a record amount of cargo passed through this port, before the Houthi attacks began.²⁸

Not only that, but the Houthi attacks have hit specific sectors such as the construction industry. In recent months, the burning issue has been the potential for the Houthi attacks to affect the supply of construction materials for the huge projects on the Red Sea coast, including the Line in Neom, the Red Sea Project, and more. The Saudi investment firm Jeddah Investments estimated in March 2024 that disruptions to commercial shipping in the Red Sea and Gulf of Aden had contributed to a 25%–50% increase in construction material prices since mid-February. This was after the Houthis attacked the Belize-registered cargo ship MV Rubymar on February 18, which sank on March 3. The ship was carrying Saudi fertilizers from the Persian Gulf port of Dammam to Bulgaria. Then, on March 6, the Houthis attacked the cargo ship True Confidence, which was sailing from China loaded with steel and vehicles. The attack caused a fire on board, killing three crew members and abandoning the ship. It was an indication of the growing risk in shipping construction materials, most of which come from Asia, to Saudi Arabia's west coast. Suppliers, shipping companies and logistics companies will be forced to make tough decisions about supplying construction materials to the Saudi construction industry. Navigating through the Gulf of Aden is a proven risk. Insurance premiums have risen tenfold from their normal cost. On the other hand, the alternative of moving construction materials from Asia to the safe ports of Saudi Arabia's east coast is safer, but the overhead costs of land transport are higher due to the inefficiencies inherent in moving large volumes of construction materials overland. This situation could lead suppliers and contractors to raise prices much higher if the Houthi attacks continue.²⁹

Between the Houthis and the United States and Israel – the political aspect

Despite the fact that Egypt, Jordan, and Saudi Arabia are suffering economic losses due to the decline in activity in the Red Sea, they are afraid to take action against the Houthis, who are harming shipping traffic. This is because they do not want to be seen as

²⁸ VOA News. (February 10, 2024). [Red Sea Tensions Threaten Saudi Mega-Project](#).

²⁹ Bambridge J., (March 13, 2024). [Red Sea crisis raises Saudi construction costs](#). *Middle East Business Intelligence*.

defending Israeli interests, given the widespread popular support in the Arab world for the Palestinian issue and the ongoing peace talks between the Saudis and the Houthis. However, Egypt and Jordan have been conducting secret talks with the Houthis to prevent missiles and UAVs from hitting their territory, to restore ship traffic in the Red Sea to normal, and at the same time, have been conducting secret talks with the United States regarding the establishment of a multinational force that will protect the continuation of international shipping activity in the Red Sea.

Houthi attacks on Israel spill over to Egypt and Jordan

At the beginning of the war, Houthi missiles and UAVs fell on the territory of Egypt and Jordan. On October 27, 2023, an Egyptian military spokesman said that an unidentified UAV crashed into a building near a hospital in the town of Taba on the border with Israel, injuring six people. Later, another UAV crashed near a power generation facility in the desert area of the town of Nuweiba, about 70 km from the Israeli border.³⁰ On October 31, 2023, according to several reports by Arab networks, at least two missiles launched by the Houthis at Israel crashed in southern Jordan. There was no report of the missiles being intercepted by the Jordanians, and according to reports, the missiles crashed in Jordanian territory and were not shot down.³¹

Both Egypt and Saudi Arabia intercepted drones and missiles launched by the Houthis towards Israel. On October 19, 2023, the Houthis launched five cruise missiles towards Israel for the first time, and about 30 UAVs. The American destroyer USS Carney and Saudi Arabia intercepted the drones before they reached Israeli airspace.³² On December 16, 2023, the Egyptian air defense system intercepted a suspected drone in the Red Sea near the resort town of Dahab in Sinai.³³ Jordan, for its part, warned the Houthis not to fire into its territory. On November 1, 2023, the Jordanian daily "Ar-Ra'i al-Youm" reported that the authorities in Jordan had warned the Houthis following the missile launch into Israel, fearing that Jordan's airspace would eventually be under threat as well. Warnings began to reach the Houthis from Jordan after they announced that they had launched missiles at Eilat, but it is unclear whether the Yemeni army provided any guarantees to

³⁰ *Middle East Monitor*. (October 27, 2023). [Blasts hit two Egyptian Red Sea towns, Israel points to 'aerial threat'](#).

³¹ Amar, Y. (October 31, 2023). [Arab reports: Missiles from Yemen crashed in Jordan, Srugim](#).

³² Gordon, R. M., Lubold, G., Nancy, A., and Youssef, N. A. (October 24, 2023). [Iranian-Backed Militias Mount New Wave of Attacks as U.S. Supports Israel](#), *Wall Street Journal*.

³³ *Al-Monitor* (December 16, 2023). [Egyptian Air Defense Shoots Down Suspected Drone Off Red Sea Coast](#).

Jordan. Jordan, for its part, announced that its defense forces would deal with any threat to Jordanian territory.³⁴

The secret Egyptian conduct towards the Houthis and Iran

Egypt does not participate in the multinational force protecting international shipping in the Red Sea and the Gulf of Aden, despite the fact that threats to international shipping in the Red Sea are a direct threat to Egyptian national security and despite its presence in other Red Sea security initiatives. In recent years, Egypt has upgraded and developed its navy and established the 'Southern Fleet' within it to protect its security interests in the Red Sea.

Egypt has the strongest navy force among the Red Sea countries, and has even contributed to international efforts to secure shipping in the Red Sea through participation in the Combined Task Force CTF-153, which was established in 2022, and has even led it in the past. The combined task force focused on combating smuggling, piracy, and illegal activities in the Red Sea and the Gulf of Aden. However, since the Houthis' response to the war in Gaza is part of their declaration of war against Israel, Egyptian participation in the coalition's multinational force could be considered direct Egyptian intervention against the Houthis, which Egypt refuses to do since public Egyptian participation in international military efforts to secure the international sea route in the Red Sea would be seen by both the Egyptian public and the entire region as indirect support for Israel's military operations in the Gaza Strip. In fact, Egypt's reluctance to act in Yemen is not new. Egypt has refrained from military intervention in the Yemeni civil war since 2014 and prefers a diplomatic solution. Although Egypt participated in the Saudi-led Operation Decisive Storm, it focused on supporting the security of the sea route through its naval forces rather than on significantly deploying forces on Yemeni soil, likely due to the tragic results and bitter memories of its involvement in Yemen in the 1960s.³⁵

Egypt also expressed concern about the multinational coalition's activities against the Houthis and their implications for the escalation of the situation in the southern Red Sea. On January 12, 2024, a few hours after joint US-British attacks against Houthi targets in Yemen, the Egyptian Foreign Ministry issued a statement according to which Egypt calls for a reduction in tensions in the region and expresses deep concern about the escalation of military operations in the Red Sea and air strikes against several areas in Yemen. It

³⁴ Ben Ari, L. (November 1, 2023). [Report: Jordan warned Hamas against firing at Eilat – and also the Houthis](#), *Ynet*.

³⁵ Maher, M., and Farid, M. (January 26, 2024). [Cairo: Stuck between Securing the Red Sea and Avoiding a Perception of Support for Israel](#). *The Washington Institute for Near East Policy*.

called for unifying international and regional efforts to reduce tensions and instability in the region, including the security of navigation in the Red Sea. It describes the dangerous and escalating developments taking place in the southern Red Sea and Yemen "...as a clear indication of what we have been constantly warning about regarding the dangers of expanding the conflict in the region as a result of the continued Israeli attacks on the Gaza Strip".³⁶

On the other hand, Egypt conducted secret talks with the Houthis, asking them to restore shipping traffic in the Red Sea to normal and to declare that they would only attack ships sailing to Israel. On January 29, the London-based Arab daily Al-Arabi Al-Jadeed reported that Egyptian officials had suggested to the Houthis that their operations would be intermittent and not against ships not destined for Israel. The Houthis rejected this proposal, although they expressed their appreciation for Egypt's refusal to join the coalition against the Houthis. The Egyptian demands were that the Houthis reiterate their promises that the attacks would only target ships linked to Israel, and demanded guarantees from a third country, most likely Iran, to this effect. The Egyptian demands from the Houthis were intended to alleviate the negative effects on the Suez Canal, but in response, they were received with great dissatisfaction in Israel, especially at a time when Israel had resumed natural gas extraction and exports to Egypt, after ceasing activity at the Tamar gas field in the first weeks after the outbreak of the war with Hamas.³⁷ According to the same report, Egypt also conveyed a message to Iran that expanding the Houthis' actions would worsen the country's economic crisis and urged Iran to prevent a security deterioration in the region.³⁸

At the same time, Egypt continued to pressure Iran to act on the issue of Houthi attacks against international shipping in the Red Sea. On February 27, 2024, Egyptian Foreign Minister Sameh Shoukry met with his Iranian counterpart, Hossein Amir-Abdollahian, on the sidelines of the high-level meetings of the Human Rights Council in Geneva. The two ministers met as part of efforts to continue reconciliation between the two countries. According to a statement issued by the Egyptian Foreign Ministry, according to Shoukry, the tensions in the Red Sea pose an unprecedented threat to international shipping in the Suez Canal, leading to direct damage to the interests of a large number of countries, including Egypt. The official spokesman for the Egyptian Foreign Ministry, Ahmed Abu

³⁶ *Middle East Monitor*. (January 13, 2024). [Egypt calls for reducing Red Sea tension](#).

³⁷ *Maariv*. (January 29, 2024). [The 'combination' that Egypt wanted to create with the Houthis under Israel's nose](#).

³⁸ Mijan, S. (January 29, 2024). [Report: Egypt asked the Houthis to declare that their actions are directed against Israel](#). *Kan News*.

Zeid, said that Shoukry and Abdellahian stressed the determination of their countries to renew bilateral relations between them.³⁹

It should be noted, in this context, that several official meetings between senior Iranian and Egyptian officials have recently taken place, including talks between Egyptian President Abdel Fattah-el-Sisi and his Iranian counterpart, Ebrahim Raisi, on the sidelines of the joint Arab-Islamic summit held in Riyadh in November 2023. In May 2023, the Iranian President asked the Iranian Foreign Ministry to take the necessary measures to strengthen relations with Egypt. The two countries severed diplomatic relations in 1979. Relations were resumed in 1990, but at the lower level of 'Chargé d'Affaires'.⁴⁰

On March 31, 2024, Egyptian Foreign Minister Sameh Shoukry spoke again with his Iranian counterpart, Hussein Amir Abdel Lahian, and warned him about the spread of the regional conflict to the Red Sea and its impact on international maritime trade. The Egyptian Foreign Ministry issued a statement in which Shoukry expressed Egypt's deep concern about the expanding conflict in the region, especially in the southern Red Sea, and its significant implications for international maritime shipping and trade passing through this vital international route. Shoukry warned of the significant implications that this could have on the stability of the region and international peace and security. He stressed that the spread of the conflict negatively affects regional and international efforts to resolve the conflict. The statement noted that the ministers agreed to continue consultations regarding bilateral relations between the two countries in the near future so that they can return to full relations.⁴¹

Peace talks between Saudi Arabia and the Houthis

At the end of December 2023, amid increasing attacks by the Houthis and Iran in the Red Sea and the Gulf of Aden, the UN envoy for peace talks in Yemen, Hans Grundberg, announced that representatives of the Houthis and Saudi Arabia had reached an agreement on a roadmap to end the war that has been going on between them since 2015. Under the emerging agreement, the Houthis will retain most of the territory they control, which includes the majority of the population, the capital Sana'a, and access to the Red Sea, while Saudi Arabia will lift the air and naval blockade it imposes on these areas and finance the reconstruction of Yemen and its governing mechanisms, which the Houthis will share with the recognized Yemeni government supported by the Saudis.

³⁹ *Asharq Al-Awsat*. (February 28, 2024). [Do Tensions in the Red Sea Affect Egyptian-Iranian Rapprochement?](#).

⁴⁰ .Ibid

⁴¹ *Shafaq News*. (March 31, 2024). [Egypt Warns Iran against regional conflict spreading to Red Sea](#).

Saudi Arabia has long been eager to put the war in Yemen behind it in order to buy peace and focus on internal reforms and its ambitious projects that are part of its 'Vision 2030'.⁴²

Thus, in early December 2023, it was reported that Saudi Arabia called on the United States to exercise restraint in response to Houthi attacks on international shipping in the Red Sea. The Houthis' involvement in the war in Gaza worries Saudi Arabia because of its fear of the conflict spreading, which could harm regional interests, primarily vital shipping lanes.⁴³

Ways to deal with the economic consequences

Egypt, Jordan, and Saudi Arabia are dealing with the economic consequences of the Houthi attacks on international shipping in the southern Red Sea and the Gulf of Aden, primarily through alternative sea and land routes to the Egyptian Bab-el-Mandeb Strait and the Suez Canal, through huge Emirati and Saudi investments in Egypt, and through Saudi aid to Jordan.

Opening alternative maritime and land transport routes

Due to the decrease in ship traffic in the Bab-el-Mandeb Strait due to Houthi attacks on international shipping in the southern Red Sea and the Gulf of Aden, Egypt, Jordan, and Saudi Arabia were forced to establish combined maritime and land-based cargo and oil transportation routes.

As part of this, on December 9, 2023, Jordan's Minister of Trade and Industry, Yousef Al-Shamali, announced that Jordan had decided to forgo exports from Haifa Port in favor of a route through Aqaba Port, which he claimed would allow exports to the United States and other countries for cheaper transportation and storage prices. The Jordanians have not attributed the diversion of exports from Haifa Port to Aqaba Port to Houthi attacks since the outbreak of the war, but it is clear that this was one of the considerations.⁴⁴ It should be noted that this statement contradicts the economic costs of exports from Jordan and

⁴² Guzansky, Y. and Zlait, A. (December 27, 2023). [At the height of regional warming: Saudi Arabia and the Houthis on the brink of a peace agreement](#). Institute for National Security Studies.

⁴³ *I24 News*. (December 6, 2023). [Saudi Arabia urges U.S. restraint amid Houthi involvement in Red Sea – report](#); Nereim, V., and Almosawa, S. (April 10, 2023). [What Do Peace Talks in Yemen Mean for Its 8-Year War?](#) *The New York Times*; Nereim, V. (December 25, 2023). [Hoping for Peace with Houthis, Saudis Keep Low Profile in Red Sea Conflict](#). *The New York Times*.

⁴⁴ Almas, D. S. (December 10, 2023). [Under the influence of the Houthis? Jordan stops exports through the port of Haifa](#). *Globes*.

may be intended to present to the Houthis and the Jordanian public a Jordanian position that avoids trade through Israel.

On December 24, 2023, Jordanian Minister of Transport, Wesam Altahtamouni, met with representatives of the Amman Chamber of Industry to discuss alternative routes for transporting goods to Europe and the United States and said that in 2021, Jordan and Egypt signed an agreement to establish an alternative goods route to and from the Mediterranean.⁴⁵

Two days later, on December 26, 2023, Jordan and Egypt agreed to operate the Arab Bridge shipping company's combined land and sea transport line between Aqaba and Egyptian ports on the Mediterranean Sea as an alternative shipping route. Arab Bridge shipping company completed all the international and technical requirements needed to operate the new sea and land route. This route runs from Aqaba to the port of Nuweiba in Sinai and from there to the Egyptian Mediterranean ports of Alexandria, Port Said and Damietta. The director of the Arab Bridge Shipping Company, Adnan Al-Abdallah, noted that the alternative route is an alternative to transferring Jordanian exports to Europe and the United States. Connecting the Red Sea with the Mediterranean Sea through trade routes diversifies trade exchanges and reduces transportation costs. According to him, the time for transporting containers from the industrial zones in Jordan to the United States through Egyptian ports will be reduced to 18 to 20 days. He explained that this alternative route increases Jordan's competitiveness as part of the changes in trade from northern Saudi Arabia and eastern Iraq towards this route.⁴⁶ The Arab Bridge Shipping Company was established in 1985 following an agreement signed between Egypt, Jordan, and Iraq.⁴⁷

Indeed, this combined alternative route includes not only Jordan and Egypt but also Iraq. On February 10, 2024, the Egyptian Ministry of Transport announced that the first phase of the Arab Trade Route connecting Iraq, Jordan and Egypt began operating in early 2024 following the rise in tensions in the Red Sea. According to the Egyptian Ministry of Transport, work is underway to complete the second phase of the combined Arab Trade Route by building 500 km of railway to increase the volume of goods transported from the Persian Gulf, Iraq and Jordan to Europe and the United States. Experts believe that this project could be a window for goods from Jordan and Iraq and even for exports from the Gulf countries.

⁴⁵ Weldali, 2023.

⁴⁶ Hanan Mohamed, H. (December 26, 2023). [Jordan, Egypt to activate shipping route amid Red Sea navigation halt](#). *Egypt Today*; *Asharq al-Awsat*, January 3, 2024.

⁴⁷ *Asharq al-Awsat*, January 3, 2024.

It should be noted that in December 2023, the Iraqi Ministry of Transportation said that Iraqi ports had become an alternative for international traffic for moving goods from east to west.⁴⁸ Also, this is not a new initiative, as during the first Gulf War and the blockade imposed by the Americans on Iraqi ports, goods entered Iraq through the port of Aqaba and from there were transported by trucks to eastern Iraq.

On March 10, 2024, following the 82nd General Council Meeting of the Arab Bridge Shipping Company, which was attended by the Ministers of Transport of Egypt, Jordan and Iraq, the Egyptian Ministry of Transport issued a statement stating that due to the tensions in the Red Sea, the Arab Bridge Shipping Company transferred 14,000 containers between Aqaba and Nuweiba in January and February. According to the statement, containers from Jordan were sent via Egypt to Italy, Algeria, Germany, Romania, Belgium, the Netherlands, Cyprus and Senegal, and containers from Germany and Spain were sent via Egypt to Jordan. He noted that this is the largest number of shipments since the company was founded as a joint initiative of the governments of Egypt, Jordan and Iraq. The Arab Trade Route for Land and Sea Transport, which connects Egypt, Jordan and Iraq, combines sea routes, truck routes and railway routes. It is the first route connecting several countries from the Persian Gulf to Egyptian Mediterranean ports on the way to Europe and America. Egyptian Minister of Transport, Kamel Al-Wazir, said that Egypt fully supports the route due to its great importance in increasing the volume of inter-Arab trade.

Egypt's involvement in this route is part of the Ministry of Transport's commitment to improving international transport hubs as part of the development of the Taba-El-Arish logistics corridor in Sinai. This initiative is part of a larger effort to establish seven international logistics corridors in Egypt. Jordanian Transport Minister Wissam Al-Tahatmoni praised the company's role in supporting Palestinians in Gaza by delivering more than 650 aid trucks since early 2024.⁴⁹

Saudi Arabia also benefits from its ability to bypass the Bab-el-Mandeb Strait and transport energy supplies to Europe from the northern Red Sea via the existing oil pipeline from the Abqaiq oil field in the east of the country to the refineries and port of Yanbu in the northwest of the country (the East-West Crude Oil Pipeline is one of the largest oil pipelines in the world). In doing so, it demonstrates its strategic advantage over the other Gulf states. This advantage makes Saudi oil more attractive because it reduces the need

⁴⁸ Salem, A. (February 11, 2024). [Red Sea tensions revive trade line between Iraq, Jordan, Egypt](#). *Iraqi News*.

⁴⁹ Wael, B. (March 10, 2024). [New Aqaba-Nuweiba maritime transport route starts off big amid Red Sea tension](#). *Ahram Online*.

for expensive and longer alternative routes, such as sailing around the African continent, without jeopardizing energy supplies.⁵⁰

As part of this, already in January 2024, Saudi Arabia significantly increased oil exports from the Al-Maajj oil terminal near the port of Yanbu. On February 1, Bloomberg reported that 18 million barrels of oil, or 580,000 barrels of oil per day, were transported from the Al-Maajj terminal during January. This compares to eight million barrels of oil, or 258,000 barrels of oil per day, that were transported from this terminal in December 2023. The oil is transported from the Al-Maajj terminal to the southern end of the Suez-Mediterranean (SUMED) oil pipeline, located in the city of Suez in Egypt, and from there it is pumped to the Sidi Karir oil terminal, located near Alexandria, on the Mediterranean coast.

From there, vessels transport the crude oil mainly to Europe. It should be noted in this context that after the oil has been loaded onto the tankers in Yanbu, they can sail and pass through the Suez Canal towards the Mediterranean Sea and Europe or unload the oil at the port of Suez and transport the oil via the SUMED pipeline. The choice between the two options is not directly related to the Houthis but rather to commercial decisions. Also, due to the Houthis' declared policy of not attacking Saudi Arabian vessels, it continues to supply crude oil to the refinery in Jizan, in the southwest of the country, from the Ras Tanura oil field in the east via Saudi tankers sailing through the Bab-el-Mandeb Strait. In addition, a small number of oil tankers carrying Saudi crude oil for export continue to sail in the southern Red Sea to markets in Asia.⁵¹

On February 1, 2024, in response to increasing tensions in the Red Sea and concerns about possible inflation and disruptions to maritime transport, the Jordanian Ministry of Transport opened new sea lanes to ensure the smooth flow of goods and maintain supply chains. The Ministry of Transport coordinated with shipping companies serving the Port of Aqaba to ensure continued service, including with shipping companies transiting through the Bab-el-Mandeb Strait. The Jordanian Ministry of Transport also established cooperation with Abu Dhabi Ports to operate feeder lines to the Port of Aqaba, thereby ensuring efficient and timely delivery of goods. Furthermore, the Jordanian government has taken additional measures such as capping container prices to reduce customs fees, expediting the release of goods from the port, especially essential goods.⁵²

⁵⁰ Bell, J. (February 16, 2024). [Report: Saudi Arabia's strategic maneuvers in the face of the Red Sea shipping crisis](#). *Al-Arabiya News*.

⁵¹ Lee, J., and Longley, A. (February 1, 2024). [Saudis Boost North Red Sea Oil Exports to Avoid Chaos in South](#). *Bloomberg*.

⁵² *Jordan News*. (February 2, 2024). [Jordan establishes new sea routes amid Red Sea tensions](#).

It should be noted that the shift to alternative transport routes was not only at the initiative of governments, but also at the initiative of shipping companies. On January 19, 2024, a month after deciding that its tankers would not sail the Red Sea, the German shipping company Hapag-Lloyd announced to its customers a temporary solution that would help with the disruptions to its services, especially in Saudi Arabia and Jordan, due to Houthi attacks, in the form of land service corridors from the ports of Jebel Ali, Dammam and Jubail in the Persian Gulf to the port of Jeddah in the Red Sea, which can also deliver goods to Jordan.⁵³

Deepening the presence and influence of the Gulf states in Egypt

The UAE is deepening its presence in Egypt in terms of building and managing strategic ports on the Red Sea coast. On January 2, 2024, Abu Dhabi Ports Company (DW) signed an agreement with the Egyptian Red Sea Ports Authority to develop and operate a new multi-purpose terminal at the port of Safaga in Egypt. Under the agreement, the company will invest \$200 million over three years to develop a state-of-the-art facility that will be the first internationally operated port serving the Upper Egypt region. The terminal will be approximately 810,000 square meters and will have a 1,000-meter pier that will handle dry cargo, liquid cargo, and cargo arriving by container and roller-coaster ships. This project is expected to be operational by 2025 and will save costs and improve efficiency for traders and businesses in the region.⁵⁴

Three days later, on January 5, 2024, Abu Dhabi Ports announced that it had signed a 15-year agreement with the Egyptian Red Sea Ports Authority to operate and manage three cruise ship terminals in the Red Sea ports of Sharm el-Sheikh, Hurghada and Safaga. The agreement also includes the renovation of the Sharm el-Sheikh terminal with the aim of enhancing the cruise tourism experience in Egypt. Under this agreement, Abu Dhabi Ports will invest \$3 million in the terminals over 15 years to improve accessibility for cruise ship operators and add additional cruise ship sailings. According to Abu Dhabi Ports, the agreement will be completed in the first quarter of 2024, subject to regulatory approvals. On January 4, 2024, the Egyptian Ministry of Transport issued a statement stating that the agreement with Abu Dhabi Ports Company would help develop yacht and cruise tourism in Egypt, including cruise routes between Mina Zayed Port in Abu Dhabi and Egyptian Red

⁵³ *The Maritime Executive*. (January 22, 2024). [Hapag-Lloyd Offers Saudi Arabia Land Routes as Red Sea Diversions Continue](#).

⁵⁴ Labrut M., (January 2, 2024). [AD Ports to invest \\$200 million in new Red Sea port terminal](#). *Seatrade Maritime News*.

Sea ports as well as with ports in the Persian Gulf, the Port of Aqaba, and ports in Europe and Asia.⁵⁵

On January 5, 2024, the Emirati oil company Dragon Oil, owned by the government of Dubai, started 2024 by producing crude oil from the Al-Wasl oil field in Egypt. This oil field is the company's first oil discovery in Egypt. The oil field was discovered by the company in 2021 and is the largest oil discovery in the Gulf of Suez in the last twenty years. The oil reserves exceed at least 95 million barrels. This situation led the company to adopt an ambitious early production project with a total investment of \$ 200 million. Recently, the company issued a statement stating that the project includes the construction of an offshore production platform. The company will implement measures such as establishing a production line and a power line to operate oil production pumps. It will also establish a water injection project to maintain high production rates and achieve the highest development rates for existing reserves. The company intends to complete the development of the oil field as soon as possible. The Al-Watsel offshore platform began operations after the successful implementation of the first phase of the oil field's early production project. Production at the oil field started at an initial rate of 3,000 barrels of crude oil per day. It connected the second well to the production line in mid-January 2024, increasing production from 3,000 barrels of crude oil per day to 6,000 barrels of crude oil per day.⁵⁶

The United Arab Emirates is also pouring huge investments into Egypt to save the Egyptian economy. On February 23, 2024, Egyptian Prime Minister Mostafa Madbouly announced the signing of a huge agreement with the United Arab Emirates, according to which it will inject about \$35 billion into the Egyptian economy. According to him, this is the largest foreign direct investment in an urban development project in Egypt's modern history. The agreement includes a \$24 billion investment in the new city project "Ras al-Hikmah", located about 350 km northwest of Cairo and about 200 km west of Alexandria on the Mediterranean coast. According to Madbouly, this mega project is part of Egypt's preparations in the housing sector for the coming decades and will be a "new generation" city. Among other things, residential buildings, free economic zones, commercial areas, tourist attractions and all related infrastructure, including a new airport, will be built in the new city. Ras al-Hikmah is a mega project and is expected to cover an area of approximately 170 million square meters. In total, the Egyptian government expects the project to attract foreign investments worth \$150 billion. The Egyptian government

⁵⁵ Lucente, A. (January 5, 2024). [UAE's AD Ports to develop Egypt Red Sea cruise terminals despite instability](#). *Al-Monitor*24.

⁵⁶ Abi Farraj, Y. (January 5, 2024). [AD Ports commits to operating terminals at Egypt's Red Sea ports](#). *Middle East Economy*.

claims that even after signing the agreement, it will continue to own 35% of the project. In this way, the Egyptian government denies rumors that, due to its economic hardship, it has begun selling its assets and has essentially transferred full ownership of the project to the United Arab Emirates. Also, as part of the agreement, Egypt will receive an additional \$11 billion after the United Arab Emirates announced that a deposit of this amount that it previously transferred to the Egyptian Central Bank will become an investment or debt forgiveness.⁵⁷

The solemn declaration by Mustafa Madbouly, the Prime Minister of Egypt, about the signing of a historic agreement with the Abu Dhabi Government Development Fund has caused a great deal of resonance in the country. The Egyptian media, which is controlled by the regime, called the agreement historic and one that could significantly change the economic direction that Egypt is taking. However, these economic investments are generating severe public criticism attributed to the failed policies of the Egyptian president and his excessive focus, from their point of view, on establishing international projects instead of establishing social safety nets, while carrying out privatization of government companies, with an emphasis on those controlled by the military. Against this backdrop, there are growing public, military and opposition government voices condemning the deal, which they see as a national disaster that threatens Egypt's stability and the status of the Egyptian regime. Commentators, especially outside Egypt, are raising questions about how much cash will actually flow into the Egyptian economy and when it will happen, and about the logistical capabilities for establishing such a project in Egypt. There are also questions about the investment of the \$11 billion that the UAE is releasing through the agreement and where it will be directed.⁵⁸

This agreement holds quite a few strategic benefits. From a financial perspective, it is already apparent that despite the massive investment of over \$110 billion in Egypt by the Gulf states – led by Saudi Arabia, the United Arab Emirates, Kuwait and Qatar – in Egypt since 2013, the largest deal in Egyptian history is this time a lifeline, critical emergency aid designed to rescue Egypt from a deep debt crisis, a severe shortage of foreign exchange and a prolonged economic hardship that includes, among other things, inflation of around 40%, a 50% devaluation of the Egyptian pound, alongside poverty of around 60% of the population. Moreover, the construction of the enormous project despite the security escalation, public criticism and logistical challenges involved, is expected to provide Egypt with 35% of the profits of future projects to be built on the site, with an estimated scope of

⁵⁷ Peskin, D. (February 25, 2024). [A \\$35 billion lifeline: Will the United Arab Emirates rescue Egypt from the economic quagmire?](#) *Calcalist*.

⁵⁸ Ibid; Hochberg-Marom, P. (March 8, 2024). [Egypt's development agreement holds strategic dividends](#). *Maariv*.

around \$150 billion. Its establishment over a vast area could be a critical turning point that will help diversify Egypt's sources of income and employment, reduce its dependence on other traditional sources and remittances, and encourage additional foreign investment that will, in turn, lead to the recovery of the Egyptian economy and economic growth. This is an economic partnership that is expected to redefine the regional status quo and the maneuverability of Egypt's diplomatic efforts. All this, alongside and in addition to the interests of the UAE government, which sees this as an important opportunity to project its economic power, strengthen and expand ties between the two countries and between the two leaders. Furthermore, the establishment of the project is intended to promote political and economic stability in Egypt, which is a critical key factor, essential for maintaining overall stability in the Middle East. The establishment of the project is expected to tighten the UAE's grip on the Egyptian market, while increasing Egypt's dependence on it, as well as to increase the UAE's involvement in economic development and investment in future projects for the reconstruction of the Strip after the end of the war. In doing so, it is expected to consolidate the geopolitical position of both countries and strengthen their position and strategic role in the Middle East.⁵⁹

Following the signing of the mega deal with the UAE, Egypt is continuing its efforts to inject cash into the Egyptian economy by selling state assets. A few days after the signing of the mega deal with the UAE, Arab media reported that Egypt intends to attract local investors and Western Saudi and Qatari investors to purchase land in Ras Jamila, on the Strait of Tiran in southern Sinai. Ras Jamila, a popular tourist and diving destination, is located about 11.5 kilometers from Sharm el-Sheikh International Airport. On February 26, 2024, a spokesman for the Ministry of Public Enterprises said that Egypt is drawing up plans to develop Ras Jamila. The Saudi daily *Al-Aqat* reported on February 25 that Egypt was preparing to offer the land to Saudi Arabia, before removing the report from the website. The spokesperson denied that any negotiations regarding Ras Jamila had taken place.⁶⁰ On February 26, 2024, the independent Egyptian news website *Manassa* reported that the Egyptian government had received a Saudi offer worth 15 billion to develop the area. According to the report by the Egyptian news website *Daily News Egypt*, the Egyptian government had received offers from the Saudi Public Investment Fund and the Qatar Investment Authority, and that the winner would be announced months later. The tender was scheduled to be published in 2021, but was postponed due to the COVID-19 pandemic. This tender is part of the Egyptian government's efforts to promote integrated urban development by 2052. Mahmoud Esmat, the Egyptian Minister of Public

⁵⁹ Ibid.

⁶⁰ *Middle East Monitor*. (February 27, 2024). [Egypt drawing up plans for south Sinai land after UAE mega-deal](#).

Enterprises, announced on February 26 that his ministry had authorized an international consulting firm to prepare plans to propose the area for investment, but no investor had been selected. He said the area is around 860,000 square meters and has great strategic value. According to an Egyptian government source, the Saudi investors are interested in securing this deal due to Ras Jamila's proximity to the Tiran and Sanafir Islands, which Egypt transferred to Saudi Arabia in 2022, and its potential to attract tourism between Sharm el-Sheikh and the future city of Neom being built in Saudi Arabia. The source noted that the Saudi proposal includes construction on an area of 400,000 square meters without changing the nature and environment of the area. This will be a partnership in investment similar to the Ras Al-Hikmah deal. It will include five-star hotels, shopping centers, diving centers, entertainment destinations, food, rental apartments, business centers and a conference hall for events and concerts. It is expected to attract 30 million tourists by 2027.⁶¹

There is a discrepancy between the various reports regarding the size of the area. Ras Jamila is one of the few coastal areas in the region that is owned by the state. Egyptian reports claim that its value ranges from \$250 million to \$15 billion. In the past, this area was intended for a large tourist development that includes a large four-star hotel with more than 800 rooms, more than a thousand apartments for rent, commercial areas and entertainment areas.⁶²

In this context, it should be noted that in 2018, Saudi Arabia said that Egypt had pledged to grant it a large area of land in southern Sinai to complete the giant city of Neom that the Saudis are building on the Saudi side of the Straits of Tiran. Ras Jamila is located near the location of the planned bridge over the Straits of Tiran.⁶³

Aid from Saudi Arabia and the United Arab Emirates to Jordan

Saudi Arabia is also pouring money into Jordan to help it overcome its economic crisis. On January 2, 2024, the Jordanian Ministry of Planning and International Cooperation and the Saudi Embassy in Jordan announced that Saudi Arabia had transferred \$38.6 million, the last of a \$250 million grant aimed at supporting the Jordanian budget between 2018 and 2022, according to an agreement signed between the two countries in 2018. The Saudi ambassador to Jordan, Naef Al-Sadiri, praised Jordan, saying that "the Jordanian economy

⁶¹ Naguib, S. (February 26, 2024). [Ras Ghamila: Is Egypt about to sell a prime Red Sea area to Saudi Arabia?](#) *Middle East Eye*.

⁶² El-Gaafari, N. (February 27, 2024). [After Ras al-Hekma UAE deal, Egypt could open Sharm el-Sheikh's Ras Gamila to Saudi investment](#). *The New Arab*.

⁶³ *Middle East Monitor*, February 27, 2024.

is strong and capable of growing despite the challenges and regional implications. Jordan has demonstrated the ability to adapt to events". Previously, Saudi Arabia granted Jordan \$1.25 billion in addition to the \$100 million intended to support Jordan's efforts to host refugees who fled to its territory from the civil war in Syria.⁶⁴

Summary

The Houthi attacks on international shipping in the Red Sea and the Gulf of Aden, their economic implications for Egypt, Jordan, and Saudi Arabia, the development of combined maritime and land routes that bypass both the Bab-el-Mandeb Strait and the southern Red Sea, and the consolidation of the Emirati and Saudi presence in Egypt, constitute the continuation of the process of establishing the new geopolitical sub region of the northern Red Sea – which includes Israel, Egypt, Jordan, Saudi Arabia, and the United Arab Emirates – as part of a broader new region connecting India to Europe through the Gulf states. In the American view, this region is supposed to serve as a counterweight to the countries of the 'axis of resistance' led by Iran.

Israel is also supposed to be an integral part of this region. Evidence of this is the Abraham Accords with the United Arab Emirates, Bahrain, and Morocco, as well as the land bridge for transferring goods from Bahrain and the United Arab Emirates to Israel via Saudi Arabia and Jordan, which was established before the outbreak of the Israel-Hamas War and serves as a land route that bypasses the Bab-el-Mandeb Strait, but the movement of goods through it has so far been very low. Israel's ability to fully integrate into this new domain, as well as into the Red Sea basin, depends on the feasibility of normalization between Israel and Saudi Arabia, which depends on the progress of negotiations with the Palestinians on the establishment of a Palestinian state. Since it appears that Israel currently has no intention of making progress in negotiations with the Palestinians, Saudi Arabia is beginning to examine the possibility of reaching a bilateral defense agreement with the United States without Israel.

As part of the consolidation of the northern Red Sea region, the process of establishing the presence and influence of the Gulf states in Egypt continues in full force, whether through the construction and management of strategic ports in the Red Sea, the exploitation of natural resources on Egyptian territory, or investments in and takeover of Egyptian state assets. On the one hand, this Gulf activity is helping the Egyptian regime overcome the economic crises that have befallen it in recent years and maintain its stability, and on the other hand, it is increasing their influence on the Egyptian regime and the criticism of it by parts of the population.

⁶⁴ *Middle East Monitor*. (January 3, 2024). [Saudi transfers \\$38.6m grant to Jordan](#).

In parallel with the consolidation of the northern Red Sea region, another inter-Arab axis between Egypt, Jordan, and Iraq has been established in recent years. In recent months, the consolidation of this axis is also reflected in the creation of combined maritime and land routes aimed at linking Iraqi ports in the Persian Gulf to the Mediterranean Sea through Jordan and Egypt and bypassing the Bab-el-Mandeb Strait. These new routes also bypass the Suez Canal. Also worth noting is the India–Middle East–Europe Economic Corridor – IMEC initiative, in which the loading port is in the Emirates but outside the Strait of Hormuz.

Finally, one wonders what will happen to the Suez Canal after the end of the Houthi attacks on international shipping in the southern Red Sea and the Gulf of Aden. Currently, many shipping companies prefer their ships to sail around the Cape of Good Hope rather than to be divided in the Red Sea and the Suez Canal. This causes changes in supply chains and reduces the importance of the Suez Canal for global shipping companies. If this situation continues for a long time (and it may even intensify due to global warming and the diversion of shipping routes between Asia and Europe to the 'Northern Passage'),⁶⁵ there is a danger that international shipping traffic will be significantly diverted from the Suez Canal, posing a real threat to the stability of the Egyptian regime and Egyptian national security, and hence to the stability of the entire Middle East.

⁶⁵ Mirkin, T. (2020). The Russian Northern Sea Route – Declarations and Reality. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2018/29*, 127–136 (Maritime Policy & Strategy Research Center, University of Haifa).

United States Policy Regarding the Israel-Hamas War 2023–2024

Ziv Rubinovitz

The article analyzes the situation until June 2024.

This article reviews US policy regarding the Israel-Hamas war in the global and regional context, and the events in the maritime domain, which are of great importance in this war – both the Gaza Strip and the Red Sea – for the United States and its position in the Middle East and in the global arena.

Since the beginning of the war, on October 7, 2023, the United States has demonstrated its deep sympathy and support for Israel. President Joe Biden expressed this emphatically in his speech on October 10 and his brief visit to Israel on October 18, an unprecedented event during a war. The support was expressed not only in presidential gestures but also in actions, primarily the provision of emergency military assistance to Israel, diplomatic assistance at the United Nations and in the international arena in general – even as the United States remained in practice Israel's sole supporter, and significant economic assistance. On the night of April 13–14, 2024, one of the peaks of US support for Israel occurred when the United States and other countries helped intercept hundreds of drones, cruise missiles, and ballistic missiles that Iran had launched toward Israel. This followed the assassination of General Hassan Mahdavi, commander of the Quds Force in Syria and Lebanon, in Damascus on April 1. However, as the war drags on, US criticism of the way the war is being conducted is growing, especially in humanitarian aspects, and in particular in relation to the number of civilian casualties in the Gaza Strip. Although the criticism has not (as of this writing) been expressed in the cessation of military aid to Israel, the US administration's criticism of Israel's conduct of the war is increasing. This is especially noteworthy because 2024 is an election year in the United States and President Biden has lost significant support in his base due to his unequivocal support for Israel, despite the dire consequences of Israeli actions in the Gaza Strip, which are provoking outrage in the liberal camp.

The debate in the United States about aid to Israel is not new and is not necessarily related to the war in Gaza. It has been going on for many years, and there is harsh criticism of the scope of aid to Israel and the way Israel uses US aid – mainly from the liberal-progressive left but also from the libertarian right.¹ The war highlights two contradictory trends in

¹ Tibon, A., and Samuels, B. (August 6, 2023). [Once Considered Taboo, Discussing Ending U.S. Military Aid to Israel Has Become Increasingly Popular](#). *Haaretz*.

the US approach to aid to Israel: On the one hand, a clear intention to help Israel in the war that Hamas forced upon it, which was expressed in the approval of a \$26 billion aid package for Israel in April 2024 (as part of broader legislation that also includes aid to Ukraine and Taiwan), and on the other hand, a demand to constrain Israel's actions using the leverage that military aid provides the administration.² The unprecedented aid package includes \$14.6 billion for military aid, \$4 billion for funding interceptors for Israel's defense systems, \$9 billion for humanitarian aid to the Palestinians, and \$2.4 billion for US forces in the region.³

Most of the war in Gaza is fought on land, but it has many maritime dimensions involving the United States: deploying aircraft carriers to the East Mediterranean at the beginning of the war, the delivering of a significant portion of aid to Israel by ship, the establishment of the humanitarian pier off Gaza, and the war against the Houthis in the Red Sea. The maritime component poses a significant challenge to the military and political supremacy of the United States in the Middle East and beyond, as the United States' adversaries scrutinize its behavior. Its actions not only serve US policy toward Israel and the war in Gaza but also signal to those adversaries what the United States is capable of if faced with a practical challenge from them.

United States Policy Regarding the War – The Global and Regional Contexts

The United States' policy regarding the war should be examined within the framework of its global policy in general and in relation to the Middle East in particular. On the global stage, the Israel-Hamas war is a challenge to US leadership in addition to the Russia-Ukraine war (since 2022). Since the outbreak of the war, US aid to Ukraine has not only been a strong message to Russia, which is challenging US supremacy and the liberal international order that the United States has created, but also a signal to China that the United States is determined to defend countries under attack, even if they are not formal allies. While Ukraine is not a US ally, as early as 2008 the United States intended to integrate Ukraine into NATO (although without a specific date),⁴ and is prepared to provide it with large quantities of weapons and equipment for its defense against Russia's attack in order to maintain its independence and territorial integrity. Russia's invasion of Ukraine violates the principle of recognized international borders, and the United States

² Knickmeyer, E. (February 9, 2024). [Biden order attaches human rights conditions to US military aid, easing Democratic rift over Israel](#). AP; Reuters (March 30, 2024). [US reportedly approves transfer to Israel of bombs and jets worth billions](#). *The Guardian*.

³ Samuels, B. (April 20, 2024). [U.S. House Passes \\$26 Billion in Emergency Israel Aid, Most Significant Step Since October 7](#). *Haaretz*.

⁴ NATO decision on open-door policy (April 3, 2008). *NATO News*. [nato.int](#)

wants to preserve the principle – in whose name the United States went to the Gulf War against Iraq in 1991 – and the liberal international order that it created after World War II.⁵ The United States is struggling to maintain its dominant position in the international arena after years of decline in its relative power and in its response to such challenges – for example, its response to Russia's invasion of the Crimean Peninsula and its annexation to Russia in 2014 compared to its behavior since 2022.⁶

The response to the war in Gaza fits with the Biden administration's aggressive approach to addressing security threats to allies. Although Israel does not have a formal alliance with the United States, the close relationship between the countries makes Israel a strategic ally of the United States in the Middle East. Other allies of the United States are examining the US attitude toward Israel in this war, inter alia, as an indication of the true stability of US support of its allies. This is particularly important for countries like Egypt and Saudi Arabia, which have had a problematic experience with the United States in recent years: President Barack Obama abandoned Egyptian President Hosni Mubarak in the midst of protests against him in January-February 2011 after Mubarak's long years of loyalty to the United States,⁷ and Saudi Arabia suffered an Iranian attack on its refinery in 2019 but the United States did not respond.⁸ Therefore, it is important for the United States to assist Israel in order to demonstrate its intention to assist other allies as well, if they are attacked.

In the regional arena, the American interest in helping Israel is clear. Hamas enjoys significant support from Iran and to a large extent functions as its proxy (although to a lesser extent than Hezbollah's ties to Iran), and assisting Israel against it is a message to Iran and its other regional proxies. Moreover, strategic backing for Israel is also a message to other countries in the region, some of which are allies of the United States in their own right, and which the United States is also helping in the face of the growing Iranian challenge through assistance to Israel. The increasing undermining of the regional order in recent years has allowed China and especially Russia to establish a foothold in the Middle

⁵ Flockhart, T., and Korosteleva E. A. (2022). War in Ukraine: Putin and the multi-order world. *Contemporary Security Policy* 43 no. 3: 466–481; Mulligan, W. E. (2022). Ruptures, and the Ending of International Orders: Putin's Invasion of Ukraine in Historical Perspective. *Society* 59, 259–267.

⁶ Kimmage, M. (2024). *Collusions: The Origins of the War in Ukraine and the New Global Instability* (New York: Oxford University Press).

⁷ Shama, N. (2018). Egypt and Obama: Turbulent Times, Bouncy Relations. in M. Maass (ed.), *The World Views of the Obama Era: From Hope to Disillusionment* (Cham, Switzerland: Palgrave), 65–85; Lloyd, C., and Gardner, L. C. (2011). *The Road to Tahrir Square: Egypt and the United States from the Rise of Nasser to the Fall of Mubarak* (New York: New Press).

⁸ AP. (September 15, 2019). [US blames Iran after attacks on Saudi oil facilities cripple production](#). *Times of Israel*.

East. The undermining of the United States' regional leadership has been expressed, inter alia, in the contacts of countries that have traditionally been allies of the United States with China and Russia. Thus, Egypt began negotiations with Russia and China, and Saudi Arabia coordinated oil prices with Russia, signed significant economic agreements with China, and, with Chinese mediation, renewed its relations with Iran in March 2023.⁹

US moves in the Middle East that started before the war continue to a large extent during its course, such as the discussions on normalization between Saudi Arabia and Israel under American auspices.¹⁰ For the United States, the war is an opportunity to create a new order in the Middle East under its leadership. This order may be related to its long-term intention to withdraw from the region in order to concentrate its military and diplomatic efforts in other regions – mainly in East Asia to contain China and in the post-Soviet sphere to contain Russia.¹¹ Yet, the United States' policy regarding the war in Gaza also corresponds with the new reality that has emerged in the Middle East, with Russia already present in Syria and through it in the Mediterranean, China gaining influence mainly through economic means, and Iran having woven an extensive network of countries in which it has considerable influence – Syria, Lebanon and Iraq, as well as guerrilla organizations that have come under its control, at least partially – Hezbollah, the Houthis and Shiite militias, most of them in Iraq.¹²

On the one hand, the continuation of the war in Gaza is politically inconvenient for the United States, and certainly highlights its status as Israel's sole supporter. On the other hand, it allows for the maturation of processes that the United States has led and is leading in the Middle East that may form a regional alliance under US auspices that

⁹ Yu, H. (2024). *Understanding China's Belt and Road Initiative* (Singapore: Springer), chap. 7; Friedman B., Saudi Arabia's Reluctant Regionalism. *Orbis*, 67, no. 2: 150–170; Hill, E., Ryan, M., O'Grady, S., and Oakford, S. (April 10, 2023). [Egypt secretly planned to supply rockets to Russia, leaked U.S. document say](#), *Washington Post*. Fulton, J. (January 8, 2025). [What's behind Egypt and China's 'golden decade' of partnership](#). Atlantic Council.

¹⁰ *i24News*. (April 18, 2024). [Biden makes new push for historic Israeli-Saudi normalization deal – report](#).

¹¹ Rubinovitz, Z. (2022). The US 'Pivot' to East Asia: Potential Implications for the East Mediterranean If It Were Implemented. In: S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa), 130–136; Kimmage, 2004.

¹² Rabinovich, I., and Valensi C. (2021). *Syrian Requiem: The Civil War and Its Aftermath* (Princeton, NJ: Princeton University Press), pp. 185–191; Fulton, J. (ed.). (2022). *Routledge Handbook on China-Middle East Relations* (London: Routledge); Bahgat G., and Ehteshami A. (2021). *Defending Iran: From Revolutionary Guards to Ballistic Missiles* (Cambridge: Cambridge University Press), chap 10; Seliktar, O., and Rezaei, S. (2020). *Iran, Revolution, and Proxy Wars* (Cham, Switzerland: Palgrave Macmillan).

would be suitable both for the struggle against Iran – the common enemy of the United States' regional allies – and for the struggle for hegemony in the Middle East – of the United States against China and Russia, both of which have close ties to Iran.¹³ Within this cauldron, Israel plays a central role in the US worldview, both because of its superior power relative to all other Middle Eastern countries and because it is more loyal to the United States than any other country in the region, willingly (ideologically, values, and materially) or unwillingly (political and military dependence).

US Support for Israel – 2023 Was a Volatile Year

On January 4, 2023, Justice Minister Yariv Levin announced the legislative plan for the judicial system, which the government framed as a "judicial reform" and its opponents called a "judicial overhaul." The plan led to nine months of demonstrations and protests across Israel. The Biden administration did not hold back, and conveyed increasingly harsh messages to the Netanyahu government that the legislation would undermine the foundations of democracy in Israel and that the administration opposed the manner in which it was being implemented—and, implicitly, that it opposed it altogether. This message was conveyed through administration emissaries such as members of Congress from the Democratic Party, then-US Ambassador to Israel Thomas Nides, and later through Secretary of State Anthony Blinken, Vice President Kamala Harris, and finally the president himself.¹⁴ The most blatant message was the refusal to invite Prime Minister Benjamin Netanyahu to the White House since he was re-sworn in office at the end of December 2022. Tzachi Hanegbi, Head of National Security Council said in a media interview at the end of April 2023 that had there not been the judicial legislation, Netanyahu would have been invited to the White House.¹⁵

¹³ Erlanger, S. (October 19, 2023). [New Global Divisions on View as Biden Goes to Israel and Putin to China](#). *New York Times*; and Esfandiary, D., and Tabatabai, A. (2018). *Triple Axis: Iran's Relations with Russia and China* (London: I. B. Tauris).

¹⁴ Rogers, K. (March 24, 2023). [Crisis in Israel Tests the Complicated Ties Between Biden and Netanyahu](#), *New York Times*; White House briefing room (March 19, 2023). [Readout of President Joe Biden's Call with Prime Minister Benjamin Netanyahu of Israel](#); Horovitz, D. (January 30, 2023). [Diplomatically but firmly, Blinken advises Netanyahu not to harm Israeli democracy](#), *Times of Israel*; Samuels, B. (February 18, 2023). [U.S. Ambassador Nides: We're Telling Netanyahu to Pump Brakes on Judicial Overhaul](#), *Haaretz*; [Ambassador Nides' interview with David Axelrod](#) on The Axe Files with David Axelrod, Episode 522, *CNN podcast*, February 16, 2023; Rep. Nadler, J. (January 25, 2023). [As the Most Senior Jewish Member of Congress, I Now Fear Deeply for the U.S.-Israel Relationship](#), *Haaretz*; JTA and TOI Staff, (March 10, 2023) [Jewish Democrats tell Israeli leaders to back off judicial shakeup, seek compromise](#), *Times of Israel*.

¹⁵ TOI Staff. (April 29, 2023). [Hanegbi: Judicial overhaul is reason Biden hasn't invited Netanyahu to White House](#). *Times of Israel*.

The Biden administration's cold shoulder to the Netanyahu government throughout most of 2023 was instantly replaced by empathy for Israel on October 7, 2023, when the extent of the horror in the western Negev communities began to become clear. In the first days after the attack, this was expressed in the president's speeches and massive military assistance.¹⁶ From that moment on, and at least in the first two months of the war, it seemed that doubts in Israel (mainly in the government and among its supporters) about the Biden administration's support for Israel had faded.¹⁷ This, of course, was coupled with an understanding of how deeply dependent Israel was on the United States, certainly in an emergency like after October 7. The massacre in the western Negev communities was quickly defined as "Israel's 9/11", and Hamas was identified as ISIS ("Hamas is ISIS"), and these slogans immediately took hold in the US and international discourse. In the United States, sympathy for Israel and support for its harsh response to Hamas' attack was bipartisan, and was expressed in November 2023 at a mass rally in support of Israel in Washington, where the leaders of both parties in the Senate and the House of Representatives spoke of their support for Israel and declared "We stand with Israel."¹⁸ This was a most unusual expression of support and solidarity in the US political arena, where in recent decades there have been very few issues on which there is bipartisan agreement. In recent decades, and especially in the last decade, Israel has become a controversial issue and support for Israel is now mainly partisan – support is strong among Republicans and much less solid among Democrats, certainly the young generation and progressives.¹⁹

US support was expressed in emergency aid to Israel, which included a massive airlift and seaborne delivery of military supplies,²⁰ including the return of equipment sent to

¹⁶ [Remarks by President Biden on the Terrorist Attacks in Israel](#) (October 10, 2023). *The White House*; Yaron, O., and Samuels, B. (November 16, 2023). [Revealed: The Munitions U.S. Supplied Israel for Gaza War](#). *Haaretz*.

¹⁷ Makovsky, D. (May 17, 2024). [Some Big Decisions: What It Will Take to Repair Israel-US Ties](#). The Washington Institute for Near East Policy.

¹⁸ Rosenfeld, A. (November 14, 2023). [Massive rally for Israel brings message of solidarity to Washington](#). *Forward*.

¹⁹ Cavari, A., and Freedman, G. (2021). *American Public Opinion toward Israel: From Consensus to Divide* (New York: Routledge); Rynhold, J. (2015). *The Arab-Israeli Conflict in American Political Culture*. (Cambridge: Cambridge University Press), chaps. 2–3.

²⁰ Shelah, O., and Shabtai, H. (January 15, 2024). [The Special Aid Package from the United States](#). *INSS Insight*, Issue 1812; Scharf, A. (March 7, 2024). [OSINT Reveals Unprecedented Extent of U.S. Arms Airlift to Israel Since Oct. 7](#). *Haaretz*.

Ukraine (still fighting Russia) from US emergency storage in Israel.²¹ In addition, at the beginning of the war, President Biden's speeches made it clear to the enemies of Israel and the United States in the Middle East that they should not try to exploit the situation and attack Israel, hinting that the game is not worth the candle. President Biden's entire speech was summed up in his repeated statement, "Don't."²²

US support for Israel began to erode as the war dragged on. Political pressure from the progressive wing and groups critical of Israel on President Biden – in the midst of the primary season and at the beginning of the presidential election year – increased, and local protests against him started, such as the protest by the Muslim community in Dearborn, Michigan, where most of the city's residents are of Arab origin and therefore has the largest concentration of Muslims in the United States per capita.²³ During the war, many pro-Palestinian student protests took place on campuses across the United States, with the peak of the demonstrations being in April 2024 (as of the time of writing).²⁴ These protests were complemented by international pressure on the president to be more critical of Israel's use of American weapons and the arms embargo imposed on Israel – even if some of it was symbolical – by many Western countries.²⁵

Despite the growing criticism of the scale of the killing in the Gaza Strip, as of June 2024, Biden is not restricting Israel,²⁶ and has even managed to pass a \$95 billion aid package for Ukraine, Israel, and Taiwan (Israel's share of this package was presented in the introduction).²⁷ However, the main bone of contention between the United States and Israel is the question of the day after. The United States is interested in promoting a political process that will ultimately lead to the establishment of a Palestinian state based

²¹ Taylor, A., and A. Suliman. (May 9, 2024). [What to know about U.S. military aid to Israel as Biden warns of cut](#). *Washington Post*.

²² [Remarks by President Biden on the Terrorist Attacks in Israel](#) (October 10, 2023). *The White House*.

²³ Jones, W. (September 26, 2023). [Census data shows Arab American population in Dearborn now makes up majority of people living there](#). Click on Detroit.

²⁴ Silver, L. (April 2, 2024). [Younger Americans stand out in their views of the Israel-Hamas war](#). Pew Research Center; Weissert, W., Price, M. L., and Megerian, C. (April 24, 2024). [Biden tries to navigate the Israel-Hamas war protests roiling college campuses](#). *AP*.

²⁵ *Haaretz* (March 19, 2024). [Israeli FM Slams Canadian Counterpart's Decision to Stop Sending Arms to Israel](#).

²⁶ Hudson, J. (March 6, 2024). [U.S. floods arms into Israel despite mounting alarm over war's conduct](#). *Washington Post*; DeYoung, K. (June 26, 2024). [U.S. war aid of \\$6.5 billion discussed during 'productive' Gallant visit](#). *Washington Post*.

²⁷ Zengerle, P., and Cowan, R. (April 24, 2024). [US Congress passes Ukraine aid after months of delay](#). *Reuters*; Samuels, B. (March 20, 2024). [Biden Administration Split on Suspending Arms Sales to Israel Ahead of Deadline on Sunday](#). *Haaretz*.

on a two-state solution, and in the immediate term, handing over the administration of the Gaza Strip back to the Palestinian Authority after it undergoes reform. Although it is clear that the establishment of a Palestinian state is not realistic in the immediate term, Netanyahu and his government are firmly opposed to this outline, and hence the argument between the governments arose, and its continuation has a significant impact on the continuation of the war itself.²⁸

The maritime challenge – multiple arenas in the maritime domain

In the days following October 7, the United States sent two aircraft carriers—the *Gerald Ford* and the *Dwight Eisenhower*—with their strike groups to the eastern Mediterranean and the Gulf of Oman to deter and signal to Israel's other enemies, Hezbollah and Iran, not to try to exploit the situation and attack.²⁹ The aircraft carriers remained in the region until the end of 2023, then sailed back when the strategic situation appeared to have stabilized somewhat.³⁰

As the humanitarian disaster in the Gaza Strip grew and the number of Palestinian deaths rose, the United States pressured Israel to expand the flow of humanitarian aid (food and medicine) into the Gaza Strip.³¹ Apparently for reasons related to domestic politics, and also in order not to be perceived as responsible for civilian life in the Gaza Strip, Israel refused to allow the flow of aid to the extent that the United States demanded, and finally, in late April and early May 2024, the United States established a floating pier off Gaza that would be used to bring aid into the Strip, at an estimated cost of more than \$320 million.³² The United States and Israel agreed that there would be Israeli inspection of the aid that would be brought in this way, but the message was that the United States was creating a bypass, a sea route, to the Strip.³³ The pier broke down several times due to the weather and sea conditions, until the United States military decided to dismantle

²⁸ Ravid, B. (January 26, 2024). [Scoop: Biden tells Bibi he's not in it for a year of war in Gaza](#). *Axios*.

²⁹ Scharf, A., and Pfeffer, A. (October 16, 2023). [Arms Airlift to Israel, Bombers in Jordan, Two Carriers: U.S. Deploying More Forces to Mideast](#). *Haaretz*.

³⁰ Harel, A. (January 2, 2024). [Reduced U.S. Naval Presence in the Region Does Not Bode Well for Israel](#). *Haaretz*.

³¹ Baker P., (February 8, 2024). [Biden sharpens criticism of Israel, calling its Gaza response 'over the top'](#). *New York Times*; Singh, K. (April 10, 2024). [Biden says Netanyahu's approach to war in Gaza is a 'mistake'](#). *Reuters*.

³² Baldor, L. C. (May 1, 2024). [The US is building a pier off Gaza to bring in humanitarian aid. Here's how it would work](#). *AP*.

³³ Agencies and TIO Staff. (May 16, 2024). [US military completes installation of Gaza pier; aid to start flowing within days](#). *Times of Israel*; Samuels, B., Khoury, J., and Kubovich, Y. (March 7, 2024). [Biden to Announce Establishment of Emergency Port in Gaza to Facilitate Aid](#). *Haaretz*.

it at the end of June and it may not be reassembled.³⁴ Added to this was the airdrop of aid that the United States and other countries – for example, Jordan, France, and the United Arab Emirates – have been carrying out for several months.³⁵ These are signs of a breaking of the Israeli siege on the Strip, which can be expected to continue within the framework of the political settlement that will emerge after the war.

The war in Gaza threatened and continues to threaten to become a multi-front war for Israel, encompassing a significant portion of the Middle East. Already in the first days of the war, Hezbollah began firing at Israel's northern communities. Organizations and militias from Iraq linked to Iran also fired at Israel, including striking the naval base in Eilat.³⁶ In addition, the Houthis in Yemen – Iran's proxies who control the Bab el-Mandeb Strait in the southern Red Sea – entered the campaign. Houthi involvement is marked by firing missiles and launching drones at Israel, and in the disruption of shipping to Israel in the Red Sea.³⁷ In fact, they led to a shutdown of the Eilat port,³⁸ and to a significant change in the trade routes between Asia and Europe. This is the most significant challenge to US naval supremacy in this war. For the United States, this is not just a matter related to the war in Gaza, but a very significant challenge to the principle of 'freedom of navigation' that it is committed to preserving as the most important and powerful naval power in the world. Since the beginning of the war, US Navy ships have been engaged in intercepting Houthi missiles on their way to Israel, and over time they have increased naval combat in the southern Red Sea, alongside allies such as the United Kingdom.³⁹ The deputy commander of US Central Command (CENTCOM) and the outgoing commander of the Fifth Fleet, Vice Admiral Brad Cooper, said in an interview with CBS's "60 Minutes" program that the naval

³⁴ Copp, T., and Baldor, L. C. (June 28, 2024). [US removes Gaza aid pier due to weather and may not put it back, officials say](#). *AP*.

³⁵ Lamothe, D. (March 2, 2024). [38,000 prepackaged meals airdropped, U.S. officials say](#). *Washington Post*.

³⁶ Fabian, E. (April 1, 2024). [Eilat naval base damaged by drone apparently launched from Iraq](#). *Times of Israel*.

³⁷ Blaff, A. (October 31, 2023). [U.S.-Developed Arrow Defense System Intercepts Missile near Israel's Port City Eilat](#). *National Review*; Bar'el, Z. (December 13, 2023). [As Houthis Threaten Ships in the Red Sea, the West Stumbles](#). *Haaretz*; Scharf, A. (January 15, 2024). [The Full Map: All Ships Attacked by Yemen's Houthis in the Red Sea](#). *Haaretz*; Bar'el, Z. (December 17, 2023). [Red Sea Threat: America and Israel Struggle to Build a Coalition Against Iran-Backed Houthis](#). *Haaretz*.

³⁸ Agencies and TOI Staff. (March 20, 2024). [Eilat Port to lay off half its staff due to Houthi attacks stymieing shipping trade](#). *Times of Israel*.

³⁹ Minor, A. (April 23, 2024). [Solving the Houthi Threat to Freedom of Navigation](#). *War on the Rocks*.

campaign against the Houthis is the most extensive by the US Navy since World War II.⁴⁰ Israel is not the only country that suffers from the Houthi actions. Egypt is losing a great deal of revenue from the slowdown in shipping through the Suez Canal, since most of the shipping that routinely crosses the Suez Canal has turned to go around Africa because of the war.⁴¹ Jordan is also suffering from the Houthi activities, since its only outlet to the sea and port – the Port of Aqaba – is on the Red Sea.⁴²

The fact that the United States has formed a coalition to confront the Houthi challenge is not surprising in the context of overall US policy under Biden, which strives for multilateral actions and the restoration of cooperation with US allies, primarily NATO countries.⁴³ This also involves more equitable burden-sharing with other countries, including countries in the Middle East that have already begun to assume maritime security responsibilities in the region in recent years.⁴⁴ However, due to regional and domestic considerations of those countries, for example Egypt and Saudi Arabia, it seems that they are severely limiting their action against the Houthis, even though they are the main economic victims of the situation. These considerations include, inter alia, their unwillingness to be perceived as supporting Israel in the war against Hamas. Therefore, the United States is required to increase its activity and with it, its European allies. Thus, the Red Sea has become an arena in which the global powers (led by the United States) operate instead of the regional states, whose naval strengthening in recent years has turned out to be limited – as mentioned above, mainly due to political considerations and not purely military reasons.⁴⁵ Freedom of navigation in the Red Sea has been severely affected not

⁴⁰ Tan, W. K. K. (February 19, 2024). [US admiral says the fight against the Houthis in the Red Sea is the largest battle the Navy's fought since World War II](#). *Business Insider*.

⁴¹ Elmas D. S. (December 5, 2023). [Egypt could be big casualty of Houthi attacks on Israel](#). *Globes*.

⁴² Ali-Khan, V. (January 16, 2024). [Why Saudi Arabia Is Staying on the Sidelines in the Red Sea Conflict](#). *Foreign Policy*; *The Jordan Times*. (April 16, 2024). [Aqaba port sees decrease in container traffic amid Red Sea crisis](#).

⁴³ Charillon, F. (2023). The United States from Trump to Biden: A Fragile Return to Multilateralism, in A. Guilbaud, F. Petiteville and F. Ramel (eds.), *Crisis of Multilateralism? Challenges and Resilience* (Cham, Switzerland: Palgrave Macmillan), 113–129; Sloan, S. R. (2022). *De-Trumping U.S. Foreign Policy: Can Biden Bring America Back?* (Berlin: De Gruyter).

⁴⁴ Chorev, S. (2023). Global Developments in the Maritime Domain, in S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa), 91–92.

⁴⁵ Maher, M., and Farid, M. (2024). [Cairo: Stuck between Securing the Red Sea and Avoiding a Perception of Support for Israel](#). *Fikra Forum*, The Washington Institute; Stewart, P., Latona, D., and Amante, A. (December 28, 2023). [Some US allies back away from Red Sea task force, not wanting to appear pro-Israel](#). *Times of Israel*; Lee, E. J. (2024). Red Sea Tensions, Tanker War Lessons?" *Survival* 66, no. 2: 115–126; Clark J., (January 4, 2024). [U.S., Partners Committed to Defensive Operations](#)

only for Israel, and the burden of proving that it can protect this freedom falls on the United States.⁴⁶ This struggle relates to the ongoing, broader confrontation between the United States and Iran, which expands the geographical scope of the war in Gaza.

The campaign for freedom of navigation in the Red Sea has implications not only for Israel's maritime trade or for traffic through the Suez Canal, but also for competition between the great powers. If the United States does not defeat the Houthis and restore full freedom of navigation through the Bab el-Mandeb Strait, this will project US weakness throughout the maritime domain. This weakness could lead to two phenomena: on the one hand, a search for another power to guarantee freedom of navigation – in terms of the size of its fleet, China is the leading candidate; and on the other hand, regional powers or non-state entities will take control of the Red Sea and trade through it. The first option seems unrealistic, certainly not in the near future. Although in early 2024 the Chinese navy escorted ships in the Gulf of Aden and off the coast of Somalia, China's deployment in this area is not significant enough to replace the United States.⁴⁷ The second option is more likely, and in fact has already happened in the recent past with the pirates who emerged from Somalia in the 1990s and 2000s and disrupted maritime trade, in a manner quite similar to the Houthi operation today, even if with less damage.⁴⁸ The piracy challenge from Somalia in the past seems easy compared to the Houthi challenge from Yemen today, both militarily and in terms of its political context; therefore, it seems more difficult to recruit regional partners for the current war.

The war in Gaza has created many difficulties for the United States – both concerning Gaza and in wider and more distant circles – but these are also opportunities for Washington to restore and strengthen its position in the region. Its success depends on Israel's military success but also on its restraint from widening the conflict and actively dragging the United States into it even more than it is now.

[in Red Sea](#), *Department of Defense News*; Lenderking, T. A. (April 19, 2024). [Securing the Red Sea: A Global Response](#). *Dipnote*, *Department of State*.

⁴⁶ Etzioni A., (2016). Freedom of Navigation Assertions: The United States as the World's Policeman. *Armed Forces and Society* 42, no. 3: 501–517; Department of Defense. (2017). [U.S. Department of Defense Freedom of Navigation \(FON\) Program](#)

⁴⁷ Frantzman, S. F. (February 27, 2024). [Chinese naval fleet on mission near Red Sea raises eyebrows in MidEast](#). *Jerusalem Post*; Herzinger, B., and Lefkowitz, B. (February 17, 2023). [China's Growing Naval Influence in the Middle East](#). Policy Watch 3706, *Washington Institute for Near East Policy*.

⁴⁸ Gilpin, R. (2007). [Counting the Costs of Somali Piracy](#). *United States Institute of Peace Working Paper*; Ginkel van, B., and Putten van der, F. P. (eds.). (2010). *The International Response to Somali Piracy: Challenges and Opportunities* (Leiden, Netherlands: Martinus Nijhoff Publishers); Daniels, C. L. (2012). *Somali Piracy and Terrorism in the Horn of Africa* (Lanham, MD: Scarecrow Press).

Conclusion

As of this writing, the war is not over, so it is difficult to assess the success of American policy. The Iranian attack on Israel on the night of April 13–14, 2024, demonstrated that explicit warnings from the United States have lost their deterrent effect, although the attack and Israeli response on April 19 appear to have been relatively measured, likely due to heavy US pressure.⁴⁹ As the November 2024 elections approach, pressure on President Biden will increase, primarily from critics of Israel who threaten not to support him, thereby making it easier for his opponent, former President Donald Trump, to defeat him and return to the White House. Biden and his administration therefore want the war to end quickly and to be removed from the public agenda.

The end of the campaign in the Gaza Strip is expected to involve the Lebanese arena, but not necessarily the Red Sea arena, where the considerations of the Houthis and the United States are not limited to the context of Israel and the war in Gaza.⁵⁰ The war against the Houthis is only one aspect of the ongoing war of the United States against pro-Iranian militias in the Middle East, and has reportedly led to an American proposal to Iran (through intermediaries) for a comprehensive settlement of relations in the region.⁵¹ It is likely that such a settlement, if implemented, would also refer to the direct relations between the United States and Iran, and in particular would touch on the Iranian nuclear program.

During the war, the maritime domain poses complex challenges for Israel and the United States. For the United States, the most difficult problem is posed by the Houthis, who directly challenge its hegemony in the maritime domain and threaten the freedom of navigation as well as the economies of US allies in the region, mainly Israel, Egypt, and Saudi Arabia. As mentioned, the United States will have to defeat the Houthis in order to reestablish its position as the leader of the international system and the main guarantor of freedom of navigation in international waters. After years of decline in the effectiveness of the United States in the region and the entry of its main rivals – Russia and China – into the arena, the war is also a strategic opportunity for the United States to exploit its comparative advantages in the maritime domain and reestablish its position. The Biden

⁴⁹ Ravid, B. (April 13, 2024). [US asks Israel to give early notice, hold consultations before future attacks on Iran](#). *Jerusalem Post*.

⁵⁰ Naar, I., Livni, E., and Gupta, G. (December 31, 2024). [Who Are the Houthis, and Why Are the U.S. and Israel Attacking Them?](#) *New York Times*. See also: Knights, M. (April 2024). Assessing the Houthi War Effort Since October 2023. *CTC Sentinel* 17, no. 4: 1–20.

⁵¹ Bar'el, Z. (January 30, 2024). [Iran Is Setting the Strategy Throughout the Persian Gulf, and the U.S. Doesn't Have a Response](#). *Haaretz*.

administration seems determined to achieve this, but it is difficult to predict what will happen if Trump wins in November and returns to the White House in early 2025. The signals he has been sending so far are not consistent with Biden's policies.⁵²

⁵² Samuels, B. (March 17, 2024). [Trump Says He Would Let Netanyahu Finish the Job in Gaza, Says 'Biden Is So Bad for Israel'](#). *Haaretz*.

China's position in the "Israel-Hamas" war

Benni Ben Ari

People's historical and cultural values influence their psychology and national identity and directly and indirectly also influence foreign policy decisions. The traditional cultural values that influence the Chinese people have been shaped for thousands of years from Imperial China to the policies of its leaders today: harmony, generosity, courtesy, wisdom, honesty, loyalty, and respect for parents. Of these, the core value is harmony, which means "correct and balanced coordination between things" and includes "rationality, propriety, and conformity".¹ The realization of these values in Chinese diplomacy is mainly based on the value of harmony, which is supposed to bring stability and prevent crises, and insists that issues of conflicting interests and opinions with opponents should be handled through consultation, coordination, and balanced measures to achieve "balance and stability". The relation between historical values and communist ideology was established by Deng Xiaoping in 1982 and serves as the basis for the government and economic theories of current Chinese President Xi Jinping, "Socialism with Chinese Characteristics".² Traditional Chinese culture includes not only Confucianism, which also focuses on cultivating virtues and maintaining ethics, but also the art of war, strategy, and tactics. However, in relation to the war between Israel and Hamas, China's "cultural values" are being replaced by the diplomacy that has recently dominated China, which is a policy of undermining the hegemony of the United States in the world.

Initial official responses in China to the "Israel-Hamas" war and reactions in the media and social media

In a telephone conversation between Chinese Foreign Minister Wang Yi and Israeli Foreign Minister Eli Cohen on October 23, 2023, the Chinese minister said, among other things:

...The current conflict between Palestine and Israel is of grave concern to the entire world, presenting a crucial choice between war and peace. China is deeply concerned about the continued escalation of the conflict and the worsening of the situation and deeply saddened by the large number of civilians affected by the conflict. China condemns any action that harms civilians and opposes any move that violates international law. All countries have the right to self-defense, but it is important to uphold international humanitarian law and protect civilians. The urgent task now is

¹ Zhang Lihua. (November 21, 2013) [China's Traditional Cultural Values and National Identity](#), *Carnegie Endowment for International Peace*.

² "Socialism with Chinese Characteristics for a New Era", is an ideological doctrine created during General Secretary Xi Jinping's leadership of the Chinese Communist Party (CCP) that combines Chinese Marxism and national rejuvenation.

to stop the situation from further escalating and causing more serious humanitarian distress.³

On March 7, 2024, the Chinese minister called Israel's war in Gaza "a disgrace to civilization" and reiterated calls for an "immediate ceasefire". "It is a tragedy for humanity and a disgrace to civilization that today, in the 21st century, this humanitarian disaster cannot be stopped", Wang told reporters.⁴

China has not explicitly mentioned Hamas in its statements or defined its actions as terrorism (unlike many Western countries), since the Hamas terrorist attack on October 7, and the Israeli attacks on Gaza that followed. China has positioned itself as a supporter of "peace", calling for an immediate ceasefire in Gaza and the establishment of an independent Palestinian state,⁵ while criticizing the United States' support for Israel (it should be noted that "peace" is a built-in expression in all Chinese statements on the cessation of hostilities). China does not consider Hamas, which controls the Gaza Strip, a terrorist organization, and officially supports the establishment of a "sovereign and independent Palestinian state" based on the 1967 borders with East Jerusalem as its capital. China has also declared its willingness to help advance peace talks between Israel and the Palestinians and has declared a "strategic partnership" with the Palestinian Authority.⁶

Following the official responses from the Chinese government, a wave of anti-Semitic statements developed on Chinese social media. An influencer with 2.9 million followers on the popular social media platform Weibo claimed that Hamas is a resistance organization, while Israel is a terrorist organization because of its attacks on the Gaza Strip that have killed civilians. In addition, a popular broadcaster in the country claimed that Jews control a disproportionate share of the wealth in the United States. Many of the responses he received were tainted with anti-Semitic imagery, and some downplayed the horrors of the Holocaust. Some social media users even compared Israel to the Nazis following the war in Gaza.⁷

³ Wang Yi (October 24, 2023). [Has a Phone Call with Israeli Foreign Minister Eli Cohen](#), *Ministry of Foreign Affairs of the People's Republic of China*.

⁴ *Le Monde* & AP. (March 7, 2024). [Chinese foreign minister calls war in Gaza a 'disgrace for civilization'](#).

⁵ *Ministry of Foreign Affairs of the People's Republic of China*. (October 8, 2023). [Foreign Ministry Spokesperson's Remarks on the Escalation of Tensions Between Palestine and Israel](#).

⁶ *AlGazeera* (June 13, 2023). [Palestinian President Mahmoud Abbas arrives in China](#).

⁷ Mann, Y. (October 31, 2024). [Against the backdrop of the war: China is wiping Israel off the map](#), YNET.



Figure 1: A cartoon in the [Chinese newspaper Global Times](#) showing the US with blood on its hands due to its involvement in the war between Israel and Hamas

Government media went even further. In October 2024, a social media account of China Central Television reposted a segment of its coverage of the 2020 US presidential election. It included several anti-Semitic conspiracy theories: "Jews influence the US government through money, and Jewish votes represent 3% of the US population, but control 70% of the money..."⁸

In a move that reflects the tech world's stabilization behind nationalist lines, Israel no longer appears on the online maps of Chinese giants Baidu and Alibaba.⁹



Figure 2: The Middle East map of the Alibaba-backed Amap mapping app does not label Israel¹⁰

⁸ Kim, P. M., Dong, K., & Prythercj, M. (January 22, 2024). [Chinese Narrative on the Israel-Hamas War](#), *Brookings*.

⁹ Auslender, V. (November 5, 2023). [Wiped off the map: Chinese tech giants erase Israel](#), *CTECH by Calcalist*.

¹⁰ Thaler, S. (November 2, 2023). [Online maps from Chinese companies omit Israel's name as war in Gaza rages](#), *New York Post*.

"Beijing's harsh anti-Israeli response to the Gaza conflict, stemming from its increasing focus on challenging Washington, exposes the limits of its diplomatic influence in the Middle East, and the broader tensions in its foreign policy strategy".¹¹

China's Grand Strategy, Foreign Relations, and Middle East Policy

For thousands of years of imperial China's existence, China's grand strategy was based on responding to land threats from the north and west. For several decades, China's strategy has focused on the issues of Taiwan and the South China Sea, relations with Japan and Russia, and the expansion of Chinese economic interests around the world. The relative openness and outreach to the wider world that has characterized China in the last generation is relatively rare in Chinese history, and the country is moving from a traditional land power to a rising maritime power in the twenty-first century.¹²

Among the components of China's geopolitics and geo-strategy for thousands of years, the aspiration for stability, both internal – since 1949 under the rule of the Chinese Communist Party – and internationally, has occupied a prominent place. The policy also includes principles of non-interference in the affairs of another country, opposition to hegemony, the aspiration to resolve conflicts through a diplomatic approach, and more.¹³

With strong political direction from the Chinese Communist Party (CCP), since 2015, the Chinese military has been renewing itself not only in terms of technology and weapons systems, but also in operational concepts and doctrine. Apart from the importance of the economy, China as a country views military power as playing a fundamental role in its grand strategy. In 2021, the Chinese Ministry of National Defense published the document on China's National Defense Policy in the New Era, which states: "China's socialist system, the strategic decision to follow the path of peaceful development, independent foreign policy, and the best cultural traditions – taking peace and harmony as the foundations – determine that China will pursue a national security policy that is defensive in nature".¹⁴

As a foreign policy, for decades and even centuries, it seems that China will continue to do everything in its power not to intervene in local conflicts at the political and military level, and especially since 1949 (the rise of communist rule) China has avoided a collision

¹¹ Singh, M. (November 29, 2023). Why China Is Taking Sides Against Israel—and Why It Will Likely Backfire, *Policy Analysis*.

¹² Teixeira, A. W. M. , & Ferreira da Silva, P. (2020). [China in the contemporary world order: Grand strategy, military modernization, and balance of power](#). *Sociedade e Cultura*

¹³ China's Middle East Policy Between Continuity and Change, December 2016 INSS

¹⁴ [China's Defensive National Defense Policy in the New Era](#), Ministry of National Defense of the People's Republic of China

course with the United States, mainly around the world (except for areas close to Chinese territory such as the South China Sea and Taiwan, or Korea in the 1950s), leaving the United States to deal with the global security issues. In a phone call on March 18, 2022, according to Chinese reports, President Biden told Xi Jinping that the United States is not interested in a new Cold War and does not want to change the regime in Beijing¹⁵. This official Chinese version is questionable, but it seems that China is not looking for a confrontation with Washington beyond the three burning issues of the South China Sea, the island of Taiwan, and the race for technological supremacy and economic influence (the trade war). The two countries will remain rivals if not enemies but are not interested in going too far.

Even when Chinese commercial shipping (like the rest of global maritime trade) suffered from widespread pirate attacks in the Gulf of Aden and the coasts of East Africa, China did not join the task forces established by world countries, led by the United States, but instead operated its warship independently in anti-piracy operations.¹⁶

In his speech at the 60th Munich Security Conference on February 17, 2024, Chinese Foreign Minister Wang Yi reviewed and emphasized the principles of maintaining global stability:

No matter how the world changes, China, as a major and responsible country, will maintain its major principles and policies, be consistent and stable, and serve as a solid force for stability in a turbulent world... First, China will be a force for stability in promoting cooperation among major countries... Second, China will be a force for stability in handling hot-spot problems... Third, China will be a force for stability in improving global governance... And fourth, China will be a force for stability in promoting global growth...¹⁷

China's interest in the Middle East is centered primarily on the Persian Gulf states and was based, until about three decades ago, on the need for energy supplies imported from the Gulf states and Iran, in quantities that were about half of China's oil and gas imports. Strategically, China saw this dependence as a potential danger of Western, especially American, interference in times of crisis. China has pursued a policy of containing the US and building economic and political relations with the countries of the region. As part

¹⁵ Ministry of Foreign Affairs of the People's Republic of China. (March 19, 2022). [President Xi Jinping has a video call with U.S. President Joe Biden](#).

¹⁶ Kamerling, S., and van der Putten, F. P. (2011). An Overseas Naval Presence without Overseas Bases: China's Counter-piracy Operation in the Gulf of Aden. *Journal of Current Chinese Affairs*, 40(4), 119–146

¹⁷ Wang Yi. (February 17, 2024). [A Staunch Force for Stability in a Turbulent World](#). Ministry of Foreign Affairs of the People's Republic of China.

of this policy, China has declared a "comprehensive strategic partnership" with Algeria, Egypt, Iran, Saudi Arabia, and the Emirates, and although China has become a country with interest and influence in the Middle East, it still pursues a policy of "national interests".¹⁸ It seems that a "division of labor" has emerged between the US and China, with the US focusing on security and China focusing on economic development. Notable among these are the China-Arab States Summit and the China-Gulf Cooperation Council (GCC) Summit, two first-of-its-kind events in Sino-Arab history, held in Doha (Qatar) on December 9, 2022, in the presence of Chinese President Xi Jinping and more than ten Arab leaders¹⁹. It seems that through strategic investments in physical and digital infrastructure, China has become the main economic partner of the Middle Eastern countries and will need to be careful to protect its investments, however, the Chinese presence in the region is expected to remain strong²⁰.

The bulk of China's economic activity in the Middle East has been through the Belt and Road Initiative (BRI)²¹ and the Digital Silk Road (DRS), the technological "wing" of the BRI. China is still the largest foreign investor in the Middle East.²²

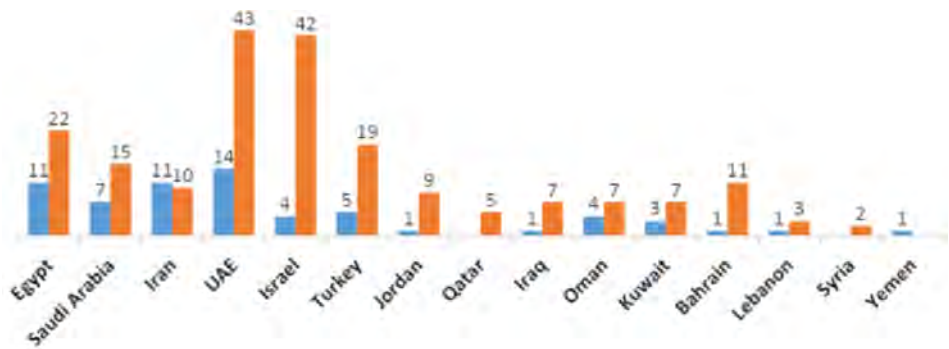


Figure 3: Chinese investments in projects in the Middle East 2005–2022²³

¹⁸ Alterman, J. B. (February 15, 2024). [What the Red Sea Crisis Reveals About China's Middle East Strategy](#). CSIS.

¹⁹ Ministry of Foreign Affairs, People Republic of China. (December 10, 2022). [President Xi Jinping Attends First China-GCC Summit and Delivers Keynote Speech](#).

²⁰ Mazel, Z. (April 21, 2022). [China's growing economic impact on the Middle East](#). GIS Reports.

²¹ National Development and Reform Commission (NDRC), People's Republic of China (January 27, 2022). [China and Syria sign MoU on Belt and Road Cooperation](#).

²² Chaziza, M. (June 4, 2023). [A Decade of China's Belt and Road Initiative in the Middle East](#). The National Interest.

²³ Ibid.

The transition from a "land grand strategy" to a "maritime grand strategy" requires China, among other things, to build a "blue water" naval fleet (the ability to operate in the seas and oceans far from home ports), which includes aircraft carriers to enable the ability to demonstrate a presence and project power in various regions. Today, the Chinese navy is the largest in the world in terms of the number of vessels, but not the best fleet.²⁴ The modern Chinese navy has no operational experience in naval warfare, and the quality and technological capabilities of its systems are still unclear. Activities to implement and achieve the ability to operate naval task forces led by aircraft carriers are a long and complicated process and are likely to take a relatively long time in order to realize the numerical superiority in vessels. According to the Pentagon report for 2023, the Chinese navy has about 370 warships and is expected to grow to 395 ships by 2025 and to 435 by 2030.²⁵

At the same time, and to avoid dependence on international shipping, China is working to expand its access capabilities and involvement in ports around the world, and to operate extensive shipping lines in which a huge fleet of thousands of merchant ships operates.²⁶ China does not have a single Mediterranean policy, and therefore its interactions with this multi-identity and multi-geographic region are shaped solely by the articulation of its interests.²⁷ The presence of Chinese warships in the Mediterranean is relatively few and infrequent, and has mainly taken place as port visits (naval diplomacy), exercises with the Russian fleet in the Black Sea and the Eastern Mediterranean (May 2015), arrival in the Baltic Sea (2017), and rescue of civilian workers from crisis countries (evacuation from Libya in the spring of 2011, from Yemen in 2015, and from Syria in 2018). It can be estimated that, in combination with "port diplomacy", the presence of the Chinese navy in maritime arenas around the world will increase.²⁸ The ongoing operational presence in the Red Sea since the war against Somali pirates (see below) is not related to the war in Gaza and is not an attempt to balance against the American Navy or other navies.

²⁴ Jacobson, L. (December 5, 2023). [Fact check: Is China's fleet bigger than the U.S. Navy's?](#) *Wral News*.

²⁵ US Department of Defense. (2023). *Military and Security Developments Involving the People's Republic of China*, Annual Report to Congress.

²⁶ Ben Ari, B., (2023). China's Port and Shipping Diplomacy, In: S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Maritime Policy & Strategy Research Center, University of Haifa), 157–191.

²⁷ Ehteshami, A. (2023). [China's Foreign Policy towards the Mediterranean](#). *IEMed Mediterranean Yearbook 2023*, 23–29.

²⁸ Jesús, C. E. (2023). [Chinese Military Influence in the Mediterranean](#), *IEMed Mediterranean Yearbook 2023*, 30–34.

China-Israel relations

On May 11, 1949, China voted in favor of Israel's accession to the United Nations. The State of Israel was the first Middle Eastern country to recognize the People's Republic of China in 1950. However, relations deteriorated, especially after "Operation Kadesh" (1956), when Israel was perceived as a member of the "imperialist" Western side. Diplomatic relations, after years of economic cooperation, mainly in the security field, which began in the 1980s, were only established in January 1992. Since then, diplomatic relations and trade ties have developed greatly, and in 2022, Israeli exports to China amounted to \$4.68 billion, and the Israeli imports from China amounted to \$16.48 billion.²⁹ Between 1992 and 2017, mutual visits were held by the leaders of the countries, and many agreements were implemented in the fields of economy, technology, security, and trade, including mutual investments in projects in various fields, up to the agreement to operate the new port in Haifa by the SIPG company for 25 years.

However, despite the flourishing economic relations between China and Israel, they remained in the shadow of Israel's pro-American orientation in the face of China's positions, as expressed in the "Falcon"³⁰ crisis in 2000 and the "Harpy"³¹ drone crisis in 2005.

At the same time, since 1955,³² and especially after the Six-Day War (1967), China and Israel continue to remain divided on the issue of Palestine, Israeli settlements in the West Bank and East Jerusalem, the economic blockade of Gaza, and the Israeli barrier wall in the West Bank. China's position on the "Israel-Hamas" war appears to be directed against Israel, and China is even included in the "Axis of Evil" that also includes Russia and Iran.³³

Despite the differences of opinion on the Arab and Palestinian issues, China has had and still has a great interest in Israel, mainly in the areas of transferring technological knowledge, investments and trade, perhaps also as part of the BRI policy. Mainly, continuing exports to Israel on an impressive scale.

²⁹ Interesse, G. (October 11, 2023). [China-Israel Bilateral Trade and Investment Outlook](#), China Briefing.

³⁰ The Falcon Crisis is a diplomatic crisis between Israel and China (and between Israel and the United States) following Israel's cancellation of a deal to sell "Falcon" reconnaissance aircraft with a system from Israel Aerospace Industries to China.

³¹ The Harpy Crisis is a diplomatic crisis between Israel and the United States following an Israeli deal to upgrade American Harpy drones sold to China in 1994.

³² [Bandung Conference](#).

³³ Shamir, S. (December 16, 2023). [The vote against Israel at the UN strengthens the Iran-Russia-China axis of evil](#). *Maariv*.

Although the relevant talks towards a Free Trade Agreement (FTA) between China and Israel were of course halted following the outbreak of the war, Israel is still an important and safe commercial and economic destination for China.

Moreover, China has moved closer to Iran – a long-time Palestinian ally that has supported the Hamas terrorist organization with weapons, funding, training and intelligence – at a time when both Beijing and Tehran are under pressure from US sanctions. Its position on the lawsuit against Israel at the International Court of Justice in Hague is a critical negative shift in Beijing's approach towards Israel, which has brought its pro-Palestinian stance to a level that "endangers relations with Israel" and "puts Israel on the opposing front", and bilateral relations are likely to deteriorate.³⁴

China's refusal to openly condemn Hamas's attack on Israel could limit its opportunities to continue investing in Israel's high-tech sector in the future, although trade is likely to remain substantial. China is the world's largest energy consumer, which means it will have a continuing interest and perhaps an attempt to exert influence in the Middle East for a long time. China's strategy in the Middle East, despite the escalating violence in the region and months of attacks by Houthi rebels on shipping in the Red Sea, has not changed. Outside of the declarations, there has been no sign of possible Chinese mediation or any sign of actual Chinese diplomacy. However, an examination of the history of Chinese strategy in the Middle East shows that the inaction is strategic – and, above all, designed to provoke antagonism toward the United States.

China's stated position on the war in Gaza

China, based on its foreign policy, which generally advocates avoiding involvement in international events and conflicts, does not have significant political weight in the Middle East, despite attempts to maintain good and balanced relations with all major countries, including Iran, the Arab states, and Israel (As you may recall, Israel is China's main partner in advanced technologies in the "technology war" against the United States). But the war in Gaza changed the balanced policy, and it shifted to support Hamas and the Palestinians. Chinese state media tends to exploit the crisis to present the United States as the cause of instability in the Middle East.

China, like most countries that recognize Palestine, views the Palestinian Authority in the West Bank as the legitimate government but also maintains ties with Hamas. On October 14, China declared that Israel's actions exceed the "scope of self-defense", and demanded that it stop imposing "collective punishment" on the Palestinians, while

³⁴ Ip, C. (March 22, 2024). [Why China's words at top UN court could signal stronger support for Palestinians cause](#), *South China Morning Post*.

refusing to condemn Hamas. President Xi Jinping expressed China's principled position on the Palestinian-Israeli situation only about two weeks after October 7, 2023, and presented China's position on several other occasions. He stressed the need for an immediate ceasefire at the end of the fighting, to ensure that humanitarian corridors are safe and unhindered, and to prevent the spread of the conflict. The Chinese Foreign Minister has conveyed similar messages in meetings and talks with various countries (including the governments of Israel and the Palestinian Authority, Saudi Arabia, Iran, Turkey, Russia, and the United States). In all meetings and talks, China's position is clear, seeking to position itself clearly in its political approach to the war and maintaining stability.³⁵ Since the outbreak of the war, China has repeatedly called for an immediate ceasefire, and has even offered to mediate in peace talks on the basis of a "two-state solution". Furthermore, China has refrained from condemning the Hamas attack and does not consider it a terrorist organization.³⁶ In the meeting of the Chinese President with the Prime Minister of Egypt, Mostafa Madbouly, in Beijing on October 19, 2023, the President emphasized:

The top priority is a ceasefire and an early cessation of hostilities. It is essential to prevent the conflict from escalating or even getting out of control and causing a serious humanitarian crisis. The fundamental way out of the recurring Palestinian-Israeli conflict is to implement the "two-state solution" and establish an independent Palestinian state, to realize the peaceful coexistence of Palestine and Israel... China is ready to increase coordination with Egypt and Arab countries to facilitate a comprehensive, just and sustainable solution to the Palestinian issue at the earliest possible opportunity...³⁷

Thus, although China did not seek to play a central role in resolving the war in Gaza, on November 30, 2023, it published a five-point position paper calling for an immediate ceasefire, the protection of civilians, and increased humanitarian assistance. The document also calls on "countries with influence on the parties" to help defuse the crisis, and to convene an international peace conference to draft a "concrete timetable and roadmap" for implementing a two-state solution and "a just and sustainable solution to the question of Palestine". It is worth noting that the document explicitly calls on the UN

³⁵ Chik, H. (October 15, 2023). [Israel 'gone beyond self-defence' in Gaza, Chinese Foreign Minister Wang Yi says, calls to 'stop collective punishment'](#), *South China Morning Post*.

³⁶ Banerjee, A. (November 22, 2023). [Explained | What is China's stance on Israel-Palestine conflict and what does it want?](#) *India TV*.

³⁷ Xinhua. (October 19, 2023). [Xi meets Madbouly, vowing to jointly work for stability, certainty to region, world](#). *The State Council, PRC*.

Security Council to lead the advancement of each of the five points. Nowhere does it refer to Beijing's offer from last spring to mediate between Israel and Palestine.³⁸

On February 22, 2024, China informed the Hague court that the Palestinians have the right to self-determination "by all available means, including armed struggle" (which is not considered an act of terrorism). Israel's response was: "China should ask itself why the terrorist organization Hamas was so quick to praise the words of the Chinese legal advisor..." Israel claims that China's support for the Palestinians' "right to self-defense" could be perceived as support for the October 7 attack.³⁹

On March 7, 2024, the Chinese Foreign Minister said that China firmly supports the just cause of the Palestinian people to regain their legitimate national rights, and is always committed to a comprehensive, just and sustainable solution to the Palestine question. China supports Palestine's full membership in the United Nations, and calls for a broader, more authoritative and more effective international peace conference to formulate a timetable and roadmap for the two-state solution. China believes that Palestine and Israel should resume peace talks as soon as possible to achieve the ultimate goal of peaceful coexistence, so that two states and the Arab and Jewish peoples live in harmony as two ethnic groups. China will continue to work with the international community to restore peace, save lives and uphold justice.⁴⁰

The increasing focus on competition with the US also appears to have influenced China's strategy towards the Israeli-Palestinian conflict. During the May 2021 round of fighting in Gaza (Operation "Wall Guardian"), Beijing deviated from its long-standing approach of balance, using its position as the rotating chairman of the UN Security Council to slam the US for its support for Israel and alleged disregard for the suffering of Muslims (without a hint of irony regarding its own treatment of Uyghur Muslims in Xinjiang).

The legal process at the International Court of Justice (ICJ) in The Hague in February 2024 served as another platform to showcase China's changing position on the Palestinians, including some parallels with the anti-colonial Maoist rhetoric of the 1960s, although China's position remained focused on the two-state solution. China's discourse at the ICJ signaled a shift, with China returning to its "historical position". China's position at

³⁸ Ministry of Foreign Affairs, PRC. (November 30, 2023). [Position Paper of the People's Republic of China on Resolving the Palestinian-Israeli Conflict](#).

³⁹ Haime, J. (February 27, 2024). [Israel says China's support for Palestinian 'right to self-defense may be seen as support for October 7 attack](#), *South China Morning Post*.

⁴⁰ Ministry of Foreign Affairs PRC. (March 7, 2024). [Wang Yi: China Supports Palestine's Full Membership in the U.N. and Calls for Working out a Timetable and Road Map for the Two-State Solution](#).

the ICJ showed solidarity with the Palestinians by stating that the struggle for liberation and the right to self-determination—including "struggle against colonialism, occupation, aggression, domination by foreign forces"—should not be considered acts of terrorism.

All of China's statements and declarations on the geopolitical level have apparently not seriously damaged the economic and commercial sphere with Israel, and the Haifa Gulf Port continues to operate under the management of the Chinese SIPG company, which is a government-owned company. Furthermore, the Israel Ports Company has allowed the Chinese company to temporarily operate two additional docks at the Bay Port despite China's position against Israel, its failure to condemn the Iranian missile attack, and its disqualification from participating in the tender for the distillate port.⁴¹



Figure 4: Haifa Bay Port under Chinese management for 25 years⁴²

The Red Sea and Houthis attacks

The Red Sea connects the Indian Ocean via the Gulf of Aden to the Suez Canal and the Mediterranean Sea, and serves as a major transportation route between Asia, Africa, and Europe, through which about 12–15% of global maritime trade passes. As part of the Arab-Israeli conflict and later the Palestinian-Israeli conflict, Arab states used the Red Sea as a tool to exert pressure on Israel. The Houthis in Yemen, based on their support for Hamas, began attacking vessels with 'connection' to Israel in the Gulf of Aden and the Red Sea.

⁴¹ Eichner, A., (April 20, 2024). [Despite Hostility to Israel in the War: Israeli Ports Considers Gestures to the Chinese](#), YNET.

⁴² שדה, י' (1 בספטמבר 2021). לאחר 15 שנים של תכנון ובנייה: נמל המפרץ בחיפה נפתח לפעילות. כלכליסט.

From November 2023 to May 1, 2024, the Houthis attacked more than 90 Western merchant ships and warships, mainly from the US and Britain,⁴³ with various types of missiles and drones. These attacks disrupt and reduce vessel traffic in the Red Sea and the Gulf of Aden and have led to a shift in traffic from the Red Sea to a route around the Cape of Good Hope. As a result, voyage times have been extended and fuel consumption on ships has increased. The Arab and African countries bordering the Red Sea have differences of opinion among themselves, and each country has its own strategy regarding the Red Sea regardless of the positions of other countries.⁴⁴

The only active Chinese naval base out of China so far was built in Djibouti, at the entrance to the Red Sea, and is also adapted for the docking and maintenance of aircraft carriers.⁴⁵ From this base, Chinese naval ships operate, both to fight pirates and to carry out security missions for Chinese merchant ships on their way to the Suez Canal and the Mediterranean Sea.



Figure 5: The Chinese base in Djibouti⁴⁶

⁴³ Congressional Research Service. (May 1, 2024). [Houthi Attacks in the Red Sea, Issues for Congress](#).

⁴⁴ To expand on the topic: Al-Anazi, T. (2001). [Strategic Importance of the Red Sea](#). U.s. Army War College.

⁴⁵ Lagrone, S. (April 20, 2021). [AFRICOM: Chinese Naval Base in Africa Set to Support Aircraft Carriers](#). USNI News.

⁴⁶ Gering, T., and Sloane, S. (July 16, 2021). [Beijing's Overseas Military Base In Djibouti](#). Memri.

The Chinese company COSCO announced in early January 2024 that it would stop its direct calling to Israel, a decision that is apparently not only related to the Houthi threat, but rather a fundamental decision by China to no longer operate directly with ports in Israel,⁴⁷ but to use other means, such as transshipment of containers to feeder ships in other ports. One reason is to not express any support for Israel in the war against Hamas, and another reason is to conduct itself in a confrontational manner on the international level and in clear contradiction to US policy. Therefore, it did not join the Western forces operating in the Red Sea in order not to acknowledge American hegemony.

Despite the increasing escalation of Houthi attacks and in the face of China's significant economic interest in the region, such as the transit route for Chinese exports to Europe and substantial Chinese investments in the Gulf of Suez and along the Suez Canal, China has shown no interest in directly getting involved in the escalating shipping crisis. It has also not joined Western task forces, other than declaring its opposition to harassing civilian ships and indirectly criticizing US and British airstrikes against Houthi-controlled sites in Yemen.⁴⁸ China is also failing to influence Iran to stop the Houthi attacks, because then Iran would appear to be not part of the "Axis of Evil". In the summary of meetings between China and the United States in January 2024 in Bangkok, no joint statement appeared at all, which was expected, about attacks by the Iranian-backed Houthi militias. This is an issue that is too important to avoid addressing, and too sensitive for a joint statement in light of the stakeholders involved, and this is in parallel with ongoing attacks by the United States and Britain on Houthi strongholds and weapons caches.⁴⁹ Additional reasons may be: the fact that China does not consider the Houthis a terrorist organization, does not press for a "diplomatic" effort to avoid embarrassment from Iran, and fears that it will "lose face" if its requests are not met, as well as the Chinese fear that any statement will be perceived as China supporting the United States in military activity against the Houthis, and not against "Israeli aggression".

The main sufferers from the Houthi attacks are Arab countries, especially Egypt, with a 70% drop in ship transit through the Suez Canal, and a loss of \$100 million per month. The continued and expanding crisis in the Middle East is a geopolitical and economic threat to China, which has invested more than \$20 billion in countries around the Red Sea (mainly

⁴⁷ Elmas, D. S. (January 7, 2024). [Chinese shipping giant COSCO to stop visiting Israeli ports](#). *Globes*.

⁴⁸ Azoulay, Y. (January 15, 2024). [China stops shipments to Israel and harms the success of the port it owns](#), *Calcalist*.

⁴⁹ Sim, D. (January 31, 2024). [Red Sea Attack: no official mention after US–China talks but progress 'likely' to have been made, observers say](#). *South China Morning Post*.

in Saudi Arabia and Egypt), and about 70% of China's oil consumption is imported, half of which comes from the Middle East.⁵⁰

Although reports indicate that the Houthis are making a localized effort not to harm Chinese ships, Beijing has sent vessels (the 46th Fleet) of the Chinese Navy to the Middle East (a guided-missile destroyer, a missile frigate, and a supply and technical support ship, with more than 700 officers and soldiers, including dozens of special forces personnel and two helicopters), "to take over an escort mission (replacing the 45th Fleet) in the Gulf of Aden and in the waters off Somalia".⁵¹ Despite a non-aggression pact against Russia and China,⁵² Houthi missiles hit a Chinese-owned tanker.⁵³



Figure 6: Chinese Navy D52 guided missile destroyer⁵⁴

China's position on attacking Iran

Also in another significant event, Iran's attack on Israel on the night of April 13–14, 2024, which included 110–130 ballistic missiles, approximately 185 drones, and 36 cruise missiles, China refrained from condemning Iran and was content with a response of "deep concern" about the situation and treated the Iranian attack as an act of self-defense. The high tension between Israel and Iran puts China in a situation where an all-out war would severely damage its economic interests vis-à-vis both countries, but China only declared that it opposed any action that would worsen and deteriorate the situation.

⁵⁰ Friedman, Y. (March 10, 2024). [The Houthis are targeting Israel and harming Egypt](#). *Maariv*.

⁵¹ Helou, A. (March 18, 2024). [Crowded waters: Who's doing what in the international hotspot of the Red Sea](#). *Braking Defense*.

⁵² Dagher, S., and Hatem, M. (March 21, 2024). [Yemen's Houthis Tell China, Russia their ships won't be targeted](#). *Bloomberg News*.

⁵³ Heather, M. (March 24, 2024). [Chinese Tanker Hit with Houthi Missile in the Red Sea](#). *USNI News*.

⁵⁴ *Seaforces - online, Naval Information*. [Type 052D Luyang III class Guided Missile Destroyer](#).

China's diplomacy is somewhat reminiscent of Maoist principles, which emphasize that "the enemy of our enemy is our friend". It is therefore not surprising that China's diplomatic rhetoric is biased towards Iran, but it is most likely that China's significant economic and trade relations in the region mean that it has a paramount interest in maintaining peace, and China will likely do everything in its power to help de-escalate the situation.⁵⁵

Summary

Since the establishment of diplomatic relations between the countries in 1992, China and Israel have developed close relations in the areas of security, technology, academia, trade, and economics (which provoked negative reactions in the United States). China's approach to the "Israel-Hamas" war is a significant departure from its traditional approach in the past towards conflicts in the Middle East, in which the Chinese generally sought to avoid involvement. Instead, it reflects the administration's new tendency to use major global conflicts as opportunities to undermine US positions and score "points" on the geopolitical plane. But at the same time, to avoid involvement as much as possible, China, at least in the Middle East, is also working with diplomatic tools.

China hosted talks between the rival Palestinian factions Hamas and Fatah to end the internal division and announced that it was willing to mediate the conflict between them, following the peace agreement signed last year, brokered by China, between Iran and Saudi Arabia to renew relations between them. In an interview with Al Jazeera, the Chinese Foreign Minister said: "Ultimately, we must achieve peaceful coexistence of the two states of Palestine and Israel and harmonious coexistence of the two peoples – the Arab and the Jewish,⁵⁶ and of course China must protect its investments in the Middle East through the Belt and Road Initiative, with behaviour based on the principles of Chinese culture".

China is trying to adopt "pro-Palestinian neutrality" and has presented itself as a fairer mediator than the US, which "blindly supports Israel", and as a representor for the "global south", with one more important goal: to further damage American global hegemony. As always, money, oil, and weapons are involved in this – as well as an attempt to get positive responses from Arab countries.⁵⁷

⁵⁵ Zhou, C. (April 19, 2024). [China says it opposes any Israel-Iran escalation amid balancing act](#). *Nikkei Asia*.

⁵⁶ Zhao, Z. (April 26, 2024) [China hosts talks between rival Palestinian factions Hamas and Fatah in bid to end internal divisions: report](#). *South China Morning Post*.

⁵⁷ YNET and the agencies. (November 1, 2023). [with a rebuke to Israel and no condemnation of Hamas: What does China want from the war in the Middle East?](#)

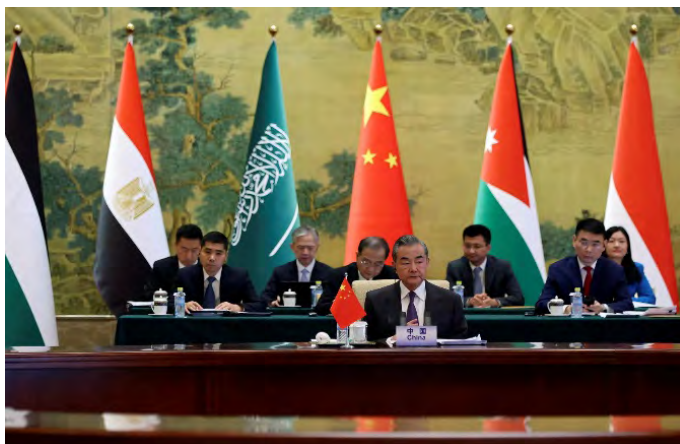


Figure 7: Chinese Foreign Minister Wang Yi attends a meeting with Saudi, Jordanian, Egyptian, Indonesian, Palestinian and Organization of Islamic Cooperation delegations in China, November 20, 2023⁵⁸

Although China presents a position of support for the Palestinians, it avoids direct confrontation with Israel. But following the regime's statements, the Chinese media also presented the war as a war of Israeli aggression, and its early reports were full of anti-Semitic and anti-Israeli interpretations, according to which Hamas defends the two-state solution, even though the organization's past and present actions are clearly aimed at destroying the Israeli state. The Chinese Foreign Minister repeatedly repeated the claim that "the heart of the problem is the fact that justice has not been done to the Palestinian people".

In contrast to the US's conduct, China has failed to achieve significant diplomatic influence over any country in the Middle East (not even Iran) or show any willingness to invest efforts to achieve its goals, which have further exacerbated the conflict that China explicitly seeks to end. In fact, despite its positive past relations with Israel, it has not changed its position in supporting the Palestinian side and the Arab states geopolitically and militarily, including consistent votes against Israel at the UN.⁵⁹

At the same time as its open support for the Palestinians, China continues to look after its interests vis-à-vis Israel in the areas of economy and technology, and is still the second largest trading partner with Israel, and carefully avoids direct confrontation with Israel on

⁵⁸ Kim, P. M., Dong, K., and Prytherch, M. (January 22, 2024). [Chinese narratives on the Israel-Hamas war](#). *Brookings*.

⁵⁹ Levinter, E. (June 7, 2021). [How the Chinese Communist Party Managed to Support the Extremists Among Our Enemies, and Also Get the Keys to Israel](#). *EPOCH*.

the issue.⁶⁰ Pressure from the United States calling on Israel to end close ties, which also include academic ties, has caused Israel to take activities to reduce the damage caused by economic and technological ties with China, which is seen as the greatest threat to the United States and the free world.⁶¹

China's quest for balance and stability has resulted in statements written according to a set script. Calls for "all sides" to exercise restraint, avoid violence, allow humanitarian access to civilians, and return to negotiations on a two-state agreement (although it often added "especially Israel" to these rebukes). This approach has been carefully maintained to avoid losing Arab support while continuing to maintain deep economic relations with Israel. Indeed, China's true priorities in the economic and financial sphere can be presented: in 2014, it invested \$4 billion in Israel but provided the Palestinians with only \$1 million in aid over the past decade. Since then, trade between China and Israel has doubled from \$11 billion to more than \$23 billion.⁶²

Considering its position, China's ability to influence the war is very limited. It has no direct connection with the Hamas organization that controls Gaza, and to influence it in any way, it will have to go through Tehran. If it succeeds in doing so, it will be able to accumulate a few more "credit points" in an attempt to present itself as a reliable, effective, and unconventional mediator.⁶³ China's membership in the "axis of evil" (Iran, Russia, and also Syria) and its statements on the subject of the war in Gaza allow us to assess, with due caution, that its position in the Middle East and the world as a whole (and despite planning a long-term political strategy), has been damaged to some extent. Although the supposedly successful visit of the German Chancellor to Beijing in April 2024 (which can be summarized in the sentence: "It is time for Xi Jinping to accept that Germany isn't America's puppet")⁶⁴ and President Xi's visit to Europe (France, Hungary, and Serbia) in May 2024 received mixed reactions, it was apparently a successful diplomatic campaign, and was perceived as one in which China established a bridgehead in Europe⁶⁵. It seems that China's position reflects both its desire to position itself as a viable alternative to

⁶⁰ Çalıřkan, S. (December 15, 2023). [Understanding China's Position on the Israel-Palestine Conflict](#). *The Diplomat*.

⁶¹ Ratcliffe, J. (December 3, 2020). [China Is National Security Threat No. 1](#). *The Wall Street Journal*.

⁶² Singh, M. (November 29, 2023) [Why china is taking sides against Israel—and why it will likely backfire](#). *The Washington Institute for Near East Policy*.

⁶³ Xinhua. (October 19, 2023). [Xi meets Madbouly, vowing to jointly work for more stability, certainty to region, world](#). *English.gov.cn Teh state council*.

⁶⁴ Berlin. (April 18, 2024). [The German chancellor's awkward meeting with China's boss](#). *The Economist*.

⁶⁵ Yanovsky, O. (May 17, 2024). [Why Xi's Europe tour was seen positively in Moscow](#). *The Diplomat*.

the US and the American order that has led it so far, while at the same time protecting its economic interests as the world's largest oil importer. Attempts to increase China's power in the Middle East include not only strengthening the strategic partnership with Iran, but also close ties with Saudi Arabia and other countries in the Persian Gulf, and in coordination with its partner Russia, with the aim of raising its status as the leader of the "global south" especially when India appears to be a rising and threatening contender.

Israel quietly signaled its displeasure with Beijing's approach to the Palestinian issue in general even before the war. In late August 2023, Israel signed a joint statement of concern with more than 50 other governments regarding alleged Chinese crimes against humanity in the predominantly Muslim Xinjiang region. In September 2024, an Israeli parliamentary delegation visited Taiwan and met with President Tsai Ing-wen.⁶⁶ An Israeli response to China's statements and its position was given by a senior official at the Israeli embassy in Beijing to China's offer of mediation, "When people are being murdered, slaughtered in the streets, this is not the time to call for a two-state solution".⁶⁷ Official Israeli responses, except in the context of the UN discussions, appear to have been absent.

And although its economic ties in the fields of trade and technology with Israel may not deepen, there is a possibility that Israel will respond by canceling the agreement to operate the Bay Port and imposing restrictions on technology and trade. Since China's position is politically biased towards reducing the power and position of the United States in the Middle East, it is possible that after the conflict and tensions and considering international moves, China will try to return to the relationship that existed before October 2023.

⁶⁶ Grossman, D. (May 16, 2024). [China is burning all its bridges with Israel](#). *Nikkie Asia*.

⁶⁷ Inbar, A. (November 27, 2023). [China is increasingly hostile to Israel](#). Jerusalem Institute for Strategy and Security.

The new Saudi Red Sea strategy: The search for alternatives to maritime independence

Alexander Bligh

Considering that since the 1930s the main interest of Saudi Arabia has been the free passage of oil and oil related products to its customers, it is no surprise that shortly after the 1979 Iran revolution it took precautionary measures. As part of that strategy, it initiated and established the Gulf Cooperation Council in 1981. The 2014 Yemen revolution and the subsequent war with Saudi Arabia raised the scenario of a closure of the Bab al-Mandeb Straits on top of possible Suez Canal closure. Both have put this area along with the Gulf on top of the Saudi naval strategy. In recent years, the Kingdom has initiated a double pronged approach: Persian Gulf policy intended to maintain the current Saudi standing in the Gulf in the face of the Iranian menace along with naval buildup in the Red Sea and the forming of an economic, military, and strategic alliance with as many regional players as possible. The Israeli dimension of this coalition is secret but have been manifested in several ways. It is a pragmatic strategy preferring response to current regional challenges to old paradigms.

Introduction

Since its declaration as the Kingdom of Saudi Arabia (KSA) in 1932 it has not suffered from its awkward location: on the shores of the Persian Gulf and the Red Sea, and yet without any independent outlet to an open sea. In its quest to export its products, oil and oil related goods, the Kingdom is limited by the Yemeni control of the strait of Bab al-Mandeb, connecting the Red Sea to the Indian Ocean, and by the Suez Canal under the full sovereignty of Egypt. Moreover, the source of the Kingdom's Muslim legitimacy among all Sunni Muslims around the world is the result of its sovereignty over the two holiest Muslim shrines in Mecca and al-Madina – both in the Hijaz, the coastal section of the Red Sea. The free passage of pilgrims is a vital interest of the Kingdom. The Saudi Persian Gulf outlet is formally controlled by Oman, a member of the Saudi led Gulf Cooperation Council (GCC), and by Iran, an archenemy curbed for the time being by the Chinese brokered March 2023 rapprochement deal. However, all outlets serve as potential friction points: the Suez Canal has been closed several times in the past due to technical and belligerency issues, and the southernmost outlet has been threatened and effectively a war zone since the war in Yemen broke out in 2014. Iran for its part is not currently using its naval power against Saudi Arabia, but the Tehran regime can and will close the straits for shipping from the Gulf to the open sea at will.

These geo-strategic constants have been exacerbated by the need of KSA to form a new naval strategy considering its wider change in its foreign policy orientation and the change in relations with the United States, Iran, Yemen, and Israel since 2015. Since Prince Muhammad b. Salman (MBS, 1985–) accession (appointed Heir Apparent, the Regent,

2017) the Kingdom has tried to hasten its effort to enhance the process of moving away from a one-product economy into a diversified one and to also expand the number of its international allies. In terms of its global standing, the Kingdom moved from relying on one international actor (the United States), in a bandwagoning policy, meaning reliance on one strong power, into leading and relying on a coalition of regional forces in the Red Sea. After a century of "special relations" with the US the incumbent Heir apparent dramatically changed the foreign policy course of his country. The Saudi preference since 2017 has been the broadening of its foreign relations. If on the international level KSA is on its way, through a prolonged process, to bandwagon with China, the regional arena is different. MBS has initiated a two-level foreign policy system in which on one level, that of the Persian Gulf, his country is aligned with China and attempts to co-exist with its archenemy, Iran, whereas on the other level, the Red Sea, KSA is investing much effort in bringing together Israel, Egypt, and other local players, probably under some form of an *ad hoc* coalition supported to some degree by the US and a coalition of other Western powers. The current Saudi approach to the local and naval challenges is intended to balance the Iranian dominance in the Gulf, to assure Saudi Arabia of its security and free navigation through the Persian Gulf and the Red Sea straits, and to make it the only player capable of talking to all regional players and their patrons. This coalition construction may in times of crisis, most reasonably the Red Sea one, to support the Saudi position in the Gulf. The most striking example of this way of thinking was manifested in the Saudi tactics during the massive Iranian attack on Israel on April 14, 2024. All members of a Red Sea coalition, KSA included, found themselves cooperating, synchronizing their armies together, and shooting down the hundreds of drones and missiles shot at Israel. It was the first time ever, that the Red Sea coalition, took a united action against a common enemy: KSA, Israel, Jordan, and Egypt with UAE participation. Obviously, this united front repelled an Iranian attack, meaning that all concerned armies coordinated their defensive capabilities. This precedent may be used repeatedly against the same Iranian forces and their proxies in the Red Sea region. Will the current set of secret understandings hold true in putting together an attack on the Houthis practically blocking the Bab al-Mandeb Straits remains to be seen in the future.

This article analyzes the strategic environment within which Saudi Arabia is operating, including current enemies and potential allies, the structure of the navy, including procurement plans, and finally, the combined naval and diplomatic Saudi maneuvers intended to secure the Saudi crucial interests. These are supposed to be answered by the attempts to build an effective Red Sea navy, the military and diplomatic efforts accompanying this build up, and finally, the strategic lookout for the Red Sea.

The naval and strategic threats map

The uneasy location of Saudi Arabia presents three major current and potential naval threats to its economy and very existence: The Suez Canal, the Straits of Bab al-Mandeb, and the straits of Hormuz. For the Kingdom to enjoy complete use of the Red Sea shipping lanes it must have full and uninterrupted access to the Canal and the straits. Available statistics speak of about 7.5 million barrels per day of oil and 36 billion cubic meters of liquefied natural gas (LNG) that have passed through the Canal (January to October 2023).¹ That includes about 2 million barrels a day [2019 figures] through the East-West pipeline, that runs from Abqaiq in the Eastern Province on the Persian Gulf shore, to the Yanbu terminal on the Red Sea.² This pipeline was scheduled to be expanded to a 7 mbd (million barrels a day) sometime in 2023.³ No announcement of its opening has been released until this article has been written. However, even this bypassing route cannot operate without an open Suez Canal. Any threat assessment must also take into account the security of the Suez-Mediterranean Pipeline (SUMED).⁴ It provides an alternative to the Suez Canal for transporting oil from the Persian Gulf region to the Mediterranean. Simply put, all oil exporting routes in the Red Sea or on its shores need Saudi defensive planning. Another alternative concerns the use of the UAE – Israel Memorandum of Understanding (October 2020) for collaboration in storing and transferring oil and oil products from the UAE to Israel.⁵ This route is using the Europe – Asia pipeline (EAPC) from the Israeli port city of Eilat at the red sea to the city of Ashkelon at the Mediterranean. Remembering that usually the UAE would not sign such a strategic agreement without some Saudi, at least tacit, approval it is quite possible that the Kingdom may try and use this way as well as some backing to sea lanes and SUMED. The northern outlet of the Red Sea is usually seen as a major conduit for exporting oil. However, Saudi Arabia has also been importing energy from Russia through Egyptian territory, mainly: the Suez canal. It uses that energy for its own electricity grid and for storage. Yet, a significant part of that energy is re-sold to Europe helping Russia thwarting the Ukraine crisis related international sanctions.⁶ The

¹ IEA [International Energy Agency], [Suez Canal – Fact Sheet](#), n.d., retrieved May 2, 2024.

² Hickin, P. (September 15, 2009). [Factbox: Crude supply under threat after Saudi Abqaiq attack](#), *S&P Global Commodity Insights*.

³ McQue, K. (December 22, 2020). [FEATURE: Saudi crude keeps flowing to Red Sea as East-West Pipeline repairs continue](#), *S&P Global Commodity Insights*.

⁴ EIA, *Today In Energy*. (July 23, 2019). [The Suez Canal and SUMED Pipeline are critical chokepoints for oil and natural gas trade](#), The U.S. Energy Information Administration.

⁵ Rabinovitch, A., and Cohen, T. (October 20, 2020). [Israeli pipeline company signs deal to bring UAE oil to Europe](#), *Reuters*.

⁶ EIA, *Today In Energy*. (December 4, 2023). [Red Sea chokepoints are critical for international oil and natural gas flows](#), The U.S. Energy Information Administration.

stated ways of using the Red Sea north of Yanbu affect the Saudi Red Sea strategy in a way that the Kingdom has a double-pronged Red Sea policy: north and south of Yanbu. The Kingdom can tolerate to some extent the closure of the Bab al-Mandeb straits, but not any Egyptian hostile move. In recent years, the Cairo regime has been friendly to Saudi Arabia, but the fact that Egypt was ruled by (Muslim Brotherhood government 2012 – 2013) only adds to the Kingdom's concerns. True, the Egyptian radical regime was not associated with Iran, but any realistic ruler in Riyadh must consider that risk as being realistic.

KSA is currently facing two integrated threats: on the Persian Gulf, a potential of an open war by Iran, which has been averted so far by the March 2023 accord. On the Red Sea Saudi Arabia has entered with the Yemen crisis a low-level war of attrition by Yemen and a potential of other littoral countries joining in that war that falls under the level of an open total war. The immediate threat by the Yemeni Houthis and a very present threat by their operating power, Shi'i revolutionary Iran, force KSA to prepare for any eventuality. Currently, the spill over of the limited war in the Red Sea and a total war in the Gulf. That necessitates two diverse ways of preparing the Saudi forces, the navy included. A more comprehensive picture will discover that main potential threat to Saudi security is encirclement by Iran and Iranian proxies. With an open war with Houthi Yemen since 2015 KSA is determined to prevent the fall of other players into hostile hands. Egypt's neighbor to the south, Sudan, is currently the object of some intense Iranian diplomatic and military effort, as well as the Hashemite Kingdom of Jordan, the northern neighbor of Saudi Arabia. The Horn of Africa presents a similar map of threats. The current outlook for the strategic standing of KSA is pessimistic. Only one player in the Red Sea region shares those concerns, Israel. It also shares the assessment of Iran as a possible nuclear power that puts on top of its priorities the removal of the Jewish state, the military occupation of the Mecca and al-Madina holy shrines, and the taking over of the Saudi oil fields.

The southern outlet from the Red Sea goes through the Bab al-Mandeb straits. The Strait witnesses the trade of about 7.80 million barrels of oil every day. Not only this, but it also accounted for 12% of global oil trade by sea and 8% of LNG (liquefied natural gas).⁷ Current figures attesting to the current Saudi share within these figures are not currently available. However, it is evident that the Saudi share has declined since the outbreak of military confrontation with the Iranian proxy, the Houthi regime in Yemen, which controls the strait.⁸

⁷ Rana, K. (March 7, 2024). [Water Woes & Global Maritime Arteries: Climate and Conflict Threaten Vital Chokepoints](#), *Logistics Insider*.

⁸ Cf. (December 6, 2023). United States: Red Sea chokepoints are critical for international oil and natural gas flows, *Thai News Service*.

Any Saudi situation assessment must consider the scenario of an abrupt closure of any of the three: the Suez Canal, the Bab al-Mandeb strait, and the Straits of Hormuz are still open for Saudi Arabia because of the China brokered March 2023 Saudi – Iranian rapprochement agreement.⁹

The Saudi naval policy and activity in the Red Sea comprises of three integrated levels of activity: the independent Saudi Red Sea navy, the participation in international task forces and the rumored but existing cooperation with other the Red Sea countries, mainly: Israel. Like any other military policy, this one is also put together to support a national strategy on the international and regional levels. That brings up the issue of procurement. Obviously, any arms deal entails some foreign policy decisions regarding the overall national strategy of a given player. In the Saudi case, since its foreign relations since 2017 have been characterized by diversification process it is also reflected in the completed and ongoing arms deals in all military branches, the navy is no exception.

These strategic considerations are bolstered by some major regional current challenges. First of them is the Yemeni/Houthi threat, which began in 2015. The conflict has involved land armed clashes between Saudi forces and the Houthis. The Houthis launched their first attack on Saudi naval vessels in 2017, using unmanned suicide boats and later, in 2019, they attacked the Aramoco refineries. In 2021 they launched their first suicide drones against the civilian/military King Abdullah Airport in Jizan in southern Saudi Arabia close to the border. All that and the de facto naval blockade on the Straits of Bab al-Mandeb make the Houthi enemy of Saudi Arabia the actual ruler of the Straits. With that they have been stopping free navigation to any shipping to and from the Suez Canal and the controller to the only port of Jordan in Aqaba.

In line with past precedents, the recent naval conflagration in the Red Sea in the wake of the Gaza War captured the attention of the superpowers, making the Red Sea for the first time ever a new scene of world attention. The US, the UK, the French navies on the one hand and the Chinese and the Russian navies have established some significant Red Sea presence on top of the local navies. The transformation from a marginal dot on the international naval map into a focus of attention clearly started several years ago. It has accelerated with the escalation in the regional tensions resulting from the 2023 Israel war in Gaza and the Iranian backed attempts to strangle Israel's economy through blocking its Red Sea outlet. Through Saudi eyes that meant establishing a visible navy, designing appropriate procurement plans, and creating the mentioned above coalitions led by the most immediate partner, Israel.

⁹ Cf. News Desk. (April 15, 2024). [The Geopolitical Gambit: Potential Closure of the Strait of Hormuz and Global Supply Chains](#). *Logistics Insider*.

The strategic environment within which Saudi Arabia is operating: The diplomatic dimension

After decades— since the 1930s—of almost full dependence on the United States for providing energy markets, selling war materials, and backing in the international arena, the Kingdom, under MBS, has changed course, taking different, yet complementary, approaches at the various levels of foreign relations. This is the result of the fact that MBS employs a panoramic view of the interests and needs of his Kingdom and acts accordingly.

The Saudi naval approach is the result of the strategic threats and foreign relations considerations. Any military and diplomatic cooperation saves, to a degree, the need to bolster the national naval force and encourages participation in multi-national task forces. Since 2017, MBS has built an innovative approach connecting his domestic and foreign policies to a degree never seen before. MBS operates as an initiator who does not wait for challenges to arise, but who takes the offensive whenever possible and does not shy away from limited local (Bahrain, Yemen, UAE) and international diplomatic and economic confrontations (US). Even though MBS is the architect of Vision 2030, a long-term development plan, he clearly aspires to immediate and medium-range territorial and economic gains. All his characteristics do indicate a break with past accepted traditional paradigms. The contemporary change compared with past crises is that Saudi Arabia now manifests and uses its economic power for strategic benefits, such as the rapprochement with China, without any concern with the US response. This is in clear contrast with the pre-2017 policies that had been intended to gain some minor benefits for the Kingdom without crossing an imaginary thin line between promoting Saudi interests and damaging US policies. The 1973 oil embargo indicated along these lines an effort to appease republican Egypt to buy itself out of the subversion without alienating the US. Even though MBS has not been in the decision-maker seat for long, he has already left a mark and clearly made himself known as an assertive leading actor. His invitation by the body bringing together some of the strongest economies on earth (BRICS) to join the organization is yet another recent indication of his aspirations and their acceptance by other significant world players.¹⁰ All that necessitates a strong strategic standing that builds on open sea and uninterrupted flow of Saudi energy to the outside world.

The newly transformed Saudi approach to its foreign relations requires more dialogue with more influential powers relative to their ability to coordinate and support the Kingdom at the economic/energy, diplomatic, and military levels. In the exploratory

¹⁰ Kennedy, N., and Chernova, A. (August 24, 2023). [Saudi Arabia, UAE and Iran among six countries invited to join BRICS group](#), *CNN Business*; Mandel, E. (September 14, 2023). [China-dominated BRICS is a threat to US interests in the Middle East](#), *The Hill*.

trek leading KSA to Beijing, New Delhi, and other centers of power, the US is a known and unsurprising player. However, any continued dependence on the US may jeopardize the developing connections with the new international partners. That translates to the diversification of procurement as well as the need to be as much independent as possible in protecting the Saudi standing in the Red Sea. As already indicated here the Persian Gulf, judging from the Saudi deployment there, is a lost case for the Kingdom. That bleak strategic outlook brings together two potential conflicting lines of action: the Saudi policy since 2017 of diversifying its global allies, with the US demoted to one of many partners, and the need to bolster its military, including: naval, in the Persian Gulf and in the Red Sea. While considering the Iranian power in the Gulf KSA cannot hope to parallel the Iranian naval power it is different in the Red Sea. The Iranian presence is not threatening as it is in the Gulf.

The fact that all routes between Israel and Saudi Arabia - land, sea, and air - are open, making Israel a major land bridge between Saudi Arabia and Europe, and that Israel has an open outlet to the sea through the Red Sea port of Eilat and its Mediterranean Sea ports, may be beneficial for the Saudi Arabia for exporting to the EU through Israel. The Kingdom, for its part, can guarantee Israel cheap energy from the nearest source possible. Moreover, considering the prominent level and quality of Israeli academia as well as R&D, coupled with Saudi innovative technologies in these fields and their own scientists, both countries can and should embark on a path of wide scientific cooperation. The potential fields for such cooperation are endless, among them: personalized medicine, pharmacology, clean-tech, precise agriculture, space for humanity, and so on.

However, even with any Saudi - Israeli cooperation Saudi Arabia cannot feel safe. As a result of the war that broke out on October 7, 2023 Israel has dramatically declined in terms of deterrence and ability to act on the international arena. That leads to the unavoidable conclusion that the best way in the present is for KSA to continue its participation in multi-national task forces along with securing strategic backing from China and Russia. Foreign naval forces, especially the United States, China, Russia, and others also patrol the Red Sea keeping an eye on any conflagration. The current application of Saudi policy, task forces and diplomatic backing, is the continuation and reinforcement of the policies that began with the 1991 Gulf war. That conflict accentuated the Saudi need for an integrated naval defence that would bring together a national Saudi military navy along with some significant participation in multinational naval forces.

The Saudi navy

In terms of court politics, the Commander in Chief of all Saudi armed forces is King Salman, whose responsibilities are in the hands of MBS. The armed forces under their command

include the land forces, the navy, the air force, the air defence, and the strategic missile force. Apart from the air force, which is led by a Saudi prince, all others, the navy included, are headed by commoners. That sends a double message: no Saudi military force (except for the air force) is seen by the Saudi inner court as a potential contender for the throne, and that all senior officers are fully loyal to the House of Saud and their past successful experience in their respective service. The present navy commander, Admiral Fahd b. Abdullah Al-Ghofaily, is a professional seaman with some historical connections between his family and the House of Saud and the former commander of the Saudi Persian Gulf fleet. The nomination of a professional naval officer further underlines the growing interest of KSA in securing all pertinent sea lanes at any cost: diplomatic as well as financial. Recently published data indicates that KSA announced a significant increase in its defense budget, which is anticipated to progressively reach \$86.4 billion by 2028¹¹ with the navy being one of the leading recipients. All that clearly indicates that after decades long of neglecting the maritime dimension in the Saudi overall worldview a change has occurred.

The Royal Saudi Naval Forces oversee securing about 2,500 kilometers (1,600 miles) of the Saudi coastline, with two fleets: the Eastern Fleet in the Persian Gulf with coastline of about 500 KM and the Western Fleet in the Red Sea with the coastline of about 2,000 KM. With the Persian Gulf fleet in place since 1991 both fleets are now in charge of protecting both Saudi outlets to sea lanes. Both were established in the wake of regional crises underlining the Saudi need for better protection on the sea: the Red Sea navy was established in 1960 based on assessing Republican and subversive Nasserite Egypt and its Red Sea fleet a threat to the Kingdom. In the last ten years, due to the war with Yemen, the Saudi high command began to re-structure it and to furnish it with the most modern equipment. The Persian Gulf fleet was created as a reaction to the need to be protected by the US after the 1990 Iraqi invasion of Kuwait, and the following Gulf war. Today, with both navies in constant readiness to repel any outside attack and the need to coordinate activities with other regional and international fleets the need arose for a joint national headquarters. The current Saudi military development plan included the establishment of the "Naval Systems Integration and Development Center of Excellence" in Riyadh, the Saudi capital city. This center, inaugurated in March 2024 is a state-of-the-art war room from which any Saudi and international operation with Saudi participation is run. It is the brainchild of MBS and executed under the supervision of Admiral al-Ghofaily. It is also part of the Vision 2030 development plan and intended to coordinate all efforts to protect the currently being built new Red Sea city, Neom, near the straits of Tiran.

¹¹ *world defense show*. (July 26, 2023). [Saudi Annual Defense Budget to Reach \\$86.4 Billion in 2028](#).

Counterbalance to Iran: Participation in international coalitions and task forces

Comparing the Saudi military, including: the naval capabilities, to the regional rival, Iran, reveals that the Kingdom cannot at present deter any hostile move nor can it encounter any full-scale attack. The strategy of MBS, intended to build such resources is based on three tiers: the global backing, secured by close relations with China and Russia; the immediate allies, including Israel and an alliance with Egypt, and finally, a Western backed international coalition.

Israel and the Kingdom have never denied their secret understanding of keeping each other safe in the face of the Iranian provocations and the blocking of the Bab al-Mandeb Straits by their proxies, the Houthis in Yemen. Saudi Arabia acknowledged that it participated in a covert regional military coalition, which includes Israel, the United States, Jordan, the United Kingdom, and France that repelled the April 14, 2024.¹² This coalition is the last addition to an already existing and working Saudi participation in international task forces: Combined Task Force 152 , in the Persian Gulf and 153 in the Red Sea, and the Coalition Task Force Sentinel. All three initiated and established by the United States: the first in 2004 is led by a Saudi naval officer since summer 2023,¹³ the second was put together in 2022 to encounter the Houthi threat and is headed by An Italian officer,¹⁴ The third, also headed by a Saudi officer and established in 2019.¹⁵

CTF 152 includes thirty-eight national naval representations and CTF-153 forty-three nations and Sentinel consists of eleven nations. All share similar tasks which include securing free passage in all regional straits, deterring any attack and be on alert for any Iranian or Houthi attacks. Briefly it is the basic responsibility of the US and the allied forces of securing the free flow of oil from the Gulf, the Red Sea, and the Suez Canal. In line with its non-alignment policy the Kingdom has not only participated in multi-nation task forces it has also conducted naval drills with the US, China (2023) and India (2021). All attest to the current diversification in its foreign policy.

¹² The Media Line Staff (April 16, 2024). [Saudi Arabia Confirms Role in Defending Israel Against Iranian Attack](#), *The Media Line*; TOI World Desk (April 16, 2024). [Saudi Arabia 'confirms' helping Israel Against Iranian Attack](#), *The Times of India*.

¹³ Combined Maritime Forces (CMF), [CTF 152: Gulf Maritime Security](#), Currently Commanded by: Royal Saudi Navy, retrieved May 14, 2024.

¹⁴ Combined Maritime Forces (CMF), [CTF 153: Red Sea Maritime Security](#), Currently Commanded by: Italian Navy, retrieved May 13, 2024.

¹⁵ NAVCENT Public Affairs, (November 5, 2020). [Coalition Task Force Sentinel Conducts Joint Exercise in the Arabian Gulf](#), *U.S. central command News*.

Procurement and plans

Perhaps the most appropriate word to characterize current Saudi strategic policies is diversification. Since MBS accession it has expanded its foreign policy granting a more significant role to China and Russia and it has begun a long-range process of diversifying its economy moving into new areas on top of the oil products. The same rule of diversification holds true for its procurement policies. Even though the United States is still the supplier of 75% of its military needs Saudi Arabia has added several more suppliers. Considering that the Kingdom is one of three world top importers of armaments along with Egypt and Qatar,¹⁶ the expenditures involved are extremely high.

Part of these budgets have been earmarked for the Saudi navy. In 2017 the Riyadh government initiated its second Saudi Naval Expansion Program (SNEP II) at an estimated cost of \$US 20 billion. That project continues the original SNEP (1970s–1990s) that enabled the Kingdom to build a defensive naval force with the help of the United States, the United Kingdom, and France.¹⁷ The current program is a part of the Vision 2030 project with its most ambitious goal of constructing a major sophisticated Western style city, Neom, on the Red Sea shore. This initiative necessitates the construction of a more advanced military, mainly: naval, power that must deter and repel any hostile planning and execution of attacks on the Kingdom in the Red Sea arena. Consequently, SNEP II calls for the purchase of corvettes, littoral combat ships, and offshore patrol vessels that would not only safeguard the Red Sea and the Persian Gulf but will also have some offensive capabilities.¹⁸ The new program brings in new naval partners, among them: Spain, in addition to old ones, specifically the United States, the United Kingdom, and France, and new vessels to the Saudi scene.

The Saudi navy is interested within that project in purchasing submarines from Germany, considering their excellent reputation in the Middle East after the Israeli and the Egyptian submarine deals. Moreover, with one eye always in Iran the lack of submarines puts the Kingdom in clear inferiority to the Iranian might. Despite the Saudi interest the Berlin government has not yet approved that desired deal. Instead, it approved the sale of light

¹⁶ Wezeman, P. D., Djokic, K., George, M., Hussain, Z., and Wezeman, S. T. (March 2024). [Trends In International Arms Transfers, 2023](#), *SIPRI Fact Sheet*.

¹⁷ Muspratt, A. (August 20, 2018). [Saudi Naval Expansion Programme II: Modernising the Royal Saudi Navy](#), *Defence IQ*.

¹⁸ McNeil, H. (September 4, 2023). [Vision 2030 to propel Saudi defence budget with a 4.5% CAGR by 2028](#), *Army Technology*.

submarines and underwater unmanned systems.¹⁹ It is probably an indication of the German dissatisfaction with the issue of human rights in the Kingdom and specifically a reaction to the 2018 Khashoggi affair.

Another European partner is Spain that operates through a privately owned company, Navatia. The firm established together with the Saudi government a joint enterprise that already set up the mentioned above new war room of both Saudi navies and will train the land auxiliary forces of the navy. Spain for its part supplied the Saudi navy with five new 2200-class corvettes to be deployed in the Gulf and in the Red Sea.²⁰ They are equipped with air defense systems, anti-submarine warfare capabilities, and surface warfare capabilities. In 2019, Saudi Arabia signed a deal with France's Naval Group to build warships within the kingdom.

As the BBC reported in 2021 based on a contemporary study: "Almost half (47%) of US arms exports went to the Middle East, with Saudi Arabia alone accounting for 24% of total US arms exports".²¹ However, the Saudi attempt to move away from its traditional ties with the United States along with President Biden announcing his will to cut off or reduce weapons sales to Saudi Arabia (along with the UAE) due to their involvement in the Yemen conflict²² contributed to an already existing policy of diversification. Still, the United States for its part actively continue to be involved in the modernization project of the Saudi navy. In 2017 the US and the Kingdom exchanged letters of intent for a US\$350 billion deal to last ten years. It included, *inter alia*, Multi – mission surface combat ships produced by Lockheed-Martin and equipped with sophisticated counter radar systems, anti-aircraft and electronic intelligence means. In February 2024 Lockheed Martin awarded Terminal High Altitude Area Defense (THAAD) subcontracts to a pair of Saudi Arabian suppliers, paving the way for a first international customer to locally produce parts of the anti-ballistic missile system.²³ The US on in late April 2024 also approved training deal for Saudi Arabia's Naval Forces worth \$250 million. The Pentagon says the training will enhance Riyadh's ability to defend itself against regional malign actors and

¹⁹ *Tactical Report*. (July 4, 2023). [Saudi Arabia-Navy: Reactivation of light submarines and underwater systems project](#).

²⁰ Naval News Staff. (December 5, 2021). [Navantia Launched The 5th Avante 2200 Corvette For Royal Saudi Navy](#), *Naval News*.

²¹ BBC. (March 15, 2021). [US remains top arms exporter and grows market share](#).

²² Uddin, R. (February 19, 2021). [Saudi Arabia arms sales: Which countries are still exporting?](#) *Middle East Eye*.

²³ Helou, A. (February 5, 2024). [Lockheed Martin strikes subcontractor deals in Saudi Arabia for local THAAD parts production](#), *Breaking Defense*.

support US Navy efforts to enforce freedom of navigation.²⁴ Considering the US interest in gaining Saudi Arabia back and moving it away from its strong relations with China and Russia it is quite possible that this deal of some highly sophisticated equipment is only the first of its kind with possible future ramifications for the Saudi navy as well. Prior to that in 2019, Lockheed Martin was awarded a \$1.5 - \$1.96 billion foreign military sales contract to design and construct four Multi-Mission Surface Combatants (MMSC).²⁵

Last, but judging from the recent Saudi diplomatic moves, not least, China and the Kingdom agreed in late 2022 on Chinese sale of US\$4 billion worth of weapons to the Kingdom. How much of it is dedicated to the navy is yet unclear, but the deal may herald a new era of building up China as a new major supplier to the Kingdom.

Conclusion and outlook

Saudi Arabia under MBS reached a strategic decision with the keyword being diversification. That along with abandoning old paradigms has guided his policy path and eventually his national strategy. The Red Sea arena is evidently one of most acute areas that will determine the survival of the Kingdom. All that considering the double reality of Iran, a temporary quiet neighbor, taking over of the Persian Gulf while attempting to become the hegemon in the Red Sea as well. With the sea outlets of the kingdom (Straits of Hormuz and Bab al-Mandeb) along with the Suez Canal at risk of being blocked by Iran or its proxies the Kingdom has dramatically expanded its safety net: from secret military and naval coordination with a former enemy, Israel, to building an interest among world players in the existence of the Kingdom. This way China, Russia, India, and others have become allies and sources of security backing. Yet, the very foundation of the Saudi kingdom is a strong and present navy in both arenas. In the Persian Gulf it is mainly defensive, in the Red Sea it is a tacit coalition with Israel aiming at a joint control of the region on top of its close relations with Egypt and attempts at enlisting Sudan and Djibouti. The current situation in the Red Sea will clearly be influenced by the outcome of the war that Israel is engaged in Gaza and the Israeli reaction to the American pressure. Looking ahead into the years to come it is safe to assume that the Saudi disengagement from the United States and the increasing interest in forming a working coalition with Israel will be noticed in the next Saudi moves in the Red Sea.

²⁴ Uddin (2021).

²⁵ Vavasseur, X. (March 16, 2021). [Lockheed Martin Started Construction On Saudi Arabia's 2nd MMSC](#), *Naval News*.

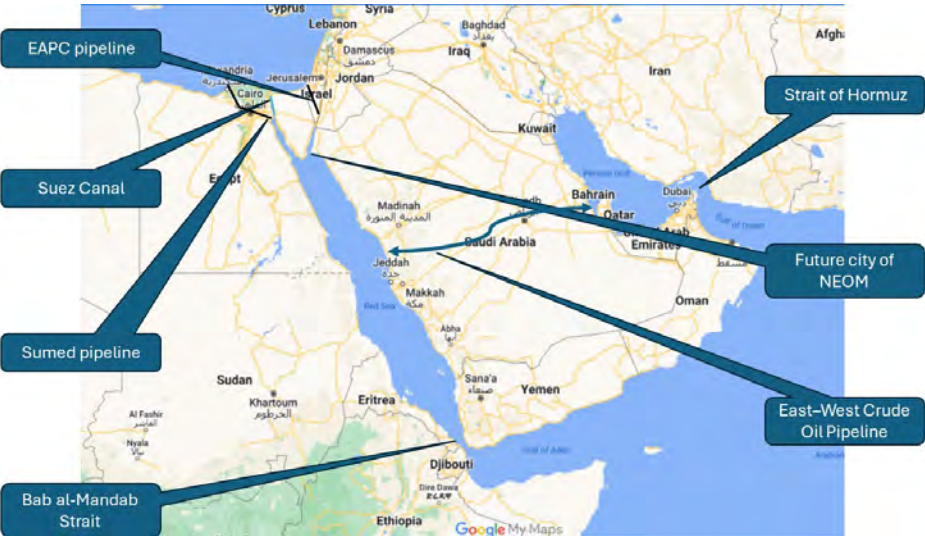


Figure 1: Places mentioned in the Chapter

Nautical Resilience: India's Ongoing Maritime Security Evolution

Vaasu Sharma

Introduction

India's strategic positioning in the Indian Ocean Region (IOR) holds significant importance for its diplomatic, military, and regional activities. The security landscape of India is intricately connected to these activities due to the proximity of both immediate and extended neighbors. Ensuring a secure and stable Indian Ocean is crucial for India's efforts to create a safe international environment. The country heavily relies on this ocean for various purposes such as shipping, energy imports, trade, tourism, and fishing. With a coastline stretching 7,517 kilometers and 14,500 kilometers of navigable waterways, India accommodates 212 active ports, comprising 12 government-owned ports and 200 immediate and minor ports, facilitating the movement of approximately 1,400 million tonnes of cargo annually. Additionally, other significant players in the region, including China, the UAE, Saudi Arabia, Türkiye, and Russia, have been increasing their investments and collaborations with Indian Ocean states.¹

The US has also shifted its strategic attention to the Asia-Pacific region because it sees the Indo-Pacific as becoming more important. The US has become more involved and present in Asia since the "pivot to Asia" policy was announced in 2011. This has led to stronger ties and partnerships with countries like India, Japan, and Australia. One important part of the pivot has been improving the agreement between the US and India on maritime security. In the "Joint Strategic Vision for the Asia Pacific and Indian Ocean Region" which was released in 2015,² both countries agreed on a set of basic marine security rules. The US has always wanted India to have a bigger defense role in the Pacific Ocean. But the US and India have different ideas about the Indo-Pacific. The US sees "Indo" as the area between its west coast and India's west coast, but India sees it as the whole Indian Ocean.³ Despite these differences, the US pivot has given the two countries a way to work together more on maritime security and help shape the new regional order.

IOR is vital for international energy vessel trade. India's maritime diplomacy has always been linked to its naval push to East Asia. In recent years, India has dedicated enough

¹ Baruah, D. M., Labh, N., and Greely, J. (June 15, 2023). [Mapping the Indian Ocean Region](#). *Carnegie Endowment for International Peace*.

² Thakker, A. (2019). [U.S.-India Maritime Security Cooperation](#). In *CSIS*.

³ Saha, P. (2020). From 'Pivot to Asia' to Trump's ARIA: What Drives the US' Current Asia Policy?. ORF occasional paper, 236; Sakhuja, V. (January 27, 2024). [North Arabian Sea Crescent: The New Maritime Hotspot and India's Maritime Security](#). *DEFSTRAT*, 17(6).

naval resources and used clever diplomacy in the IOR and West Asian waters to shift this attitude. Despite IOR's three main choke points—the Straits of Malacca, Hormuz, and Bab-el-Mandeb—36 million barrels of oil, 40% of global oil production, pass through them daily.⁴

India's economy relies on the Red Sea's trade between the Indian Ocean and the Mediterranean. India's trade with Europe and North Africa depends on it. Western Asia's oil and gas resources have made the Red Sea route more significant. However, the Gaza conflict between Israel and Hamas has affected the Red Sea, eastern Mediterranean, and northern Arabian Sea. This conflict hinders sea transport and threatens India's security. Since maritime battles represent a greater threat, India is facing more hurdles than continental security.

The Indian Navy patrols the IOR from eastern Africa to western Australia. From the Horn of Africa to the Straits of Malacca, it is present in Australian waters but not prominent.⁵ Traditionally, India has focused on land-based threats, neglecting its maritime domain. India's defense budgets show this lack of concentration, with the Navy receiving the lowest funding of the three forces. India now prioritizes maritime issues and the Indian Ocean in its foreign policy. Since 2014, PM Modi has led a national policy to expand the maritime sector and boost maritime capabilities and influence.

The principal challenges confronted by the Indian Navy are situated in the western Indian Ocean, significantly remote from the shores of India. Without overseas military installations, the Indian Navy relies exclusively on agreements such as logistics exchange agreements with foreign nations to enhance its capabilities for deployment and maintenance of its local representation.

Politically, India separates the Indian Ocean into the eastern and western basins and emphasizes its involvement in the eastern basin. India focuses on the Arabian Sea, Bay of Bengal, and Persian Gulf along the northern Indian Ocean. With its regular naval presence since the anti-piracy operations of 2008, India has been a prominent participant in the geopolitics of the Western Indian Ocean.⁶ India has expanded oil imports from Russia and

⁴ Baruah et al. (2023).

⁵ Baruah, D. M. (May 12, 2022). [Maritime Competition in the Indian Ocean](#). *Carnegie Endowment for International Peace*.

⁶ Ibid.

exported refined petroleum products to the West through the Suez Canal from 2022, making the Red Sea and Gulf of Aden even more significant.⁷

The establishment and functioning of Chabahar port in Iran has significantly enhanced India's maritime prominence and sway in the Western Indian Ocean. Situated on the southern coast of Iran, adjacent to the Gulf of Oman, Chabahar plays a pivotal role as a strategic entry point for India to access markets in Iran, Afghanistan, and Central Asia. In 2016, India entered into a trilateral deal with Iran and Afghanistan to facilitate the development of the Shahid Beheshti terminal at Chabahar port. India has made a financial investment of more than \$120 million and obtained a 10-year agreement to build and manage the port, demonstrating its dedication to turning Chabahar into a prosperous center for maritime activities.⁸ India seeks to exploit the advantageous geographical position of Chabahar in order to circumvent Pakistan and develop a direct route to Afghanistan and Central Asia. This would diminish India's reliance on neighboring competitors. India's growing presence in the Middle East is exemplified by the progress made in developing the Chabahar port. This demonstrates India's proactive efforts to promote its economic and geopolitical interests in the Western IOR.

While Sri Lanka and the Maldives are part of South Asia and its sub-regional groups, other nations of interest to India such as Mauritius, Seychelles, Madagascar, and the Comoros are in Africa. Mauritius and Seychelles exhibit a larger Indian diaspora compared to Madagascar and Comoros. Port Louis and Victoria are part of India's Indian Ocean outreach due to this. India gives priority to Sri Lanka and Maldives, then Mauritius and Seychelles in strategic cooperation. India has limited reach in Madagascar and Comoros within the Indian Ocean. Sub-groupings have influenced the Indian Ocean's partition and India's approach to these states.⁹

India's Maritime Security Strategy

The Indian Navy regards the entire Indian Ocean, encompassing the Arabian Sea, Bay of Bengal, Persian Gulf, Gulf of Oman, Gulf of Aden, Red Sea, and their coastal regions, as its "primary areas of interest". These areas are determined and influenced by political leadership.

⁷ urjar, S. (January 12, 2024). [The Crisis in Red Sea and Gulf of Aden: Strategic, Economic, Political and Maritime Dimensions](#). *Indian Council of World Affairs*.

⁸ Kumar, V. K. (June 24, 2024). [India's Ambitions in Chabahar: Securing the Project Amidst Financial and Regional Hurdles](#), Centre for Public Policy Research (CPPR).

⁹ Baruah (2022).



Figure 1: The Indian Ocean region and the places mentioned in the article

India's evolving strategy in the IOR now includes elements like countering sea terror, piracy, and Chinese presence. The Security and Growth for All in the Region (SAGAR) and Indo-Pacific Oceans Initiative (IPOI) are India's comprehensive strategies for IOR and Indo-Pacific. Both strategies emphasize the importance of maritime security for a safe and prosperous maritime domain.¹⁰

Strengthening its capabilities and those of regional countries has helped the Indian Navy lead regional security operations. In 2007, the Information Fusion Centre-IOR (IFC-IOR) was established as the first regional framework for "white shipping" information sharing. The term "white shipping" refers to commercial merchant vessels - ships used for the global trade of goods and resources. Sharing information about the identity, movement, and activities of these commercial ships is crucial for enhancing maritime domain awareness and coordinating effective responses to transnational threats like illicit fishing, drug smuggling, and human trafficking. This collaborative approach has enabled

¹⁰ Godbole, A. (June 22, 2022). [Extending India's Maritime Security Strategy](#). Gateway House.

the Indian Navy and its regional partners to better monitor and address these concerns. By fostering this information-sharing network, the IFC-IOR has become a vital hub for promoting regional security and stability in the IOR. The Indian Ocean Naval Symposium (IONS), founded in 2008 by the Indian Navy, aims to improve maritime cooperation among littoral state Navies by providing an open and inclusive forum for discussion of regionally relevant maritime issues.

The current "Information Management and Analysis Centre (IMAC)" under the Indian Navy is undergoing an upgrade to the National Maritime Domain Awareness (NMDA) Centre. This upgrade, which could take up to three years, will allow fifteen agencies under seven Ministries to access and exchange information, allowing for a thorough assessment of maritime domain awareness (MDA) in the Arabian Sea.¹¹

The Indian-flagged commerce vessels operating in the area are constantly monitored by IMAC and IFC-IOR. To facilitate an MDA operating framework for the entire Indian Ocean, the Indian Maritime Administration Central (IMAC) is anticipated to be linked with Singapore's Information Fusion Centre and Madagascar's Regional Maritime Information Fusion Center. The Ministry of Earth Sciences has also strengthened New Delhi's maritime engagement with its neighbors by training partner countries in operational oceanography, extreme weather forecasting, and climate change proofing vital infrastructure. Delhi has bilateral maritime white-shipping agreements with 22 nations and the Virtual Regional Maritime Traffic Centre.¹²

The Indian Navy published Ensuring Secure Seas: Indian Maritime Security Strategy in 2015. Increasing maritime cooperation and coordination and providing a framework for stakeholder synergy were the goals. Indian maritime security was affected by three occurrences events. The move from a Euro-Atlantic to an Indo-Pacific paradigm and the repositioning of global economic and military power toward Asia have caused substantial political, economic, and social developments in the IOR and affected India's maritime environment. After the 2008 Mumbai attacks,¹³ coastal and offshore security was reassessed. Third, nationally recognized maritime security led to a more inclusive strategy.

¹¹ Peri, D. (January 2, 2024). [National Maritime Domain Awareness centre to be ready in three years.](#) *The Hindu*.

¹² Basu, P. (July 23, 2023). [Maritime India: The Quest for a Steadfast Identity.](#) *ORF*.

¹³ The 2008 Mumbai attacks were a series of terrorist attacks that took place in November 2008, when 10 members of Lashkar-e-Taiba, a militant Islamist organisation from Pakistan, carried out 12 coordinated shooting and bombing attacks lasting four days across Mumbai.

The Indian Navy introduced Mission Based Deployment in 2017 to increase its Indian Ocean presence and visibility. The project seeks Navy leadership in crucial Indian Ocean security sectors. The Gulf of Aden, northern Arabian Sea, Lakshadweep and Maldives EEZs, Seychelles and Mauritius EEZs, northern Bay of Bengal, Andaman and Nicobar Islands, and Straits of Malacca are seven zones where 15 warships and reconnaissance aircraft patrol year-round.¹⁴

India's strategic relations with its maritime surroundings focus on developing and enhancing its MDA to deter adversaries and ensure maritime security and strategic benefit. India wants to provide real-time maritime information sharing via military satellite to combat regional transnational crime and monitor maritime risks.

Developments in Middle East Theater

Following the Israel-Hamas conflict outbreak on 7th October 2023, Houthi rebels attacked merchant ships in solidarity with Palestinians.¹⁵ The Houthis are a Shia-Islamist group controlling the north-western part of Yemen, part of the 'axis of resistance'. Their attacks aim to link the Gaza war with the global economy, highlight Palestinian issues, and show their capability. Yemen has been in conflict since 2014, with Houthi rebels surviving military intervention by Saudi Arabia and UAE. The conflict in Yemen is regarded as a proxy conflict between Iran and Saudi Arabia, with the Houthis being supported by Iran. Iran's presence in Yemen near Bab-el-Mandeb is crucial, allowing them to strike against Israeli and American interests and to practically affect one of the busiest maritime lanes in the world. Iran endorses Hezbollah in Lebanon and Hamas in the West Bank and Gaza, providing them with a strong network of proxies in the region (Minor & Huggard, 2024).

In response, several commercial shipping companies have adjusted their routes by redirecting their container ships from the Red Sea to the Cape of Good Hope route in the southern part of Africa. Maersk and Hapag-Lloyd have also declared their decision to reroute ships on December 15, 2023.¹⁶

If shipping companies choose to circumvent this route, transportation expenses will likely rise, leading to delays for consumers in Europe and Asia. This scenario could exacerbate inflation in vulnerable economies already struggling with the aftermath of the Russia-

¹⁴ Baruah, D. M. (June 30, 2020). [India in the Indo-Pacific: New Delhi's Theater of Opportunity](#). *Carnegie Endowment for International Peace*.

¹⁵ Yerushalmy, J. (December 19, 2023). [Red Sea crisis explained: what is happening and what does it mean for global trade?](#) *The Guardian*.

¹⁶ Ahmed, S. N. (February 19, 2024). [The Indian Navy and Maritime Security in the Red Sea](#). *Manohar Parrikar Institute for Defence Studies and Analyses*.

Ukraine conflict.¹⁷ The Houthi assaults on worldwide shipping must be comprehended within this context. It has been documented by the Armed Conflict Location & Event Data Project (ACLED) that there have been over 50 violent incidents in the Red Sea since October. Notably, only 250 incidents have occurred off the coast of Yemen since 2015.¹⁸ The attacks have been intensifying and occurring more frequently in a strategic manner.

In a recent occurrence, a container vessel associated with Israel, known as MSC Aries, was apprehended by Iran's Revolutionary Guard in the Strait of Hormuz on April 13, 2024. The crew of 25 individuals on board the vessel flying the flag of Portugal consisted of 17 Indians, including the Master, four Filipinos, two Pakistanis, one Russian, and one Estonian. Subsequent to the incident, India has been maintaining constant communication with the Iranian authorities.¹⁹

Operation "Prosperity Guardian" was launched by the US naval task force Combined Maritime Forces (CMF) to counter the Houthi attacks. The US invited important allies and partners to join the operation. Initial announcements included the UK, Bahrain, Canada, Netherlands, Norway, Germany, Greece and Seychelles in the coalition. The goal was to "jointly handle security concerns in the southern Red Sea and the Gulf of Aden" to secure "freedom of navigation for all countries" and "regional stability and prosperity".²⁰ Spain and Italy, however, are understood to have steered clear of the operation led by the US. The initiation of the naval coalition by America and the prevention of attacks have not succeeded substantially in stopping the Houthis.²¹

India in Middle East Theater

India is a founding member of the Indian Ocean Rim Association (IORA) established in 1997. The IORA has historically prioritized economic cooperation over maritime security. India's chairmanship of the IORA in 2011 saw a significant shift towards maritime safety and security.²²

¹⁷ Gurjar (2024).

¹⁸ Nevola, L. (January 5, 2024). [Q&A: Why Are Yemen's Houthis Attacking Ships in the Red Sea? ACLED](#).

¹⁹ Laskar, R. H. (April 13, 2024). [India in touch with Iran for release of Indian crew members of seized ship](#). *Hindustan Times*.

²⁰ DoD. (December 18, 2023). [Statement from Secretary of Defense Lloyd J. Austin III on Ensuring Freedom of Navigation in the Red Sea](#). *U.S. Department of Defense*.

²¹ Gurjar (2024).

²² Godbole (2022).

India largely ships steel, engineering items, textiles, chemicals, cars, and agricultural products to Europe and the West via the Red Sea. The diversion of routes has raised prices and reduced demand for long-grain Basmati rice and tea from India to West Asia, Europe, and the Americas, as well as fertilizers, sunflower oil, machinery components, and electronic goods into India.²³

According to New Delhi-based Research and Information System for developing Countries (RIS), India could lose \$30 billion in exports this year, a 6% decline, if more shipping goes through South Africa (Srivastava, 2024). Therefore, the ambitious India Middle East Europe Economic Corridor (IMEEC), proposed earlier at the 2023 G20 summit in Delhi to lower freight costs and transit time between India and Europe, has been disrupted. The rail freight corridors were supposed to link Mundra and Jawaharlal Nehru Port Trust, two IMEEC ports on the Indian coast,²⁴ to the Mediterranean through the UAE, Jordan, Saudi Arabia and Israel. With the conflict in Gaza, the IMEEC confronts a regional bottleneck since cooperation between Israel and its Arab neighbours is limited and Haifa cannot act as India's key gateway to the West owing to the conflict.

India acknowledges the spread of violence beyond the Red Sea. The country affirms that piracy and Houthis are not related. Participating actively, the Indian Navy engages in anti-piracy operations and rescue missions to safeguard India's interests and ensure maritime traffic safety.²⁵

The Indian Navy strategically deployed its indigenous Offshore Patrol Vessel INS Sumitra for anti-piracy and maritime security missions in East Somalia and the Gulf of Aden. On January 29, 2024, INS Sumitra successfully thwarted the FV Iman piracy attempt. A separate effective anti-piracy operation off the East Coast of Somalia led to the rescue of the Fishing Vessel Al Naeemi and its 19 Pakistani crew members from 11 Somali Pirates on January 28–29, 2024.

A drone strike occurred off the west coast of India on December 23, 2023, targeting the Liberian-flagged vessel MV Chem Pluto, which had 21 Indian crew members. This incident took place amidst attacks by Iran-backed Houthi militants on multiple commercial ships in the Red Sea, causing security concerns in New Delhi. On December 24, 2023, MV Sai Baba, a Gabon-flagged ship with an Indian crew, reported a drone attack in the Southern Red

²³ Mishra, R. D. (December 23, 2023). [Export of basmati rice could be affected by Red Sea attacks](#). *The Indian Express*.

²⁴ ANI. (November 15, 2023). ['India-Mideast-Europe corridor a win-win for all involved': Nirmala Sitharaman](#). *The Times of India*.

²⁵ Reuters. (February 1, 2024). [India Deploys Unprecedented Naval Might Near Red Sea](#). *Voice of America*.

Sea. Prior to these events, pirates had hijacked the Malta-flagged MV Ruen on December 14.²⁶

Notably, India has increased its presence in the Arabian Sea, while China is being cautious about being active in this region due to concerns about its relationship with the Arab world.

The Iran Factor

Amidst heightened regional tensions with the United States, Iran has elevated its military cooperation with Beijing and Moscow. As part of this collaboration, Iran provided military drones to Russia after its invasion of Ukraine in 2022. In recent years, there has been an uptick in the frequency of trips to Iran by naval representatives from Russia and China.²⁷

In March 2024, Iran, China, and Russia collaborated in a 5-day naval drill known as 'Maritime Security Belt 2024' in the Gulf of Oman, located at the entrance of the Persian Gulf. The key focus of this training was to strengthen the security of commercial operations in the maritime sector. The IRGC of Iran recently took part in a military drill, deploying new naval vessels like the Shahid Soleimani corvette. This vessel is equipped with advanced anti-ship cruise missiles that have the capability to engage targets at varying distances.²⁸ Moreover, it is armed with Vertical Launching Systems, facilitating the deployment of surface-to-surface and surface-to-air missiles.

Iran has persistently articulated its disapproval of the establishment of military bases in the Persian Gulf by the United States, United Kingdom, and France. However, Iran is willing to consider the presence of the People's Liberation Army Navy in Djibouti (Sakhuja, 2024). Furthermore, it engages in joint naval drills in the Arabian Sea alongside the Chinese and Russian naval forces. Positioned on opposite sides of the Strait of Hormuz, Iran and Oman have the legal responsibility to ensure the well-being and safety of global maritime traffic in that region. Nevertheless, conflicts have often surfaced between Iran and both the United States and the United Kingdom over their rivalry for control in the area.

India's diplomatic ties with the Gulf countries are indirectly influenced by the political dynamics of the Middle East, since India frequently becomes entangled in the competition

²⁶ Ahmed (2024).

²⁷ AP News. (March 12, 2024). [Iran, Russia and China show off their ships in a joint naval drill in the Gulf of Oman](#).

²⁸ Freid, S. L. (March 15, 2024). [China-Russia-Iran Maritime Drills Send Signal to West](#). *Voice of America*.

between Iran and its Arab counterparts.²⁹ India, with its strong trading relations with Iran, has chosen not to participate in the coalition led by the United States against the Houthis. The Arab Gulf countries exhibit reluctance in furthering their military involvement with India due to its affiliations with Iran.³⁰ Simultaneously, India's reluctant attempt to separate itself from Iran regarding the nuclear issue has created an opportunity for China to establish stronger connections with Iran. India-Iran relations encompass both economic and security aspects. Despite India's decision to stop providing Iran with refined petroleum products due to the nuclear stalemate between Tehran and certain Western nations, India continues to view Iran as a crucial energy provider.

The Israel Angle

In October 2021, a quadrilateral agreement was signed by India, Israel, and the UAE with the United States (US), known as I2U2, owing to the increasing convergence of their economic and strategic interests. The main objective of this regional coalition is to collectively tackle global challenges through a focus on investments in water, energy, transportation, space, health, food security, and technology. The initiation of the India-Middle East Food Corridor by India, Israel, and the UAE in 2022 was followed by the introduction of another project, the India-Middle East-Europe Economic Corridor (IMEEC), at the G20 Summit in New Delhi in September 2023. The IMEEC aims to boost economic growth by promoting economic harmonization among Asia, Europe, and the Middle East, serving as a multifaceted economic pathway.³¹

The emergence of the I2U2 and its successive advancements represent a noteworthy transformation in the geopolitical terrain of the Middle East. This transition has been enabled by a reconfiguration of geopolitical dynamics and has been sparked by the convergence of strategic and economic objectives shared between Israel and adjacent nations in the region. Undoubtedly, it has enhanced the opportunities for collaborative efforts involving multiple alignments in the region.

India has adopted a policy of de-hyphenation in its approach towards Israel and Palestine. The country is furthering its connections with Israel solely based on their individual merits and making sure to keep a clear distinction from the Palestinian issue. Unlike in the past, Indian administrations had associated the Israeli stance with the Palestinian dilemma.

²⁹ Grare, F. (2022). Is India a Maritime Player in the Gulf? *Middle East Institution, Insight*, 200(3).

³⁰ Rajvanshi. (February 2, 2024). [India Is Walking a Diplomatic Tightrope in the Red Sea Conflict](#). *TIME*.

³¹ Ningthoujam, A. (January 16, 2024). [India-Middle East Relations Unsettled by Israel-Hamas Conflict](#). *Geopolitical Monitor*.

Thus, India was obstructed from fully maximizing the opportunities present in the Indo-Israeli partnership.

The implementation of the "de-hyphenated policy" became apparent during Modi's stand-alone visit to Israel in July 2017, where he communicated a resolute message to the global community regarding India's unapologetic stance on establishing ties with Israel. Furthermore, India eliminated the usage of "East Jerusalem" in official declarations and, during a speech in 2017 while hosting Mahmoud Abbas, the President of the Palestinian Authority, Modi articulated optimism for the realization of a sovereign, independent, unified, and viable Palestine living peacefully alongside Israel.³² These occurrences indicated a gradual shift in New Delhi's approach towards its Palestinian policy, demonstrating its intention to manage its association with Palestine separately from its ties with Israel.

Measures by India to Bolster its Maritime Domain

The Indian government and the Navy have enacted various measures to confront maritime security challenges, which include engaging in diplomatic efforts, strengthening Coordinated Patrols (CORPATs), ensuring a continuous presence, conducting anti-piracy missions, and promptly responding to distress signals from affected vessels. The Indian Navy has markedly improved its maritime surveillance activities in the Central/North Arabian Sea and heightened its force capabilities. India is projected to pursue a two-fold approach to maritime security, leaning on diverse partnerships for non-traditional maritime security risks in the Indo-Pacific region and the Quadrilateral Security Dialogue (QUAD), which involves collaboration between the United States, Japan, Australia, and India.

As mentioned, India has abstained from participating in the U.S.-led initiative Operation Prosperity Guardian in the Red Sea. Nonetheless, recognizing the critical significance of the area and in order to safeguard the sea routes, India has dispatched a substantial naval fleet to the region comprising 12 military vessels in addition to reconnaissance aircraft. A duo of sophisticated ships has been stationed in the Gulf of Aden while the remaining ten are positioned in the Northern and Western parts of the Arabian Sea.³³

To uphold a preventive stance and strengthen its dedication to maritime safety, the Indian Navy has positioned its guided missile destroyers, namely INS Mormugao, INS

³² MEA. (May 16, 2017). [Press Statement by Prime Minister during the State Visit of President of Palestine to India](#). Ministry of External Affairs, Government of India.

³³ Pant, H. V., and Bommakanti, K. (February 7, 2024). [Dynamic Shift: Indian Navy in the Red Sea](#). *Observer Research Foundation*.

Kochi, INS Kolkata, INS Chennai, and INS Vishakhapatnam in the Arabian Sea area. As per media reports, it has been observed that INS Kolkata is stationed at the entrance of the Red Sea, INS Kochi is positioned to the south of Yemen's Socotra Island, INS Mormugao is located in the western region of the Arabian Sea, while Chennai is situated in the central Arabian Sea. Moreover, INS Visakhapatnam has been given the responsibility of patrolling the northern Arabian Sea (Ahmed, 2024).

Indian naval vessels deployed in the Arabian Sea and Gulf of Aden are equipped with a diverse array of sophisticated armaments including BrahMos missiles, surface-to-air missiles, anti-submarine warfare helicopters, Sea Guardian drones, and P8 surveillance aircraft.³⁴ The primary emphasis of the current mission of the Indian Navy has been on executing anti-piracy and anti-hijacking operations, which also encompass a substantial naval special operations force component. Over 250 vessels have been inspected by the Indian Navy, with Western powers directing their attention towards incursions by Yemen's Iran-backed Houthis (Reuters, 2024). The surface vessels of the Indian Navy currently participating in anti-piracy efforts cover a vast area of 2.5 million square nautical miles, which poses a significant challenge for any single naval force to patrol effectively.

The Indian navy has persistently conducted training sessions for naval personnel from the Gulf region, with a key emphasis on enhancing connections with Saudi Arabia and the UAE in recent times. The UAE, in particular, has seen a growth in its interests in the Indian Ocean, leading to increased interactions with India and competition with China along the eastern African coasts (Grare, 2022). A significant milestone was reached in 2017 when India and the UAE established a comprehensive strategic partnership, thereby broadening the horizons of their defense collaboration. Subsequently, in March 2018, the navies of India and the UAE engaged in their inaugural bilateral exercise. Concurrently, relations with Saudi Arabia underwent a transformation. Commencing in 2016, a series of treaties paved the way for the first-ever joint naval drill between the two nations, which took place during Modi's visit to Riyadh in October 2019.³⁵ During this visit, both parties also committed to enhancing cooperation in safeguarding the waterways of the Indian Ocean and the Gulf region against potential threats that could impact the entire area.

India's military collaboration with its maritime neighbours is consistently growing. A \$50-million agreement was endorsed with Maldives in 2021 to bolster the enhancement

³⁴ FP Explainers. (January 9, 2024). [How Indian Navy's warships are battling pirates, drones in the Arabian Sea](#). *Firstpost*.

³⁵ Siddiqui, H. (October 25, 2019). [Strengthening ties: India-Saudi Arabia to hold the first-ever joint naval drill](#). *Financial Express*.

of the country's coast guard and other security infrastructure endeavors.³⁶ Additionally, a memorandum of understanding was sanctioned between Sri Lanka and India in 2022 to create a Maritime Rescue Coordination Center, a pact arising from India's Security and Growth for All in the Region (SAGAR) initiative.³⁷ In the fiscal year 2019–20, India allocated approximately 1.03 billion US dollars as grants, predominantly directed towards countries in the IOR. In contrast, it is estimated that China dispensed 5.9 billion US dollars as grants within the same timeframe. Consequently, India has turned to Japan and more recently, the EU, to explore alternative funding avenues for its regional maritime associates.³⁸

India expanded its strategic partnerships with the US, Japan, and Australia to signal China. In July and September 2023, the US Navy inked a five-year Master Shipyard Repair Agreement (MSRA) with Larsen and Toubro (L&T) shipyard in Chennai and Mazagon Dock Shipbuilders in Mumbai to repair US military warships there.³⁹ Cochin Shipyard inked a similar MSRA in April 2024. Both governments are also examining Kolkata port for a new MSRA pact to make India a key Indo-Pacific base for US Navy ship maintenance and repair.⁴⁰

Conclusion

Enhancements in India-Middle East defense ties revolve around joint military exercises, counterterrorism actions, and cybersecurity partnerships. India aims to boost military diplomacy and security cooperation in the region to protect its strategic interests. The Gulf Cooperation Council countries (GCC) are also keen on establishing partnerships for security, economic, technological, and political reasons. India's military diplomacy with the Gulf region is expected to make further progress. Realpolitik and strategic interests are key factors bringing India and Gulf countries closer despite ideological differences. Terrorism remains a challenge, influencing Indian maritime strategy development. Other regional countries hope India will lead in infrastructure, maritime awareness, and humanitarian efforts. Despite the upheaval in geo-political matters impacting Indian shipping, India perceives a chance to position itself as a maritime leader emphasizing stability and peace.

³⁶ NDTV. (February 21, 2021). [India Signs Deal To Develop, Maintain Coast Guard Harbour In Maldives](#).

³⁷ Abeysinghe, A. (April 15, 2022). [India and Sri Lanka Sign Pacts to Enhance Maritime Security](#). *The Diplomat*.

³⁸ Godbole (2022).

³⁹ ANI. (July 11, 2023). [L&T signs ship repairing agreement with US Navy](#). *The Economic Times*.

⁴⁰ Mattoo, S. (May 1, 2024). [India, US to expand naval ship repair network](#). *Mint*.

The ongoing issues in the Red Sea region, the strategic waterway has seen exacerbated tensions and security challenges in the past few months. Piracy, arms trafficking, and the threat of regional conflicts have raised concerns about the safety of commercial shipping. The ongoing conflict between Hamas and Israel, with the Houthis backing Hamas, has further exacerbated the situation in the Red Sea. India has a vested interest in maintaining the free flow of trade through the Red Sea, as it is a critical route for its energy imports and exports. India has sought to enhance its naval presence and cooperation with regional partners to address these threats, including joint patrols, information-sharing, and capacity-building initiatives. As a regional power, India is well-positioned to play a constructive role in promoting stability and security in the Red Sea, which is crucial for its own economic and strategic interests.

Geo-economic analysis of the implications of the Houthi attacks on Israeli foreign trade

Ehud Gonen

Since 2014, a civil war has been raging in Yemen, during which the Houthis have taken control of territory in the country, including the port city of Hudaydah and are controlling the Bab-el-Mandeb Strait – one of the world's major maritime choke points. In November 2023, after the outbreak of the 'Israel-Hamas' war, the Houthis began attacking ships with ties to Israel. The Houthi attacks caused significant changes in global shipping traffic, which led to an international diplomatic and military response. In addition, the attacks caused Israeli shipping to completely avoid transiting the region, to the actual cessation of activity at the Port of Eilat, and to other economic impacts. The article analyzes the impact of the attacks on Israeli foreign trade from a geographical-economic perspective and attempts to quantitatively estimate the impact of the direct damage on Israeli foreign trade. Keywords: naval blockade, supply chain, international trade, Houthis, 'Israel-Hamas' War.

Introduction

About a month after the outbreak of the Israel-Hamas War, the Houthis in Yemen – an ethnic group affiliated with the Shia branch of Islam and supported by Iran – began attacking ships with ties to Israel.¹ The first ship was hijacked by gunmen who arrived by helicopter (the *Galaxy Leader*, which was attacked on November 19, 2023). In the four months since then and until the end of March 2024, about 60 ships were attacked by various means.² The attacks killed three sailors, captured 25 foreign citizens, and sank two ships (March 2024).

The Houthis control the Bab-el-Mandeb Strait – one of the world's major maritime choke points – through which about 15 percent of world trade goes through.³ The Houthis' goal is, among other things, to impose a trade blockade on Israel.⁴ Initially, the Houthis announced that they would attack any ship flying the Israeli flag or owned by Israel, and

¹ Shipping is the most global sector in the world economy. The ownership and management of a merchant ship consists of at least eight different relationships that are not necessarily legally or geographically related. These relationships (or layers of management) include: beneficial owner, holding company, ship registration (flag), management, operation, port of origin, port of destination, country of origin of the goods, and nationality of the captain and crew.

² C.R.S INSIGHT (March 2024). [Houthi Attacks in the Red Sea: Issues for Congress](#).

³ United Nation Conference on Trade and Development – UNCTAD. (2024). *Navigating troubled Waters*, February 2024, p. 5.

⁴ Additional goals of the Houthis can be listed, such as harming Israeli sovereignty and Israeli assets in the attack on the city of Eilat, expressing solidarity with Hamas and the Palestinians, as well as aspects of Yemen's internal politics such as increasing local legitimacy, and more.

later the threat was extended to ships with ties to Israel or ships that have visited an Israeli port. However, it should be noted that in the vast majority of Houthi attacks, there is no known relation between the ship that was attacked and Israel. The international community sees these attacks as a violation of the principles of freedom of navigation and transit passage. On January 22, 2024, the UN Security Council passed a resolution condemning the attacks⁵ and calling for the immediate release of the hijacked ship, and an international coalition led by the United States and Britain was established, which launched a military operation called Prosperity Guardian⁶ to protect the strait. Although the coalition's attacks are damaging Houthi assets on land and thwarting some of the Houthi attacks by intercepting missiles and drones, it appears that these efforts are far from curbing the Houthi attacks, and even after months of fighting, the Houthis are still attacking and damaging ships passing through the area. As a result of the attacks, many shipping companies have changed their ship routes, mainly on shipping routes between the Indian Ocean and the Mediterranean Sea. Given the centrality of the strait in global shipping, the impact of these changes in shipping routes is significant from an operational and economic perspective.⁷

The purpose of this article is to analyze the impact of the Houthi attacks and the maritime blockade that they effectively imposed on Israel in the Red Sea, and thus on Israeli foreign trade. The commercial consequences of the Houthi attacks can be divided into three main groups: The first – direct consequences on the Israeli economy, resulting from the logistical changes made by importers, exporters and shipping companies as a result of the attacks. These consequences are mainly expressed in the increase in transportation costs and the additional time until the goods arrive in Israel. The second group concerns direct local economic damage (of which a large part), mainly the de facto closure of the Port of Eilat, the cessation of phosphate exports from this port and damage to Israeli shipping companies. The third group, which this article does not discuss in detail and is also the most difficult to measure, is the long-term geostrategic consequences on Israel, which embody heavy indirect economic consequences.

The first part of this chapter describes the historical, legal, and theoretical background of the blockade of Straits, the second part discusses the general logistical effects of the

⁵ *United Nations*. (January 10, 2024). [Adopting Resolution 2722. \(2024\). by Recorded Vote, Security Council Demands Houthis Immediately Stop Attacks on Merchant, Commercial Vessels in Red Sea.](#)

⁶ U.S. Department of Defense. (December 21, 2023). [Ryder Gives More Detail on How Operation Prosperity Guardian Will Work.](#) *DOD News*.

⁷ United Nation Conference on Trade and Development – UNCTAD. (February 2024). *Navigating troubled Waters*.

attacks, the third part deals with the impact on Israeli trade passing through the Bab-el-Mandeb Strait, and the fourth part is devoted to discussion and conclusions.

Strategic and historical background: Blockade of Straits

Attacking commercial watercrafts and imposing a naval blockade as part of a military campaign are age-old practices. The Houthi attacks are characterized primarily by littoral warfare against watercrafts passing through an international strait. This activity is a form of sea denial,⁸ with Houthi control being exercised primarily through land-based weapons systems. This type of naval warfare differs, for example, from the blockade imposed by the Allies on the ports of the Central Powers in World War I using battleships, or from the Battle of the Atlantic in World War II, when the Germans attempted to attack supply convoys from the United States to Britain using submarines, and is also different from the blockade of straits and ports using naval mines, as was done in the Russo-Ukrainian War,⁹ or the Egyptians' mining of the Jubilee Straits in the Yom Kippur War.¹⁰

In the 17th–19th centuries, when Britain was a great maritime empire, it was careful to control the world's key choke points through permanent littoral bases near those straits. Thus, British naval bases were established in Singapore, near the Strait of Malacca, in the Strait of Gibraltar, which is the gateway to the Mediterranean Sea, and in the Suez Canal.¹¹ However, selective closure of straits to commercial watercrafts of a particular country after World War II is a relatively rare occurrence. It may be noted that Egypt closed the Straits of Tiran to Israeli shipping (see below). Iran, which controls the Strait of Hormuz at the entrance to the Persian Gulf, has repeatedly threatened to close it to oil exports if attacked by the West.¹² In recent years, Iran has indeed hijacked or damaged oil tankers as they passed through or around the Strait of Hormuz, but these activities were carried out from the sea and in the air, and not by firing from the coast and not as littoral warfare.

⁸ Chorev, S. (2021), *Maritime Domain, Maritime Strategy and Everything in Between*. IDF – Systems Publishing and the Center for Maritime Policy and Strategy Research, University of Haifa, pp. 56, 396.

⁹ Center for Naval Policy and Strategy Research (2022). Summary of expert discussion on the naval campaign between Russia and Ukraine.

¹⁰ Guetta, S. (2021). The Egyptian Sea Mining Surprise during the Yom Kippur War (October War 1973). In: S. Chorev and A. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, Center for Naval Policy and Strategy Research, University of Haifa.

¹¹ Chorev (2021).

¹² Guzansky, Y., Lindenstrauss, J., and Schechter, Y. (2011). Maritime "Bottlenecks": The Vulnerability of Seafarers in the Middle East. Strategic Update, 14(2). Institute for National Security Studies (INSS).

¹³ The use of choke points as a policy tool has been called the weaponisation of choke points, meaning the use of choke points as a weapon within a broader foreign policy framework.¹⁴

In some of the world's maritime choke points, an international regime prevails within the framework of a specific treaty, such as the 1936 Montreux Convention, which deals with the Bosphorus and Dardanelles straits under Turkish control. However, there is no international treaty on the subject of passage through the Bab-el-Mandeb Strait, and a general regime of 'transit passage' prevails there under the Convention on the Law of the Sea.¹⁵ The international community sees these attacks as a clear violation of the principle of the right of passage. Added to this is the fact that the Houthis are a non-state organization that has been defined by the United States as a terrorist organization,¹⁶ and therefore are not considered a littoral state bordering the Strait, whose set of duties and rights regarding it is defined in the Convention on the Law of the Sea. On January 22, 2024, the UN Security Council adopted a resolution condemning the attacks and calling for the immediate release of the hijacked ship.¹⁷

The Houthi attacks initially targeted (at least according to the official statements of the Houthis) only ships with Israeli ties. After the establishment of the international coalition, the Houthis attacked military and merchant ships of the coalition countries. In this way, these attacks join the broader issue of Israeli freedom of navigation in the Red Sea, which has accompanied Israeli policy since the early years of the state. In 1956 and 1967, the Egyptians closed the Straits of Tiran to Israeli shipping towards the port of Eilat using coastal guns. The closure of the Straits was one of the reasons for the outbreak of Operation Kadesh (1956) and the Six-Day War (1967). Since the nationalization of the Suez Canal in 1956, Egypt even prevented Israeli ships from sailing through the canal, until the peace agreement between the countries in 1979.

¹³ Guetta, S. (2020). Iran's Maritime Policy as Expressed in the "Tankers War" of 2019. In S. Chorev and A. Gonen (eds.). *Maritime Strategic Evaluation for Israel 2019/20*. University of Haifa, Center for Maritime Policy and Strategy Research.

¹⁴ Medunic, F., (2021). A glimpse of the future. The Ever Given and the weaponisation of chokepoints. *European Council on Foreign Relations*, 23; Diane M., Kessler G. C., and Zorri, (2021). [Position, Navigation, and Timing Weaponization in the Maritime Domain: Orientation in the Era of Great Systems Conflict](#). *Joint Force Quarterly* 112, 12–21. National Defense University Press.

¹⁵ UNCLOS (1982). United Nations Convention on the Law of the Sea 1982, Part III. Straits Used for International Navigation.

¹⁶ US Department of State (January 17, 2024). [Terrorist Designation of the Houthis](#). *Department of State Press Statement*.

¹⁷ UNSC Resolution 2722 (January 10, 2024). [Security Council Demands Houthis Immediately Stop Attacks on Merchant, Commercial Vessels in Red Sea](#). *UN press release*.

From the establishment of the state of Israel in 1948 until the 1980s, the Israeli trade with Asia (including with South Africa and the countries of the east coast of Africa) was relatively small and consisted mainly of consumer goods, cars, and a few raw materials. An exception was the import of oil from Iran before the Islamic Revolution, some of which continued to Europe via the Eilat-Ashkelon oil pipeline (EAEP). Therefore, the issue of Israeli freedom of navigation in the Red Sea was more principled and strategic than commercial. Israel's limited maritime trade with Asia arrived at the port of Eilat or was absorbed among the many cargoes carried by global shipping not related to Israel, including in the Suez Canal. With the economic rise of China in the 1980s, after Deng Xiaoping's economic reforms, the share of Israeli trade with Asia began to rise, mainly in the area of imports.

Beyond the direct Israeli aspect, the Houthi attacks must also be analyzed from a broader strategic perspective. Preventing commercial shipping at choke points is one of the methods of exploiting control over these points, along with preventing the passage of warships and forces of third-party rival states.¹⁸ The trade routes in the Red Sea are a "transit sphere" at the intersection between several geopolitical and geo-economic regions, and harming them is a force multiplier in the hands of revisionist actors seeking to change the current world order, such as the Houthis and their Iranian supporters against Western countries and democratic players in the international system, of which freedom of navigation of global shipping is one of their most prominent symbols. The straits region is also an area of friction between the powers that maintain a naval presence in the region through naval bases in the port of Djibouti,¹⁹ international forces based in the region (CTF forces),²⁰ as well as the presence of naval forces from other regional players such as India, the United Arab Emirates, Saudi Arabia, Turkey, and Russia.²¹ These strategic aspects mean that the Houthi attacks are, according to their statements, selective towards Israel and the West, and are not ostensibly directed at ships with Chinese, Iranian, or Russian ties. Indeed, in March 2024, reports were published that the Houthis had allowed Chinese

¹⁸ Vego, M., (2018). *Maritime strategy and sea denial: Theory and practice*. Routledge.

¹⁹ In 2023, the following countries had a naval base in Djibouti (or a similar presence): United States, United Kingdom, Germany, Spain, France, China, Japan, and Saudi Arabia.

²⁰ The Combined International Maritime Task Force (CTF) is a task force established by the United Nations Security Council, in which over 20 countries participate, to secure peace in the Red Sea, Persian Gulf, and Arabian Sea regions.

²¹ Ben Ari, B. and Tredman, M. (2021). Geography and Strategy in the Red Sea – The Current Situation. In: S. Chorev and A. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, Center for Maritime Policy and Strategy Research, University of Haifa.

and Russian ships to pass through the Strait.²² Russia is not a significant player in the global shipping industry, but China is very dominant in this industry (the China state-owned shipping company COSCO is the fourth largest container shipping company in the world).²³ Continued Chinese use of the Strait could have mitigated the global economic effects of the Houthi attacks, but it seems that all major shipping companies are avoiding transit through the straits altogether, including Chinese companies.

The logistical consequences of the attacks in the Bab-el-Mandeb Strait

The Houthi attacks on ships passing through the strait is forcing most of the world's shipping on routes between the Indian Ocean and the Mediterranean Sea, that is, in trade between Asia and Europe, to circumnavigate the African continent instead of shortening the route through the Suez Canal. According to the UN's International Maritime Organization (IMO), traffic in the Suez Canal decreased by 70 percent from December 2023 to March 2024 compared to the monthly average in January-November 2023.²⁴ A review of ship transit data in the Suez Canal is a relatively good indicator of ship transit in the Bab-el-Mandeb Strait, but it should be remembered that there is also internal regional trade between the Red Sea countries that does not pass through the strait or the Suez Canal. In addition, there is trade that leaves the Red Sea and passes through the Suez Canal on its way to Europe, such as oil exports from ports on the Saudi coast of the Red Sea.²⁵

The decline in ship traffic is not the same for all types of ships and cargo. The sharpest decline was caused by ships carrying liquefied natural gas (LNG). These ships have completely stopped passing through the Bab-el-Mandeb Strait, apparently due to their high vulnerability. Another type of ship is those carrying vehicles – the passage of ships of this type has also almost completely stopped. As you may recall, such a ship (*Galaxy Leader*) was the first to be hit and hijacked by the Houthis. The third type of ship that saw a sharp decline is container ships. This category saw a decline of about 90 percent. Container trade accounts for only about 16 percent of world trade by weight but about 60 percent of the monetary value of trade, and is sometimes referred to as the "engine of

²² Dagher, S., and Hatem, M. (March 21, 2024). [Yemen's Houthis Tell China, Russia Their Ships Won't Be Targeted](#). *Bloomberg*.

²³ [Alphaliner TOP 100](#) (Container Companies Index).

²⁴ IMO (2024). Measures to Enhance Maritime Security, Update on the Red Sea. MSC 108/7/1.

²⁵ For example, from the port of Yanbu, which is the western end of the Saudi East-West Oil Pipeline. This is one of the oil pipelines with the highest capacity in the world. It transports oil from oil facilities in the east of the country to its west, to enable Saudi oil exports that bypass both the Strait of Hormuz and the Strait of Bab-el-Mandeb.

globalization"²⁶ (Israeli trade is characterized by a higher container rate than the world's and stands at about 45 percent by weight, and container trade accounts for most of Israel's trade with Asian markets, see below).²⁷ In the first half of the war (October 2023 to March 2024), all major shipping companies carrying containers rerouted their ships around Africa. The World Shipping Organization notes that maritime traffic of all types of ships passing around the Cape of Good Hope increased by about 85 percent. Other types of ships such as general cargo, bulk carriers, and others recorded a decrease in volumes of 30–50 percent in ship traffic in the Bab-el-Mandeb Strait.

The passage through the Suez Canal shortens the navigating distance from the Strait of Malacca to Rotterdam (the largest port of entry in Europe) by about 3,500 nautical miles, and therefore the shipping route that passes through the Bab-el-Mandeb Strait and further through the Suez Canal is one of the most important shipping routes in the world. Avoiding this route involves a long circumnavigation of the African continent, which adds orders of magnitude of about three weeks to the voyage (the duration of the voyage around Africa depends on various technical factors and the weather). The daily cost of operating a container ship can be tens of thousands of dollars per day to up to one hundred thousand dollars per day,²⁸ meaning that the cost of sailing around Africa (when including additional expenses such as fuel and other expenses) can reach one million dollars and even up to three million dollars for a large container ship. However, it should be noted that the passage through the Suez Canal also involves heavy costs. The cost of paying the canal authorities for the passage of a large container ship can also reach hundreds of thousands to a million dollars per passage.²⁹ It should be noted that the Suez Canal Authorities are flexible in determining the price of passage through the canal, and they grant discounts to certain ships according to market conditions, so the price of passage is not fixed.

Therefore, when we examine the direct economic cost of circumnavigating Africa compared to transiting the Suez Canal, we must subtract the costs of transiting the canal from the costs of circumnavigating it. Even after this calculation, the cost of navigating the long route is still hundreds of thousands or even a million dollars higher per ship (depending on the type and size of the ship) than transiting the Suez Canal. Although these are large sums, the additional cost per unit of cargo is not high. For example, a ship

²⁶ OECD (2020). Containerships – the engines of globalization and trade, OECD library.

²⁷ Shipping and Ports Authority (2023). Shipping and Ports Statistical Yearbook 2022. Ministry of Transportation Shipping and Ports Authority, p. 13.

²⁸ Hamburg and Bremen Shipbrokers' Association (VHBS), Container Ship Time Charter Assessment Index – Con Tex

²⁹ Suez Canal Authority (2024), [Vessels Tolls Calculator](#).

carrying ten thousand containers, which adds about a million dollars to its voyage cost, actually loads a cost of only about one hundred dollars per container. Such a container can contain many items, for example about 100 washing machines, nearly 10 thousand shoe boxes, more than 50 thousand shirts. In other words, the additional cost per single item is quite marginal (a few dollars for a large electrical appliance such as a washing machine, a few cents for textile and footwear products).³⁰

In addition to the additional costs of the voyage itself, there is the issue of extending the voyage time, which is also of course equivalent to money. Shipping companies, especially in the container sector, operate lines with a fixed frequency. Due to the attacks and the longer voyage time around Africa, the companies are forced to increase the number of their ships in order to meet the fixed schedules for customers. The required ships are diverted from other parts of the world, and in this way a general increase in global sea freight rates is created.³¹

Additional implications arise from the structure of the container shipping industry: The global container trade is characterized by a structure of clusters and transshipments hubs. Giant liner-ships sail along a predetermined round-the-world route and load and unload containers at central ports (hub ports), where the containers are transferred to smaller feeder ships and distributed to ports in the region. Israel's Mediterranean ports, Ashdod and Haifa, are located relatively close to the main global shipping line that departs from the northern exit of the Suez Canal at the Port Said port in Egypt towards the western Mediterranean. This proximity to the global shipping line allows for better service to Israeli ports. The two new ports that began operating in 2021 – the 'Bay-Port' in Haifa and the 'Southern Port' in Ashdod – were built with sufficient scope and depth to be able to service the giant ships on global routes. On the other hand, shifting the main shipping lines to the Atlantic Ocean means moving Israeli ports away from these main lines and relying on greater transshipments. This means both increasing trade costs and extending transportation times.

The extension of the voyage time also harms the owners of sensitive cargoes – cargoes with a relatively short shelf life such as agricultural product, livestock, refrigerated

³⁰ It should be emphasized that the above calculations are rough and general. Actual costs vary over a very wide range of prices and costs that depend on dozens of different technical, operational, and economic factors.

³¹ For example, for a weekly service departing from Japan to Europe for a four-week navigating via the Suez Canal, at least eight ships are needed to operate the service weekly throughout the year (four weeks each way). Extending the navigating time by three weeks due to the circumnavigation of Africa to seven weeks each way and 14 weeks both ways would require 14 ships to maintain the same level of service as a weekly sailing from Japan to Europe.

goods (such as food, medicines, special chemicals, etc.). These will prefer to navigate the fastest route, and the extension of the voyage time requires the owners of these cargoes to try to find new trade routes such as air transport (which is very expensive and not always possible), land transport (such as via Saudi Arabia and Jordan) which is also more expensive, finding new suppliers in other countries, or even suspending trade altogether until the storm passes. For importers, uncertainty about delivery dates usually means maintaining larger inventories. Maintaining inventory has significant costs, from renting warehouses to interest expenses on financing the purchase of inventory.

It appears that after December 2023 and the beginning of the Houthi attacks on shipping in the Bab-el-Mandeb Strait, transportation prices from Asia to Europe stabilized at a new price level, reflecting the additional logistical costs for trade due to the need to bypass Africa, as well as the opportunity for shipping companies to raise prices. In addition to transportation costs, additional costs of managing a larger inventory by importers must be added.

The price of transporting a container from China to the Mediterranean Sea (40 feet) was about \$1,400 at the end of November 2023, before the Houthi attacks began, and it peaked at the end of January to \$6,400 and stood at \$3,800 at the end of March 2024.³² For comparison, the price of transporting a container rose in extreme cases to about \$20,000 at the height of the Corona crisis. The changes in transportation prices reflect a (slight, as explained) increase in the real expenses of shipping companies, alongside the pricing of political uncertainty by the market, as well as an opportunity on the part of shipping companies to raise prices that will be understood by customers,³³ and on the other hand, the gradual stabilization of the market in the new situation ("new normal").

Estimating the consequences of the Houthi attacks on Israeli foreign trade

In order to assess Israel's exposure to Houthi attacks, it is necessary to distil the share of Israeli maritime trade that passes through the Bab-el-Mandeb Strait. The share of foreign trade in Israeli GDP is relatively large, at more than 60 percent,³⁴ but a significant portion of this trade are services, and other significant portion (in monetary terms) is transported by air. Other large portions of maritime trade are with the United States,

³² World Container Index (WCI) Shanghai to Genoa, published by Drewry. The index details the cost of transporting a 40-foot container (i.e. 2 TEU). To the cost to the port of Genoa in Italy, an additional transportation cost to Israeli ports must be added.

³³ Gavison, Y. (May 21, 2024). [The Houthis arranged for Zim a 30% jump in transportation rates, and a faster-than-expected return to profit](#), *The Marker*.

³⁴ World Bank Group (WBG) (2024), DataBank: World Development Indicators (Trade as percentage of GDP – Israel).

Europe, and other markets.³⁵ Table 1 below describes the share of Israel's maritime trade with Asia, Oceania, and East Africa (i.e., trade that passed through the Bab-el-Mandeb Strait in 2022) as a percentage of Israeli GDP, Israeli trade, and Israeli maritime trade. The table shows that the share of Israeli trade exposed to Houthi attacks in 2022 constituted approximately 9.2 percent of total Israeli trade (15.7 percent of total imports and 2.9 percent of total exports), which constitutes approximately 5.5 percent of Israeli GDP. It should be emphasized that this is the potential exposure of Israeli trade and not that which was actually affected.³⁶

Table 1: Share of Israel's maritime trade with the East out of Israel's total trade and GDP 2022, (millions of US dollars)

	Total	% of GDP	% of trade	Import \$	%	Export \$	%
GDP	499,033.50						
Foreign trade	301,609.80	60.40		147,586.80		151,348.60	
Trade in goods	180,303.90	36.10	59.80	107,735.70	73.00	72,568.20	47.90
Sea trade	99,756.40	20.00	33.10	73,430.60	49.80	26,325.80	17.40
Sea trade from Asia and Oceania	27,651.90	5.50	9.20	23,192.50	15.70	4,459.40	2.90

(Source: Central Bureau of Statistics, adapted by the author).

Beyond the financial analysis, one must also examine the types of cargo traded between Israel and Asia, which determine the types of ships serving this trade as well as the Israeli ports through which the goods are transported.

Most imports from the East arrive in Israel in containers; in fact, half of all maritime imports from Asia originate from China, and most of them are consumer goods. Exceptions to this are the import of cars, which arrive in Israel on ships specifically designed to transport cars (Roll-on/roll-off ship: RORO), and the import of livestock (sheep and cattle, from Australia). Apart from cars and livestock, it is rare for cargo to arrive in Israel from the East that is not in containers. Normally, container ships arriving from the East cross the Suez Canal and unload their cargo at Israel's Mediterranean ports (the ports of the Haifa and Ashdod regions). There is no container unloading at all at the Port of Eilat, but imports of cars and livestock are sometimes carried out through it. Keep in mind that land transportation from Eilat to the center of the country is expensive, and therefore it is sometimes more economical, for example for car importers, to transport the RORO ship through the Suez Canal (including the high costs described above, associated with

³⁵ Central Bureau of Statistics (2024). Import and export of goods by type of transport 2023.
³⁶ Central Bureau of Statistics (2023). [Exports and imports of goods by type of transport](#), 2022, Table 3 – Trading countries by maritime transport of goods – imports and exports.

the transit) than to unload the cars at the port of Eilat and make hundreds of trips using special tow trucks to transport the cars to the center of the country, over a distance of more than 300 kilometers.

Israeli exports to the East by sea also depart in containers from Israel's Mediterranean ports and the Suez Canal. A notable exception is the export of phosphates from the Dead Sea plants, which is carried out from the port of Eilat. This is an export of approximately two million tons per year.

In 2022, approximately 775,000 containers were imported into Israel,³⁷ of which approximately 290,000 containers were from Asia, Oceania, and Africa. If we assume that the average cost of transporting a container from China to the Mediterranean Sea increased by approximately \$5,000 in the fourth quarter of 2023 compared to the pre-war price, and that it will stabilize at a new, fixed level during the next three quarters of 2024 (the new normal), of approximately \$2,500 above its pre-war level, it can be very roughly estimated that the aggregate cost to the Israeli economy of importing the same number of containers is on the order of \$200 million annually.

In addition to containers, RORO ships are also avoiding the Bab-el-Mandeb Strait. In 2022, a total of 340,000 vehicles were imported to Israel, of which 166,000 (49 percent) were imported through the Port of Eilat.³⁸ It is likely that additional vehicles were imported from Asia through the ports of Haifa and Ashdod, but the statistics on this subject are unclear. A RORO ship carries about 4,500 cars, and therefore it can be estimated that about 35–40 RORO ships visited Eilat in 2022, meaning that, in a very rough estimate, about \$50 million was added as a cost to the economy due to the sailing around Africa of these ships. Therefore, the total costs to the economy of importing containers and cars on the route around Africa is about a quarter of a billion dollars annually.

On the export side, in 2022, approximately 455,000 containers were exported from Israel, of which approximately 30,000 containers were to Asia. The costs of transportation to Asia are lower than those of transportation from Asia, but we will use the same data for the calculation. The aggregate cost to the Israeli economy of exporting the same quantity is on the order of \$75 million annually. In addition to the export of containers, phosphate exports from the Port of Eilat have also been affected. These exports to Asian markets are carried out as usual by transporting the phosphates in special trucks from the Dead Sea plants (ICL) in the Sodom area to the Port of Eilat, from where they are loaded onto bulk

³⁷ Shipping and Ports Authority (2023). "Shipping and Ports Statistical Yearbook 2022". Ministry of Transportation, Shipping and Ports Authority, (p. 53).

³⁸ Shipping and Ports Authority (2023), 19–21.

ships and exported eastward, mainly to India. On a multi-year average, approximately two million tons of phosphates are exported from the Port of Eilat per year. The cessation of activity at the Port of Eilat requires ICL to export the phosphates eastward via the Port of Ashdod and a route that encircles Africa. If we assume that a bulk carrier can carry about 40,000 tons (DWT), this would require about 50 ships and, by rough estimate, several tens of millions of dollars more. It should be noted that phosphates are a commodity, the trade in which is very price-sensitive. Therefore, increasing transportation costs around Africa could harm ICL's competitiveness, especially in the phosphate markets in the East.³⁹

Therefore, the total costs to the economy of exporting containers and phosphates on the route around Africa are approximately \$100–150 million annually, and the total costs to the economy (exports and imports) are roughly in the order of \$350 to \$400 million annually.

Beyond the broader economic implications of the Houthi attacks on Israeli trade, two additional specific but significant effects on the country's foreign trade should be noted. The first is the de facto cessation of activity at the Port of Eilat (including, as described above, the export of phosphates); the second is a change in the activities of Israeli shipping companies or those with direct ties to Israel.

The Houthi attacks on shipping traffic in the Bab-el-Mandeb Strait completely paralyzed operations at the Port of Eilat, and reports appeared in the Israeli media about the intention to lay off more than half of its employees. If these layoffs were to go ahead, there would be direct economic damage to many employees employed at the port, along with potential strategic damage from the loss of the operational capacity of the southern gateway to the country. This led to a discussion by the Knesset's Economics Committee on whether the state should repurchase the port after it was sold as part of a privatization.⁴⁰

In the field of Israeli shipping, by international comparison, Israel does not have a developed shipping sector (in terms of flag or ownership registration).⁴¹ Only two major shipping companies have direct ties to Israel – Zim and XT (formerly Ofer Brothers). There are also ships owned by Israeli businessmen, such as the Galaxy Leader mentioned above. These companies have diverted their ships from routes that pass through the Strait, and this may have economic implications for them. It is also possible that the crisis will reduce Zim's cooperation options within regional alliances, especially after the expected end of

³⁹ ICL Group Ltd., Annual Report, for the period ending December 31, 2023.

⁴⁰ [The Knesset Economics Committee](#) dated April 1, 2024.

⁴¹ See the expansion in note 44 regarding the significance of registering ships in the Israeli registry.

the 2M alliance in January 2025.⁴² For example, in January 2024, it was reported that due to changes in the routes of the Chinese shipping company COSCO due to the crisis in the Red Sea, Zim's cooperation with the company was affected.⁴³ It should be noted that most of Zim's revenue is not from trade activities related to Israel, but from global activities.

Summary

Months after the start of the Houthi attacks on shipping with ties to Israel and the outbreak of the Israel-Hamas War, it is possible to begin to assess the economic implications of the partial blockade of the Bab-el-Mandeb Strait. Israel does not have a significant merchant fleet, and in international trade it relies on global shipping. It appears that a significant portion of global shipping (orders of magnitude of 50–90 percent, depending on the type of ship) has avoided transiting the Strait and is choosing the shipping route around Africa, thus creating a new stable situation (new normal) of lengthening shipping routes and increasing freight rates. So far, it appears that the efforts of the United States and its allies to curb the Houthi attacks are not bearing fruit. Furthermore, uncertainty about the identity of the ships that the Houthis are attacking and errors in identification on the part of the Houthis mean that the new stable situation could last for many more months, and even longer.

A rough estimate of the magnitude of the direct costs to Israeli foreign trade based on the situation at the end of March 2024 suggests that the transportation costs are in the order of \$350 to \$400 million annually for Israeli trade (imports and exports), which normally passed through the Strait. Most of this trade consists of containers, cars, and phosphates. The estimate includes only the transportation costs of foreign trade and does not include other heavy economic costs such as switching suppliers, boycotting Israeli products, delaying or preventing investments, and a long list of other indirect and long-term consequences that are very difficult to measure or evaluate. Comprehensive qualitative research, including interviews with business people, is needed to assess the overall economic impact of the Houthi attacks.

Although this is a considerable sum, as things appeared six months after the start of the war, the Israeli economy can easily meet these costs giving the fact that the total Israeli trade sum to 301.6 billion US\$ in 2022 the attacks add approximately 0.15% to the trade

⁴² IM Integrated Shipping Services LTD, [Annual Report for the fiscal year ended December 31, 2023](#), p. 15.

⁴³ *Port 2 Port System* (January 8, 2024). [ZIM: We will operate the Tyrrhenian Sea service without COSCO](#); Elmes, D.S. (January 7, 2024). [The fourth largest Chinese shipping company in the world stops sailing to Israel](#). *Globes*.

costs. There were no significant disruptions in imports and there were no reports in the media of a shortage of products at the national level. However, certain companies are sometimes forced to deal with significant difficulties, to the point of endangering their existence. In this context, the Port of Eilat and commercial activity carried out through this port, such as the export of phosphates, the import of cars and livestock, should be mentioned in particular.

In a broader perspective, the Houthi attacks violate the principle of freedom of navigation and the transit passage of global shipping, and this violation has indeed received a public response on the international level through condemnation by the Security Council and the establishment of a Western international force led by the United States and Britain, which attacked Houthi bases. It can be assumed that for global shipping, freedom of navigation is a global interest that is not directly related to Israel, and certainly in a business environment of widespread use of flags of convenience (FoC). However, as the international system moves from a "liberal" system in which there is free flow of goods (including international shipping) towards a "realistic" system in which there is a struggle between great powers alongside the rise of revisionist states, it can be expected that disruptions to the flow of goods will develop in additional places in the world.

Israel, as a small and economically open country, benefits greatly from its integration into the global system, and a large part of Israel's GDP per capita, which is also high relative to Western countries, can be attributed to this economic openness. Therefore, harming trade relations and labeling Israel as "problematic" in international relations – such as uncertainty in the processes of exporting and importing goods to and from Israel – can harm the economy in the long term, and this is a diplomatic and economic challenge at the national level. In addition to its business reputation, in a realistic international system, Israel must develop an independent merchant fleet that navigates under the Israeli flag or is under Israeli control.⁴⁴ Developing such a merchant fleet is not a solution to preventing Israeli shipping in certain regions of the world, but the Houthi attacks (as well as Hezbollah threats in the north) show that Israel's adversaries see an economic blockade as a legitimate weapon against Israel, and building an Israeli merchant fleet can help prevent disruptions to the flow of Israeli trade in other cases, such as avoiding International shipping visits Israeli ports.

⁴⁴ A distinction must be made between a ship carrying the Israeli flag (according to the Shipping (watercrafts) Law, 1960) and a ship carrying a foreign flag under Israeli control (according to the Shipping Law, Foreign Watercraft under the Control of an Israeli Entity, 2005).

Maritime aspects of the Israeli energy economy following the 'Israel-Hamas' war

Elai Rettig

The Israel-Hamas War exposed a number of weaknesses in the Israeli energy sector that require long-term solutions. These include the overreliance of the electricity sector on a small number of gas fields and backup power plants, reliance on Turkey as the main transit country for oil imports to Israel, and a shortage of local fuel reserves for emergencies. In addition, the Gaza Strip's heavy dependence on sources of electricity, diesel, and water from Israel, which until now had been considered a strategic advantage, turned out to be a burden that limited the IDF's operations during the war and increased international pressure on Israel. However, the war also emphasized the political advantages created by Egypt and Jordan's heavy reliance on Israeli gas exports, and reinforced the need to establish a land infrastructure bridge through Israel that would connect the Gulf states to Europe as a means of bypassing the dangers of the Red Sea. These lessons demonstrate the increasing importance of the maritime domain in improving Israel's energy security. This includes plans for artificial islands as a solution for decentralizing energy production and storage, laying underwater power lines to increase connectivity to the European electricity market, commissioning a floating LNG ship to increase export capacity and encourage more gas exploration, and the rehabilitation of energy infrastructure in the Gaza Strip via maritime routes, such as the development of the offshore Gaza Marine gas field and cross-border electricity connections to Egypt.

Maritime aspects for strengthening the local energy economy

The Israel-Hamas War exposed a number of weaknesses in the Israeli energy sector, highlighting the need to turn to the sea as a domain for backup, storage, and transportation of fuels in times of emergency. Paradoxically, Israel's most significant weakness stems from its energy independence. Israel's reliance on three offshore gas fields for 70% of its electricity generation mix, and on a relatively small number of power plants capable of operating on alternative fuels in the event of a disruption to one of the main gas pipelines.¹ During the first month of the war in Gaza, the Tamar gas field was closed as part of emergency regulations due to attempts by Hamas to target it with rockets, making Israel wholly reliant on the Leviathan gas field to fill the gap.² If Israel had opened a second front with Lebanon as early as October 2023, it could have led to the closure

¹ Electricity Authority. (2023). [Electricity Sector Report September 2023](#).

² Sternlicht, H. (October 9, 2023). [After the outbreak of war: The Ministry of Energy ordered the cessation of gas flow from "Tamar"](#). *Globes*.

of the Leviathan field as well, which would have led to a severe shortage of natural gas for electricity. In a scenario of supply disruption from two fields simultaneously, Israel would have to rely on a limited number of power plants with the ability to switch to coal or fuel oil to fill the gap. Over the years, most coal-fired power plants were closed to meet various environmental goals, and because coal imports were more expensive when compared with local gas supplies. While in theory the demand for electricity during wartime can be artificially reduced to operate on a smaller number of stations, Israel's onshore emergency reserves of coal and fuel would still struggle to sustain the economy's needs for long. This created a need to import additional supplies via tankers and cargo ships during the war, emphasizing the vital importance of continuing to operate Israeli ports during emergencies. It also emphasized the importance of government and semi-government companies such as the Israel Natural Gas Lines Ltd. and the Trans-Israel pipeline, which are responsible for unloading and transporting fuels in Israel even during wartime, including during direct missile attacks on Israel's energy sites. However, the reduction of the Israeli merchant fleet over the years has meant that Israel has no way to require tankers to dock in Israel during emergencies and supply it with the missing fuels. These are longstanding problems that Israel has not addressed since the Second Lebanon War (2006), when tankers refused to arrive at ports on the grounds that their insurance did not cover this, which almost led to a shortage of jet fuel and other fuels in the latter stages of the war.³

The steps required to increase the security of the Israeli electricity sector are not immediate and require several years as well as the construction of expensive infrastructure, with an emphasis on the maritime domain. These include constructing additional underwater gas pipelines to the shore for backup, encouraging and promoting additional gas exploration in Israeli waters, and accelerating plans to connect two underwater power lines to Cyprus. There is also a need to decentralize the electricity sector through a wider deployment of power plants of various types. There is a possible maritime component to this, but it depends on the progress of technological developments, some of which are not yet matured while others have not yet proven themselves economically feasible. These include establishing artificial islands at sea, promoting floating solar solutions, promoting hydrogen technologies for storing electricity in the maritime domain, and storing more emergency fuels in marine reservoirs rather than on land so that they do not themselves become targets for missiles and a danger to nearby communities.

Maritime solutions of this type will all need direct and extensive government support. This support will be expressed, among other things, through providing guarantees to

³ State Comptroller's Office. (2008). [Emergency Preparedness in the Fields of Energy Infrastructure – Ministry of National Infrastructures](#). *Annual Report 58B for 2007*.

private companies that will give them long-term regulatory and economic certainty, directing government grants, clearing maritime areas for the construction of maritime energy infrastructure, and updating various regulatory guidelines that have so far hindered smaller companies from developing and implementing new renewable energy technologies in the maritime domain. Such steps also require coordination between various ministries, from the Ministry of Finance to the electricity and gas authorities. This coordination can help private companies promote various solutions for gas production and innovations in solar array sitings, and it can also help the Israeli Electric Corporation (IEC) upgrade the national grid infrastructure to absorb more renewable energy coming from the sea. Regulatory coordination may also assist the Ministry of Energy bridge between these entities smoothly and without unnecessary bureaucracy.

Maritime aspects for strengthening the regional energy economy

One of the main bright spots that emerges from the analysis of Israel's electricity sector during the war concerns the country's regional status, which was not severely damaged with respect to energy connectivity and export plans, and may even improve in the coming years. In the past decade, Israel, together with private gas companies, led extensive and unprecedented regional moves to connect gas pipelines to Jordan and Egypt. These connections created regional dependence on Israeli gas, which played a moderating role during the war, especially with regard to Egypt's conduct. The shutdown of the Tamar field at the beginning of the war decreased exports to Egypt and increased the Egyptian understanding that it must strive for stable and positive relations with Israel if it wishes to work to expand gas exports to it.⁴ Jordan's dependence on gas and water from Israel was also very prominent during the war. On the surface, the Jordanian kingdom has adopted a very strong rhetorical approach towards Israel and has even announced the freezing of the "Prosperity Green" and "Prosperity Blue" projects, which were intended to promote trade in solar energy and desalinated water between the parties. However, it is very likely that these projects, as well as more ambitious collaborations, will be renewed down the road, as Jordan desperately needs water from Israel.⁵

To all this, it should be added that energy considerations apparently played a role on the Lebanese side as well and served as a lever of American pressure to moderate Hezbollah's

⁴ Peskin, D. (January 24, 2024). [The war in Gaza sharpened Egypt's energy dependence on Israel](#). *Calcalist*.

⁵ Al-Sharafat, S. (January 31, 2024). [The Impact of the War in Gaza on Israel-Jordan Cooperation](#). *The Washington Institute for Near East Policy*.

actions against Israel in the first six months of the war.⁶ Reportedly, the United States prevented the French energy company 'Total' from conducting further gas exploration drillings in Lebanese waters as long as Hezbollah continued to exchange blows with Israel, after Total's first drilling ended without any discoveries in October 2023. The acute energy crisis in Lebanon, which has only worsened during 2024 with regular and prolonged power outages, has led to the Lebanese government also putting pressure on Hezbollah so as not to lose American and French assistance for the revival of its energy sector. In this sense, the border agreement between Israel and Lebanon in October 2022 proved to be an important element in dealing with Hezbollah, as it gave the United States more tools to pressure both Hezbollah and the government in Beirut.

Beyond the regional dependence on Israeli gas, the European desire for gas from the Eastern Mediterranean, which increased following Russia's invasion of Ukraine, did not wane following the war. However, the disruption to the continuity of supplies to Egypt at the beginning of the war also affected Europe, as Egypt hardly liquefied gas for export due to the shortages created in its domestic economy. This resulted in Europe being forced to increase imports of liquefied gas from other places, including even from Russia.⁷ There is therefore a concern that Europe will prefer another, more stable and secure source for its gas than the Eastern Mediterranean. However, there are two reasons to be optimistic in this context as well. The first is the confidence expressed by major European energy companies in the Eastern Mediterranean. In October 2023, both BP and ENI were awarded drilling licenses in Israel's economic waters,⁸ in addition to their efforts to continue searching for gas and oil reserves in Cyprus and Egypt. Added to this is the United Arab Emirates, which in the past year has been seeking additional investments in Egypt and Cyprus. These moves express confidence not only in the potential to find additional gas in the East Mediterranean waters, but also in Israel's ability to find markets for additional gas that is found, both through Egypt and directly to Europe through plans to build a floating gas liquefaction facility that may also be used by other countries in the region.

The second reason for optimism is that the Houthi attacks on the Bab-el-Mandeb Strait have made it clear to Europe that even alternative sources of liquefied gas from the East,

⁶ Harari M. and Rettig E., (2024). [The energy component in the overall considerations of Lebanon and Hezbollah regarding the war in Gaza](#). Insights in the field of geo-energy, No. 1.

⁷ S&P Global Platts. (April 10, 2024). [Europe is set to continue to rely on Russian LNG in short term](#). *S&P Global Platts Commodity Insights*.

⁸ Ministry of Energy and Infrastructure. (2023). [The Ministry of Energy and Infrastructure announces the results of the fourth competitive process for natural gas exploration in Israeli waters in two clusters](#).

such as Qatar or Australia, are not safe from security threats and periodic blockades. The Houthi attacks did raise oil and gas prices in Europe for a short time, but the market quickly stabilized after companies established alternative shipping routes and the market was flooded with new oil and LNG supplies from the USA.⁹ However, the attacks reinforced the understanding that there is political logic in promoting the India-Middle East-Europe Corridor (IMEC) plan, which made headlines in August 2023 at the G20 summit in India and called for the construction of land infrastructure that would connect the Gulf states to Israel and thus bypass the Red Sea and the Suez Canal. In practice, there was already limited movement of goods by truck during the war, showcasing the usefulness of such a corridor¹⁰. This infrastructure may include railways, an oil pipeline, a gas pipeline that will also serve as a hydrogen pipeline in the future, and high-voltage power lines. These plans were not abandoned following the war, and it has even been hinted that they will be part of the benefits package following a possible future normalization agreement between Israel and Saudi Arabia.



Figure 1: India-Middle East-Europe Corridor (IMEC), Source: G20 Summit, August 2023

However, an important weak point concerning Israel's energy ties with its region stems from its overdependence on Turkey as its main oil route. Over half of the oil imported into Israel passes through Turkey, whether from Azerbaijan via the BTC pipeline ending at the port of Ceyhan, or from Kazakhstan in tankers in the Black Sea that pass through

⁹ *The Economist*. (March 27, 2024). [Three reasons why oil prices are remarkably stable](#).

¹⁰ VOA News. (February 15, 2024). [Red Sea Attacks Foster Arab-Israeli Trade Link by Land](#). *Voice of America News*.

the Bosphorus and Dardanelles on their way to Israel.¹¹ This dependence is particularly problematic because during the war, Turkey did not content itself with simply escalating its rhetoric against Israel, as it does during any military operation that Israel conducts, but de facto launched an economic boycott of Israel. In April 2024 Turkey gradually began to prevent Turkish private enterprises from exporting goods to the ports of Ashdod and Haifa, and also delayed the unloading of Israeli products at Turkish ports. Initially, the boycott only included construction products produced in Turkey, such as cement, steel, and aluminum, but the boycott was eventually expanded to a blanket ban that also included air cargo transportation.¹² Oil was not included in the Turkish boycott because Turkey only serves as a transit country for oil coming from Azerbaijan and Kazakhstan, which were still interested in trading with Israel. However, Turkey's actions during the war served as a red flag for Israel and a sign that it must work to diversify its oil suppliers.

In order to reduce dependence on the Turkish route, Israel can continue to purchase oil of similar quality to that of Central Asia from West African countries, Brazil, and even the United States, but these solutions are more expensive. For this reason, the Abraham Accords can play an important role since the United Arab Emirates could serve as an additional source of cheaper oil, especially in a scenario in which an overland corridor to Israel is established, which may also include an oil pipeline. Even without such a corridor, the UAE can transport oil to Israel from the Red Sea through the Europe-Asia Pipeline Company (EAPC), but such a move would require stronger environmental regulations to remove the restrictions currently in place on unloading and loading oil through the port of Eilat. In a scenario of normalization with Saudi Arabia, Israel's situation would be even better, as it could bypass the Bab-el-Mandeb Strait and export oil to Israel through the 'east-west crude oil pipeline' that crosses it and ends at the port of Yanbu in the Red Sea. In the future, it may even be possible to connect the Saudi pipeline directly to Israel's EAPC, thus avoiding the environmental hazards of unloading oil in tankers at the port of Eilat.

Maritime aspects of infrastructure rehabilitation in the Gaza Strip

Another weak point that the war exposed is the Gaza Strip's complete dependence on electricity and diesel supplies from Israel, which has turned a strategic advantage into a humanitarian and economic liability for Israeli. Before the outbreak of the war, half of the electricity in Gaza was provided by Israel, creating a debt of two billion shekels in the budget of the IEC. The other half was produced in part by a single power plant in Gaza that runs on diesel fuel coming from Israel, and the rest came from a wide deployment

¹¹ Feldman, N. (January 2, 2024). [Israel's Oil Trap: Will Erdogan Stop the Flow?](#) *The Marker*.

¹² Ministry of Foreign Affairs. (April 9, 2024). [Turkey's announcement on export restrictions to Israel](#).

of private diesel generators, as well as rooftop solar panels.¹³ In other words, almost all the energy needs of the Gaza Strip were provided by Israel in unpaid debt. Ostensibly, this situation was supposed to give Israel a strategic advantage during the war despite the economic burden, due to the ability to cut off the supply of electricity and fuel to the Strip at the push of a button, as it did in the first weeks of October. However, Israel quickly discovered that this ability was very limited in its effectiveness for two reasons. First, Gaza residents were used to living without reliable electricity and have already developed alternative solutions for themselves, while Hamas has accumulated fuel supplies for many months ahead to power its underground tunnels, and was therefore not affected by the cutoff. The second reason is that the cutoff has also effectively blocked the Strip's ability to produce its own potable water. Most of the groundwater in Gaza is contaminated and therefore has to pass through energy-intensive water purification or desalination plants, which cannot operate without electricity or diesel from Israel. The humanitarian crisis created by the electricity cutoff led to unprecedented international pressure that finally forced Israel to restore the supply of diesel to the Strip about a month and a half after the start of the war, despite the understanding that Hamas was stealing it.¹⁴

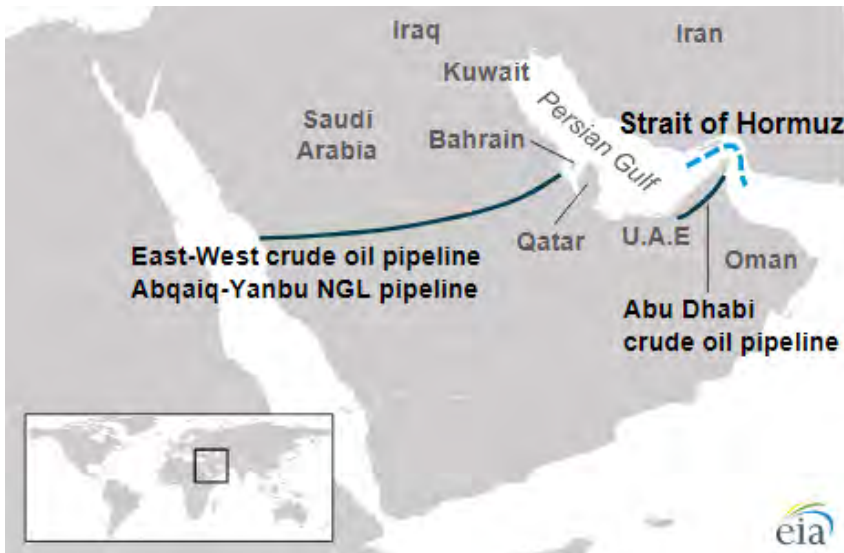


Figure 2: East–West Crude Oil Pipeline, Saudi Arabia (U.S. Energy Information Administration)

¹³ Rettig, E. (2023). [Cutting the Electricity Supply to Gaza – Consequences and Implications](#). *BESA Center Perspectives Paper*, No. 2219.

¹⁴ Rettig, E. (November 19, 2023). [Preventing fuel supplies to the Gaza Strip: Considerations and Implications](#). *Begin-Sadat Center for Strategic Studies*, No. 2,232.

U.S. Energy Information Administration

An important lesson from the war, therefore, is that Israel should promote a more independent energy economy in the Gaza Strip as part of its reconstruction process. This would enable it to detach itself from the need to provide for the basic needs of Gaza's residents. To this end, Gaza must turn to the sea to meet its energy needs. This move is reflected, among other things, in the development of the Gaza Marine field off the coast of Gaza, which contains approximately 30 billion cubic meters (bcm) of natural gas and could supply the Strip's needs for approximately 10 years, provided that a large gas-fired power plant is built in the Strip.¹⁵ This plant was already planned to be built as part of the "Gas 4 Gaza" project, and will now receive an additional incentive. Independent electricity production in Gaza could also address its water needs, which would be fully met by the construction of two additional large desalination plants on the coast, which could theoretically also supply water to the Palestinian Authority in the West Bank. Furthermore, various plans for establishing a port in Gaza could also include the construction of an "artificial island" to absorb fuel independently in a way that would allow Israel to monitor the goods and resources entering Gaza before they reach the mainland. Additional solutions to promote energy independence in Gaza also include underwater electricity connections to Egypt and even Cyprus, as well as onshore gas pipelines to Egypt. of the feasibility of these plans will depend on the identity of the government in the Gaza Strip in the coming years and the identity of the donors who will finance these infrastructure projects, as well as on Israel's involvement in their approval and construction.

Thus, we can see how the Israeli energy sector played an important role during the Israel-Hamas War, both positively in terms of strengthening Israel's regional position and mitigating the response of its neighbors, and negatively in terms of exposing the weaknesses of the Israeli electricity sector and complicating Israel's conduct in the Gaza Strip. These various aspects demonstrate how deepening the connection between Israel and its maritime domain can help strengthen Israel's energy security for decades to come. Today, the sea in Israel is used mainly as a source for producing natural gas and transporting it to land through pipelines, but in the future it may also be used as a solution for storing and accumulating energy, as a source for producing green energy, as a source for exporting liquefied gas to Europe and Asia, and as a bridge for physically connecting power lines between Israel and Europe.

¹⁵ Rettig, E., and Spanier, B. (2024). Striking energy deals in disputed seas: the case of the Gaza Marine gas field. *The Journal of World Energy Law & Business*. 17 no. 2, 128–135.

Gas discoveries in the Eastern Mediterranean – Israel as a local, regional, and global gas supplier? The State of Israel's energy security in historical perspective

Moty Kuperberg

The beginning of electricity production using natural gas in Israel about 20 years ago marked a dramatic transformation in the energy security of the State of Israel. Thanks to the offshore gas discoveries in the country's economic waters (Exclusive Economic Zone EEZ), Israel can provide a significant portion of its energy consumption without dependence on external sources. In 2023, about 70% of electricity production in Israel was through natural gas,¹ apart from the economic aspect, gas exports contribute to the country's geopolitical position in the region vis-à-vis Egypt and Jordan, and export options to Europe were even raised, especially after the outbreak of the war in Ukraine. With the outbreak of the 'Israel-Hamas' war in October 2023, part of the gas production was temporarily shut down, which showed another aspect of the complexity of the country's energy security, and the need to re-evaluate the importance of gas in the local, regional and perhaps even global aspects. The State of Israel is required to update its approach to gas exports, mainly in terms of (a) quantities, including examining the export quotas set in the previous decade by the Tzemach Committee and the Adiri Committee, (b) export targets and establishing Israel's regional geopolitical position by increasing exports to Egypt and Jordan, or directing some of the gas exports to the global market, and (c) export means. These three aspects require the involvement of international companies to which the state will be required to provide a guarantee of regulatory stability, which was not possible in the past.

Energy security – diversification of energy sources

In 1999, gas resources were first discovered in the depths of the State of Israel's economic waters, by the "Yam Tethys" partnership of Delek and a small, unknown drilling company from Texas called "Samedan", and brought the gas revolution to Israel.² Natural gas was

¹ Ministry of Energy and Infrastructure (2022). [Energy Sector Status Report](#).

² 'The Gas Revolution' was the name given to the transformation that the United States underwent following the 2008 energy price crisis. A crisis in which oil prices rose mainly from 2005 after Hurricane Katrina struck the Gulf of Mexico, and continued due to geopolitical events, plus speculation and manipulation of oil and gas prices, to a peak of \$147 per barrel in July 2008. The United States began producing oil and gas from its own sources, mainly with innovative OIL SHALE processing technology, and within a few years moved to gas and oil production that brought it closer to energy independence. In the past two years, it has become the world's largest oil producer and the world's largest exporter of liquefied natural gas. The revolution was significant, as at the beginning of the first decade of this century, the United States planned to establish about forty terminals for receiving liquefied natural gas from around the world, and the gas revolution shelved these plans, when some of what was planned and even begun to be built as a receiving terminal became a production and export line for liquefied natural gas. The Energy Agency added another superlative to the gas revolution when it noted that the world had entered the Golden Age of Gas.

first pumped into Israel in 2004, leading to optimism that more gas reservoirs will be discovered that would meet a larger part of the State of Israel's needs. Indeed, discovery followed discovery, the "Tamar" platform in 2009, the "Leviathan" in 2010, and several other smaller platforms in the same area. The "Aphrodite" gas field was also discovered in Cypriot Block 12, which borders Israel's economic waters, and even extends into it.

In the early 1980s, coal-fired power stations were established in Hadera and Ashkelon, which produced electricity in a reliable supply from coal that the state imported from a variety of sources, stabilizing the energy security of the State of Israel. Natural gas was intended to replace mainly coal, coal replaced the Mazut fuel oil and diesel fuel used in a number of smaller stations, including Eshkol in Ashdod and Reading in Tel Aviv, and allowed the construction of new gas-fired power stations.

From an economic perspective, the use of gas became attractive after large gas deposits were discovered in Israel's economic waters, and agreements were signed with Egypt regarding "importing gas at a favorable price". The benefit inherent in the use of gas is not only economic, since the beginning of the use of natural gas raised environmental awareness of its inherent advantages over coal. Indeed, the gas supply agreement was signed with Egypt in 2005, and the flow of gas through the pipeline to Israel through North Sinai began in 2008. Although the agreement added natural gas at a favorable price, which provided about 45% of the country's gas consumption, it added geopolitical risk, as became clear in February 2011 when the pipeline was blocked by terrorists in Egyptian territory and the flow of gas was disrupted.

Israel also began examining the import of liquefied natural gas (LNG), as a third pillar for supplying the gas required for the economy, mainly for electricity generation. Later, with the start of production from the Tamar gas field, natural gas became a significant component of the country's economy, its foreign relations, and especially in terms of energy security.

The International Energy Agency (IEA), established after the global energy crisis in 1973, is responsible for global energy security for the organization's 31 member countries and 13 associated companies.³ The agency defines energy security as the uninterrupted availability of energy at an affordable price. However, in recent years, the agency has focused on a 'zero emissions' agenda even at the cost of neglecting energy security, a policy that proved to be unsound with the Russian invasion of Ukraine in February 2022. Another example of the failure of the agency's policy lies in the energy price crisis of

³ The State of Israel is an associate member. In October 2020, Israel applied to join the agency as a full member.

2008 and 2010–2014. At that time, the agency did not come out against speculation and manipulation of oil prices, did not link the price of oil to energy security as required by its own definition, and did not require its members to maintain the rule of maintaining a 90-day oil reserve. A reserve that was originally established to regulate any possible shortage during a crisis, even if it was a crisis caused by manipulative reasons.

The State of Israel, due to its security and geostrategic situation and its dependence on imported oil and coal, has dictated to itself the requirements of larger reserves. Furthermore, Israel has allocated and allocates resources to maintain the country's energy infrastructure, apparently at a higher level than other members of the organization. However, in practice there was very little awareness in Israel of the significance of energy security, as was revealed with the explosion of the Egyptian gas pipeline in early 2011.

Starting in 2005, the Ministry of Energy began discussing the issue of supplying liquefied gas to Israel via a floating liquefied gas terminal (Floating Storage Regasification Unit – LNG FSRU). The main significance of such a terminal is the creation of a third source of supply as an addition and backup to local gas (which was then limited to the Yam Tethys reservoir), and to the gas supply from Egypt. An equation for covering predicted future consumption of 12 Billion Cubic Meters (BCM) at that time indicated four BCM from domestic sources, four from Egypt, and four from the international market using liquefied gas. This diversification of sources was essential for Israel's energy security. In 2009, an initial tender was published to examine the FSRU issue, to which six companies responded,⁴ including leading international companies, but the issue was not advanced by the Ministry of Energy until 2011 and the explosion of the Egyptian gas pipeline. After the explosion and the interruption of the Egyptian gas supply, the state launched an international tender to establish a floating terminal to receive liquefied gas, and in January 2013, the construction of the infrastructure to connect a 'Floating Storage Regasification Unit' (FSRU) was completed, off the coast of Hadera.

Energy security is also affected by regional and local wars, and of course the struggle between the powers, which has only intensified in recent years, from the South China Sea and the Straits of Taiwan to the Russia-Ukraine war in the Black Sea. The effects of the war reached the Baltic Sea with the explosion of the Nord Stream underwater gas pipeline and the cessation of regular gas transfers from Russia to Europe. The "Israel-Hamas" war of October 2023, exacerbates and sharpens Israel's energy security challenges. Although gas production from the Tamar platform was halted for a month and the Houthi naval blockade of the Bab-el-Mandeb Strait is disrupting trade in energy products (oil and gas), in a mature, responsible energy market with a diverse supply of oil and gas, the impact of

⁴ Request For Information – RFI: An initial tender to locate potential suppliers.

events in Israel on oil and gas prices over the past year is marginal.⁵ This is in contrast to the surprise that Russia's invasion of Ukraine caused, and the enormous damage to the economies of Europe in general and Germany in particular, with the closure of Russian gas supplies to Europe.⁶

We must, therefore, appreciate the contribution of the "gas revolution" that began in the United States in the previous decade to the relatively calm situation in the crude oil market. For example, the price of a barrel of "Brent" oil has remained relatively stable at around \$80 per barrel. The International Energy Agency's lack of interest in preparing for crises in advance despite early signs showed its helplessness in the Ukraine crisis. The German government also made the mistake of relying mainly on Russian gas supplies for several decades. The crisis caused gas prices in Europe to increase dozens of times, and in the United States prices tripled, but in Israel, price stability was maintained in everything related to electricity production from domestic gas. Electricity consumers in Israel were forced to pay a premium for the relative share of electricity produced from coal, and its price rose due to its being an alternative to gas in many countries, but the country's energy security has proven to be stable, even while the war continues.

From importing fuels and coal, to energy independence

From the outset, with the discovery of the "Mary-B" gas reservoir opposite Ashkelon, which contained 28 BCM, it was clear that all the gas found, and gas that would be found later, would be used to generate electricity in the State of Israel, for water desalination, for heavy industry, and for other local uses. Electricity production in Israel faced two revolutions – the gas revolution and a regulatory revolution, in which the State of Israel allowed private companies to establish gas-fired power plants. Electricity production in Israel was about to become more competitive, with the help of local gas. The Electric Company had the right of first refusal, and indeed the first phase of the process began in 2004, when the Eshkol C and D power plants were first synchronized to operate on natural gas.

It is important to note the public protest that arose in Israel in these years. A social protest against those who were called 'gas tycoons', and against the environmental pollution

5 The price of a barrel of Brent crude, which is the basis (INDEX) for many energy contracts, including natural gas prices. See the annual average price on the U.S. Energy Information Administration website for the years 2018 to June 2024. EIA, U.S. Energy Information Administration, [Petroleum & Other Liquids](#).

6 Henderson, J., Yermakov, V., and Connolly, R. (2024). [Outlook for Russia's oil and gas production and exports](#) (No. 189). OIES Paper: 35; Kantchev, G., and Wallace, J. (January 16, 2023). [Russia's Energy Clout Is Waning, Weakening Its Global Influence](#). *The Wall Street Journal*.

inherent in natural gas (although significantly reduced compared to coal and fuel oil); and a real concern that arose against gas exports, or at least in favor of limiting the amount allowed for export, in order to preserve reserves for future generations. Apart from the serious delays in bringing the gas to shore and the loss of economic value to the country, as well as the reduction of pollution from coal - this process was a continuous damage to the country's energy security - this counterargument was not heard in the public debate.

The social protest led to the establishment of the "Sheshinsky Committee", and later, pressure from discovery and exploration entrepreneurs to allow them to export gas in quantities that would contribute to additional investments in exploration and production led to the establishment of the "Tzemach Committee",⁷ whose purpose was to examine the quantities of gas required to ensure the country's energy security for future generations, as well as to define the quantities of gas that could be exported in order to strengthen the local economy.

Israel – Regional Market

The Tamar Partnership, a pioneer in exporting gas to the regional market, began receiving its gas into the national transmission system, from the processing facility west of Ashkelon, in March 2013. This was the culmination of a technical, engineering and economic effort that included drilling in water depths of approximately 1,700 meters, and even deeper target layers, up to approximately 5,000 meters below sea level. The significant event that enabled Israel's entry into the regional energy market was the discovery of the Leviathan reservoir in 2010. The Leviathan reservoir is the largest energy infrastructure project carried out in Israeli history, entirely financed by the private sector. Apart from the financial investment – over 12 billion shekels in the development of the reservoir, this is a technically complex project that begins in the middle of the sea, approximately 130 km west of the coast of Haifa, and is centered on a platform located approximately 10 km west of the coast. Gas production from the reservoir began on the last day of 2019,

⁷ The Tzemach Committee was appointed in October 2011 by the Prime Minister and the Minister of National Infrastructure. It was established as an inter-ministerial committee to examine the government's policy on the natural gas sector in Israel, headed by the then-director general of the ministry, Shaul Tzemach. Among the goals defined in the appointment letter was to conduct an analysis of future demand for natural gas in the country, a future development policy for the natural gas sector in the parameters of the needs of the energy sector, economic, environmental and political goals. Unequivocally, parameters of energy security! The committee's recommendations were published in August 2012, and were anchored in government resolution 442 in June 2013. Among the important decisions: preserving proven natural gas reserves in the amount of 540 BCM for the needs of the local economy for the next 29 years. This was important news. It also approved the export of up to 40% of the State of Israel's total gas reserves, which at that time stood at 1,020 BCM, a billion cubic meters of natural gas.

and during 2020, approximately 7.3 BCM of natural gas were produced and sold from the reservoir, and approximately 10.7 BCM of natural gas in 2021. In 2022, 11.3 BCM were already produced, of which approximately 2.7 BCM of natural gas will be exported from the Leviathan reservoir to Jordan, and another record amount of approximately 6.3 BCM of natural gas to Egypt.

With the discovery of the large Tamar and Leviathan reservoirs in 2009 and 2010, Israel faced a new era in its energy security. Proven discoveries in quantities beyond consumption projections for the coming decades opened the window of opportunity for exporting gas to the world. Israel joined the global gas revolution – entering a period that could be called the "golden age of natural gas".

Four options can be mentioned for the export of Israeli natural gas: the first is export to Egypt for the benefit of the energy-hungry Egyptian market and Egypt's liquefaction facilities for the benefit of exports to Europe. The second is export to Jordan. The third is a floating liquefaction facility (FLNG), which will be located above the Leviathan reservoir, and will liquefy gas that can be transported to more distant export markets (this direction was examined in depth for the Tamar reservoir, and a significant amount was even invested in an initial survey in 2011-2012). The fourth is the laying of an undersea pipeline towards Europe. It should be noted that this option has many technical difficulties, the cost of construction requiring budgetary planning that is divided over export quantities much larger than the total of all reservoirs discovered to date, and is considered in the industry as an option that is raised mainly for political needs.

During January 2017, the Tamar reservoir began supplying gas to the Jordanian Dead Sea plants (Arab Potash Company and Jordan Bromine Company). This was the first export agreement approved by the Israeli government. A long-term agreement for a period of 15 years. To this can be added the constant shortage of drinking and irrigation water in Jordan, a shortage that can be solved with the help of water from Israel. Desalinated water whose desalination plants are powered by natural gas. Gas for Water is an equation familiar to those who have natural gas, seawater, and proven and effective desalination technology, as is the case in the State of Israel – can supply desalinated water to anyone who demands it, at a stable gas price that Israel can afford.

Although Jordan and Egypt are not economies of similar size. The Egyptian market is many orders of magnitude larger than the Jordanian market, the land border and proximity to reservoirs have made it possible to advance export agreements with Jordan. Egypt has oil and gas reserves that were supposed to be sufficient for both the growing domestic market and for exports through two liquefaction facilities built in the first decade of the 21st century. Poor planning of the increase in domestic consumption has led Egypt to

a broken market in terms of natural gas to cover its needs and liquefaction needs for export under its obligations in long-term export contracts signed in the past with global gas giants.

The geopolitical importance of gas supplies to Egypt and Jordan is undeniable. These exports are in the political consensus as a key factor in establishing and strengthening the peace agreements. However, regulatory obstacles, lack of coordination between the Ministries of Finance, Foreign Affairs, Energy, and Defense, in recent Israeli governments, have led to delays in the implementation of possible contracts, and the failure to realize the potential inherent in exports to these countries.

It is worth noting the export of gas from Leviathan and Tamar as an Israeli achievement that was also achieved thanks to the commitment of the producing companies to develop the gas reserves to a production capacity that allows for export. In 2022, gas exports reached 8.76 BCM, which is 42% of the total gas production that year, which stood at 21.9 BCM.⁸ In 2023, the Israel Natural Gas Pipeline Company (NGPC, the national natural gas transmission system) already flowed 24.7 BCM in the gas system, with most of the increase being in exports.

It seems that in the regional market, the desired development directions before the 'Israel-Hamas' War should have been the addition and integration of additional players in Israeli exports, including the Palestinian Authority, Cyprus, and Turkey. Later, Lebanon as well.

The Leviathan Partnership signed an agreement with the Palestinian Authority (PA) to supply 4.75 BCM for a period of 20 years, to the power plant that is to be built in Jenin. This is a project that was planned and approved about a decade ago.⁹ But it has been repeatedly postponed. On the map of the natural gas transmission system of the Netivei Gas Company INGL (Figure 1), one can see the Afula-Jenin line 'in statutory planning'. There was also an appeal to Israeli logistics companies to price the transportation of the station components from Haifa Port to the designated construction area, adjacent to the border fence, on the Palestinian side. In practice, there is no gas export to the PA, and such an export is not on the agenda, and certainly not as long as the 'Israel-hamas' war continues.

⁸ Ministry of Energy and Infrastructure (2022). [Energy Sector Status Report](#).

⁹ Choen, H. (April 11, 2016). [Approved: A power plant to be built in the PA that will run on natural gas](#). *Globes*.

Cyprus is supposed to be the first partner due to the maritime proximity and the fact that the same international drilling and production companies are active in both countries, sharing knowledge and resources, and has been dragging its feet for years in implementing the basic need to flow gas for its energy needs. A gas pipeline from Israel to Cyprus – if laid ('if' because Cyprus has once again decided on a terminal to receive liquefied gas) – would in fact be a mirror image of the pipeline from 'Leviathan'; that is, from the Cypriot Block 12, to a natural gas receiving system on the Cyprus coast, which has not yet been established. Cyprus has dragged its feet in every possible decision regarding the supply of gas for electricity generation on the island. Even before the discovery of the 'Tamar' and 'Leviathan' reservoirs and later the Cypriot 'Aphrodite', Cyprus was offered the supply of liquefied gas in the small quantities it requires, via LNG tankers of up to 15,000 cubic meters. The proposal was rejected in 2006, against a decision to import liquefied gas via a pipeline with a capacity (and cost) greater than the island's needs and possibilities to accommodate and finance. This option was unsuccessful. Later, after the discovery of the 'Aphrodite' reservoir, the companies involved presented development plans that were repeatedly rejected, most recently by Chevron. The LNG terminal that was decided upon is being delayed under various pretexts, and in the meantime Cyprus continues to burn heavy fuel oil and fuel oil for its electricity production, all this instead of connecting directly to the existing reservoir, as Israel did from 'Tamar', and previously from 'Yam Tethys'.

Turkey is a story of disappointment. From the vision of nearly 20 years ago of establishing an energy corridor to Turkey – a physical corridor that would carry water, electricity and gas, for the benefit of both sides – we have woken up to angry, resentful leaders who are dismissive of any goal that has economic well-being for their people, and strengthening regional energy security. It seems that Turkey's political approach at this stage prevents any rational decision. In an exploration campaign that Turkey is conducting in the Black Sea, it has already found quantities of gas that approach the amount of reserves in Israeli economic waters. It should be noted that Turkey is a large economy that consumes gas on a huge scale, in 2022 it consumed 51.2 BCM. Turkey is even threatening the border of its economic waters with Cyprus, a threat that could escalate into a violent conflict.

The vision of the Eastern Mediterranean as a regional natural gas hub (HUB) has not disappeared, but it faces significant geostrategic challenges, with the entry of the Azerbaijani company SOCAR (The State Oil Company of Azerbaijan Republic), the British Company (British Gas) and other investors from the United Arab Emirates, delayed due to the war.



Figure 1: The natural gas transmission system in Israel¹⁰

¹⁰ The website of the [Israel Natural Gas Routes Company](https://www.israelng.com/).

Israel – Global Market

The quantities of gas discovered in the Leviathan reservoir have sparked the imagination of developers and producing companies. Gas exports are essential to ensuring a stable price for the local market, as exports are expected to bring in the huge sums required to continue offshore exploration, potentially finding additional gas reserves.

First, it is necessary to examine whether the known reserves are sufficient for export to the world beyond local consumption and the regional export commitments that have already been signed. The assessment of the Israeli market requirements must be re-verified. Future consumption in the local and regional markets, in the face of long-term energy security, is a reality.

As of these days, the total gas reserves in the Tamar and Leviathan reservoirs, according to what is published on the companies' websites, are 389 BCM in Tamar, 639 BCM in Leviathan. Energian's Karish and Tanin reservoirs contain about 100 BCM. It seems that the local demand forecasts differ from the client's point of view. In 2019, consumption in Israel was 10.8 BCM, and a decade earlier in 2009, only 4 BCM (some of which came via pipeline from Egypt, and some from Israeli gas in the Yam Tethys field opposite Ashkelon). The Knesset website notes in a report on natural gas consumption in Israel that in 2020, the volume of natural gas production was estimated at approximately 15.8 BCM, of which 11.9 BCM was for local consumption. In 2021, the Adiri Committee, Director General of the Ministry of Energy at the time, gave a demand forecast by 2045 of 482 BCM, with annual consumption of 27.5 BCM – double what it is today.

We can discuss the recommendations of the Adiri Committee: Is 2045 an anchor year for a consumption target? Why not go beyond that? Perhaps this is where the International Energy Agency's (IEA) agenda for zero emissions by 2050 comes in. A target date that may be appropriate (!) for a number of advanced and wealthy countries, but certainly not for all. Israel, in relation to this target, set a target of 85% reduction in emissions, and then succumbed to pressure and announced that it accepts 2050 as an agreed target for zero emissions. It is important to note and understand that even with 'zero emissions', there will be many countries that will consume natural gas, that will consume fossil fuels. Electricity production will continue to be from gas turbines, as will water desalination.

Therefore, if the pipeline option to Europe is apparently ruled out for technical reasons,¹¹ according to the Israel Natural Gas Lines Ltd. regarding the proposed pipeline to connect to Europe: "It should be noted that at this stage the company is unable to assess the

¹¹ Laying a gas pipeline from the eastern Mediterranean to Greece, with its final destination in Italy, poses a huge technological challenge and is probably not economically viable under current

readiness to receive the aforementioned permits or regulatory approvals, to sign a development agreement for the project or to implement it",¹² therefore, the possibility of a floating liquefaction facility (FLNG) returns.

The great optimism of the FLNG market, which expects an additional production capacity of approximately 30 BCM in the next two years, conflicts with the IEA's global gas consumption forecast, which predicts a peak in demand for oil and gas as early as 2030.

Is the construction of a floating liquefaction facility practical in Israel? It can be determined with certainty that it is. The issue has been examined, millions have been invested in initial surveys, and now, with a more developed, more available, more proven FLNG market, it remains to be seen who the first company will implement this option, and what size of the liquefaction facility will be planned. Ordering an FLNG, including contracts for the global market, requires the backing of an international energy company. A company that can add another 2–6 million tons of LNG per year to its portfolio for supply to its customers. It is likely that these will be in the Mediterranean basin and Western Europe. Such companies, primarily Chevron, have already been present in Israel since 2020, others are also here, and others have expressed a desire to join. Among them are the Italian ENI, the British BG, the Azerbaijani SOCAR, and ADNOC from Abu Dhabi.

Chevron's entry is more than a merger and acquisition deal with Noble Energy. It is a strong statement from a giant American energy company, active around the world, from Australia to Saudi Arabia, from Angola to Brazil, and of course in the United States.¹³ The global connection can also be noted in the world's gas reserves. Three countries hold about 50% of the world's gas reserves: Russia, Iran, and Qatar.

Is this related to Israel's global market? More than a decade ago, Russia, Iran, and Qatar tried to make manipulative political capital in the OPEC style, when they established the so-called 'Gas Troika'. Its goal was to establish an OPEC-style supranational body that would influence the gas and energy market, but the initiative did not materialize. The gas revolution in the United States may have removed their threat from the agenda. However, it is important to note Qatar's strong position as a giant supplier of liquefied gas. There were years when it also led the global gas market with an incredible vision of growth, of purchasing and operating a fleet of huge, modern gas tankers. Even now, Qatar is leading an impressive development and growth plan, increasing production capacity from 77

market conditions. The pipeline, if laid, would be the longest in the world and would run along an extremely deep route with seismic activity.

¹² As stated in its financial statements dated December 31, 2023.

¹³ In the first quarter of 2024, Chevron reported revenue of \$5.4 billion.

million tons of liquefied gas per year to a production capacity of 142 million tons per year by 2030. Qatar also manages to produce its liquefied gas at a lower price than most of its competitors. This is a very important factor for possible competition later on, when the market reaches saturation, possible oversupply, and competition for every customer.

Russia and Iran – at this stage are lagging behind, although Russia, despite sanctions, despite the explosion of gas pipelines in the North Sea, continues to produce and sell natural gas by pipeline, and liquefied gas to the world. Iran consumes most of the gas it produces for itself, but it also has development plans for its gas reserves.

The Houthi blockade of the Bab-el-Mandeb Strait has a significant impact on LNG trade. LNG tankers are completely avoiding transit through a strait. However, it is likely that future customers of liquefied gas originating from Israel will be in the Mediterranean basin or Western Europe and will be less affected by the situation in the Red Sea straits.

Conclusions

Israel is not an energy Major, the amount of gas in the reservoirs, and the annual volume that Israel produces is marginal. Annual output of less than 25 BCM, compared to global output that exceeded 4,000 BCM in 2021, with 4,059 BCM in 2023. Israel has what it needs, including ensuring the energy security required for the coming decades, while strengthening its geopolitical and economic position in the region.

The world is far from here, even if we connect it to Greece via the Mediterranean pipeline, and even if we liquefy gas here for export (through smaller liquefaction facilities), the quantities will not be sufficient to establish the status of a reputable global supplier. However, gas exports have great geopolitical importance even with countries further away, and as it turns out after the Ukraine crisis, even relatively small quantities are attractive.

An important point that supports increased exports is the economy of scale. The more Israel sells, the more money will come in. Money that lowers the price of gas for the Israeli consumer will allow for continued investment in exploration and production. It will allow for deeper drilling, which may also uncover oil deposits. Therefore, it is recommended to promote a floating or land-based liquefaction facility in cooperation with Cyprus.

Export targets should be based on an annual quantity, which will be agreed upon based on previously established parameters. In a land-based facility with an annual production capacity of 8–12 Million Tonnes Per Annum of LNG (MTPA), in long-term contracts for 25–30 years, this means between 200 and 360 BCM of export, an amount that will be deducted from the country's gas reserves. In a floating facility of 3–4 BCM per year, in

long-term contracts for 25–30 years, this means between 75 and 120 BCM of export. This quantity should be weighed against proven reserves and availability during the feasibility study for these options.

The State of Israel consumed 13.14 BCM in 2022, with an expected increase of up to 15 BCM per year in this decade, and up to about 25 BCM per year in two decades. This is a forecast that is also based on a forecast for growth in electricity demand. Electricity that is likely to come in large part from natural gas-powered turbines in the coming decades. Electricity that can also be exported to neighbouring countries, as well as desalinated water with gas-powered electrical energy. A process that is mainly defined and known as Gas for Water. It is important to note that any increase in demand and supply of Israeli natural gas has many advantages for the state treasury and the consolidation of the Israeli economy, and for the geostrategic position of the State of Israel.

In a situation of regulatory uncertainty, controversial regulatory changes that are protracted and delayed, even in the decisions that must be made, we will no longer see foreign companies bringing foreign money and practical experience in the field of exploration and production that is unique to the Eastern Mediterranean (deep waters, and even deeper layers), and also bringing with them the international market, with a variety of customers around the world.

Foreign investments are what will continue to strengthen the energy security of the State of Israel, especially in light of what is becoming clear to all of us in these days of security uncertainty in the Middle East and around the world, threats to Israel and global trade routes that are only increasing.

The American Floating Pier in Gaza – A Look on the Shipping Passage to the Gaza Strip

Yossi Ashkenazi

The issue of establishing a port in Gaza has been raised and discussed several times in the past during talks on the future of the Gaza Strip. After the outbreak of the war on October 7, it seems that any discussion and cooperation with those who claimed to be sovereign in Gaza is irrelevant, and discussion about shipping passage, including international shipping to the Strip by the State of Israel – is unrealistic. Since the issue of "the day after" in the Gaza Strip also remains, as of the time of writing, without an answer or substantive discussion, there seems to be no substance in a renewed current discussion about international shipping passage to the Gaza Strip, certainly not one granted to the Palestinians by the State of Israel or on its behalf.

However, for several months now, the Americans have been trying to transport supplies and humanitarian aid to the Gaza Strip using a floating pier that is actually a type of port on the Gaza coast. A pier that is supposed to save the land crossings that are subject to threats from various players and involve logistical difficulties. Because of this, the questions arise: Does the very existence of this pier, or at least the attempts to establish such a sustainable infrastructure that have so far largely yielded no results, resonate with the possible alternatives regarding shipping passage to the Strip? And what does this attempt mean for the future establishment of a port in Gaza and the strategic implications of this move?

In this chapter, I will review the main alternatives for shipping passage to the Strip, which were detailed in detail in my 2020 article,¹ and I will also briefly review the history of the floating pier that the Americans attempted to establish in the first half of 2024. I will examine the situations in which, assuming that such a pier would indeed function reasonably over time, it could integrate with the alternatives previously proposed solution for shipping passage to the Strip, this of course only if a geopolitical and strategic reality occurs that would allow this.

Alternatives to water passage to the Gaza Strip

In the discussion on shipping options for the Gaza Strip, the following alternatives came up:

¹ Ashkenazi, Y. (2021). The Options for a Commercial International Port in the Gaza Strip: A Historical Perspective. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, 242–263 (Maritime Policy & Strategy Research Center, University of Haifa).

Transporting goods to the Gaza Strip through the Port of Ashdod

In fact, this is the main sea supply route through which thousands of containers actually arrived in the Gaza Strip each year. Ships unloaded at the port of Ashdod and the containers destined for Gaza were concentrated for security inspection, preparation for loading onto trucks and transport overland from the port of Ashdod to the Kerem Shalom crossing. Two transportation systems were involved in the process, the Israeli one up to the Kerem Shalom crossing, and the Palestinian one which would receive the goods at the crossing, transport them to trucks in the Gaza Strip, and distribute them to the end users – mainly to farmers who ordered raw materials.

This method was not without its drawbacks. The security inspection of the contents of the containers, and the veterinary inspection when it involved agricultural produce (such as eggs for breeding), took time, damaged the quality of the produce, and in fact created a process of depreciation that intensified as the process progressed.

The transfer at Kerem Shalom from Israeli to Palestinian trucks also took its toll on Gazan farmers. Payments or bribes to Hamas members, theft of produce and goods from trucks, and the like, were routine events. Data examined in 2014 and 2020 showed that up to 25 percent of the produce that arrived at the Ashdod port was lost in one way or another by the time it reached the end users in Gaza.

Palestinian pier at the port of Ashdod

Towards the end of the 1990s, the Israeli Ports and Railways Authority offered the Palestinians their own pier at the port of Ashdod.² The gist of the proposal was to embody through the pier symbols of Palestinian sovereignty with their own area in the port, a flag, work vehicles and operational staff on behalf of the Authority. In practice, this alternative was never relevant because it was not accepted by the Palestinian Authority, and because the geopolitical situation was far from allowing it.

Alternative deep-water or shallow-water port in Gaza

The idea of building a new port on the Gaza coast, as expressed over the years, whether a deep-water or shallow-water port, is based on the engineering plan of the Dutch-French company 'Ballast Nedam' from the 1990s.

Building a deep-water port, defined as such, that can accommodate large container ships, requires a water depth of at least twenty meters, to accommodate the draft of the ever-

² Marom, E., Agmon, G., and Soffer, A. (1998). *Seaports in Gaza – Implications for Israel*. National Security College (Hebrew).

increasing ships.³ There is also an alternative of a shallow-water port to which cargo that has been loaded at hub ports such as Ashdod or Alexandria would arrive. This alternative is running like a second thread in the various scenarios at a time when there is still talk of the possibility of normalization between Israel and the Gaza Strip. As early as 2006, the Israel Ports Company (IPC) included in its master plan a shallow-water port in the Gaza Strip, which would provide a solution mainly for Roll-on/roll-off (RORO) ships⁴ as an aid to the ports of El-Arish and Damietta.⁵ Such a port would serve as a source of livelihood for the Gazan population with the variety of professions required to operate a seaport, but it seems that in the current reality after October 7, this option is not realistic.

An alternative to an artificial island for seaport and airport purposes

Works on the need for artificial islands for the State of Israel have been widely discussed over the past three decades.⁶ In the context of an artificial island that would serve as a seaport and airport for Gaza, one can mention the proposal of the then Minister of Transportation, Israel Katz, during Operation Protective Edge (2014), regarding the establishment of an artificial island and the possibility of a civilian separation from the Gaza Strip, i.e., establishing infrastructure on the island for the benefit of the Strip (such as an airport and energy facilities).⁷

According to that plan, Israel would cut off the supply of electricity, fuel, and food to Gaza, which would at the same time be stripped of the weapons, rockets, and missiles in Hamas' hands. To meet the needs of the Strip after the cessation of Israeli logistical

³ The new 'Hamifrats' and 'South' ports of the State of Israel are examples of deep-water ports that were built at a cost of more than a billion dollars each, and can serve 18,000 TEU ships.

⁴ A roll-on/roll-off ship (often referred to by the acronym RORO) is a ship that carries rolling cargo, which is carried on trailers.

⁵ Israel Ports Company (2006), Strategic Master Plan for the Development of Israel's Mediterranean Ports, Volumes A and B (Hebrew).

⁶ See reviews in: Kalmar, M. (2017). Artificial Islands for Energy Infrastructure. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2016*, 166–177 (Maritime Policy & Strategy Research Center, University of Haifa); Kalmar, M., and Gonen, E. (2019). Developments in the Construction of Artificial Islands and Floating Platforms during the Past Year. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2018/19*, 211–217, (Maritime Policy & Strategy Research Center, University of Haifa); Weiss, S. (2014). *Artificial Islands on the Coast of Israel: A Milestone in the Development of the State of Israel?* The Chaikin Chair for Geostrategy, University of Haifa and the National Security College (Hebrew); Burt, M. (2014). *The Maritime Option – The Blue Avenue*. The Chaikin Chair for Geostrategy, University of Haifa (Hebrew); Maritime Plan for Israel, Phase C Artificial Islands, Policy Measures.

⁷ *The Guardian*. (Mars 30, 2011) [Israel may build artificial island off Gaza Strip coast](#).

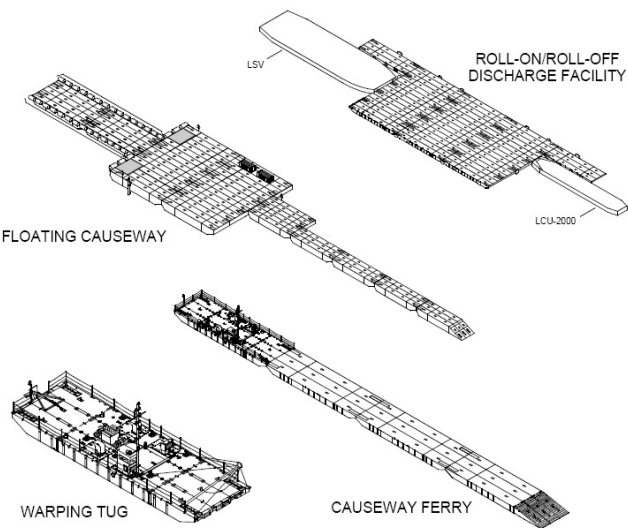
support, the Rafah crossing between Gaza and Egypt would be opened for an interim period for the transfer of goods and people, under supervision.

The financing of the artificial island, which will be built 4.5 kilometers off the coast of Gaza, will be financed by the international community, and the engineering model will be taken from the Israel Ports Company. A seaport with a water depth of 30 meters, a logistics hinterland, and a marina for yachts will be built on the island. In addition, infrastructure facilities such as energy and water desalination facilities will be built on it, and later an airport. The plan also provided a solution to the issue of security checks. Again, there is no doubt that after October 7, it is difficult to imagine the realization of such an alternative.

Floating port

This alternative is partly what the Americans are trying to build with the floating pier these days. When discussing a floating port, two types of ports can be mentioned: One is a deep-water port based on floating elements, such as the one built by the British during the Falklands War in 1984. A port on an artificial island can serve larger ships as described above. On the other hand, a floating pier can connect the shore to the deep sea, so that it is possible to transport goods unloaded from small to medium-sized ships by vehicles to the shore.

These elements of pier construction are part of the logistical capabilities of advanced navies, in this case the US Navy. In the US Navy Technical Specification TM 55-1945-205-10-4, options for building floating piers using modular components are presented:



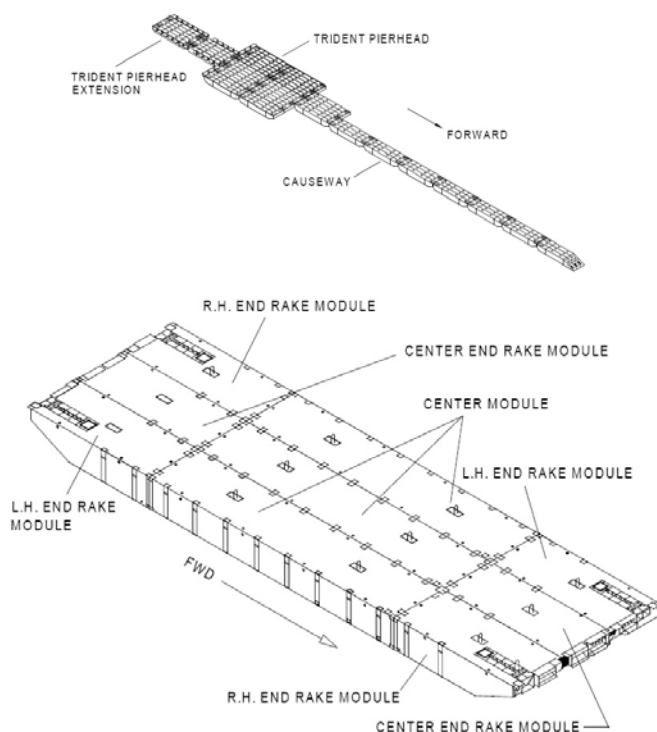


Figure 1: From the American technical specification for a floating pier ⁸

In the floating pier alternative, the ships transporting the goods (called feeders) carry between dozens and hundreds of containers.

A secure, loaded port and shipping line from it to the Strip

This alternative is primarily political, and aims to offer a solution to the security issue that has troubled Israel for years. According to this model, ships carrying goods for the Gaza Strip would arrive at one of the Mediterranean ports that would be agreed upon in advance, such as the port of Mersin in Turkey or the port of Larnaca in Cyprus. At the port, transshipment would take place, that is, unloading the goods from the ships and loading them onto smaller feeder ships that would arrive in the Strip. The transshipment would be carried out under the control of a third party – in the past, the European Union or NATO were mentioned as such a party that would supervise to ensure that no weapons were smuggled. The voyage from the transshipment port to the Strip would be accompanied

⁸ Modular Causeway System (MCS) Floating Causeway (FC) FC-1 NSN 1945-01-473-2162.

by Israeli Navy ships to ensure that no sea crossings would be made to load weapons onto the feeder ships. The final destination of the feeder ships is the same floating pier in Gaza, on which the cargo would be unloaded and transported to shore.

El-Arish Port and Land Transit/Passage

In this alternative, the renovated El-Arish port in Egypt serves as the base port for bringing goods into the Gaza Strip through the border crossing between Gaza and Egypt (El-Arish Crossing), and Egypt supervises the crossing from a security perspective and prevents the smuggling of weapons into Gaza.

The American pier in Gaza

The idea of placing the floating pier for the delivery of humanitarian supplies from the sea arose from American frustration with the allegedly slow pace of humanitarian supplies entering Gaza during the Israel-Hamas War. President Biden announced this intention on March 7, 2024, in his State of the Union address, defining it as an emergency mission for the US Navy. Pentagon spokesman Patrick Ryder estimated the day after Biden's speech that the US Navy would need about sixty days to establish the pier project.

The Gaza aid project is structured so that aid arrives in Cyprus, where it is transferred from large supply ships to smaller feeder ships that sail to the Strip. The feeder ships arrive at a floating platform located a few miles offshore, fixed to the seabed, where the goods are unloaded. From the floating platform in the deep sea, the aid is transferred by US Navy logistics boats to another floating platform connected by a pier to the Gaza coast, where it is loaded onto trucks and transported to shore.

The pier began to function fully for the first time on May 17, 2024, after a little more than two months of organization and construction, and an investment of \$230 million. A total of 12 days passed from the date of its construction until the first time it was unloaded. As mentioned, it is built of two main parts, a floating platform a few hundred meters from the shore where the supply ships arrive and unload, and a narrow pier connecting it to the shore where the trucks drive. More than 1,000 American soldiers and sailors were involved in the construction of the pier, with the assistance of logistics ships and a landing ship of the British Royal Navy, which was used for housing during the construction stages. The platform was built under the United States Central Command (CENTCOM) and the capability is branded under the term Joint Logistics Over-the-Shore (JYLOTS). This capability of the Americans has been known to the Israeli Navy for years, and in the previous decade, cooperation exercises were even held between the navies in the field of logistical assistance from sea to shore.

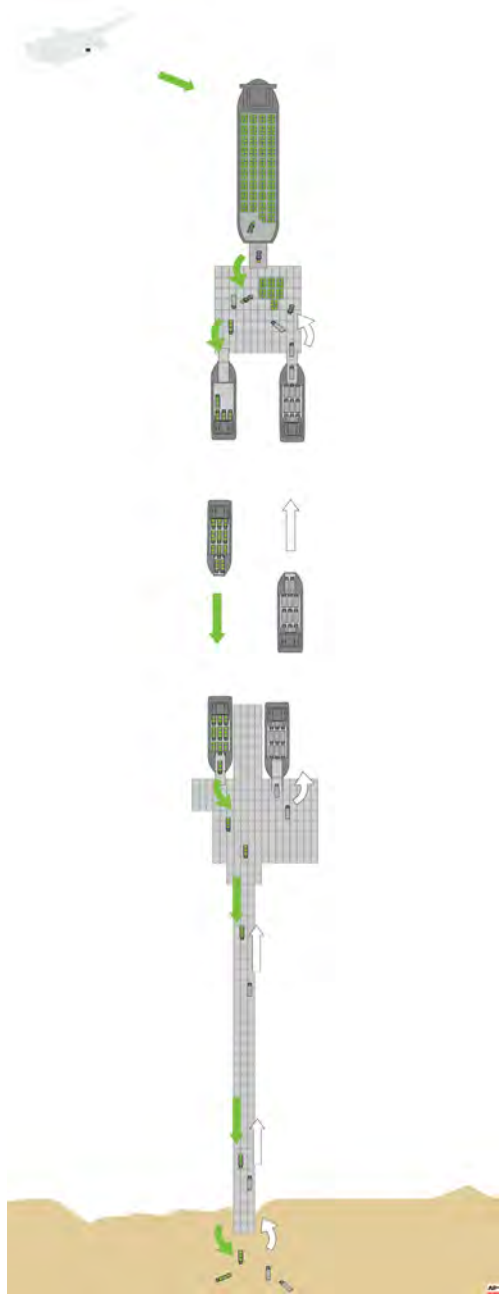


Figure 2: Diagram of the Gaza floating platform operating method⁹

⁹ Baldor, L. C. (May 30, 2024). [The US-built pier in Gaza broke apart. Here's how we got here and what might be next](#). AP News.

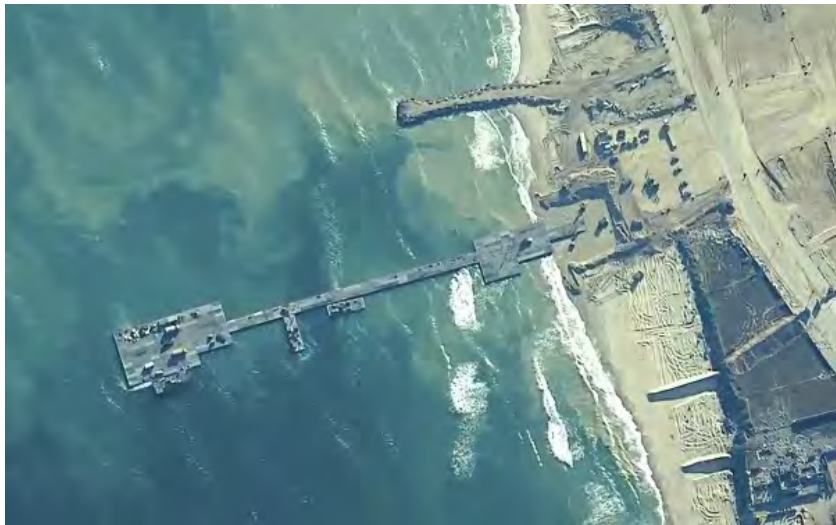


Figure 3: The floating pier off the coast of Gaza¹⁰



Figure 4: A truck is unloaded from a US Navy cargo ship onto the floating pier off the coast of Gaza.¹¹

¹⁰ Knickmeyer, E., and Lederer, E. M. (June 14, 2024). [US-built pier in Gaza is facing its latest challenge — whether the UN will keep delivering the aid](#). *OPB*.

¹¹ Correa, L., and Bentov, A. (June 26, 2024), [US military shows reporters pier project in Gaza as it takes another stab at aid delivery](#). *AP World News*.

Supposedly, in terms of its design, the pier is capable of withstanding "Sea State 3" (between 0.5 and 1.25 meters of wave height) with the expectation that it will survive the spring and summer until the winter days characterized by higher seas, starting in September. In fact, the first storm that subdued it occurred on May 25. After being restored in Ashdod, it was returned to operation on June 8 and has since experienced additional failures and functional discontinuities. By the end of June 2024, the pier had been dismantled and reassembled about four times, and on some occasions it was swept away or towed to the port of Ashdod. As of June 28, 2024, the pier was dismantled once again due to weather conditions, and it is currently unclear whether it will resume operations. In general, it appears that the pier is not sufficiently resistant to the conditions of the Mediterranean Sea, and in storms it must be dismantled and towed to Ashdod – which prevents it from serving as a viable solution to the issue of supplies from the sea. The cumulative amount of supplies that have been transferred through it to the Gaza Strip since its construction exceeds 8,000 tons of equipment.



Figure 5: Assistance truck on the floating platform¹²

It should be noted that due to the conditions of the war, the supplies concentrated in the coastal area near the pier, after being unloaded from it, are not flowing into the Strip as of the end of June 2024. According to the UN, approximately 6,800 tons of equipment are waiting in the distribution area, which has not been distributed into the Strip due to "security concerns," according to them. According to the Americans, if supplies do not arrive continuously into Gaza, then there is no point in rebuilding the pier. Pentagon

¹² The guardian. (June 23, 2024). ['They miscalculated': Gaza's floating aid pier failing to deliver in rough seas.](#)

Deputy Spokesperson Sabrina Singh confirmed at the end of June 2024 that it was unclear whether the pier would be repositioned. In addition, she raised the issue that food supplies arriving in Cyprus should be channeled to the loading port, and to this end, the Americans are talking with aid organizations. The UN, which is the main factor in placing supplies through the pier, did not deliver new supplies from June 9 to the end of June 2024.¹³ According to the UN, the supply of aid was stopped because the IDF used the compound adjacent to the supply concentration area for the operation to rescue the four kidnapped (Operation Arnon, June 8, 2024).¹⁴

The current discussions between the Americans and the UN revolve around changing the supply route, from the transshipment port in Cyprus, where the supply will be inspected from a security perspective, directly to the port of Ashdod, and from there by truck into the Strip without the need for additional security checks.

Between the American pier in Gaza and shipping transit alternatives to the Gaza Strip

If we return to the discussion of alternatives for shipping transit for the Gaza Strip, a floating pier was an integral part of them. A floating pier is not relevant to the alternative of land supply through the port of Ashdod, nor to land supply through the port of El-Arish. In the alternative of building a deep-water port, as well as in the alternative of a floating pier for large ships that would be located in the depths of the sea off the coast of Gaza – there is no need for a floating pier. Therefore, the floating pier is relevant to the alternative in which there is a loaded port in a neighboring country, from which the goods arrive directly to the Strip.

The American pier in Gaza actually created the sixth alternative described earlier, and defined the parameters for its operation. The transshipment port is in Cyprus (not Turkey). The force supervising the non-introduction of weapons into the equipment containers during the transshipment process is American. The transshipment process is carried out while the aid is being unloaded from the ships that brought it to Cyprus, and it is divided into smaller feeder ships, from there to the US Navy ships that make their way directly to the floating pier off the coast of Gaza, where the equipment is unloaded and loaded onto trucks that transport it along the narrow part of the pier to the coast. In practice, it

¹³ US Department of Defense (June 17, 2024). [Deputy Pentagon Press Secretary Sabrina Singh Holds an Off-Camera, On-the-Record Press Briefing](#).

¹⁴ Ynet. (June 29, 2024), [The UN is again distributing aid in Gaza that arrived by sea. The US is considering: Will the Ashdod Port replace the pier?](#)

turns out that this alternative is not viable in the face of Mediterranean conditions, not even after the large investment in its construction, which amounted to approximately \$230 million. This alternative is likely to end with the unloading of the goods at the port of Ashdod, and a return to overland transportation from the port of Ashdod by trucks into the Strip. In addition, this alternative has raised problems regarding the accumulation of aid and its distribution within Gaza.

Summary

The issue of a "port in Gaza" has resurfaced in the past in discussions regarding possible alternatives for international shipping to the Gaza Strip. After the outbreak of the war, it appeared that an Israeli-supported port in Gaza was unrealistic. However, in order to assist the Gazan population, the Americans decided to establish a floating pier that would accelerate the entry of humanitarian aid into the Strip, which they claimed was lacking in the rate of its arrival and distribution within the Strip. The task was assigned to the US Central Command, and over the course of more than two months and with an investment of approximately \$230 million, the pier was established in May 2024. The US Navy established the pier relying on its sea-to-shore logistical support capabilities – JYLOTS. Although more than 8,000 cumulative tons of supplies were brought in through it, in practice the pier did not meet its purpose and did not survive the conditions of the Mediterranean Sea. By the end of June, it had been dismantled and reassembled several times.

The alternative of a floating pier as part of a secure cargo terminal and a shipping line from it to the Gaza Strip, mentioned above, is an essential part of the discussion on shipping transit alternatives to the Gaza Strip. The alternative is aimed at supplying equipment to the Gaza Strip via a port located in Cyprus. Circumstances have shown that this alternative does not stand the test of reality in the sea conditions of the Gaza coast, despite the large financial investment, and has also raised questions about the accumulation of aid on the coast and its distribution to the population.

It seems that the American pier will not be able to develop into a real port for Gaza, and it is likely that if there is a discussion in the future about bringing supplies into the Gaza Strip directly by sea, another permanent engineering project will be needed, such as a port and the construction of a breakwater, a high pier or an artificial island, which will require a corresponding financial investment.

Operational and engineering aspects of constructing a floating pier on the Gaza coast

Moti Kalmar

Construction of the pier

The location of the pier was determined by operational considerations, primarily control of the coastline. The speed of construction and operation of the pier were the determining considerations. In any case, the resulting product is temporary in nature and the date of its operation will depend greatly on environmental factors and sea conditions, such as the strength and direction of the winds and waves. The pier was built modularly from standard parts called "pontoons." The dimensions of the modular parts are a fixed element, and they result from optimizing the transportation of the parts to the location that will need these means, but also correspond to the dimensions of the land transportation means that transport the pontoons from the place of production to the concentration and storage locations. Usually no more than 40 feet long - the size of a container. The pontoons themselves are sealed and have mooring accessories embedded in them.

The pier built in Gaza is about eight meters wide and about 500 meters long. It is a modular construction and can be expanded to 1,000 meters or even 1,500. At the head of the pier are loading and unloading areas measuring about 120 meters by 120 meters, which can also be expanded to 150 meters by 150 meters.

To build the pier, modular parts and floating pontoons were taken from the army's emergency depots in the southeastern United States, loaded onto special vessels for logistical support, and sailed to the Ashdod port area chosen as the site for the pier's construction. The transport ship (mother ship) unloaded the modules into the water, and a skilled crew assembled the desired structures from them with the assistance of motorized barges (also composed of the same modules: pontoons). This is work that requires skill and practice, and is also highly dependent on the weather and various sea conditions. After assembly, with the assistance of the motorized barges and other means, which are also standard equipment on the mother ship (such as tugs), the structure was towed to the designated location on the Gaza coast.

The pier was built by a military unit from the US Army in close cooperation with US Navy sailors, and the base of the pier lies on the shore and was built by an IDF engineering unit, whose soldiers were specially trained by the American unit building

the pier. The IDF dug a wide moat on the Gaza coast at the location designated for the pier base, about 20 meters wide, about 30 meters long, and about 10 meters deep, and it is filled with seawater. The pier is pushed at a speed of about four knots into the moat and stuck to its sides. This end serves as the land anchor of the floating pier. The pier itself is supported along its length by the motorized barges (they also assist to "straighten" it in cases of an unexpected lateral movement), and is anchored to the ground in predetermined places as needed.

Cargo unloading method and pier operation

The cargo arrives at the port in Cyprus, where it is loaded onto a relatively small supply ship carrying the humanitarian aid two miles offshore. At this point, it unloads the cargo onto independently powered barges operated by the US Navy. The barges sail to the platform at the head of the pier. The supplies are supposed to be packaged in a way that will allow for easy loading from the powered barge onto trucks waiting on the bridgehead platform. The trucks will transport the supplies to distribution centers on the shore. The design allows for two-way traffic on the pier, but the actual implementation depends on weather conditions, the skill of the drivers, and the experience that will be gained with operation.

The pier that was built is a military pier for temporary civilian use operated by the American military. As such, many planning and safety aspects (sometimes even those required by law in the United States or Israel) have been neglected and become irrelevant, such as determining the minimum height of the freeboard when transporting cargo on the pontoons, the distance of the pier deck from the waterline, and more. Therefore, its operation depends on it being operated by soldiers.

Wear problems

Floating piers of this type are constructed from many interconnected parts, and suffer increased wearing over the time due to the movement of the parts on the water, which creates loads on the connectors between the parts. This erosion is increased by sea conditions and winds. Therefore, the pier built in Gaza cannot serve as a substitute for a permanent civilian pier, since the lifespan of the pier is limited. In addition, its operating times depend entirely on weather conditions and sea state. The number of possible operating days of such a pier in the winter season is limited. For comparison, one can examine the nearby port of Ashdod, which, although protected by large breakwaters, is closed for several days each winter. On the weekend of May 25, 2024, the media reported on parts of the pier that were swept away by coastal

waves and washed onto the Ashdod coast. The height of the waves at that time was slightly less than two meters.

In the first days of the pier's operation, it was reported that the rate of cargo unloading was not high. It appears that sea conditions are making it difficult to transfer supplies from the mother ship to shore. Looking ahead, it can be assumed that the pier will not withstand the winter storm on the Israeli coast, when the wave height reaches more than eight meters, and it will need to be towed to the port of Ashdod, or dismantled before a significant storm arrives. Therefore, it is likely that no transportation operation will continue at the pier after the fall of 2024. Furthermore, it is unclear what the fate of the pier will be after the end of the humanitarian aid operations, whether it will remain in Gaza or be dismantled and transferred back to the United States.

The Impact of the Israel-Lebanon Maritime Delimitation Agreement of 2022 in the Post October 7th Era

Orin Shefler

Written during June and July 2024

Introduction

Much water has flowed from the river to the sea since the Israel-Lebanon Maritime Delimitation Agreement was signed in October 2022.¹ The events of October 7th and resulting "Iron Swords" war in Gaza have sidelined immediate hopes for regional reconciliation between Israel, Lebanon and existing Palestinian leadership, creating an atmosphere where international agreements are almost impossible to broker. The harmful influence of Iran in the region continues to take a toll. Iran's political, military and financial backing of armed proxies, such as Hezbollah and Hamas, continues to undermine leadership and/the sovereignty of governments. Moreover, the Biden administration's attempt to broker a cessation of hostilities, in the form of a hostage deal, in the wake of the October 7th massacre, whilst Israeli hostages are still captive in Gaza, have caused heightened tensions between leaderships of Israel and the US projecting weakness in the eyes of Israel's enemies. Additionally, the pending 2024 US general elections shadowed by the Trump-Biden rivalry, together with the changing political US landscape with antisemitism on the rise, have stalled hopes for a permanent cessation of hostilities. There may even be a subdued incentive to "hold-arms" and wait for a better outcome after the US elections. In wake of all this turmoil, current leaders now openly argue that there is no virtue in diplomacy at this time, whilst others maintain their belief that now, more than ever, is the time for full-on diplomacy. Having set the stage, this report examines the aftermath of the 2022 Maritime Boundary Line Delimitation Agreement between Israel and Lebanon – or simply referred to as the "Agreement" – in the post October 7th era. This report identifies positives, negatives, wins and losses resulting from the US mediated deal between two enemy states with an armed Iranian proxy militia wedged firmly in the middle.

The Israel-Lebanon Maritime Delimitation Agreement of 2022²

Dubbed monumental at its time, but controversial, the Agreement was achieved during the final days of Prime Minister Yair Lapid and President Michel Aoun governments in late October 2022. Having been under negotiated for over a decade, and spanning ever-

¹ The [Israel-Lebanon Maritime Delimitation Agreement of 2022](#).

² See "[The Delimitation Agreement Between Israel and Lebanon – Challenges and Achievements](#)" By Dr. Benny Spanier & Orin Shefler, published in the *Maritime Strategic Evaluation for Israel 2022/23*.

changing leaders and governments, the Agreement was finally achieved through US diplomatic efforts led by President Biden's special envoy to the region, Amos Hochstein. The meetings were held at the Office of the United Nations Special Coordinator for Lebanon at Naqoura (UNSCOL).³ The Agreement established, for the first time, a mutually recognized maritime boundary line or "MBL" between Israel and Lebanon paving the way for each side to acknowledge sovereignty rights over natural resources in each's respective Exclusive Economic Zones (EEZs). The Agreement adopted a median maritime boundary line principle using commonly accepted principles of international law that balanced between two separate, and mirrored legal doctrines developed by each party during the years of negotiations. The specific MBL coordinates were established according to principles from the United Nations Convention on the Law of the Sea (UNCLOS).⁴ The Agreement set a precedent for a peaceful resolution of the Israel-Lebanon maritime dispute, and served as a vote of confidence for believers that Israel and Lebanon, two enemy states, were capable of reconciliation through diplomacy. The Agreement was made possible by the US, in spite of Hezbollah's power and influence in Lebanon and a watchful Iranian eye.

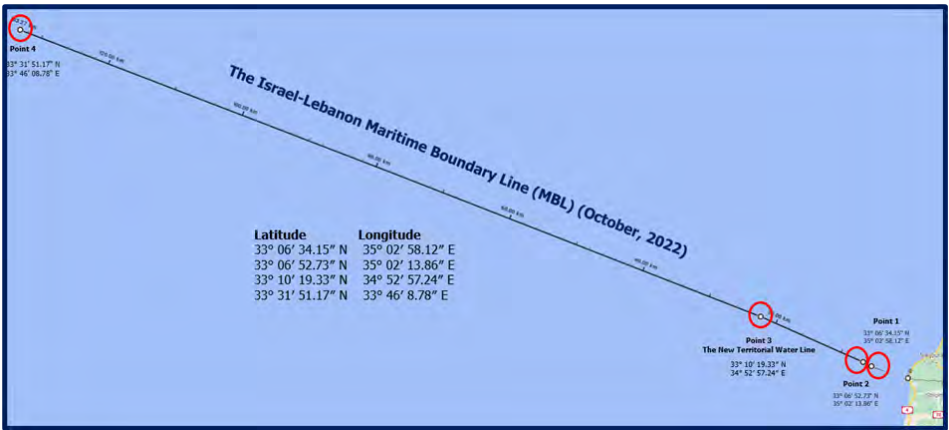


Figure 1: The Coordinates of the Israel-Lebanon Maritime Boundary Line (MBL)⁵

Israel's Underlying Interests in 2022

Israel's interest to engage Lebanon were driven by economics at a time when Israel was focusing on commissioning the "Karish" floating, production, storage and offloading

³ The [Office of The United Nations Special Coordinator for Lebanon](#).
⁴ [United Nations Convention on the Law of the Sea](#).
⁵ See "[The Delimitation Agreement Between Israel and Lebanon – Challenges and Achievements](#)" By Dr. Benny Spanier & Orin Shefler, published in the *Maritime Strategic Evaluation for Israel 2022/23*.

facility (FPSO) operated by Energean, the concessionaire of the "Karish" gas field located not too far from the MBL within Israel's EEZ. The Agreement placed the Karish FPSO well within recognized boundaries of the Israeli side of the MBL thus ending Lebanese claims that portions of the Karish field was located within the Lebanese EEZ. The Agreement also established an option for Israel to receive pro-rata portions of revenues accumulated from future hydrocarbon production from a presumed "Qana" field located in the Block 9 that straddles the MBL on the Lebanese side, if the Block 9 operator was to prove that portions of the "Qana" play extended into the Israeli EEZ. A key issue that was purposely shelved from the Agreement was an exact determination of how much revenue Israel would be entitled to receive from the "Qana" field. The exact percentage would need to be substantiated first by the Block 9 operator after concluding a drilling campaign. Supporters of the Agreement believed that the Agreement, brokered by the US and submitted to the UN under the principles of UNCLOS, had the potential to promote regional stability, advance oil & gas exploration, and provide security for existing offshore infrastructure. Indeed, quite the expectations. But alas, the Agreement also immediately sparked controversy.



Figure 2: The Karish FPSO located in the Israel EEZ, south of the internationally recognized MBL⁶

Opponents on both sides cited concerns over the long-term effects of conceding parts of a disputed triangular maritime area in the sea to the other. The concern was that concessions made, without clear and quantifiable gains, would be perceived as weakness by the other side, especially by Hezbollah, harming Israel's regional deterrence and weakening the Lebanese government. Opponents in Israel equated between concessions of portions of the Israeli EEZ as equivalent to waiving portions of the Jewish homeland. Benjamin Netanyahu, who was leader of the opposition at that time, criticized the then Prime minister Yair Lapid

⁶ [Energean](#), Energean Power FPSO.

arguing that the Agreement was executed in haste, under US pressure, at the end of Lapid's term and prior to a general election.⁷ Netanyahu argued that concession of areas in the sea attributed to Israel was illegal,⁸ and required an affirmative vote by the Knesset.

Lebanon's Underlying Interests in 2022

Lebanon's underlying interest to engage Israel, at that time, were also primarily economic namely the possibility of developing the "Qana" gas field in Block 9 located on the Lebanese side of the MBL. The Lebanese perception was that the majority of the play lay in Block 9 with a much smaller portion of the field (presumed around ~16%~17%) crossing over into the Israeli side of the MBL.⁹ The fact that the deal was brokered by the US government sparked interest from major oil and gas players. None the less, the Agreement colored the Lebanese government as "choosing a side" in the escalating US, Russia rivalry thus causing Russian gas companies to exit the Block 9 prospect making way for European players to enter the space, backed by financing from Qatar.¹⁰ For moderates in Lebanon, the Agreement was perceived as a positive step towards economic growth in wake of the devastating 2020 Beirut explosion¹¹ and the energy crisis in the country. But for others, especially, Hezbollah, the perspective was that negotiations and concessions made to Israel – the Zionist Entity – undermined Lebanon's long-term interests and sovereignty. Naturally, public opinion in Lebanon leaned both ways, and surveys showed that "more than 80 percent of the Lebanese public do not want a conflict".¹²

Proponents of the deal were happy that "Lebanon [could] enjoy economic benefits of the area north of Line 23 [on the MBL], including the Qana gas field"¹³ promised by the Agreement with a future option of becoming a self-producer of energy.¹⁴ Opponents of the Agreement raised concerns that the revenue-sharing arrangement with Israel could put Lebanon in debt to Israel, which was against Lebanon's best interest. The Agreement

⁷ *Israel National News* (Arutz Sheva), October 11, 2022 "[Netanyahu condemns maritime agreement: Lapid surrenders to Hezbollah](#)".

⁸ *i24news*, October 12, 2022 "[Israel: Opposition parties work to delay Lebanon maritime deal](#)".

⁹ *France24*, October 14, 2022 "[Lebanon-Israel maritime border deal: what do we know?](#)".

¹⁰ *AP News*, January 29, 2023 "[Qatar replaces Russian company in Lebanon gas exploration](#)".

¹¹ *Times of Israel*, September 19, 2020 "[US said to redouble efforts for Israel-Lebanon maritime talks after Beirut blast](#)".

¹² *The New York Times*, December 22, 2023 "[U.S.-Brokered Talks Seek to Ease Tensions on Israel-Lebanon Border](#)" By Adam Entous, Ronen Bergman, Maria Abi-Habib and Euan Ward.

¹³ *The Times of Israel*, October 11, 2022, "[Israel announces 'historic' maritime border agreement with Lebanon](#)", By Lazar Berman and Jacob Magid.

¹⁴ *France24*, October 6, 2022, "[Lebanon years away from gas riches despite Israel deal: Analysts](#)".

placed all payment responsibilities to Israel upon the Block 9 operator, with a clear divide, so as to ensure that there would be no direct cash flow from Lebanon to Israel. The Agreement also caused political divide between various factions within Lebanon. While the government, led by President Michel Aoun, supported the Agreement,¹⁵ opponents argued that the Agreement was ambiguous, not legally valid,¹⁶ executed in haste and under international pressure.



Figure 3: The Transocean Barents arrives in Lebanon for the Total drilling campaign in Block 9¹⁷

The Aftermath of the Agreement, and its Effect on the Lebanon-Hezbollah-Iran Axis

As with all complexities in Lebanon, the negotiations and the effectuation of the Agreement were monitored by Hezbollah and their state sponsors, Iran.¹⁸ Traditionally, Hezbollah's massive influence and military power can potentially overpower any call to act by the government of Lebanon. But in this case, although Hizballah and Iran did not publicly support the Agreement, *de-facto*, neither acted to stop it therefore. The assumption is that Hezbollah purposely allowed this Agreement to progress. Even more so, some would even argue that Hezbollah have gloated that their military capabilities, together with the

¹⁵ *The Times of Israel*, October 13, 2022, "[Lebanon's president announces official approval of maritime border deal with Israel](#)".

¹⁶ *The Times of Israel*, October 12 2022, "[Leaked text of Lebanon-Israel maritime deal underscores its ambiguity](#)" By Lazar Berman.

¹⁷ *Energy Voice*, August 16, 2023, "[Transocean Barents arrives in Lebanon for Total drilling](#)".

¹⁸ *Arab Center Washington DC*, October 31. 2022, "[Lebanon Will Not Benefit from Its Maritime Agreement with Israel](#)" by Imad K. Harb.

legal strategy developed by Lebanon during the negotiations, created the deterrence that swayed Israel to reach a deal. Hezbollah often tries to bolster its popularity in Lebanon since the 2020 Beirut blast by exaggerating its accomplishments against Israel. While the Agreement may have temporarily reduced tensions in the Mediterranean Sea for a very short time, it did nothing to resolve the buoy-line dispute near the shore line,¹⁹ or the remaining land border dispute near the Shebaa Farms in the Golan Heights,²⁰ which were purposely detached and excluded from the Agreement. But let no one be naïve. Hezbollah has clearly recognized the potential economic benefits of offshore gas discoveries and the chances of a massive revenue stream to Lebanon which it would surely like to gain access to in the future. The government of Lebanon and Hezbollah would have conflicting interest in taking control of said benefits. This will clearly remain a serious concern for the sovereign government of Lebanon who will need to find measures for restraining Hezbollah's going forward.



Figure 4: The Government Palace in Beirut, HQ of the Prime Minister of Lebanon²¹

If the Lebanese government wishes to reap any rewards from gas revenues in lieu of the Agreement, the first stop will have to be regaining its sovereignty back over Lebanon. The Lebanese government will need to strengthen institutes, and dismiss Hezbollah's grasps over the country. Massive gas revenues would need to be monitored, and protected from

¹⁹ The [Israel-Lebanon Maritime Delimitation Agreement of 2022, Section 1, Article B.](#)

²⁰ *The Times of Israel*, April 9, 2019, "[Lebanon says Golan recognition undercuts its claim to disputed land with Israel](#)".

²¹ [Grand Serail \(Government Palace\).](#)

the grasps of Hezbollah's armed militia forces. The Lebanese government also suffers from corruption, which would also need to be rekindled in preparation for a vast wealth injection. Perhaps, one good way of doing that would be through developing some mutual interests with Israel, and also leading internal dialog with Hezbollah. If such dialogue was to occur, and de-militarization processes could be instigated, then perhaps the US, together and other influential EU nations such as France, could support the internal process. Indeed, international support could be useful if the government of Lebanon was to apply pressure on Hezbollah to disarm itself.²² However, in the post-October 7th era, it seems more and more likely that Hezbollah will not voluntarily disarm itself, nor release its influence on the Lebanese government.

Hezbollah represents the Shiite Muslims in the diverse Lebanese population. Hezbollah's power and influence in Lebanon, together with a changing demographic within Lebanon, has exposed weaknesses within the Lebanese political system. The Lebanese constitution, enacted in 1926,²³ together with the National Pact Agreement, introduced in 1943²⁴ embedded built-in demographic checks and balances into the Lebanese government organs to ensure adequate representation for all the people of Lebanon including, without limitation, appointing a Maronite Christian as President, a Sunni Muslim as Prime Minister, a Shia Muslim as the Speaker of the Parliament and a Greek Orthodox Christian as Deputy Prime Minister and Deputy Speaker of the Parliament.²⁵ At that time, the demographic balance represented a very slight Christian majority in Lebanon. The National Pact Agreement established a ratio between Christian and Muslim representatives within the Lebanese parliament.²⁶ If any progress was to be made internally, the government of Lebanon would need to establish an accepted necessary demographic balance again, and perhaps even prosecute Hezbollah for its destabilizing activities, disregard of the Lebanese constitution, and for its continuous arms trafficking, which has significantly weakened the Lebanese military and government. The likelihood of success is extremely low (to say the least). And then of course there is Lebanese public opinion.

Reuniting Lebanon under a single sovereign requires public unity and demilitarization. When looking at the magnitude of these tasks objectively, it becomes quite clear that the likelihood of civil war could increase dramatically if the Lebanese government was to move in any these directions.

²² See footnote 18 above.

²³ [The Lebanese Constitution \(1926\)](#).

²⁴ The [National Pact of Lebanon \(1943\)](#).

²⁵ Ibid.

²⁶ [The Lebanese Constitution, Article 24](#).



Figure 5: Hezbollah Flying drones into the Israeli EEZ up to the Karish Gas field FPSO²⁷

Iranian influence in Lebanon through Hezbollah

Iran, as Hezbollah's primary state sponsor coordinates, and at times even directs Hezbollah's strategies in Lebanon. Through Hezbollah, Iran holds significant power and influence in Lebanon. The chances that internal Lebanese reconciliation processes could be successful without Iranian involvement are zero to none. Iran has voiced strong objections to the Agreement and would clearly not voluntarily encourage Hezbollah to stand down, retreat and/or surrender in its military might in southern Lebanon. It is true that Hezbollah may have turned the blind eye at that certain point in time with respect to executing the Agreement but, this was done for reasons attributed to internal wealth and politics not for the love of Israel. If ever challenged, it is more than likely that Hezbollah will not allow implementation of the Agreement to undermine its presence and influence in southern Lebanon. Iran itself will also not allow the Agreement to weaken Hezbollah's influence in Lebanon from fear that it would weaken its own influence in Lebanon.

The Post October 7th Era. Regional Implications and the Constant Threat of War

Two years onwards from the Agreement, many people in Israel are now asking if the Agreement has contributed anything to the dynamics of the region? In no easy terms, the answer is not exactly clear. Granted that the October 7th massacre by Hamas, and the coordinated attacks on Israel from Lebanon have heightened the stakes, and were apparently not foreseen in advance. Yet, the fact that Hezbollah has chosen to actively join the war against Israel and fire rockets into Israel for months at a time keeps border tensions high. Indeed, the current risk of all-out war is extremely high. And if that is the

²⁷ Press TV, July 5, 2022, "[Hezbollah: Flying Drones To Karish Gas Field Conveyed Message To Israel](#)".

case, has Israel gained anything from the Agreement at all? Perhaps the answer depends on what Israel was aiming to achieve in the first place.

For a short while the Agreement did successfully secure the start-up and commissioning of the Karish FPSO. This was probably THE win for Israel from the Agreement, and in fact, the production of natural gas from the Karish FPSO has been relatively steady ever since the Agreement was signed, including in the post October 7th era. Moreover, there is a certain level of comfort due to the content of a side-letter issued by President Biden to Israel at the time of the Agreement presumably promising that Israel will receive a "US commitment to support Israel's ability to defend itself, including its gas infrastructure and ships in the Mediterranean".²⁸ Perhaps there could also be some sort of unspoken understanding in the background as well, probably not backed up in writing or verifiable anywhere, that offshore infrastructure would be off-limits during military conflict in the region. If true, that principle could align with a broader Iranian interest since Iran itself has much to lose if its own offshore infrastructure was to become "fair game". But if that is the case, one would argue that military might may be a stronger deterrent than the Agreement itself. And then a bigger question would be who exactly is providing the military deterrence? In theory, each of Lebanon and Israel were poised to gain significant gas revenues from the "Qana" field. Yet, until today oil & gas have prospects not been found in the vicinity. So, in the economic sense, there doesn't seem to be any gain from the Agreement to either party.

The Agreement has not deterred Hezbollah from firing rockets into Israel in support of Hamas after October 7th, nor did the Agreement stop Hezbollah from sending drones to survey Israeli cities mapping out potential targets for a future war.²⁹ The Agreement also did not stop Hezbollah sending drones to survey the Karish FPSO.³⁰ It seems that although the Agreement may have been the love-child of fancy US diplomacy, perhaps only contributing to resolving a theoretical debate about how best to draw a line in the sea. The fact that Hezbollah is not a party to the Agreement is detrimental to its implementation in all aspects. Voices in the current government in Israel now call to place full responsibility for Hezbollah's action on the Lebanese government itself,³¹ thus further weakening the already fragile Lebanese government with threat of war.

²⁸ *The Times of Israel*, October 29, 2022, "[Biden Drafts Letter Guaranteeing Israel's Rights In Lebanon Maritime Deal](#)".

²⁹ *Reuters*, June 18, 2024, "[Lebanon's Hezbollah Publishes Drone Footage Claiming To Show Surveillance Of Israel's Haifa](#)".

³⁰ *The Times of Israel*, July 2, 2022, "[IDF shoots down 3 Hezbollah drones heading for Karish gas field](#)".

³¹ *The Israel Defense Forces (IDF)*, January 18, 2024, "[UNSC Resolution 1701 and Israel's Northern Front](#)".

The Karish FPSO Security & Operational Concerns

Perhaps the only quantifiable upside for Israel from the Agreement, for now, are the operational aspects relating to the Karish FPSO. Another positive factor could also be the fact the current US envoy, Amos Hochstein, is still able to travel between Beirut and Jerusalem coordinating de-escalation of a potential full-scale war.³² Although the Karish FPSO is currently fully operational, there has been quite a lot of work put in by Israel to keep it so. First, even after signing the Agreement, Hezbollah continued to threaten to the Karish gas field. Prior to, and shortly after the Agreement was signed, Hezbollah used drones to signal to Israeli its capabilities in the region.³³ Use of Hezbollah drones has skyrocketed from October 7th onwards, violating both the land border understandings and the MBL, sometimes on a daily basis.³⁴ To date, there have been several IDF interceptions of drones launched by Hezbollah towards the Karish gas field.³⁵ These acts of aggressions by Hezbollah are of major concern to the Israeli government. The fact that an armed proxy militia, sponsored by Iran conducts drone missions against offshore infrastructure, in spite of an internationally recognized agreement, undermines hope for further diplomacy and puts the future of the Agreement itself at risk.

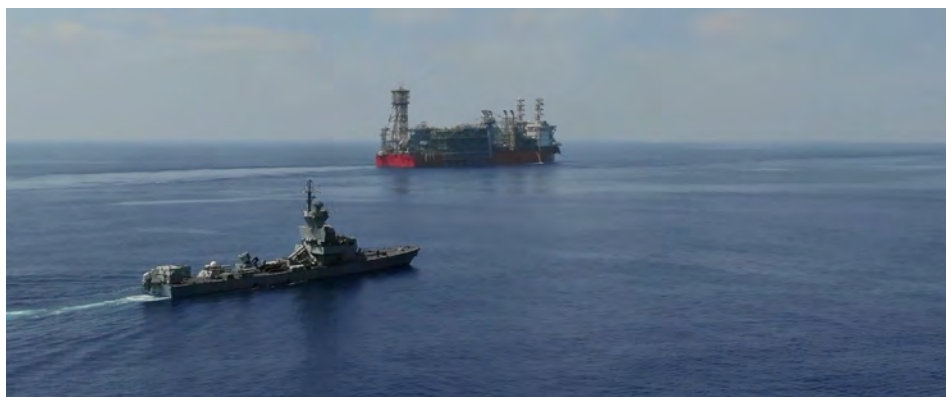


Figure 6: The Israeli Navy Enforcing a Safety Zone Around the Karish FPSO According to UNCLOS³⁶

³² *The New York Times*, July 2, 2024, "[Top U.S. Official Held Talks in Paris on Defusing Israel-Hezbollah Conflict](#)".

³³ *The Cradle*, July 4, 2022, "[Lebanese PM criticizes Hezbollah for drone operation over Karish gas field](#)".

³⁴ *Bloomberg*, July 4, 2024, "[Hezbollah Fires Over 200 Rockets and Drones at Israeli Bases](#)".

³⁵ See footnote 27 above.

³⁶ *The Times of Israel*, October 16, 2022, "[Lebanon Accuses Israeli Naval Gunships Of Entering Its Territorial Waters](#)".

But it is not just a question of oil and gas production. The Karish FPSO is located on major maritime shipping lanes in the eastern Mediterranean which can easily be exploited by Hezbollah and Iran during times of war. The existence of the Karish FPSO on international shipping lanes creates hazards that may conflict with principles of innocent passage and transit passage established through UNCLOS.³⁷ The Israeli Navy enforces a safety zone around the FPSO from ongoing ships which is a right afforded to Coastal States under UNCLOS.³⁸ Enforcement of a safety zone is grounds for confrontation and risk. If passing vessels were to ignore the Israeli Navy's instructions, or contest their legitimate presence in the area, as they approached, naval interceptions could occur. It seems that the existence of an internationally recognized MBL is an important tool for enforcing safety zones around an FPSO, and can definitely be regarded as a win for Israel due to the Agreement without which Israel would have lesser grounds to intervene with shipping routes in the Eastern-Mediterranean Sea. Additionally, servicing the Karish FPSO is a challenge for Energean and for the Israeli Navy.

The Karish FPSO requires the constant arrival of ships and support vessels, including for condensate offloading. Energean and the Israeli Navy engage in coordination of local shipping activities, which require Naval supervision and presence by the Israeli Navy. If hostilities were to break out between Israel and Hezbollah spreading into the EEZ, coordination of shipping to the area could be impaired, and the safety of the Karish FPSO would be held in question. And then of course are the economic consequences of naval hostilities. Risk of war, and war itself, deeply affects insurance costs.

By executing the Agreement, and especially at that critical point of time, Energean was able to conclude its development of the Karish field and reduce their risks. Clearly, without the Agreement in place, Energean wouldn't have been able to complete the project. In that perspective, the Agreement was favorable to Energean, and can also be considered a win for the State of Israel.

Cyprus & Turkey

Another key point to look at when monitoring the influence of the Agreement in the region can be derived by looking to the Cyprus-Turkey maritime dispute indirectly affected by the Agreement. The principles of international law through which Israel

³⁷ See [UNCLOS, Part III. "Straits Used for International Navigation" §2 \(Transit Passage\) & §3 \(Innocent Passage\)](#). Also see "UNCLOS and the Protection of Innocent and Transit Passage in Maritime Chokepoints" (2021). By the Maritime Policy & Strategy Research Center (HMS) and the Konrad Adenauer Foundation (KAS), Edited by Benny Spanier, Orin Shefler, Elai Retig.

³⁸ [Article 60 \(5\), Artificial islands, Installations And Structures In The Exclusive Economic Zone, UNCLOS](#).

and Lebanon have resolved this dispute, can similarly be applied to the Cyprus-Turkey maritime dispute. Specifically for Cyprus, the Israel and Lebanon MBL includes maritime coordinates that straddle the Cypriote EEZ as well, therefore by reaching an agreement on the western coordinates of the MBL, it would follow that Lebanon and Cyprus can now agree on their mutual maritime coordinate thus ending open issues between them and ratifying the agreement between them.³⁹ But now, a new threat is emerging in the wake of growing hostilities between Israel and Hezbollah. Hezbollah has recently lashed-out and threatened Cyprus.⁴⁰ Hezbollah is concerned that Cyprus may allow Israel to use its land and sea spaces to launch attacks on Hezbollah and Lebanon itself.⁴¹

Cyprus has many interests that align with those of Israel which don't fit nicely with Shiite regional aspirations. The question remains if Hezbollah would want to cause a war against Cyprus undermining the sovereignty of the legitimate government of Lebanon. Hezbollah's threat to Cyprus plays directly to the hand of Turkish policies in the Mediterranean Sea. Under Turkey's watchful eye, and coordination with Iran, the Agreement has the potential to influence Turkey's aspirations in the region, such as the Turkish Republic of Northern Cyprus's (TRNC) claims to natural resources in the Cypriote EEZ.⁴² Turkey is a nation with strong energy dependence on Russia and Iran. The emergence of natural gas in the eastern Mediterranean, and especially in the Cypriote EEZ, has triggered claims that Cypriote hydrocarbons should be shared with Turkey, or its proxy state the TRNC.⁴³

Turkey has consistently increased its naval presence in the Cypriote EEZ and performs projection of power navy drills to deter Israel, Cyprus and Greece.⁴⁴ Turkey has not yet missed an opportunity to challenge Israel's policies publicly. Any fallout stemming from the Agreement will be used to Turkey's advantage.

Commercial Oil & Gas Plays in the Lebanon Region Since the Agreement was Signed

Since the Agreement was signed, Lebanon has been actively seeking to reap benefits from the Agreement. On October 13, 2023, it was announced that the Block 9 operator,

³⁹ *The Times of Israel*, October 29, 2022, "[After Israel deal, Lebanon and Cyprus agree to move forward on maritime border talks](#)", By AFP.

⁴⁰ *The New York Times*, June 22, 2024, "[Hezbollah Has Threatened Cyprus. Here's Why](#)".

⁴¹ *The Guardian*, June 19, 2024, "[Hezbollah leader: Cyprus will be target if it lets Israel use its territory in conflict](#)".

⁴² Republic of Türkiye, Ministry of Foreign Affairs, "[No: 323, 27 October 2022, Press Release Regarding the Signing of the Maritime Boundary Delimitation Agreement Between Lebanon and Israel](#)".

⁴³ Turkish republic of Northern Cyprus (TRNC), Ministry of Foreign Affairs, September 18, 2020. "[Özersay, "We Should Commence With Negotiating Of Sharing Of Hydrocarbon Resources In Order Not To Be Imprisoned To A Vicious Circle Of Negotiations"](#)".

⁴⁴ *BBC News*, August 20, 2020, "[Turkey-Greece Tensions Escalate Over Turkish Med Drilling Plans](#)".

the French giant Total Energies completed a drilling campaign, completing one single exploratory drill in the Block 9 play and "no gas was found".⁴⁵ Total is the operator of Block 9 in Lebanon (35%) together with the Italian company, Eni (35%) and Qatar Energy (30%).⁴⁶ Perhaps this was just a bad start, but it's not over yet. Dry wells are common practice when entering a new, unexplored area. It has already been reported that Lebanon expects Total to perform additional drillings in Block 9 in the future at an unspecified date.⁴⁷ Additionally, the Government of Lebanon, has formalized an extension to the third offshore licensing round in the Lebanese EEZ. The deadline for submitting bid applications for the third round is currently set at 17 March 2025.⁴⁸

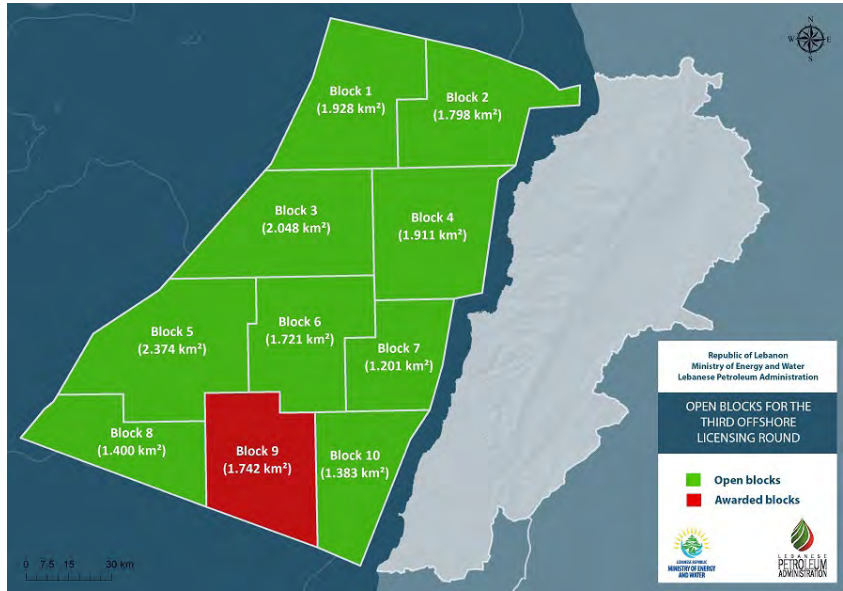


Figure 7: Open License Blocks in the Lebanese EEZ, just north of the MBL defined in the Agreement⁴⁹

The importance of the Agreement was especially important for Lebanon since it defined the MBL clearly marking the maritime border between Israel and Lebanon, allowing Lebanon to attract investors willing to proceed with exploration in their EEZ under the

⁴⁵ Reuters, October 13, 2023, "[No Gas Finds After Drilling At Lebanon's Offshore Block 9, Source Says](#)".

⁴⁶ TotalEnergies, August 22, 2023, "[Lebanon: Totalenergies Launches Exploration Activities On Block 9](#)".

⁴⁷ Offshore Technologies, October 25, 2023, "[Lebanon Expects Totalenergies To Drill Second Offshore Exploratory Well](#)".

⁴⁸ [Lebanese Petroleum Administration, Third Licensing Round.](#)

⁴⁹ [Lebanese Petroleum Administration, Third Licensing Round, Open Blocks.](#)

auspices of international law. For Lebanon, attracting companies like Total, Eni and Qatar Energy can be considered a win from the Agreement since such companies would only drill so close to the Israeli border, if an Agreement with Israel was firmly in place.

On the Israeli side, until the events of October 7th, and the resulting "Iron Swords" war, things were progressing quite nicely within the Israeli EEZ. Israel's energy security was steadily improving. The Leviathan field was commissioned, and not long after the Agreement was signed, the Karish FPSO was commissioned. The positive vibes led to another successful Offshore Bid Round 4 (OBR4) completed by the Government. In the north, near the MBL between Cyprus & Lebanon, Socar (Azerbaijan), BP (England) and NewMed Energy (Israel) were awarded Zone I. "According to the JV agreement, the participating interests ... are distributed as follows: SOCAR (33.34%), BP (33.33%), and NewMed Energy (33.33%)".⁵⁰ Very interestingly to Israel from a geopolitical standpoint is that "SOCAR is set to act as the designated Operator on behalf of the Zone I JV and plan to lead the exploration work programmed activities".⁵¹ In the south, near the proposed maritime boundary with Egypt, ENI (Italy), Dana Petroleum (Korea) and Ratio Energies (Israel) were victorious on the Zone G play.

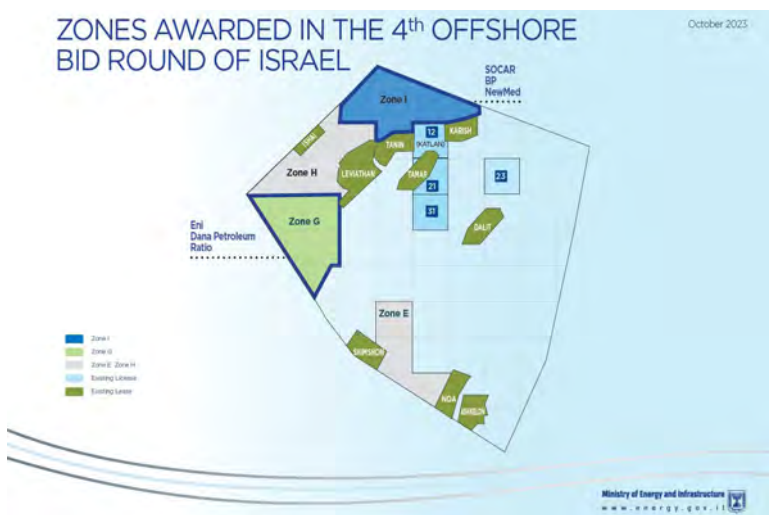


Figure 8: Zone I-6 in the Israeli EEZ was awarded to BP, SOCAR and NewMed Energy⁵²

⁵⁰ NewMed, Press Release, October 2023, "[In October 2023, NewMed Energy as part of a JV was awarded an Exploration block in the Israeli EEZ. The block defined as Zone I, consists of several exploration licenses](#)".

⁵¹ See footnote 47 above.

⁵² Israeli Ministry of Energy and Infrastructure, Press Release, October 29, 2023 "[The Ministry of Energy and Infrastructure Announces Results for Two Zones in the 4th Offshore Bid Round](#)".

Many energy professionals in Israel acknowledge the fact that the involvement of supermajors, such as BP, Eni, SOCAR and Dana Petroleum, in activities within the Israeli EEZ, so close to the MBL in the north and the Egyptian border in the south, would not have been possible if not for the Agreement. Israel's then minister of Energy, Israel Katz, was quoted saying that "the winning companies have committed to unprecedented investment in natural gas exploration over the next three years, which would hopefully result in the discovery of new natural gas reservoirs".⁵³ These are all performance indicators with respect to the impact and/or success of the Agreement from Israel's perspective, and can be considered a win for Israel.

What are the implications if war broke-out between Israel and Lebanon?

But, going forward, in the event of a full-scale war, can all these wins be sustained? In all likelihood, the Agreement would probably just be ignored, suspended, nullified, terminated or just lose its official status. As with wars, fighting would supersede diplomacy. All the trust, frameworks and working groups born by the Agreement would cease to be effective. The potential economic benefits from exploration in the EEZ would be lost. International energy companies would cease operations in the region. The Karish FPSO would face operational threats from Hezbollah and perhaps even Iran directly.⁵⁴ Shipping in the region would be harmed, and shipping lanes could be shut off under blockade. The possibility of diplomacy at such time would be subject to willingness of the country's leaders, with severe interference by Hezbollah. Hezbollah would probably do anything in its power to escalate military activities against Israel. The consequences for significant attacks on the Karish FPSO would give grounds to retaliation against the government of Lebanon, and Lebanese infrastructure, severely harming the country's chance of financial recovery. The war could even escalate to other nations nearby. And then, at the end, the possibility of bring the Agreement back would be subject to the war's outcome.

Consequences for Breach of the Agreement

The big legal question still also remains open as to what would happen if one side was to claim a breach of the Agreement against the other side? What would be the consequences of such a claim at the international level? What would happen if Hezbollah breached the Agreement in contrast to the Lebanese government policy?; and what would be the level of responsibility of the sovereign government of Lebanon for Hezbollah's breach? There are no clear answers to these big legal questions. Looking at the options, in the event of breach there may be several roads to repair. Diplomacy would be a good option, although

⁵³ Reuters, October 30, 2023, "[Israel Awards Gas Exploration Licenses To ENI, BP And Four Others](#)".

⁵⁴ Reuters, April 14, 2024, "[Iran's Attack On Israel: World Leaders React](#)".

highly unlikely during war. Perhaps restarting a US mediation process aiming at restoring the status quo. Perhaps involving additional influential countries, like France, Italy, the UK and perhaps Qatar to attempt to de-escalate and reinstate the Agreement.⁵⁵

The Parties could choose to implement enforcement strategies such as submitting claims to the International Court of Justice (ICJ)⁵⁶ or the International Tribunal for the Law of the Sea (ITLOS)⁵⁷ as other nations have tried before.⁵⁸ Such international courts may consider taking pro-active measures, but Israel has traditionally objected to any involvement of international courts on its internal matters, especially since it is not a party to UNCLOS and other conventions. This is truer now than ever before, following the current judicial persecution of Israel by international bodies in lieu of the Iron Swords war in Gaza, which are perceived as biased, and anti-Israel to say the least.⁵⁹ In extreme scenarios, the UN and other countries may try to impose sanctions. Such sanctions could include political pressure or other diplomatic measures. If Lebanon was to be the cause of breach, such sanctions could achieve exactly the opposite effect severely undermining the sovereign government of Lebanon, at the expense of the growing powers of Hezbollah. None the less, during times of breach, both parties, including Hezbollah would opt to increase their military deterrence.

Undoubtably, if this was to happen other nations, like the US, would likely dispatch Naval vessels to de-escalate the region.⁶⁰ Projection of power would increase risks of escalation in the region. A combination of all of the above is also plausible scenario in the event of a breach of the Agreement. The US would be expected by Israel to assume its mediation role but also to take an active role in executing Israel's military defense strategy. US influence on Israel may be lightly hindered due to the ongoing Iron Swords war in Gaza, and also depending on the identity of the elected leaders at the helm at the time of breach. Since the Agreement was crafted under the principles of UNCLOS there are those who would seek to resolve breaches according to similar legal doctrines under UNCLOS, even though Israel is not a party to UNCLOS. Any resolution regarding the Agreement would need to be accepted by both parties, and the international community.

⁵⁵ *The Jerusalem Post*, July 2, 2024, "[Diplomacy Needed To Avert Israeli-Lebanon War, Macron Tells Netanyahu](#)".

⁵⁶ *i24 News*, July 1, 2024, "[Spain Joins South Africa In ICJ Case Against Israel](#)".

⁵⁷ [International Tribunal for the Law of the Sea](#).

⁵⁸ [International Tribunal for the Law of the Sea, List of Case Law](#).

⁵⁹ *Reuters*, May 24, 2024, "[International Court of Justice ruling on Israel's actions in Gaza](#)".

⁶⁰ *PBS News*, January 19, 2024, "[The U.S. Reshuffles Its Warships In The Mediterranean As Middle East Tensions Soar](#)".

Summary & Conclusion

Clearly, the first two years following the Agreement have been tense. Within the criticism, skepticism, aggression, attacks and war, the perception of good and bad, win or loss is in the eye of the beholder. Success is derived from expectation. There do not seem to have been any significant geopolitical wins following this Agreement. Perhaps, Israel and Lebanon had some nice press, and perhaps there are people in Israel and Lebanon who believe that peace is possible. They proved that with the Agreement. But for as long as Hezbollah, together with Iran, retain their power and influence in Lebanon, it will be almost impossible to make progress. Especially as we write these words, there is constant threat that war that could be brake out any day. Non-the-less, from an oil & gas perspective, the Agreement has allowed the start-up and operation of the Karish FPSO. It achieved an "end-of-all claims" status regarding Israel and Lebanon's EEZ. The Agreement was internationally recognized allowing safe operations and legitimate safety measures performed by the Israeli navy around offshore infrastructure. The Agreement also allowed future profit sharing of gas revenues between Israel and Lebanon. And also attracted to the area major oil and gas companies that have expressed interest in exploring and developing the region. For the good and the bad, the Agreement still stands. It will be interesting to continue to monitor its effect going forward.

The constabulary dimension and national security in Israel's maritime domain

Eleanor Dayan

This chapter discusses the constabulary dimension, law enforcement, national security issues, and 'good order at sea' in Israel's maritime domain. The purpose of the article is to review three areas: first, civilian national security challenges such as law enforcement and emergency events at sea (which are not part of warfare); second, a review of key entities participating in maritime enforcement efforts, centered on the Israel Maritime Police. Finally, a review of the procurement and reforms that the Ministry of National Security is currently implementing and in the near future to improve enforcement capabilities at sea. The third part of the article will review a wide range of policy recommendations that stem from knowledge in the existing literature and from previous studies to improve effectiveness in policing and enforcing good order at sea. In addition, a review of the challenges and capabilities that exist in maritime enforcement can provide the necessary background for a discussion of whether there is currently a need for a coast guard in Israel. We will focus on internal security and civilian maritime security issues in their broadest sense, such as illegal trafficking, pollution and environmental damage, and the resilience of the Israeli population living near Israel's Mediterranean coast. This article will not discuss the security aspects of maritime border protection.

Introduction

The importance of law enforcement and public order at sea has increased greatly in recent years. In the past decade, the number of small boat operators has doubled from 55,000 to 120,000 and the number of small vessels from 12,000 to 32,000, while the maritime policing force has remained the same. Criminal activity exploits gaps in governance and enforcement in the maritime domain, and in a more targeted manner, exploits the ability to enter the territory of the State of Israel without regular inspection in order to commit smuggling, weapons offenses, and drug trafficking. In the maritime domain, the police do not have the authority to seize vessels (as the police on land have the authority to seize vehicles/cars), or deterrent capabilities against offenses such as the revocation of a boating license. Between entering the country's territorial waters and the inspection of vessels by customs (which have the authority to search vessels only when they arrive at port), there is a gap in the ability to enforce laws and good order at sea.¹ Although the Israeli Navy is well equipped to protect maritime sovereignty, maritime assets, and protection against terrorist attacks or political threats, by conducting naval and air

¹ National Security Committee, Knesset website. (May 14, 2023). Committee broadcasts, Sunday, [Maritime Policing](#).

patrols, maintaining a military naval presence in the economic waters, and collecting extensive intelligence on the domain, it does not have the authority and responsibility, and sometimes does not have the tools to respond to a wide range of threats in the form of maritime violence and civil enforcement. It should be noted that the 'Maritime Zones Law 2017' (not yet approved by the Knesset) provides a limited response to the issue.

As for the concept of 'maritime violence', Israel is dealing with maritime terrorism as the main threat to good order at sea. Maritime terrorist incidents began in the late 1960s following the events of 'Black September' and the transfer of Fatah's headquarters to southern Lebanon. In the 50 years since (as of 2020), more than 80 maritime terrorist acts have been identified.² As part of the interconnected and cross-border nature of threats in the maritime domain, maritime terrorism is accompanied by other threats, such as arms smuggling.³ Arms smuggling can be carried out by civilian vessels such as fishing boats. Maritime terrorism and the activities that support it represent the 'hard' types of non-state threats, especially when they are backed by hostile state support. This situation also creates a gray area between the civil-enforcement and the military-defense dimensions. In the Israeli case, the main entity that provides a response to maritime terrorism is the Israeli Navy.⁴ The "Israel-Hamas" war introduced a new dimension of maritime terrorism that threatens national interests, trade, and state security with the threat of missiles, cruise missiles, and unmanned surface vehicles against maritime targets and assets. Since this is a gray area (especially in the Israeli case where terrorist threats are supported and led by a statist threat) that goes beyond the realm of civilian law enforcement and significantly enters the military dimension, this chapter will focus on the "softer" threats to good order at sea and, accordingly, on the entities that provide a solution to them.

The first part will present a theoretical background to a number of topics, including the maritime domain, maritime security, the patrol aspect, and the enforcement of good order at sea. The second part will review the state of policing and maritime enforcement in Israel, and in doing so will discuss the Israeli maritime domain and the challenges therein, the role of the Israeli Navy in national security missions, the Maritime Police,

² Dabran, S. (2020). Maritime Terror in Israel. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2019/20*, 249–257 (Maritime Policy & Strategy Research Center, University of Haifa).

³ Germond, B. (2016). Small Navies in Perspective: Deconstructing the Hierarchy of Naval Forces. In M. Mulqueen, D. Sanders, & I. Speller (eds.), *Small Navies: Strategy and Policy for Small Navies in War and Peace*. Routledge. p. 50.

⁴ Gour Lavie, O. (2017). Chapter 8: Building the Israeli naval force against terrorist and other threats. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2016/17*, 123–129 (Maritime Policy & Strategy Research Center, University of Haifa).

and other enforcement organizations in maritime security issues in a broader sense. The third part will present a summary, recommendations, and briefly discuss the issue of the coast guard.

The main conclusion resulting from the review of the current situation is that establishing an entity called a "coast guard" will require a large investment in budget, legislation, and structural changes. On the one hand, it is appropriate to strive for this possibility in the defense establishment, especially after the October 7th, as it should lead to a higher level of security, enforcement, and crisis management. Additionally, with the advancement of technological development and extensive use of the maritime domain, it is expected that the complexity of threats and challenges in this domain will develop, and the need for a coast guard that centralizes all relevant capabilities and authorities is expected to grow. From this, it can also be concluded that the possibility of establishing a coast guard early should be established, and it is desirable to establish it sooner rather than later. On the other hand, this possibility is not necessary in order to achieve effective performance in maritime enforcement and policing. Close and effective cooperation and efforts between entities participating in security, intelligence and coordination may create a high level of maritime awareness, and strategic utilization of technology through maintaining innovation and planning capabilities, all of which can leverage the totality of currently existing capabilities to create the required performance. Accordingly, the recommendations presented at the end of the article will discuss these issues.

Theoretical background

The maritime domain, i.e. the seas, bays, river estuaries, the coastal zone, islands, oceans and the airspace above all of these – has four characteristics; the maritime domain as a resource, as a medium for physical movement (such as people and trade), as a medium for the transfer of knowledge and ideas, and as an area of control. In recent years, the importance of the maritime domain has increased significantly. Among the trends that have led to this are an increase in the volume of trade due to globalization processes, technological developments that increase the utilization of the sea as a resource and as a medium for communication (through underwater cables, technologies that enable the extraction of resources at great depths, etc.), the use of artificial islands, the use of the sea for illegal trade, illegal immigration, and the rise in awareness of the marine environment.⁵ Over the years, states have established four main political uses of maritime domain. Firstly, for military purposes such as spatial control, the exercise and projection

⁵ Chorev, S. (2021), *Maritime Domain, Maritime Strategy and Everything in Between*. IDF – Systems Publishing and the Center for Maritime Policy and Strategy Research, University of Haifa. pp. 15, 21.

of military power. Second, diplomatic use such as 'gun diplomacy' and 'showing the flag'. Economic use is centered on trade and resource exploitation. Finally, the constabulary function, which includes the enforcement of good order, peace, and national security.⁶

A range of man-made threats to good order at sea, such as illegal trade, theft of property and resources, armed robbery, illegal fishing, piracy, terrorism, pollution, cyberattacks and other types of crime, can be included in the concept of 'maritime violence'.⁷ In the face of maritime violence, the state works to achieve 'maritime security'. The concept of maritime security is broad and has two parts: first, it refers to all activities that are related to the maritime domain, and second, the concept refers to the three dimensions of security and the actions that represent them: (a) The safety of individuals and groups from non-human threats such as accidents, hazards inherent in navigation and extreme natural phenomena (search and rescue); (b) Security, which deals with good order at sea, from non-state threats that intend to use violent or illegal means, from terrorism and piracy, to smuggling and illegal trade, crime to illegal fishing and damage to natural values (enforcement of good order); (c) Security as protection against threats posed by other state actors to territorial integrity or national interests.⁸ Since 'good order at sea' represents an ideal state to be achieved but sometimes does not include a definition of what good order means and what its nature is, discussions on maritime security develop into questions that attempt to understand how law enforcement in maritime domain can be improved. In a broader sense, maritime security also refers to aspects of the blue economy and the resilience of coastal populations, as well as processes of securitization of threats, and to actors and entities involved in security.⁹

Improving law enforcement and order requires 'Maritime Domain Awareness', that is, the effective understanding of everything related to the maritime domain. In addition, in order to deal with the complexity of threats and challenges in the maritime domain, effective 'capacity building' is needed, including the integrative use of all resources and expertise in a large number of fields at the disposal of the state. These requirements

⁶ Bruns, S., and Kraus, J. (2016). Introduction: The changing face of twenty-first-century naval strategy and maritime security. In J. Krause, and S. Bruns (eds.) *Routledge Handbook of Naval Strategy and Security*. Routledge. p. 3

⁷ Bruns, S., and Kraus, J. (2016). Introduction. In P. Shemella (ed.), *Global Responses to Maritime Violence: Cooperation and Collective Action*, 1–3, Stanford University Press.

⁸ Till, G. (2022). The Changing Nature of Maritime Security. In F. Bradford, J. Chan, J. Kaye, S. Schofield, and G. Till (eds.), *Maritime Cooperation and Security in the Indo-Pacific Region*, Chapter 21, 427–429, Brill.

⁹ Bueger, C. (2015). What is Maritime Security?. *Marine Policy*, 53, 159–164. DOI: 10.1016/j.marpol.2014.12.005.

require leveraging knowledge, capabilities and cooperation between all entities that can contribute to enforcement efforts.¹⁰ There is a need to build strong legal institutions, establish maritime governance at the national, inter-state and supranational levels, and formulate maritime strategies. In the current century, these strategies emphasize a broad vision compared to the missions of war navies, and on the other hand, especially in countries where there is no coast guard (like Israel), navies are central players in many civilian missions including enforcement and policing.¹¹ Planning an enforcement system at the national level is required to consider geopolitical and governing factors and how these shape challenges, threats, responsibilities, and define the capabilities needed to respond to them. An effective maritime enforcement system will be comprehensive, meaning it will know how to utilize every relevant resource and player and to successfully integrate mechanisms that build effectiveness. Likewise, a state enforcement system should have a high degree of strategicness, meaning that it should be prepared for the future through a balance between short-medium-and long-term planning that is consistent with national interests, optimizes capacity-building processes, and establishes effective mechanisms that are capable of rapid, easy, and forward-looking adaptation and development. These mechanisms can be divided into four groups: awareness, planning, innovation, and cooperation.¹²

These mechanisms will enable the enforcement system to deal with the development of events and threats in the area according to several principles. The enforcement system will maintain an active operational force with a high level of availability and response capability and will have the tools required for operations to respond to extreme weather events and under various circumstances. It will have the ability to collect and analyze intelligence in real time using advanced intelligence means and the ability to deter and prevent events by patrols and demonstrating presence. In addition, the system will operate advanced means to detect, identify, and track suspicious activity by an operational force and a coordination and control center, and will therefore be able to contain the event by intercepting threats, disrupting criminal activity, and apprehending suspects. Finally, the system will have the ability to rescue, rescue, and restore during and after the event.¹³

¹⁰ Wilson, B. (2016). The complex nature of today's maritime security issues: Why whole-of-government frameworks matter. In S. Bruns and J. Krause (eds.) *Routledge Handbook of Naval Strategy and Security*, 152–153, Routledge.

¹¹ See footnote 5, pp. 19,15,180–181.

¹² Dayan, E. (2024). Conceptualizing maritime constabulary effectiveness (MCE). *Marine Policy*, 161(106047), 1–10. DOI: 10.1016/j.marpol.2024.106047.

¹³ Ben Moshe, I. (2021). Implementing of Maritime Defense concepts for Protection of Israel's Economic Waters. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21* (Maritime Policy & Strategy Research Center, University of Haifa), 212–226.

Legally, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) is the international legal framework for (among other things) coastal states on issues of law enforcement and policing in the maritime domain, among other issues.¹⁴ Israel is not a signatory to the convention but accepts the convention as customary law.¹⁵ From the perspective of enforcement, the maritime domain is divided into several zones. 'Internal waters' represent all the waters between the land and the coastal baselines, while 'territorial waters' represent all the domain reaching up to 12 nautical miles from the baselines. In both of these zones, the coastal state has full sovereignty and the laws of the state apply in these areas, therefore the coastal state can enforce its laws and take all the necessary actions for this purpose. In the territorial waters, there is a single limitation on law enforcement under the right of a vessels for 'innocent passage' which limits the coastal state's scope of action, but given the structure of the coast, this limitation is not relevant to Israel which is far from regional shipping lanes. Furthermore, a coastal state has the right to claim an 'adjacent zone' to the territorial sea, this area constitutes a maximum distance of 24 miles from the baselines and in which the coastal state has enforcement rights intended to prevent illegal activity from entering the territorial sea in sanitary and monetary areas or rights to pursue lawbreakers who have fled the territorial sea. The fourth area is the Exclusive Economic Zone (EEZ), states can claim an area parallel to the baselines and up to a distance of 200 miles from them, in which the coastal state does not have sovereignty but has the authority to enforce aspects related to the exploitation and conservation of resources, research and protection of the marine environment. On the 'high seas' (an area not relevant to the discussion in this chapter) most enforcement rights are reserved for the flag state (the state whose laws apply on board the watercraft).¹⁶

It is important to note the difference between 'prescriptive jurisdiction' and 'enforcement of jurisdiction.' While prescriptive jurisdiction represents the state's ability to enact laws on activities in the maritime domain and put them into effect, enforcement of jurisdiction represents the state's ability to actually enforce its laws through enforcement entities such as coast guards, maritime police units, fleets, etc. This difference is expressed in two types of cases. The first, when two different states have a different legal basis for operational enforcement in the same given event (such as cases of a conflict between the authority of the coastal state and the authority of the flag state of a vessel). Second,

¹⁴ Bautista, L. (2016). The Role of Coastal States. In R. Warner and S. Kaye (eds.). *Routledge Handbook of Maritime Regulation and Enforcement*. Routledge, p. 53.

¹⁵ Spanier, B. (2022). The State of Israel and the Convention on the Law of the Sea – the Current State. In: S. Chorev, and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22*, 301–310 (Maritime Policy & Strategy Research Center, University of Haifa).

¹⁶ The Global Maritime Crime Programme (GMCP). (2019). *Maritime Crime: A Manual for Criminal Justice Practitioners*. United Nations Office on Drugs and Crime: Vienna.

when a state cannot enforce its legal authority. This situation can arise (a) due to a lack of resources of the enforcement entities in relation to the size of the maritime domain under the state's jurisdiction, in relation to the amount of maritime activity in the domain, and in relation to the extent of maritime crime occurring in the domain;¹⁷ (b) from a constitutional or regulatory gap that does not allow for appropriate conditions for effective operational enforcement; and (c) due to the state's lack of governance in the maritime domain, the coastal environment close to it, and among populations living near the coast.¹⁸

Most coastal states around the world have entrusted law enforcement and policing responsibilities to a coast guard, although the term has a broad meaning, and various maritime enforcement entities may be considered a coast guard (whether as a collective of enforcement agencies under the same political entity or as a single entity) even if they are not officially named as such. A 2008 study found that out of 174 geopolitical entities, 142 had a coast guard, 75 had both a coast guard and a navy, and 31 had only a navy (Israel belongs to this group).¹⁹ Generally, a coast guard is a force (primarily a maritime force, though it may also include others as an air component) that enforces a state's maritime laws, assists vessels and civilians in distress or emergency situations, and may also be responsible for operating and maintaining navigational aids, clearing shipping routes with icebreakers, collecting meteorological data, and patrolling a state's maritime domains and borders.²⁰ There are several models for structuring maritime law enforcement forces, including coast guard models where the force operates as a branch of the navy (such as in Norway or the Netherlands), as an independent arm under government ministries (such as in the United States), or as a police organization (such as in Singapore).²¹ It is important to note that law enforcement and policing missions require different operational concepts, tools, capabilities, and rules of engagement compared to wartime operations, although many states use the same vessels for both types of missions.²² Beyond that, maritime law enforcement involves a wide range of additional

¹⁷ Kaye, S. (2016). A Zonal Approach to Maritime Regulation and Enforcement. In R. Warner and S. Kaye (eds.), *Routledge Handbook of Maritime Regulation and Enforcement*, 3–15, Routledge.

¹⁸ Shemella, P. (2016). Assessing Maritime Governance. In p. Shemella (ed.). *Global Responses to Maritime Violence: Cooperation and Collective Action*, 88–103, Stanford University Press, p. 88

¹⁹ Paleri, P. (2009). *Coast Guards of the World and Emerging Maritime Threats*. Ocean Policy Research Foundation. pp. 3–50.

²⁰ *Britannica*. (2024). [Coast guard](#).

²¹ The Center for Maritime Policy and Strategy Research (2021). Brainstorming Session on "Israel's Response to Civilian Emergency Events in Its Maritime Domain". Internal Presentation.

²² Guilfoyle, D. (2017). Maritime Law Enforcement Operations and Intelligence in an Age of Maritime Security. *International Law Studies*, 93, 298–323, pp. 299–300.

entities, including intelligence and policing agencies, customs authorities, regulatory and legal entities, port authorities, government ministries, private security companies, coordination and rescue centers, civic and social organizations, and the maritime sector and industry.²³

The Constabulary dimension and maritime enforcement in Israel

Israel's maritime area in the Mediterranean Sea spans 26,000 square kilometers, which is 5,000 square kilometers larger than its land territory. Of this, the territorial waters cover 4,000 square kilometers. Israel's Exclusive Economic Zone extends 70 to 110 kilometers from the coastline. There are three main port areas: the Haifa Bay ports, the Ashdod ports, and the Eilat port, along with approximately ten smaller marinas and harbors.²⁴ Israel's total coastline measures 319 kilometers, including 197 kilometers along the Mediterranean, 56 kilometers along the Sea of Galilee, 14 kilometers along the Red Sea in Eilat, and approximately 53 kilometers along the northwestern shore of the Dead Sea (excluding the evaporation ponds). Out of the roughly 300 kilometers of coastline, only 19 kilometers are designated as open public beaches, while 162 kilometers are closed to the public, and 126 kilometers have no official designation.²⁵

Beyond counterterrorism efforts, the Israeli Navy is the primary actor in Israel's maritime security. The Israeli Navy is responsible for defending Israel's maritime borders, participating in IDF operations and missions, generating an intelligence picture of the maritime domain, serving as a key deterrent force, and protecting maritime areas and assets.²⁶ In this framework, the navy also communicates with vessels seeking to enter Israel's territorial waters and conducts search and rescue operations at sea.²⁷ A 2013 Security Cabinet decision Resolution 53/B also designated the Israeli Navy as the entity responsible for protecting offshore gas platforms.²⁸ The Israeli Navy consists of several squadrons and units, with some being particularly relevant to this discussion. The Coastal

²³ Bueger (2015), p. 163.

²⁴ Eiran, E. (2021). Israel: Traditional Approaches to Securitizing the Maritime Domain. In C. Bueger, T. Edmunds and R. McCabe (eds.), *Capacity Building for Maritime Security: The Western Indian Ocean Experience*, 49–72, Palgrave Macmillan, p. 55.

²⁵ Eshed, A. (2021). An Examination of the Coastal Life Rescue Services in Israel – Does Israel Need a lifeboat service? In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, 353–364 (Maritime Policy & Strategy Research Center, University of Haifa).

²⁶ State Report. (2014). [Protection of Offshore Oil and Gas Production Facilities and Infrastructure](#). Annual Report 64b.

²⁷ Eiran (2021), 62–63

²⁸ See footnote 26.

Security Division includes Flotillas 914, 915, and 916, which conduct routine security patrols along Israel's maritime borders using light patrol vessels such as the Dabur, Dvora, or Shaldag, each manned by approximately ten naval combatants.²⁹ The Snapir Unit operates within the Coastal Security Division and is tasked with protecting Israel's civilian and military ports.³⁰ The Maritime Control Division is responsible for constructing the navy's intelligence picture, maintaining situational awareness of the maritime domain, and monitoring activity within Israel's waters. This division oversees vessels entries into Israeli territory and tracks the movements of ships near national borders in real time.³¹ Since the 2000s, the development of Israel's offshore natural gas fields has become a major national energy project with significant economic implications. The navy has been entrusted with securing these infrastructures, which has significantly influenced its force buildup and procurement strategies in recent years.³² Historically, the Israeli Navy maintained a small base on the Dead Sea, which has since been closed, the issue of smuggling from Jordan raises a question about the need for an enforcement presence in the Dead Sea, whether through a naval presence or through observation and coastal presence.³³ The Israeli Navy has no presence in the Sea of Galilee.

Discussing blue crimes and criminal threats to 'good order at sea', the illegal trade in drugs and the smuggling of prohibited substances is the most common category in Israel and around the world. The vast majority come from their place of cultivation and production via sea cargo, whether by smuggling in containers passing through ports or via lighter vessels. The methods for smuggling drugs and prohibited substances by sea are diverse and difficult to detect. The main source of most of the cross-border trade is South and Central America, especially when it comes to cocaine. Significant quantities of heroin are imported from South Central Asian countries such as Afghanistan. The methods of smuggling unveiled as "creative and constantly renewed".³⁴ In November 2022, an interesting event occurred in this context that greatly emphasizes this point in the context of the Israeli maritime domain.³⁵

²⁹ Israeli Navy Site: [Border Patrol Flotilla](#).

³⁰ Israeli Navy Site: [Snapir](#).

³¹ Israeli Navy Site: [Command and Control](#); Israeli Navy Site: [Naval Bases](#).

³² Ben Moshe (2021).

³³ Shapira, N. (2023). [Permission granted for publication: Huge smuggling of weapons from the Jordanian border foiled](#). *N12*.

³⁴ McNicholas, M. A., and Draughon, G. R. (2016). 7 – Drug Smuggling via Maritime Cargo, Containers, and Vessels. In M. A. McNicholas (ed.), *Maritime Security: An Introduction*, 207–260, Butterworth-Heinemann.

³⁵ On November 26, 2022, Saturday, in the late morning hours, many drug tubes (according to information provided at the time, they were filled with a type of hashish) washed up on the shores

The police provide the main response to this issue, and within it the Maritime police. Its mission is to "fulfill the functions of the police in the coastal waters of Israel, in general, and to enforce the laws relating to vessels, in particular, and its duties include carrying out and assisting in rescue operations at sea, enforcing laws relating to the use of small vessels, preventing the smuggling of valuables, drugs, weapons, and the illegal crossing of people across the maritime border, enforcing vessels licensing, and maintaining public order in the coastal zone".³⁶ Among its duties, rescue operations are one of its main occupations.³⁷ In 2016, for example, there were 523 rescue incidents, 461 assistance incidents, and 216 missing persons search incidents. The Maritime police is deployed in five bases; in the port of Haifa, the marina in Tel Aviv (as of 2020, with 14 police officers and 25 volunteers, 2 small vessels and 2 jet skis operating in an area of 64 km along the coast),³⁸ the marina in Ashkelon (37 km, 12 police officers and 21 volunteers as of 2020),³⁹ in the Sea of Galilee, and in the marina in Eilat. Each base is equipped with two Defender-class boats that arrived in 2017 and reach a speed of 40 knots,⁴⁰ rubber boats and jet skis (which reach 60 knots), rescue, navigation, and observation equipment, and a drone for locating at sea. Each base is subordinate to the district in which it is located, and to the Naval Police Headquarters located at the national headquarters in Jerusalem, which is responsible for building the force and establishing procedures.⁴¹

of Tel Aviv, Haifa, Nahariya, Hadera and other places. Apparently, the winter weather sabotaged the way they were hidden off the coast of the country, and dozens of plates with hundreds of kilograms of hashish were found. A police officer said, "In order to identify the person who ordered the hashish, you mainly need intelligence information. Laboratory tests can confirm that it is a drug, but certainly not the person who ordered the package... In the 1970s, cargo ships would dump drugs that were disposed of in tubes into the sea. The criminals who ordered the drug from abroad would send fishermen to bring the tubes from the sea". The law enforcement system did not know who to link the smuggling to and how it had not been detected before; Levy, L. (2022). [The drug mystery on the beaches: "We haven't seen anything like this in many years". Ynet](#); Ben Tzur, R., Glickman, A., and Levy, L. (2022). [A mystery on the beaches: Many drug packages were released from the sea, from Nahariya to Tel Aviv. Ynet](#).

³⁶ Israel Police, Police Command Section, [Maritime Policing Division – Purpose and Roles](#).

³⁷ Israel Police, [Knows the sea very well, the commander of the maritime police](#). YouTube.

³⁸ Israeli Police, [A day with the Maritime Policy Tel Aviv](#), YouTube; Israeli Police: ["Swimmer can you hear me?" - The Maritime Police of Tel Aviv](#), YouTube.

³⁹ Leibowitz, A. (2020). [Heroes on the Waves: The Maritime Policing Unit in Action Along the Coasts of Ashdod and the South](#). *Kan South – Ashdod*.

⁴⁰ Hertz, D. (2017). [10 new maritime police ships launched, watch the demonstration](#). *Kikar Hashabbat*.

⁴¹ Eliyahou, A. (2017). [Rescue Services on the coasts in Israel](#). Knesset, Research and Information Center. p. 14; Eshed (2021).

In addition to rescues⁴² and locating missing persons,⁴³ the additional type of activity of the Maritime Police is handling criminal offenses such as boat theft or violence on vessels, safety offenses such as dangerously approaching jet skis to a bathing beach and enforcing public order in general. Alongside these tasks, the Maritime Police must assist the navy in emergencies (and routinely) with coastal defense missions and interception of targets.⁴⁴ Since the beginning of the Swords of Iron War in October 2023 and as of the time of writing this chapter (May 2024), the state of emergency has become routine. The Maritime Police unit in the Lachish area with combat equipment and machine guns assists the Israeli Navy in patrols in a second line of defense to prevent vessels from entering the maritime domain in the border area with Gaza, which was declared a closed area following the fighting.⁴⁵ The war also led to the addition and change of issues in maritime security. It appears that the naval blockade of Gaza, which has lasted for about 17 years, will in the near future become an enforcement mission and a task of maintaining good order in the Gazan maritime domain, and as part of this, the Israeli Navy will be required to secure the movement of ships arriving at the naval dock built by the American Navy, and to monitor all fishing or other activity in the coastal area of the Strip, where two million people live.⁴⁶

The issue of environmental pollution and damage to the ecosystem, flora and fauna in the marine domain are integral to the concept of 'maritime violence' and represent a threat to good order in the domain. The potential for environmental disasters and maritime crime increases as the volume of activity in the marine domain increases, mainly the operation of drilling and gas production rigs, the movement of merchant ships and the transfer of other infrastructure from land to sea. Not only that, but as the national dependence on the sea for water desalination, energy production, cooling power generation systems, commerce, recreation and other activities increases, the fear of an environmental disaster will have broad implications for national resilience and security.⁴⁷ The issue has made headlines several times in recent years, including in 2018 when it was decided

⁴² Segev, S. (2024). [Watch: Rescue of a boat and 4 sailors from the sea in front of the Hilton](#). *Tel Aviv Online*.

⁴³ Ice. (2023). [Sad ending: After four days, the body of the missing man was found in the Sea of Galilee](#).

⁴⁴ Leibowitz (2020).

⁴⁵ Tamari, L. (2023). [Strong on the outside, crying on the inside: With the Maritime Policing Unit in the South](#). *Ynet*.

⁴⁶ Barel, Z. (2024). [The US naval platform in Gaza could turn the IDF into a police force in the Strip](#). *Ha'aretz*.

⁴⁷ Ben Moshe, I., and Gonen, E. (2022). Seawater Pollution – How to Prevent the Next Disaster. *The Geostrategic Series 2021*, Maritime Policy & Strategy Research Center.

to place the Leviathan gas field about 10 km from the Dor coast.⁴⁸ A more significant event occurred in February 2021 when thousands of tons of tar spilled onto the coast of Israel.⁴⁹ The cause is suspected to have been a leak from a tanker off the southern coast of the country.⁵⁰ Two years after the incident in question (and as of the end of 2023), the National Emergency Plan designed to deal with events of this type has not been budgeted as required, so there is concern that a similar or more dangerous event that may occur will still not be able to receive an appropriate response.⁵¹

The National Marine Environmental Protection Unit of the Ministry of Environmental Protection is engaged in protecting the marine environment, including preventing pollution from land-based sources, marine pollution from oil and chemicals from ships and tankers, from marine installations and marine terminals, managing marine pollution incidents, setting policy, and managing monitoring, information, and research programs on the marine environment. The unit's enforcement powers stem, among other things, from the Environmental Protection Law (2011), and the Oil Pollution Prevention of Seawater Ordinance (1980).⁵² The unit operates a number of vessels, including the national research ship "Bat-Galim" (operated in cooperation with the Institute for Seas and Lakes Research),⁵³ and smaller vessels such as the Red inspection ship (in cooperation with the Israel Nature and Parks Authority) operating in the Eilat area.⁵⁴

Harm to wildlife is also manifested through illegal fishing. In 2021, over 250 enforcement cases were opened for violations of the Fishing Ordinance. Most of the offenses are related to fishing without a license, fishing offenses using prohibited methods, fishing for fish smaller than the minimum size, and fishing during the breeding season.⁵⁵ Since 2016, the

⁴⁸ Raviv, E. (2018). [The Battle for the Rig / Thousands Protested Against the Location of the Leviathan Gas Field: "The Planning Is Influenced by Personal Whims"](#). *Davar*.

⁴⁹ Ashkenazi, S. (2021). [From the North to Rishon LeZion: Large Amounts of Tar Are Emitted to Israel's Coasts](#). *Globes*.

⁵⁰ Lieberman, K. (2021). [Change in route of tanker suspected of tar contamination: "Could indicate a change of destination or malfunction"](#). *Mako*.

⁵¹ Bagno, Y. (2023). [Environmental organizations warn the government, "Israel is not prepared for a sea pollution incident as a result of the war"](#). *Maariv*; Pasternak, G. (2019). Marine Pollution: Source, Response and Prevention. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2018/19*, 256–269 (Maritime Policy & Strategy Research Center, University of Haifa).

⁵² Ministry of Environmental Protection. (2024). [National Marine Environmental Protection Unit](#).

⁵³ Institute for Seas and Lakes Research. [Bat Galim - Exploring the Seas](#) (ocean.org.il)

⁵⁴ Israel Nature and Parks Authority. (2023). [Meet Edom: The Nature and Parks Authority and the Ministry of Environmental Protection inaugurated a new inspection ship in the Gulf of Eilat](#).

⁵⁵ Fisher, N. (2021). [The fight against illegal fishing: 253 cases opened this year](#). *Ynet*.

entity enforcing the Fishing Ordinance and protecting wildlife at sea has been the Marine Unit of the Nature and Parks Authority (18 enforcement personnel and approximately 7 vessels),⁵⁶ which also operates in cooperation with the Maritime Police.⁵⁷

In terms of other entities operating in the Israeli maritime domain in the context of maritime security, we can mention the Joint Rescue Coordination Center (RCC), which operates under the Ministry of Transportation and the Shipping and Ports Authority in Haifa. Its purpose is to be a warning center and manage emergency situations of vessels and aircrafts at sea, and its function is to provide initial response and coordination of search and rescue operations, emergency medical care, in all matters related to marine pollution incidents and navigation safety incidents, and assistance to the Shipping and Ports Authority in emergencies.⁵⁸ At the RPA, the Supervision and Control Division monitors foreign vessels in order to ensure their safety and integrity when they call at Israeli ports in accordance with the "Port State Control" (PSC) regime of the International Maritime Organization (IMO) and the Mediterranean Memorandum of Understanding (MEDMOU). Furthermore, the division is responsible for licensing and supervising Israeli vessels over 24 meters or 100 tons, in everything related to preventing marine pollution from ships, training and certifying seafarers and ensuring their employment conditions, supervising the technical integrity of Israeli vessels, supervising cargo loading, implementing international conventions in its field, and representing the State of Israel in professional entities in the shipping world.⁵⁹

Beach rescue services (funded by local authorities) provide primary and central assistance for bathers at designated coasts. These operate under Ministry of Interior regulations. The rescuers have rescue equipment, basic CPR equipment, and jet skis. In addition, many beaches have paramedics and beach inspectors on behalf of the local authority. In addition, in the context of search and rescue, there are several diving units operating in Israel under several organizations: two diving units for search and rescue in waters of the Israel Police, the 'Lahava' unit of the fire department, a diving unit of the ZAKA, and in special cases, the Israeli Navy's Underwater Missions Unit (The YALTAM), which has the most advanced equipment of any unit, is called upon.⁶⁰

Another issue that arises in the context of maritime enforcement is the protection of antiquities and maritime archaeological assets. The Maritime Archaeology Unit of the

⁵⁶ Israel Nature and Parks Authority. (2020). [The Marine Unit - Nice to meet.](#)

⁵⁷ Cohen, Y. (2019). [Marine Policing Exercise.](#) Israel Nature and Parks Authority.

⁵⁸ Administration of Shipping and Ports. (2020). [Rescue Coordination Center at Sea RCC.](#)

⁵⁹ Administration of Shipping and Ports, [Supervision and Control Division.](#)

⁶⁰ Eshed (2021).

Israel Antiquities Authority is the entity responsible for preserving the country's maritime heritage in the Mediterranean Sea, the Sea of Galilee and the Dead Sea, and its role is to enforce the Antiquities Law, prevent the robbery of antiquities on the coast and at sea, supervise construction projects while protecting declared archaeological sites, and other activities in this context.⁶¹

Regarding smuggling and illegal trade, Customs has the authority to search, seize, and confiscate vessels when they arrive at a port and harbor.⁶² There are additional factors that contribute to security and safety at various levels and in various ways around the core issues related to the maritime domain, including port security units, including security centers, cargo inspectors, and security inspectors,⁶³ the Ministry of Interior's inspection mechanism, local authority inspection and patrol units,⁶⁴ government ministries related to these issues (national security, transportation, interior), research institutes, and information gathering stations (in terms of advice and knowledge). As a final point, it is worth noting that there are 'classic' threats to maritime security and enforcement that hardly concern Israeli maritime domain, such as piracy⁶⁵ and ship robbery (as occurs in ungoverned maritime domains in Africa and Asia), theft of marine resources (except for cases of illegal fishing) as occurs in places like the Gulf of Guinea, and illegal migration by sea (except for negligible migration from Gaza to Europe in the past) as southern European countries along the Mediterranean are dealing with.⁶⁶ Table 1 lists the organizations with authority and independent operational capacity to maintain good order at sea.

The coast guard question

On May 14, 2023, the Knesset National Security Committee discussed the issue of maritime policing to obtain a picture of the state of policing at sea, existing challenges to effective enforcement, and required goals for strengthening the system's capabilities. The maritime milieu was characterized by police representatives as a "national problem",

⁶¹ [Maritime Archaeology Unit](#). Israel Antiquities Authority.

⁶² National Security Committee, Knesset website. (May 14, 2023). [Committee News, Maritime Policing](#).

⁶³ Security company – Araks, [sea-ports-security](#).

⁶⁴ Eliyahu (2017).

⁶⁵ Lucas, E. R. (2017). Chapter 17: Maritime Piracy and Armed Robbery at Sea. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2016*, 210–213 (Maritime Policy & Strategy Research Center, University of Haifa),

⁶⁶ Germond, B. (2015). [The geopolitical dimension of maritime security](#). *Marine Policy*, 54, 137–142; Eran, E., and Rubin, E. (2017). Chapter 3: Israel and the Eastern Mediterranean. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2016/17*, 67–76 (Maritime Policy & Strategy Research Center, University of Haifa).

Table 1: Details of organizations with authority and independent operational capacity to maintain good order at sea

Operative entity	Office in charge
Israeli Navy – (mainly Ongoing Security and Naval Control System)	IDF, Ministry of Defense
Israeli Maritime Police	Israel Police, Ministry of National Security
National Marine Environmental Protection Unit	Ministry of Environmental Protection
The naval unit	Israel Nature and Parks Authority
Supervision and Control Division	Shipping and Ports Authority
Beach rescue services	Local authorities, Ministry of the Interior
Customs	Israel Tax Authority

with the capabilities that exist today and are similar to those of 30 years ago, it was said, "it is impossible to provide a proper and required response". The police also presented goals for staff work that can provide a response to those gaps, including increasing the number of bases and manpower, establishing a dedicated investigation and intelligence department in the Maritime Police, strengthening cooperation and staff work with the Israeli Navy, and expanding legal powers regarding searches of vessels without a search warrant or prior intelligence, the latter issue being central to the effectiveness of enforcement efforts. Committee chair MK Zvika Fogel said at the meeting that he would recommend changing the structure of the Maritime Police to a similar hierarchy as in the army, with a unified force and centralized intelligence capabilities, rather than according to the current district-based division of responsibilities.⁶⁷

About 10 months later, on March 21, 2024, when the National Security Committee visited the Haifa base against the backdrop of the reality after October 7, Committee Chairman Fogel said, "The missions and threats have increased in all areas... The system of expectations from the police has increased... and we need to give you more power so that we can demand more results from you". From a border control perspective, about 1,600 private vessels enter Israel every year, which is a particularly weak point in the context of drug smuggling. Lt. Col. Larry Samara, head of the Special Policing Department, said, "There are several elements operating in this domain and there is no conductor for this orchestra... The maritime border remains open, and we need to prepare for this... In this range, we cannot exhaust our capabilities... We know what to do, but there are bureaucratic difficulties".⁶⁸

⁶⁷ National Security Committee (2023). See footnote 62.

⁶⁸ Heller, S. (2024). ["The maritime border remains open": The National Security Committee sends a boat to the maritime policing system in Acre and Haifa.](#) *Walla news*.

It is worth addressing and discussing the question that sometimes arises in the discussion of maritime security in Israel, whether there is a need for an Israeli coast guard. Some support this and have even pushed for the establishment of an Israeli coast guard that would coordinate certain military responsibilities such as ongoing security and civilian responsibilities such as rescue and rescue, sea patrols and border checks. Supporters emphasize the importance of the maritime domain to national interests, which leads to the need for the existence of a coast guard.⁶⁹ This was claimed by former Navy Commander David Ben-Bashat, who proposed establishing a maritime border guard as a police unit under the army (according to the 'border guard' model). Studies conducted on the subject in the past indicate that there was a recommendation to establish a coast guard with different scopes, authorities, and framework. Following a study conducted in 1999 by the Vydra Institute at the University of Haifa, there was a proposal to establish a coast guard under the Shipping and Ports Administration with tasks of supervision, enforcement, management of a situation room, and information collection and coordination of activities between all relevant entities in the country, enforcement entities from various countries, and with neighboring countries. On the other hand, some claim that the maritime police and enforcement entities are well prepared to carry out their missions, and the scope of maritime activity in Israel does not justify the establishment of a coast guard.⁷⁰

First, it is important to note that close and effective coordination efforts between entities, collection and dissemination of information and its sharing to create a high level of maritime awareness, utilization of technology through maintaining innovation capabilities, and comprehensive strategic planning, can leverage the total capabilities of existing entities to create effective enforcement and policing performance in the maritime environment. A coast guard will increase the level of security under a central condition, if it concentrates all areas of responsibility for maritime enforcement from all existing entities. As technological progress continues and the use of the maritime domain increases, the complexity of the challenges increases and so do the requirements for planning, cooperation and coordination between many entities, and the concentration of all capabilities and powers in one entity will over time be seen as a more suitable option. When every issue of maritime security, except for military combat areas under the Israeli Navy, is the responsibility of a single entity, it is easier to achieve a high level of comprehensiveness and strategicness in maritime enforcement efforts. The option of an operational national-maritime security entity under a single government ministry could also facilitate various bureaucratic procedures. Still, this is a drastic reform that will

⁶⁹ Surkes, S. (November 25, 2021). [Experts: Israel has 'no strategy' for managing 'lifeline' Mediterranean Sea](#). *The Times of Israel*.

⁷⁰ Eshed (2021).

require a large budgetary investment. Legislation (which is very likely to be delayed) and structural changes, the implementation of which is sometimes very challenging from an internal political perspective. Such a reform is possible and some would say, first, that it is appropriate for the security reality after October 7, and second, that, assuming this option will appear more relevant over time, it is advisable to establish it sooner rather than later.

Discussion and recommendations

Israel suffers from Sea-blindness, and although the Navy is well equipped to protect maritime sovereignty, maritime assets, and defense against terrorist attacks or political threats, while conducting naval and air patrols, maintaining a military naval presence in economic waters, and collecting broad intelligence on the area, it does not have the authority and responsibility to respond to a wide range of threats in the form of maritime violence, from smuggling to pollution, and more. The responsibility and authority for these is divided in various ways between nine government ministries and a long list of government entities and organizations.⁷¹ The following recommendations will present a broad overview of a potentially wide range of actions available in the academic literature. These actions represent the mechanisms at the national level for creating effectiveness in maritime enforcement efforts.⁷²

Increasing Maritime Domain Awareness—From the perspective of awareness mechanisms, Maritime Domain Awareness (MDA) requires the collection of information and monitoring of the maritime domain using multiple sources simultaneously,⁷³ and automation of data and information fusion based on artificial intelligence, which can be carried out by previously proposed entities such as the Maritime Authority.⁷⁴ It should be noted that the Navy collects extensive intelligence about the maritime domain but does not share it in an organized manner with other organizations, (an unclassified) information that can be used by other organizations for enforcement, policing, and environmental protection. Singapore, for example, has achieved a fairly high level of awareness in the maritime domain. Singapore's National Maritime Sense-making Group (NMSG) uses artificial

⁷¹ Surkes (2021).

⁷² Dayan, E. (2024), 1–8.

⁷³ Polinov, S., and Chorev, S. (2022). A Model for an Israeli Academic Marine Monitoring System. In: S. Chorev, and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22*, 333–345 (Maritime Policy & Strategy Research Center, University of Haifa).

⁷⁴ Erez, R. (2019). The Maritime Domain Policy: From Awareness to Reality. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2018/19*, 151–163 (Maritime Policy & Strategy Research Center, University of Haifa).

intelligence systems and data analyses from multiple sources to build in-depth profiles of vessels passing through Singapore's maritime domain. The system is regularly connected to databases of intelligence agencies, shipping companies, and government entities.⁷⁵ Maritime Situational Awareness (MSA) represents an extension of the MDA concept by collecting and analyzing intelligence (and thus creating a response) regarding what is also happening on land, especially in the context of the complexity of the challenges in the maritime domain and due to their close dependence to activities on land.⁷⁶

In this context, a creative range of courses of action can be reached in Israel, starting from investment by the government and local councils in studies of proper behavior at sea and education for safety at sea.⁷⁷ Concerning the first dimension of security, continuing to increased cooperation between local authorities and security entities for increased security in marinas and their surroundings in relation to smuggling. To the establishment of a national intelligence system based in part on unclassified information from the Israeli Navy.

Desing of a maritime strategy and approval of the Maritime Areas Law – Within the planning mechanism, a central issue that arises in the context of Israeli maritime security and contributes to the current sea-blindness is the lack of a grand maritime strategy in the country.⁷⁸ Maritime strategies provide goals, a vision for success, and ways to achieve them. They link policy and operations, means to objectives, and effective resource management.⁷⁹ Development plans for enforcement agencies are similar to maritime strategies but are specific to a particular agency, and will include resource requirements, costs, schedules, and coordination of expectations with various parties.⁸⁰ Resource planning and administrative planning also contribute to the effectiveness of policing and

⁷⁵ Dayan, E. (2023). Whole-of-Government Frameworks for Maritime Security. In: S. Chorev, and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23*, 439–452 (Maritime Policy & Strategy Research Center, University of Haifa).

⁷⁶ Feidt, I. (2016). The complex nature of today's maritime issues: A European perspective. In J. Krause, and S. Burns (eds.), *Routledge Handbook of Naval Strategy and Security*, 11–26, Routledge, p. 12.

⁷⁷ Eshed (2021).

⁷⁸ Gour Lavie, O. (2018). A Model and Methodology for a Grand Maritime Strategy for Israel. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2017/18*, 96–103 (Maritime Policy & Strategy Research Center, University of Haifa).

⁷⁹ Shemella, P. (2016). Integrated strategies against maritime violence. In P. Shemella (ed.), *Global Responses to Maritime Violence: Cooperation and Collective Action*, 71–87, Stanford University Press, pp. 71–73.

⁸⁰ United States Government Accountability Office. (2012). *Coast Guard Needs to Improve Use and Management of Interagency Operations Centers*. Report to Congressional Requesters.

enforcement. In Israel, the continued promotion of the Maritime Areas Law will contribute in this aspect to more optimal management of the maritime domain.⁸¹ The proposal by minister and committee head Fogel, to change the Maritime Police to a format similar to the army, could be useful and contribute to the ability to plan, manage and use resources, and exert force in the system. But beyond that, when it comes to enforcing good order at sea, the perspective should be on a broad national (and even international) level, to include all organizations participating in maritime security, the various government ministries, the maritime sector, intelligence agencies, and research institutes.

Policy, collaboration and technological innovation – Cooperation, coordination and integration between capabilities, knowledge, resources and manpower are critical to maritime security, especially when a large number of government ministries and entities share a vision of security in the region. Whole-of-government frameworks are frameworks for coordinating and integrating the work of maritime security entities, collecting and analyzing information, holding discussions, leveraging resources, creating emergency procedures, conducting exercises, and learning lessons. All activities of the framework are carried out by a joint decision-making of the coordinated entities, with a political-security command with broad powers, and under one roof.⁸² Due to the cross-border and interdependent nature of maritime security challenges, creating regional coordination and cooperation capabilities with security agencies in nearby friendly countries (such as Cyprus, Greece, Italy, and, with investment from the political level, Egypt and Jordan) can be effective in addressing challenges such as illegal trafficking or marine pollution.⁸³

For successful enforcement performance, a country in question is required to develop mechanisms that can produce effective use of capabilities, budgets and manpower, i.e. inter-organizational synergy. From the aspects of innovation mechanisms, although it was noted that maritime policing uses drones to locate missing persons, the potential use of unmanned aircraft and surface vessels⁸⁴ is broad and can be adapted to a variety of missions, including patrolling and increased presence in the domain with the ability to reduce the required operational manpower. Use of unmanned surface and underwater vehicles with a certain level of autonomy to scan the sea with the desire to discover

⁸¹ Shefler, O. (2018). The Proposed Marine Areas Law 5777 – 2017 and its Impact on the Energy Sector. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2017/18*, 156–177 (Maritime Policy & Strategy Research Center, University of Haifa).

⁸² Dayan (2023).

⁸³ Pasternak (2019).

⁸⁴ Pinko, E. (2018). Unmanned Vehicles in the Maritime Domain: Missions, Capabilities, Technologies and Challenges. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2017/18*, 82–95 (Maritime Policy & Strategy Research Center, University of Haifa).

drug smuggling (such as those found in the aforementioned event from 2022), to collect enforcement and criminal intelligence, and to collect intelligence and early warning in all matters related to environmental pollution, and to protect the marine ecosystem. At a national level, using Israeli shipyards and companies for shipping and security solutions can benefit a higher level of adaptation and suitability for specific challenges to the maritime sector in Israel.⁸⁵

Coast Guard – As noted, the Maritime Police, as part of the Israel Police, and the Ministry of National Security are in the midst of a process of strengthening constabulary capabilities in the maritime environment, some of the goals for this were presented to the committee last year. Considering that these entities, through coordination with other maritime security entities, are in the process of having defined goals and methods of action. The recommendation about a coast guard will be focusing on the long term (i.e., with strategic consideration of beyond the next 20 years). Three arguments underpin the recommendation. First, as noted earlier, following the growing trend of the complexity of security challenges in the maritime domain and the increasing scope of use of the maritime domain over the years, the gap between the investment required to establish a coast guard and that required for effective coordination and planning mechanisms of a large number of organizations, similar to today, will decrease as time goes by. Therefore, the need to concentrate enforcement capabilities under one entity (i.e., a coast guard) will increase. Second, an examination of case studies from around the world indicates a significant preference by countries to entrust the issue of enforcement and maritime policing to a dedicated coast guard, a consideration that stems mainly from the need for unique professionalism required in dealing with the variety of security challenges in the region, and a high level of effectiveness. Finally, from a political-strategic perspective, the new security reality in Israel has raised the issue of security against security threats (whether terrorist, state, or other) to the top of the government's and public discourse's agenda. This situation has opened a window of opportunity in the coming years in which it will be possible to further promote significant and drastic security reforms that require extensive investment and many structural changes.

The process of fully establishing a Coast Guard will likely require several years, including a broad political process, significant legislation, budget mobilization, concentration of many authorities from many entities, capacity building, recruitment of personnel, training, establishment of intelligence collection, monitoring, coordination, and control systems, procurement of watercrafts, aircraft, and specialized equipment, construction of

⁸⁵ Zarhi, N., and Chorev, S. (2020). The Contribution of Private Shipyards to Israel's National Security. In: S. Chorev, and E. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2019/20*, 105–113 (Maritime Policy & Strategy Research Center, University of Haifa),

infrastructure, creation of cooperation mechanisms at the international level, creation of procedures, protocols, and establishment of operational units. Assuming that a coast guard (even if years from now) will emerge as an effective alternative for achieving security in the maritime domain, the leadership must take advantage of the current security window of opportunity and see the issue of national security in the maritime domain as a long-term issue that will require a permanent, evolving, and adaptive response throughout the years of the state's existence. As a result, efforts should be made to establish a coast guard as a long-term investment in the country's national security, a process that will be completed only a few years after its beginning, but one that will lead to improved national security many years into the future.

Maritime supply chains to Israel in the "Israel-Hamas" War

Ehud Gonen

Introduction

Israel entered the "Israel-Hamas" war after a decade of a certain decline in globalization processes, and after years of upheaval in the global trade system due to the Corona and the Russia-Ukraine war crisis, as well as a decline in the international trade component of Israeli GDP. However, trade, and especially imports by sea, is still an existential necessity for the state. For example, the State of Israel imports food worth about eight billion dollars a year, of which about one and a half billion dollars are grains, which are more than 90% of the country's grain consumption.¹ In addition, energy products are imported by sea at a cost of more than ten billion dollars, as well as various necessary raw materials, and of course countless other products essential to a developed economy.²

Israel's various enemies see national infrastructure as a target for attack, and widespread economic damage as a legitimate goal. The supply chain to Israel, both civilian and military, is challenged along its entire length, from boycotts and sanctions in the countries of origins abroad, to risks in shipping lanes, which have culminated in attacks by the Houthi movement from Yemen on shipping in the Red Sea in the Bab-el-Mandeb Strait, to direct threats to Israeli ports.

This chapter analyses the threat to Israel's maritime supply chains during the war.³ The chapter will open with a review of the situation in the global and Israeli commercial system before the war; the second part will review the risks to supply chains in three dimensions: the countries of origins for the goods imported, shipping lines and ports, and an analysis of the key logistical events during the war in these three dimensions. The third and final part will discuss the challenges and propose appropriate policies.

Trends in the global commercial system and Israeli foreign trade prior to the "Israel-Hamas" War

An examination of the indicators of the trade flow and foreign direct investments (FDI) from the global GDP (which are one of the most widely accepted indicators of a country's

¹ Yuval Lipkin, Deputy Director General of the Ministry of Agriculture and Food Security (May 16, 2024), Seminar: "Risks in the Supply Chain", Institute for National Security Studies (INSS), Tel Aviv.

² Central Bureau of Statistics (CBSS) (2024), [Foreign Trade – Goods 2023](#).

³ A supply chain is a system that includes fixed and mobile components, as well as "soft" components such as laws and regulations involved in delivering a product or service from raw material to the final product to the customer.

integration into globalization processes) indicates that the world economy has reached the peak of globalization at the present time, at the end of the first decade of the 21st century. The global financial crisis in 2008 effectively marked the end of the last period of globalization. The second decade of the 21st century was marked by the rise or consolidation of leaders with a national worldview in the great powers: Vladimir Putin in Russia, Xi Jinping in China, Donald Trump in the US, as well as the withdrawal of the United Kingdom from the European Union (Brexit, 2020). One of the main characteristics of this decade is the intensification of the inter-power struggle for technological supremacy and global hegemony, which finds its economic expression in the Chinese government's "Belt and Road" initiative, and the outbreak of the "trade war" between the US and China in 2018.⁴ These processes were intensified due to three major exogenous events: the Corona pandemic (2021–2020), the Russia-Ukraine War (2022–), and the Israel-Hamas War (2023–).

The coronavirus pandemic has brought many economic systems to a temporary standstill and has tested liberal notions of international relations regarding global cooperation in times of crisis, a test that most countries have failed to meet. Countries within the European Union have imposed mutual restrictions on the trade and export of medical equipment,⁵ vaccines have become a political product and are granted to supporters and sponsor countries regardless of the country's medical situation,⁶ and respected international bodies such as the World Health Organization (WHO) have been accused of politicization and submission to the dictates of superpowers.⁷

The **Russia-Ukraine** war brought the concept of conventional war back to the center of public discourse in the West. The war led to the expansion of NATO,⁸ a sharp increase in the defense budgets of many European countries, as well as the return of concepts such as "energy independence" in relation to energy imports, mainly from Russia, or "self-reliance" and "food security" in relation to food imports, especially grains, since Russia and Ukraine are among the world's largest grain exporters.

⁴ It is customary to mark the beginning of the trade war between the US and China with the filing of an official complaint to the World Trade Organization by the US against China in April 2017.

⁵ Oni, A. (March 4, 2021), [For the first time: The European Union prevents the export of coronavirus vaccines to other countries](#), *Globes*.

⁶ Rothbard, A. (February 17, 2021), [What's Behind China's Huge Vaccination Campaign in Africa](#), *Haaretz*.

⁷ Yamin, A. (May 11, 2020), [Report: China asked the World Health Organization to hide information regarding the Corona virus](#), *Here 11*.

⁸ NATO (April 4, 2023), [Finland joins NATO as 31st Ally](#); NATO (March 7, 2023) [Sweden officially joins NATO](#).

On the international level, even before the individual discussion of the Israeli economy, the Israel-Hamas War led to the almost complete closure of the Bab-el-Mandeb Strait, which is one of the busiest sea straits in the world, through which about 15% of world trade is transported, and to the imposition of economic sanctions in violation of international law with Turkey's decision in May 2024 to ban exports to Israel. It should be noted that "freedom of navigation" is one of the most widely accepted principles among most nations of the world, and physically underlies the principle of "free trade" for goods. In addition to the impact on the Israeli economy, which will be discussed in detail below, at the level of the global economic system, the Turkish decision has not encountered condemnation, opposition, or actual action from the World Trade Organization (WTO), which has enshrined free trade anchored in international agreements. This shows the erosion of the status of international bodies, as well as the selectivity and limitations of their policy enforcement.

Therefore, when we come to discuss the security of Israel's supply chains during the Israel-Hamas War and "the day after", the global economic system has already been in a process of convergence, protectionism, and retreat from the globalization process for a decade. This retreat finds expression in the rise of nationalism (including an increase in defense budgets), in the erosion of the status of international organizations and international obligations, and in the move away from ideas of economic efficiency and comparative advantage, which find their expression in free trade – towards ideas of self-reliance and energy and economic security, even at the cost of sacrificing economic efficiency and declining economic well-being.

Trends in Israeli foreign trade before the Israel-Hamas War

Foreign trade is a significant component of the Israeli economy, but its share of Israeli GDP has been decreasing over the past decade. The share of foreign trade has decreased from a peak of nearly 80% of GDP in 2012 to 55% in 2021. Some of the reasons for this are structural changes in the Israeli economy, including a decrease in the physical industry component, an increase in the energy production component, and more.

In reviewing trends in Israel's foreign trade, several components should be noted: the type of trade (goods or services), the means of transportation, and the origin and destination markets.

Foreign trade consists of goods (tangible) and services (intangible) and is characterized by a steady increase in the service trade component from the general trade. Most of the exports of the Israeli high-tech sector are included in the exports of services. Trade in services is mostly carried out digitally via communication lines, or through the physical

passage of service providers and recipients (such as in the tourism services sector). Therefore, **trade in services** is less exposed to threats to shipping and ports, but is very exposed to threats to communication lines that cross the sea. Most of the data traffic volume on Israel's international Internet lines is carried out via submarine cables (and not via satellites).



Figure 1: International trade (exports and imports) and trade in services (exports and imports) as a percentage of Israeli GDP⁹

Israeli trade in **goods** is carried out by air and sea, with almost no land trade (except for gas exports via pipeline to Egypt and negligible land trade with neighboring countries). High-value, low-volume products such as electronic components, pharmaceuticals, and diamonds are transported by air. Therefore, most of Israel's trade in terms of weight is carried out by sea. Air trade was greatly affected by the Israel- Hamas war, and especially by a sharp decrease in the number of international flights calling Israel due to the withdrawal of flight operators from the Israeli market. This withdrawal caused a decrease in the volume of cargo available for international trade. Most of Israel's air trade (similar to most countries in the world) is transported in the cargo hold of passenger aircraft rather than in dedicated cargo aircraft. However, air trade (which is of course significant to Israel's economy) is outside the scope of this article.

Israeli maritime trade in goods is about 20% of GDP, and about a third of total Israeli foreign trade in monetary terms. Maritime trade is unbalanced, and in monetary terms its main share, about 73%, is imports and the remaining, about 27%, is exports. (The export of goods by sea from Israel has been fairly constant for several years, a figure that suggests a real decline, relative to GDP, of this component).

⁹ World Bank Group (WBG) (2024), DataBank: World Development Indicators (Israel).

Table 1: Share of foreign trade, trade in goods, and maritime trade in Israeli GDP¹⁰

	Total	From GDP %	From trade %	Import \$	%	Export \$	%
GDP	499,033.50						
Foreign trade	301,609.80	60.40		147,586.80		151,348.60	
Trade in goods	180,303.90	36.10	59.80	107,735.70	73.00	72,568.20	47.90
Maritime trade	99,756.40	20.00	33.10	73,430.60	49.80	26,325.80	17.40

The main countries of origin of imports by sea transport in 2023 were: China 19.5% of all imports by sea transport, Turkey 7.8%, Germany 6%, the United States 5.3% and Italy 4.5% of all seaborne trade in that year.

The physical infrastructure for Israel's maritime trade is ports and shipping. There are six ports operating in Israel: in the Haifa area, there is the "Port of Haifa" operated by the ADANI Group from India, the "Bay Port" operated by SIPG from China, the "Israel Shipyards Port" owned by Israel Shipyards, as well as a chemicals dock, the "Dagon" dock, and the "Fuels" port. In the Ashdod area, there is the "Southern Port" operated by TIL from Switzerland, the "Ashdod Port" owned by the state, as well as the cement and phosphate docks. In addition to these, there are two energy ports in Israel for unloading coal in Hadera, and coal, oil, and LPG in Ashkelon. In the south is the "Eilat Port" owned by "Papo Maritime LTD" from Israel. In total, the total length of the docks of all Israeli ports in the Mediterranean Sea is more than 13 km and includes cranes and unloading equipment for all types of cargo. It can be said that as long as the ports are operating, they and the equipment within them are sufficient to serve the Israeli economy (regarding reference scenarios for damage to the ports, see the discussion and recommendations paragraph).

In contrast to the port infrastructure, Israeli shipping before the war was in a bad state. Only a few ships flying the Israeli flag sail around the world in international trade, and a little more than 30 ships are registered under Israeli control, sailing under flags of convenience. According to the Director General of the Israeli Ports Authority (hereafter: IPA), there are still "hundreds" of Israeli-owned ships around the world that are not registered in the Israeli ship registry as required. Therefore, it can be assumed that the difference between the approximately thirty ships registered in the ship registry as Israeli-controlled and the "hundreds" of ships reported by the Director General of the IPA stems from the ship-owners' failure to report as required by law, as well as a policy of deliberate lack of enforcement on the part of the IPA.

Figure 2 below describes the development of the Israeli-owned merchant fleet in terms of Dead Weight – DWT.

¹⁰ Central Bureau of Statistics (CBSS) (2024), Import and export of goods by type of transport 2023.

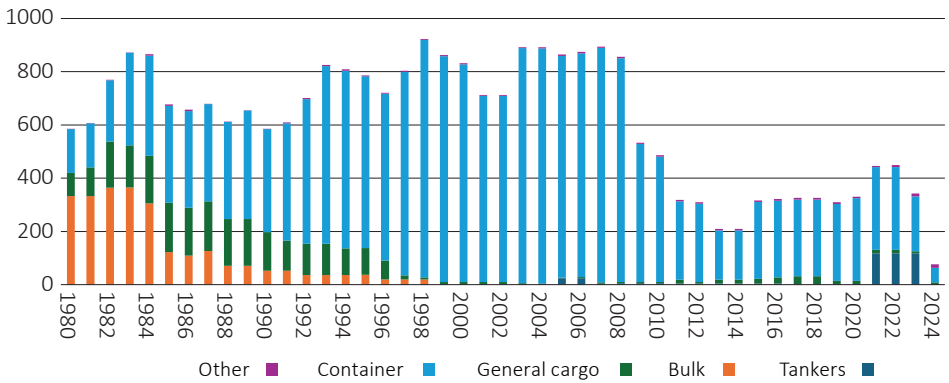


Figure 2: Development of the Israeli merchant fleet (by flag and registration) in terms of DWT¹¹

In addition to the ships, it should be emphasized that Israel's naval manpower is also very limited. There are no Israeli "ratings" (non-officer seamen) in the Israeli merchant fleet and fewer than a hundred naval officers in total.¹² It should be noted that by law, ships registered in the Israeli ship registry (whether under the Israeli flag or owned by Israelis) are required to have a "manning obligation" of a minimum number of Israeli naval officers. This manning obligation is intended to leave command of the ship in Israeli hands in order to allow the ship to sail to Israeli ports in an emergency. Most ships in the Israeli registry are exempt from manning obligations, as there are not enough Israeli naval officers to meet the standards required by law. In Israel, there is a maritime training authority whose role is to train Israeli sailors and naval officers. It can be assumed that this is a cause-and-effect relationship in which granting an exemption does not encourage companies to train Israeli maritime personnel, and the lack of training in turn causes a shortage of maritime personnel (see discussion).

Israeli Foreign Trade in the Israel-Hamas War

Although the war broke out by surprise, in recent years since the Corona crisis, the issue of securing Israel's supply chains has come up for public discussion. Accordingly, staff work has been conducted on the matter, and emergency plans have been prepared for the logistics sector in Israel. On the national level, so far, Israel's supply chains have fulfilled the mission of supplying the Israeli economy and the IDF's military effort. No shortages of essential products, food, or fuel have been reported. It can be said that overall, Israel's international trade flow is taking place in a manner that properly serves

¹¹ UNCTAD maritime transport (Israel)
¹² Shipping and Ports Statistical Yearbook 2022, IPA.

the Israeli economy. Although it is likely that in order to avoid handing over information valuable to national security to the enemy, if there were failures in the supply chains, they would not have been reported to the public. On the other hand, it is equally likely that if there were significant gaps and logistical failures during the war, this would have become known eventually.

The war, of course, affected the entire Israeli economy, starting with the recruitment of many reservists, the evacuation of communities and the closure of businesses and factories, enormous government spending, and more. Businesses abroad may also have paused or stopped trading with Israel. In terms of international trade, 2023 ended with Israeli foreign trade recording a decrease of approximately \$15.8 billion in imports of goods, a decrease of approximately 14.8% compared to 2022. At the same time, exports of goods decreased by approximately \$9.2 billion, a decrease of approximately 12% compared to 2022. It should be noted that this is an annual decrease that resulted from a decrease in the last quarter of the year, so in quarterly terms the decrease in trade is even greater. The statistics do not detail the decrease in trade by means of transport (sea or air), and the data review all Israeli trade in goods. Data for the first quarter of 2024 show a similar trend, although there is a recovery in specific countries such as an increase in exports to the United States, which is Israel's main export market.¹³

The maritime insurance sector is very significant in maritime transport. With the outbreak of the war, international insurers did not renew 'war risk' policies for Israeli cargo, so the Ministry of Finance, the Accountant General, issued guidelines regarding war risk insurance of Israeli-owned seaborne cargo through property tax.¹⁴ It should be noted that this insurance concerns only the cargo and not the ship's hull.¹⁵ This means that the costs of increasing insurance on the ship's hull (to the extent that such were imposed) are generally borne by the ship-owners (as per the lease agreement), who in the event of high costs may refrain from calling Israeli ports.

Review of the challenges to Israel's supply chains as they came up during the war

Countries of origin: With the outbreak of war, a murky wave of anti-Semitism swept the countries of the world. Although the pro-Palestinian demonstrations that broke out on

¹³ Central Bureau of Statistics (2024), Foreign Trade – Goods 2023.

¹⁴ [Questions and answers regarding the compensation payment for indirect damages to businesses due to the "Israel-Hamas" war – according to the Property Tax Law and its regulations and temporary order](#), Israel Tax Authority.

¹⁵ During the Second Lebanon War (2006), Israel, through the government insurance company "Inbal", insured ships (hulls) visiting Israel, but until now there had been no need for similar insurance in the Israel-Hamas War.

October 8 (before the IDF entered the Gaza Strip) were ostensibly directed against Israeli policy, from the very beginning the demonstrators nullified Israel's very right to exist (with the slogan "From the River to the sea"), and a clear anti-Semitic trend emerged in the demonstrations. The wave of anti-Semitism that swept the streets of the world's major capitals stems from three combined reasons: the first is ethnic-religious, meaning Arab and Muslim minorities in those countries who identify with the Palestinians in Gaza on religious and ethnic grounds; the second is left-wing organizations that identify with the issue of human rights in Gaza, and the third (which is somewhat related to the second) is the "global south" protesting against Israeli (and American) "colonialism", starting with South Africa as the representative of the struggle against "Israeli apartheid" and continuing with China, which is exploiting the situation to attack the United States.

These factors are reflected in the economic system at three levels:

Civil society: The violent demonstrations against Israel in most Western countries were directly aimed at Israeli economic interests, with calls for a boycott of companies that have ties with Israel, a halt to investments, harm to Israeli companies abroad, and more. In addition to the direct damage, the demonstrations have created a negative sentiment toward economic ties with Israel. Companies and organizations fear that they will be caught in the eye of the storm, and will find themselves at the center of public criticism for being a country that supports Israel. Therefore, many choose to wait or avoid ties with Israel until the rage is over, or have declared that they will reexamine investment policies and ties with Israel, as some universities in North America and other commercial companies have announced. What this thing has in common is that it is a "voluntary" activity of the companies and the restrictions they have imposed on themselves, and not a government policy, law, or trade practices.

In the same context of civil society activity, one can also note activity that has deliberately come to disrupt the physical flow of goods to Israel, including demonstrations at ports and protest activity by labor organizations at ports. It should be noted that such activity also existed before the October 7th attacks, but to a lesser extent.¹⁶

From the perspective of the countries of origins: As the war in Gaza and the violent protests against Israel continue, several countries have begun to announce laws or

¹⁶ Port workers' committees' resistance to handling Israeli ships was reported in California 2010, 2014, 2021, and South Africa 2009. Halpern, N. (February 8, 2009). [A 'ZIM' ship left the port of Durban in South Africa after port workers refused to unload goods](#). *The Marker; Channel 7*. (August 21, 2014) [US: Israeli ship unloaded goods despite protest](#); Sade, Y. (June 5, 2021). [Port workers in Oakland, California, refused to unload an Israeli ship](#), *Calcalist*; *Ynet* (June 21, 2010). [California: Hundreds Prevent Israeli Ship from Unloading](#).

regulations restricting trade with Israel. Whether this is a move stemming from moral beliefs or a move to appease Muslim and leftist groups as potential electoral groups, these are official restrictions on trade with Israel by governments, and not voluntary decisions by commercial companies. In most cases, these are restrictions concerning the export of weapons or other defense exports to Israel¹⁷, but in the Turkish case, this is a blanket legal ban (for Turkey, see a separate chapter). The global arms market operates according to laws that are somewhat different from the normal laws of supply and demand, and is characterized by high levels of government involvement and regulation, but cautious or accusatory official policies toward Israel by the countries of origins also have repercussions on the normal commercial market. A government signal that Israel is a "problematic" country causes commercial companies to avoid trading with Israel, some of which are even restricted by company regulations, or because they are public companies, from trading with countries in military conflict. Therefore, bans on exports to Israel, even if they are of weapons and security equipment, first and foremost affect the military supply chain, of course, but also greatly affect the general sentiment in the country, and even directly harm trade with Israel in civilian products.

The international system: Legal claims against Israel in the International Court of Justice, the issuance of international orders against Israel, and personal claims against senior Israeli officials – are part of a legal campaign that, among other things, is directed to restrict the IDF's operational steps (sometimes called: lawfare), but in the long term they have economic significance. The very discussions and proposals to impose international sanctions on Israel mark Israel as a problematic and "leper" state, even if the chance of imposing such sanctions is relatively low due to the fact that they can only be imposed by the UN Security Council, and it is likely that the United States will veto such a proposal (of course, we are in times of upheaval and the boundaries between reasonable and unreasonable are no longer clear). However, the mere addition of Israel to "blacklists" by international entities¹⁸ causes large multinational companies to suspend or sever their relations with Israel, as such companies are usually governed by "corporate responsibility" regulations and policies that limit their activities in conflict zones, and they are subject to close public scrutiny, primarily by the civil society organizations mentioned above.

¹⁷ The countries that imposed restrictions on exports to Israel are Italy (January 20, 2024), the Netherlands (February 2024), and the United Kingdom (June 2024). In France, Israelis were banned from entering an international arms exhibition.

¹⁸ Eichner, I. (June 7, 2024), [Israel placed on the UN's "blacklist": the consequences, and the response measures being considered](#), *ynet*.

Turkish policy

Trade relations with Turkey gradually deteriorated during the months of the war. In January 2024, Turkey announced the removal of Israel from the list of ten Turkish priority export destinations. This mainly meant the cessation of subsidizing marketing activities of Turkish exporters. In April 2024, Turkey announced a ban on exports to Israel of 54 products, including iron, cement, blocks, aluminum products, optical fibers, forklifts, chemical fertilizers, plastic pipes, jet fuel, and cranes.¹⁹ In May 2024, Turkish President Recep Tayyip Erdogan announced a general ban on Turkish exports to Israel.²⁰

Turkey is a significant country of origin for Israeli imports – the volume of imports from Turkey was approximately \$4.78 billion in 2023, of which \$4.6 billion was by sea. Imports from Turkey are on a slight downward trend that began even before the war, and they include a long list of products. The Ministry of Economy published a comprehensive report on the robustness of supply chains to Israel. While the report presents a relatively positive picture regarding the robustness of supply chains to Israel compared to OECD countries, the report specifically mentions Turkey as a country from which Israel is exceptionally dependent on imports.²¹

An in-depth review of trade relations between Israel and Turkey shows a complex picture of a certain mutual dependence. Table 2 below describes imports from Turkey to Israel – the share of Turkish imports out of total imports to Israel (i.e., Israeli exposure to imports from Turkey), and the share of exports to Israel out of total Turkish exports (Turkish exposure to exports to Israel).

The volume of imports from Turkey stands at 5.8% of total imports to Israel, while at the same time it is 1.9% of total Turkish exports. Several product groups stand out in particular, such as building materials (items made of stone, gypsum, cement, asbestos, mica, ceramic products, glass and glass products) in which imports from Turkey account for more than a quarter of total imports to Israel of these products, basic metals (about 19% of total imports to Israel), textile products and plastic products (about 11% of total imports to Israel each), and additional product groups. On the other hand, the volume of the Israeli market is about 4%–6% of total Turkish exports in these products. These rates of a few percent of total Turkish exports should not be underestimated, as they

¹⁹ Ministry of Foreign Affairs (April 9, 2024), [Turkey's announcement on restricting exports to Israel](#).

²⁰ Bloomberg, Shmil, D., and Spolter, S. (May 2, 2024), [Turkey Halts Trade with Israel; Israel Katz: "Erdogan Breaks the Rules"](#), *The Marker*.

²¹ Ministry of Economy and Industry (2024), [The Resilience of the Israeli Business Sector to Disruptions in Global Supply Chains: Structural Sensitivity Analysis and International Policy](#), Jerusalem.

are hundreds of millions of dollars, and these Turkish exports are broken down into the exports of hundreds of separate Turkish companies that collectively employ thousands of workers (and perhaps even more). However, it can be said that Israeli exposure to imports from Turkey is orders of magnitude greater than Turkish exposure to exports to Israel.

Another significant aspect is Turkish exports to the Palestinians. Trade relations between Israel and the Palestinian Authority are regulated by the Paris Protocol, which defines a single 'customs envelope' between Israel and the Palestinian Authority. Hence, a significant portion of Turkish exports to Israel actually continue to the Palestinians. There are no official statistics that separate imports to Israel from imports to the Palestinians.

It is common practice in the business world that for most products it is easier to find suppliers than customers, meaning that it will be easier for Israeli importers to replace Turkish suppliers than for Turkish exporters to replace Israeli customers. However, it should be taken into account that the costs of changing suppliers are significant and involve finding suppliers (such as traveling to international exhibitions and finding new partners), regulatory approvals (for example, compliance with Israeli standards), coordinating production lines in Israel for new raw products, and more.

Table 1: Breakdown of Israeli imports and exports from Turkey, out of total Israeli imports and total Turkish exports²²

Part of the customs book	Israeli imports from Turkey	Out of imports from Turkey	Turkish exports to the world	Imports to Israel from total Turkish exports	Israeli imports from around the world	Imports from Turkey out of total imports to Israel
Total	4,788,262		255,440,780	1.9%	83,163,005	5.8%
Base metals and base metal items	1,032,713	21.6%	30,915,579	3.3%	5,489,973	18.8%
Machinery and mechanical devices; electrical equipment	602,578	12.6%	40,560,465	1.5%	19,641,212	3.1%
Mineral products	465,695	9.7%	21,638,183	2.2%	10,260,845	4.5%
Vehicles, aircrafts, watercrafts and transportation-related equipment	454,965	9.5%	36,117,373	1.3%	9,350,866	4.9%
Plastic and items from it; rubber and items from it	366,619	7.7%	14,389,382	2.5%	3,408,818	10.8%
Textiles and textile products	340,173	7.1%	32,872,593	1.0%	2,901,517	11.7%
Items made of stone, plaster, cement, asbestos, mica, ceramic products, glass and glass products	313,449	6.5%	4,959,132	6.3%	1,266,490	24.7%

²² [International Trade Center \(ITC\) data](#)

Part of the customs book	Israeli imports from Turkey	Out of imports from Turkey	Turkish exports to the world	Imports to Israel from total Turkish exports	Israeli imports from around the world	Imports from Turkey out of total imports to Israel
Wood and items made of wood; wood charcoal; cork and articles of cork; products of straw, esparto or other plaiting materials; wickerwork and plaiting products	257,551	5.4%	13,752,402	1.9%	4,303,424	6.0%
Natural or cultured pearls, precious or semi-precious stones, precious metals, jewelry, coins	182,965	3.8%	13,646,812	1.3%	4,694,806	3.9%
Products of the chemical and related industries	176,623	3.7%	13,426,888	1.3%	8,117,466	2.2%
Various manufactured items	170,380	3.6%	6,655,271	2.6%	1,913,001	8.9%
Pulp of wood or of other fibrous cellulosic material, waste and scrap of paper or paperboard, paper and paperboard	160,184	3.3%	2,879,384	5.6%	943,301	17.0%
Herbal products	108,704	2.3%	12,578,952	0.9%	2,507,796	4.3%
Animal, vegetable or microbial fats and oils and their products, processed edible fats, animal or vegetable waxes	61,529	1.3%	2,978,992	2.1%	376,955	16.3%
Animals, animal products	57,821	1.2%	3,391,101	1.7%	1,993,429	2.9%
Everything else	36,310	0.8%	4,678,277	4.9%	5,993,109	5.4%

In terms of Israeli exports to Turkey, the issue is no less complex. Israeli exports to Turkey amounted to \$1.49 billion in 2023. The volume of these exports is about 2.5% of all Israeli exports and a negligible percentage (less than half a percent) of total Turkish imports. About half of Israeli exports to Turkey are products of the chemical industry and various minerals.²³ These exports are based on large Israeli companies in the petrochemical sector. On the other hand, the other half of Israeli exports is divided between hundreds of exporting companies.

In addition to direct trade with Turkey, it should be noted that goods are transported to Israel from third countries through Turkey, especially oil from Azerbaijan, which is transported both via the BTC oil pipeline (The Baku–Tbilisi–Ceyhan pipeline) to the Turkish port city of Ceyhan and from there in tankers to Israel, as well as by tankers through the Bosphorus and Dardanelles Straits. Bulk carriers carrying grain from Russia and Ukraine on their way to Israel also pass through these straits. Therefore, the Turks have the option of further increasing the economic sanctions against Israel by blocking the straits from

²³ CBSS, 2024.

ships destined for Israel, or by stopping the flow of oil destined for Israel through the BTC pipeline. The Montreux Convention (1936) regulates the regime in the straits and its implications are for many countries located on the Black Sea coast and the Caucasus countries. It appears that over the years, including during the Russia-Ukraine war, Turkey has generally adhered to the treaty and acted according to its rules.²⁴ Therefore, it can be assumed that closing the straits to Israeli shipping by Turkey is possible but very unlikely.²⁵

It should also be noted that Turkish Airlines decided not to resume flights to Tel Aviv, even though it was the company's most profitable route.²⁶ In addition to blocking of the straits, Turkey could block its airspace to Israeli flights to Northeast Asia and Eastern Europe, an action that would make it difficult for Israel to maintain its air connectivity.

Israel and Turkey have a series of economic agreements, including a free trade agreement deposited with the World Trade Organization, so a blanket ban on trade with Israel is an illegal, extreme, and highly unusual step on the international level. Therefore, although these options for blocking Turkey's maritime or air domains seem extreme, and involve Turkey's relations with other important countries in the Black Sea region, especially Azerbaijan and Russia, it appears that the Turkish government is not restrained by international agreements to which it has committed, so these options for escalation must be taken into account.

The threat to shipping lanes

Israel's location in the eastern Mediterranean requires that most shipping traffic to it pass through straits.

To the south, the Bab-el-Mandeb Strait in the southern Red Sea has been completely closed to Israeli shipping, and in fact most of the world's shipping on the route between Asia and Europe avoids transiting through the straits, and bypasses Africa. For more on the implications of the closure of the Bab-el-Mandeb Strait on Israeli trade, see the section on the commercial implications of the Houthi attacks in this review.

²⁴ Glenn Segal (2023). The Regime of the Straits (Montreux Convention 1936) and the Russia and Ukraine War. In: S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23*, 255–271, Maritime Policy & Strategy Research Center, University of Haifa; Guzansky, Y., Lindenstrauss, G., and Schechter, J. (2011). "Maritime Bottlenecks", for the Vulnerability of Egyptians in the Middle East, Institute for National Security Studies (INSS).

²⁵ Lilian, I. (July 3, 2024), Israeli Ambassador to Turkey. Remarks at a seminar on the Israel-Hamas War, Emek Jezreel College.

²⁶ Working meeting on the deterioration of relations with Turkey, February 12, 2024, Institute for National Security Studies (INSS).

To the north, as described, some of Israel's oil imports are transported by tanker through the Bosphorus and Dardanelles Straits, as is a significant portion of Israel's grain imports. These straits are under Turkish control and are subject to the Montreux Convention, but in light of the Turkish policy described above, it can be estimated that closing them to shipping serving Israeli trade is not impossible.

In the western Mediterranean Sea is the Strait of Gibraltar, through which Israel's maritime trade is mainly transported with the United States and Northern Europe (for example, Germany). While the countries surrounding the strait – Britain (in the colony of Gibraltar), Spain (including the autonomous city of "Ceuta" on the African side of the strait) and Morocco – are politically stable and unlikely to prevent the passage of ships carrying Israeli trade, it is possible to imagine scenarios in which Israeli trade in the western Mediterranean and eastern Atlantic could be affected.

The Iranians have repeatedly threatened to harm Israeli trade in the western Mediterranean as well. Two scenarios can be drawn for these threats. The first is through the rebel front "Polisario" in the "Republic of Western Sahara" region south of Morocco, where there is a conflict between Morocco and this front, which is supported mainly by Algeria and, to a lesser extent, Iran. As part of the "Abraham Accords" between Israel and Morocco, the United States and Israel recognized Moroccan sovereignty over the region, thus making the Polisario an opponent of Israel. Copying Iran's model of activity against the Houthis in Yemen to this arena through Iranian support with weapons and training could allow for damage to shipping circling Africa towards the Strait of Gibraltar.²⁷

Another scenario could be a threat to shipping by a terrorist attack along the coasts of Libya or Algeria and even in the Strait of Gibraltar by groups linked to refugee and migrant smugglers, who have acquired extensive experience in maritime activity in recent years in building and operating small watercrafts, and evading naval patrols such as those of the Italian and Spanish navies.

In addition to the threat of closing shipping lanes or kinetic attacks on shipping lanes, shipping lanes to Israel have been changed and restricted in light of shipping company policies. After the Houthis attacks began on ships with ties to Israel, several shipping companies issued statements to refrain from transporting goods to Israel. Among them, COSCO – the world's fourth largest container shipping company owned by the Chinese government – is refraining from shipping to Israel, despite the fact that the company is a partial owner of SIPG, which operates the "Bay Port" in Haifa.

²⁷ Salami, M. (May 21, 2023). [Examining Iran's Geopolitical Goals in the Western Sahara Conflict](#), *Gulf International Forum*.

Furthermore, there have been several reports of difficulty for Israeli importers to "get" ships, mainly bulk and general cargo, for Israeli trade, as well as reports from oil refineries of difficulty in the oil tanker sector. With the beginning of the Houthis attacks, the National Security Council (NSC) ordered ports not to publish data on ships calling at Israeli ports. Therefore, shipping data is not available. It appears that there has been a sharp decline in the number of ships calling at Israeli ports (see connectivity below), but so far trade to and from Israel continues.

The threat to the ports

So far, activity in Israeli ports has been ongoing, and no physical damage has been recorded in Israel's Mediterranean ports, except for reports of interceptor fragments falling. At the beginning of the war, it was reported that ships and cargo were diverted from the port of Ashdod to the ports of Haifa, mainly ships carrying goods such as chemicals etc.¹ In addition, there were localized difficulties in storing cars or extending the time for goods to remain in the ports until they were picked up by the importer.

Ashdod and TIL Ports: In the early days of the war, activity at the Ashdod Port was reduced by about half, and over time it returned to full operation. The (relatively) short-term rocket threat from Hamas to the Ashdod and TIL ports was removed due to IDF activity in the Gaza Strip, and the dismantling of Hamas' military infrastructure. Of course, more Hamas attacks on the cities of Ashdod and Ashkelon and their ports can be planned, but these possible future isolated attacks will likely not be able to stop activity at the port for an extended period of time. On the other hand, Hezbollah has the ability to attack ships in the Ashdod Port area as well as the port itself.

Port of Eilat: The closure of the Bab-el-Mandeb Strait effectively imposed a complete blockade on the Port of Eilat, which has completely ceased operations and is in a deep economic crisis. Theoretically, ships can pass through the Suez Canal from the Mediterranean Sea southward and reach the Port of Eilat, but in most cases this makes no economic sense, as it is already preferable to unload the goods in Israel's Mediterranean ports, Ashdod or Haifa. In addition to the threat to shipping, the city of Eilat, including the port, has been and still is (July 2024) subject to missile and drone attacks both from Yemen and from the east – from Iraq. The naval base in Eilat was directly hit by a drone apparently launched from Iraq.²⁸

Port of Haifa: The city of Haifa has been attacked by Hamas at least twice in the war with long-range missiles from Gaza. The Houthis have also stated several times that they

²⁸ Zaytun, Z., and Ben-Ari, L. (April 1, 2024). [A drone launched from Iraq hit the naval base in Eilat \(documentation\)](#), *Ynet*.

have attacked targets in the Mediterranean Sea and the port of Haifa, although no such attacks have been reported in the Israeli media. It should be noted that in terms of the range of means at the disposal of the Houthis, they can carry out such attacks, although they would have to pass over Israeli or Egyptian territory. Pro-Iranian militias in Iraq have also announced several times that they have attacked targets in the port of Haifa.

So far, Hezbollah attacks from Lebanon have been carried out as far as Haifa Bay, and do not reach the city of Haifa and the port. In June 2024, Hezbollah released a video allegedly filmed by a drone that penetrated Israeli airspace (and even returned to Lebanon) and filmed, among other things, the port of Haifa as a threat from Hezbollah to attack the port. It should be noted that in recent years, Hezbollah has threatened to attack the port of Haifa many times.

Port connectivity: Israel's Mediterranean ports are relatively close to Port Said at the northern entrance of the Suez Canal, which serves as a major cargo port for the eastern Mediterranean region. In addition, the ports are on local feeder lines from other relatively nearby cargo ports such as Piraeus in Greece, which is used by the Chinese shipping giant COSCO. The two new ports, "Bay Port" in Haifa and "South Port" in Ashdod, were built to allow giant 18,000 TEU ships to call at the ports, in order to take advantage of Israel's proximity to international shipping lines.

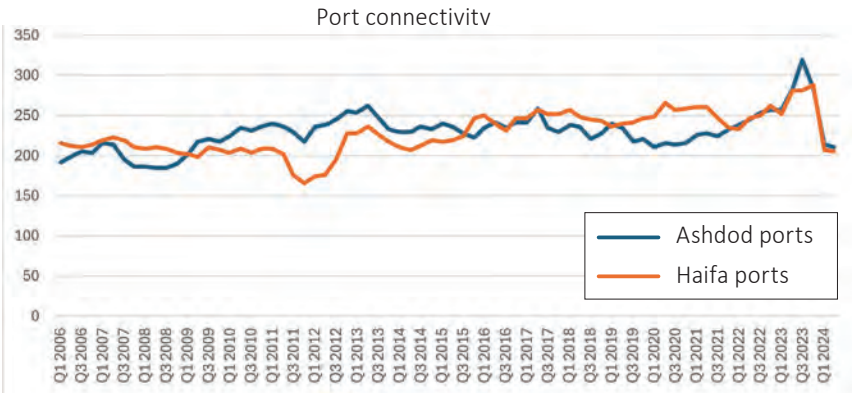


Figure 3: Development of maritime connectivity of the ports of the Haifa and Ashdod region²⁹

As stated, according to the National Security Council directive, no statistics are published regarding the calls of ships at Israeli ports during the war. However, the United Nations Organization for Trade and Development (UNCTAD) publishes a "maritime connectivity"

²⁹ UNCTAD maritime transport (Israel)

index (measured for the container sector only) and it is defined by an index of several parameters, such as the number of ports that can be reached without loading, the number of weekly lines that call at the ports, and more. Since 2017, there have been no significant changes in the connectivity indices of Israel's Mediterranean ports. In the first quarter of 2024, there was a dramatic drop in the connectivity of Israeli ports that can be attributed to the decrease in the number of calls of ships at the ports.

Conclusions and policy recommendations

We are in the midst of a war, and as I write this the situation on the Lebanese front is unstable, and any day there is a possibility of the limited war expanding into a full-scale war. It can be said with caution that overall, so far Israel's international trade flow is occurring in a manner that properly serves the Israeli economy and the military effort.

However, in light of the dramatic developments in the commercial and economic fields due to the war, the following are a number of issues that it is recommended to pay special attention to:

Countries of origin: The challenges and risks detailed regarding the various countries of origin require decision-makers to conduct a mapping of the various sources for the import of goods into Israel. Such mapping has been done in part, as stated, but it should also be conducted in relation to the necessity of the goods imported from them, and the risks to trade in that country, in order to assess the exposure to risk resulting from policy changes in those countries. Such risk mapping should also include risks resulting from civil society decisions and decisions by commercial companies (as opposed to government policy), such as the boycott of ships destined for Israel in ports. In addition, it is specifically recommended to examine the commercial dependence with two specific countries, Turkey and China, and to seek suitable alternatives.

Economic relations with Turkey: Turkey is a key country for imports from Israel, and a critical transit country for both oil and grain and transit through its airspace. The Turkish move to ban exports to Israel is unprecedented internationally, and the political and economic price for this move must be exacted from Turkey, such as demanding compensation through forced international commercial arbitration, and lawsuits against Turkish companies wherever possible. However, it appears that the Israeli Ministry of Economy and Industry's proposal to impose a 100% tariff on all imports originating in Turkey until 2029 (the year of the next elections in Turkey) is a double-edged sword that will primarily harm Israeli importers (and subsequently Israeli consumers). It is recommended to adopt a balanced policy of imposing customs and financial countermeasures according to the requirements of the Israeli economy for Turkish products, in accordance with

the pace of finding import alternatives, and in coordination with the relevant business organizations (mainly the Israeli Chamber of Commerce) and not in a blanket manner (despite the understandable impulsive desire to do so).

Economic relations with China: Chinese policy during the war was clearly pro-Palestinian, including an unprecedented attack on Israel and Jews, including expressions of anti-Semitism in the style of the "Protocols of the Elders of Zion" in media channels affiliated with the government. At the same time, China took advantage of the war to attack the United States and its "colonialism", thereby seeking to lead the "global south". China is the largest country of origin for imports to Israel. Most of Israel's imports from Asia come from China. The government shipping company COSCO's refusal to call ports in Israel should raise a red flag for all decision-makers. As we have reviewed, it is likely that the international commercial system is heading in the direction of polarization between major trading blocs. Israel is in the Western bloc together with the United States, versus the bloc led by China (and other countries such as Russia and Iran). Therefore, in the medium term, steps should be taken to reduce Israel's dependence on imports from China, especially of sensitive technological products.

Diversification and protection of shipping lanes: The threats to shipping lanes to Israel are serious, and in the case of the Houthis attacks have even caused global changes in the shipments of goods. It appears that the IDF and the Israeli Navy are having difficulty providing an operational solution for protecting shipping lanes to Israel in areas as far away as the Bab-el-Mandeb Strait, so it is likely that they will encounter similar difficulties in the event of disturbances in the western Mediterranean, and certainly in the event of a blockage of the Bosphorus and Dardanelles Straits. The response to the shipping lane challenge should be diversification of lanes alongside international alliances, presenting the issue as a global problem and not an Israeli one (as has indeed been done), and in the Turkish case – diplomatic activity.

Diversifying shipping companies and rehabilitating the Israeli merchant fleet: In practice, there is almost no Israeli merchant fleet. This fact creates a critical dependence of the Israeli economy on international shipping. This international shipping is conducted according to different economic and strategic considerations than Israeli ones, and this gap constitutes a critical weak point in the strength of Israel's supply chains.

If, due to an attack on Israeli ports, international shipping ceases to call Israel, this will be a hard blow to the economy, and there is no certainty that foreign ship-owners can be persuaded to come to Israel through financial incentives or government insurance, as was done in 2006. For example, we can mention the shipping company COSCO, owned by the Chinese government, which ceased calling on Israeli ports for strategic reasons and not

due to an attack on Israeli ports. Therefore, it is necessary to assess a minimum Israeli "iron fleet" that will be sufficient for the needs of the economy in an emergency. Such a fleet should include a mix of ships (container, bulk, tanker, etc.) to enable Israeli trade, mainly in the eastern Mediterranean, such as the transport of containers from the port of declaration of "Termination of Voyage" to Israel. This iron fleet should be permanently stationed in the Mediterranean or the Red Sea. It should be noted that when the Zim company was privatized, such an iron fleet was determined, but this fleet became obsolete and differences of opinion arose between the company and the Ministry of Finance regarding the cost of its renewal. Such a future iron fleet must be operated by a minimum number of Israeli seamen, and professional training must be conducted in this field.

For several years, an "occupancy tax" law has been under discussion that would change the tax regime for Israeli ships. It should be noted that this will not provide a full response to the activities of the Israeli merchant fleet, as this is a cross-cutting measure that applies to all types of ships, while in reality a specific mix of ship types and sizes is needed to meet the strategic needs of the Israeli economy.

Emergency supply: The current war is longer than any other war in Israel's history (except for the War of Independence), and its length requires a redeployment in the field of supply. In this context, it is worth noting the change in name (and part of its function) of the "Ministry of Agriculture and Rural Development" to the "Ministry of Agriculture and Raw Food Security". The change in name and designation has received some public criticism (some of which may be justified, such as in the field of grains), but it symbolizes a change in the government's perception to include the issue of supply chains in the ministries' policy.³⁰ The assessment of emergency supply should also take into account its ability to be renewed in time of war.

Threat to Israeli ports

The ports in Israel are the bottleneck of Israeli trade. Despite the removal of most of the Hamas rocket threat over the port of Ashdod, there is still the possibility of harm to the port's operations, mainly from Hezbollah in the north, and perhaps even from the Houthis or pro-Iranian organizations in Iraq. In addition, it is clear that the port of Haifa is under significant threat from Hezbollah. Specifically, here are some recommendations regarding ports:

Foreign operators of Israeli ports: The Bay Port in Haifa and the South Port in Ashdod are operated by foreign operators. So far, no special problems have arisen in this regard,

³⁰ Prime Minister's Office. (2024). [Changing the name of the "Ministry of Agriculture and Rural Development" to the "Ministry of Agriculture and Food Security"](#)

including at the Bay Port in Haifa, which is operated by the Chinese state-owned SIPG company (as mentioned, China has been taking a fairly strong anti-Israel and anti-Semitic approach during the war). However, it is necessary to make sure that these ports can be operated by Israeli workers in the event that the foreign staff leaves Israel due to the increased threat.

An Israeli-owned/managed port abroad: Attacks on Israeli ports in the event of a war in Lebanon could lead global shipping to avoid calling at Israeli ports. It is recommended to examine the possibility of operating an Israeli dock in a nearby country such as Cyprus or Greece by the Israel Ports Company (IPC). Cargo for Israel could be unloaded at such a dock, both as an intermediate destination and in the event of a declaration of "termination of voyage" by a foreign shipping company. Concentrating cargo for Israel at a nearby port would make it easier for Israel to bring it to Israel on feeder ships that make short trips, or to divert urgent cargo for short-haul air transport.

In light of Hezbollah's threat to Cyprus in the context of Israeli airstrikes on Hezbollah from Cypriot territory (which both Israel and Cyprus have strongly rejected),³¹ this agreement should be made in advance, commercially without Israeli military involvement, just as many government companies manage maritime terminals outside their country (for example, DW from the Emirates, PSA from Singapore, or SIPG and COSCO from China).

Means for unloading outside of ports: Attacks on Israeli ports in the event of a war in Lebanon could lead, in an extreme scenario, to the complete closure of the ports. It should be noted that during the Second Lebanon War (2006), the Port of Haifa was closed to operations. In such an extreme case, it is recommended to prepare for alternative unloading of cargo at the piers in Hadera and Ashkelon using mobile cranes, using barges at sea, and self-unloading of the ship using its cranes and even by landing craft/rigs towed on suitable coasts rather than at ports (including directing naval landing crafts to this task). It is clear that these solutions deal with a very small part of trade, and do not provide a solution for trade on a national scale, but they can serve as a temporary solution for a few days for critical goods and for military needs.

³¹ Ben Ari, L. (June 19, 2024), [Nasrallah threatens: "The invasion of Galilee is still on the agenda, Cyprus is at risk"](#), *Ynet*.

The Forgotten Campaign: The Naval Blockade in the Strait of Bab-el-Mandeb during the Yom Kippur War

Ehud (Udi) Golan¹

Introduction

In the Yom Kippur War, the Israeli Navy conducted combat in a maritime domain divided into four sub-areas, each of which was, to a large extent, a separate area. In three sub-areas: in the Mediterranean Sea opposite Syria, in the Mediterranean Sea opposite Egypt, and in the Gulf of Suez (northern Red Sea) area, the Israeli Navy achieved impressive results, sank enemy vessels, lost no vessels, and achieved situational sea control and freedom of action in the Mediterranean Sea and the Gulf of Suez.² This chapter focuses on the fourth sub-area: the southern Red Sea and the Bab-el-Mandeb Strait area – a remote area in which the Israeli Navy did not have a permanent presence and in which operations were a significant challenge. Egypt imposed a naval blockade on the southern Red Sea precisely because of its remoteness and being outside the range of the Israeli Air Force.

The campaign for freedom of navigation in the Red Sea during the Yom Kippur War has both historical and current significance. Following the October 7 attack and Israel's war against Hamas in Gaza, this challenge resurfaced. The Houthis, as part of their identification with and support for Hamas in Gaza, began attacking ships passing through the Bab-el-Mandeb Strait on their way to Eilat, including ships not affiliated with Israel, effectively imposing a naval blockade on shipping in the southern Red Sea, which has become another arena in the multi-front war that Israel is waging.

Theoretical background: Naval blockade

Naval blockade is a classic naval strategy known since the days of sailing ships, a form of economic warfare that aims to affect the enemy's ability to wage war by preventing supplies by sea. The blockade may be comprehensive or apply only to certain resources

¹ This chapter is part of a broader study on the subject of "The Israeli Navy in the Yom Kippur War", which will focus on the strategic level. The author thanks Rear Admiral (Ret.) Prof. Shaul Chorev and Capt. (Navy) (Ret.) Shlomo Guetta.

² Two comprehensive studies about the Israeli Navy in the Yom Kippur War, which were published on the 50th anniversary of the war, see: Sam Brunfeld, "The Israeli Navy in the Yom Kippur War – Was Not Surprised and did Surprise", Foundations, Issue 5, 50 Years of the Yom Kippur War, 2023, pp. 3–41 (Hebrew); Shlomo Guetta, "The Maritime Arena", in Gideon Avital Epstein (ed.), Yom Pekuda (Rishon LeZion: Meshkal, 2023), pp. 631–658 (Hebrew).

such as fuel, weapons, ammunition, etc. Naval blockade serves a central goal in naval strategy, which is to achieve sea control and prevent the enemy from using the sea (Sea Denial).³ A naval blockade, even when effective and not violated, takes time to affect the enemy, and it also depends on the degree of dependence on the sea of the country subject to the blockade and its vulnerability to the blockade, whether it has emergency reserves and independent production capacity or both, and whether it has alternative land routes for receiving supplies.⁴ In this respect, Israel in 1973 was, and to a large extent still is, an "island state" – it had land borders with four Arab countries: Egypt, Jordan, Lebanon, and Syria, which were enemy countries. Israel did not conduct trade or receive supplies through its land borders but was completely dependent on supplies from the sea.⁵

In the literature on naval strategy, a distinction has been made between a close blockade and a distant blockade.⁶ A close blockade means that the vessels imposing the blockade are within visual range of the port or coast on which the blockade is imposed, to ensure immediate interception of any threatening vessel leaving the target port. The disadvantage of close blockade is that the short distance from the coast may lead to a threat to the vessels imposing the blockade from gunfire, and in the 20th century from missile fire and aircraft capable of hitting the vessels imposing the naval blockade, and this must be taken into account in planning the blockade.

A distant blockade is carried out at a distance from the port or coast and is intended to block the shipping lanes rather than the port or its entrances. The vessels imposing the

³ For background on naval blockades, see: Lance E. Davis and Stanley L. Engerman, *Naval Blockades in Peace and War* (Cambridge: Cambridge University Press, 2009); Adam Biggs, Dan Xu, Joshua Roaf, and Tatana Olson, "Theories of Naval Blockades and their application in the twenty-first century", *Naval War College Review*, (Winter 2021), 74(1), Article 9: 78–108.

⁴ Jakub J. Grygel, "The Limits of Sea Power", *Naval War College Review*, 74(4), Article 8 (2021), 97–106.

⁵ Chorev, S. (2021), *Maritime Domain, Maritime Strategy and Everything in Between*. IDF – Systems Publishing and the Center for Maritime Policy and Strategy Research, University of Haifa, p. 33 (Hebrew); Aviad Rubin, "Naval Power and Fleet Building – On the Question of Maximizing the National Potential in the Maritime Domain", *Between the Poles*, Issue 38, January 2023 (Hebrew). It should be noted that air supply and trade are very limited. Approximately 98% of Israel's international trade in terms of weight passes by sea (CMS 2023). The largest cargo planes are capable of carrying a weight equivalent to only 2–3 containers, for comparison with the thousands of containers carried by a medium-sized ship. Certain goods that are transported in bulk or as general cargo cannot be transported by plane at all.

⁶ Biggs and his colleagues added an intermediate option, a semi-distant or loose blockade, which allowed the arrival of civilian ships and was intended primarily against enemy military vessels. Biggs et al., "Theories of Naval Blockades", 86–87.

blockade are better protected. According to Julian Stafford Corbett, a close blockade is intended to prevent enemy vessels from leaving the port, while a distant blockade aims to draw the enemy into battle on the high seas under conditions where the force imposing the blockade has an advantage. Technological changes (sea mines, radar) and changes in naval strategy have made it possible to implement a distant blockade with some of the advantages of a close blockade.⁷

Freedom of navigation in the Red Sea

From its establishment until the 1980s, the young State of Israel had to deal, in addition to the threats at its borders, with a threat to freedom of navigation in the Red Sea and the Suez Canal, which was effectively closed to Israeli shipping. The blockade of the Straits of Tiran by the Egyptians to Israeli shipping was one of the reasons for the 1956 Sinai War. In the war, the IDF occupied Sinai, including Sharm El-Sheikh, which controls the straits, but later evacuated it under pressure from the great powers. In exchange for the evacuation, a letter of guarantee for freedom of navigation was given by the Eisenhower administration and a UN force was stationed in Sinai and Sharm El-Sheikh. In the years 1957–1967, Israeli ships sailed to Eilat. The importance of shipping in the Red Sea increased because it was the route on which tankers carrying oil from Iran, Israel's main oil supplier at the time, navigated to Eilat.⁸

Before the 1967 Six-Day War, Egyptian ruler Gamal Abdel Nasser again imposed a naval blockade on the Straits of Tiran. One of the *casus belli* for the war was the blockade of shipping to Eilat.⁹ Defense Minister Moshe Dayan pushed for the occupation of Sharm El-Sheikh to ensure freedom of navigation, and indeed the Israeli navy took control of Sharm El-Sheikh without a fight after an Egyptian force withdrew from it.¹⁰

⁷ Ibid., 85–88, 101–102.

⁸ For historical background on Israel and the Red Sea, see: Nir Maor, *The Red Sea Region and the State of Israel – A Historical Survey*, this volume; on the 1956 naval blockade and the situation after the Sinai War, see: Michael Oren, *Six Days of War: The Campaign That Changed the Face of the Middle East* (Or Yehuda: Dvir, 2004), pp. 29–33, 112; Eithan Barak, "Between Reality and Secrecy: Israel's freedom of navigation through the Straits of Tiran, 1956–1967", *Middle East Journal*, 61(4) (Autum 2007), 664–679.

⁹ Regarding the naval blockade, see: Michael Oren, *Six Days of War*, 111–116 (Hebrew).

¹⁰ On the occupation of Sharm el-Sheikh, see: Yitzhak Rabin, *Service Register* (Tel Aviv: Maariv Library, 1979), 191 (Hebrew); Shamir, Moshe Dayan: *The Development of a Strategist* (Tel Aviv: Ministry of Defense, 2023), 297–298 (Hebrew); Shimon Golan, *War on Three Fronts: Decision-Making in the High Command in the Six-Day War* (Tel Aviv: Ministry of Defense, 2017), 254, 290 (Hebrew).

After the Six-Day War, the Israeli political and security leadership adopted the concept of "defensible borders" or "security borders". On June 19, 1967, a government decision was made that in exchange for peace, Israel would be prepared to withdraw from Sinai. However, on October 31, 1968, the government rescinded this decision and stated: "A secure border between Israel and Egypt requires changes to the former international border. Including the Gaza Strip within Israeli territory, continuing Israeli control of Sharm El-Sheikh, and thereby territorial continuity with the State of Israel, and other essential security arrangements".¹¹ The concept of "defensible borders" also had broad support in public opinion. According to a survey conducted in May 1969, 93 percent of respondents opposed an Israeli withdrawal from Sharm El-Sheikh.¹²

The strategic importance of the Bab-el-Mandeb Strait stems from the fact that the strait is the connection point between the Indian Ocean and the Red Sea, and its width of 20 miles (32 km) makes it a choke point that is particularly vulnerable to blockage by a hostile force or disruption of navigation.¹³

After the takeover of Sharm El-Sheikh by the IDF in the Six-Day War, the problem of freedom of navigation in the Straits of Tiran was resolved. Israel insisted on a military presence in Sharm El-Sheikh in any future arrangement. But there was still a potential threat, and also overt threats from Arab countries to navigation in the Red Sea and the possibility of disruption or blockade in the Bab-el-Mandeb Strait, as mentioned, a convenient choke point for blocking or disrupting navigation.

Israel's security and political leadership has been aware for years of a possible threat to freedom of navigation in the Red Sea, and has attempted to address this in a number of ways:

1. As part of the "periphery alliance" strategy, Israel developed security ties with Turkey, Iran, and Ethiopia starting in 1957. One of the considerations for strengthening

¹¹ Yoav Gelber, *Atrition: The Forgotten War* (Havel Modi'in: Kinneret, Zmora Bitan, Dvir – Publishers, 2017), 110; For the Israeli government's decision, see: 31.10.1968 [Meeting 9](#), ISA, A.M, A-7634/5; Regarding Dayan's emphasis on the importance of controlling Sharm, see: Shamir, Moshe Dayan, 356–357, 409.

¹² Hagai Tzoref, "Golda Meir's Government Before the Yom Kippur War – A Reply to Yigal Kipnis", *Studies in the Resurgence of Israel*, 28 (2017), p. 12, note 15 (Hebrew).

¹³ Data from [Bab-el-Mandeb Strait](#), Britannica. On choke points in general and the Bab-el-Mandeb Strait in particular, see Shaul Chorev, "Global Developments in the Maritime Domain", in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2023), 42–43, 52–54; Richard B. Remnek, "The Strategic Importance of the Bab el-Mandeb and the Horn of Africa", *Naval War College Review*, 43(4) (Autumn 1990), 6–30.

relations with Ethiopia was its location on the Red Sea coast (Eritrea was still part of Ethiopia) near the Bab-el-Mandeb Strait. Israel provided Ethiopia with extensive assistance in the areas of intelligence, security, and economics. In the mid-1960s, there was an Israeli presence for a period of time at the Ethiopian naval base in Assab, and Israel also built a secret airstrip in Ethiopia so that air force planes could operate in the Bab-el-Mandeb area if necessary. However, an attempt to sign a military alliance or official agreement between Israel and Ethiopia failed, and by 1973 there was already a downward trend in relations between the countries.¹⁴

2. Building the Navy's strength – In 1968, with the support of Defense Minister Dayan, it was decided to build the 'Saar-4' missile boats at the Israeli shipyards, larger ships than the original Saar class boats and intended to operate in the Red Sea. In 1973, the construction of two ships was completed. According to the Navy's work plan (before the outbreak of the war), the two 'Saar-4' missile boats, INS 'Reshet' and INS 'Keshet', were planned to sail from Haifa on October 15, 1973, to circumnavigate Africa, a voyage lasting about a month, and to reach the Red Sea to operate there. The war broke out on October 6, the two missile boats remained and operated in the Mediterranean, and there were no Israeli missile boats in the Red Sea during the war.¹⁵
3. Air Force Operation Against the Naval Blockade at Bab-el-Mandeb – In 1971, the Air Force developed an aerial refueling capability by converting a Boeing 377 Stratocruiser aircraft.¹⁶ In April 1973, intelligence arrived from Mossad agent Ashraf Marwan about the possibility of a war breaking out in May 1973. Marwan also reported that in the event of war, the Egyptians would block the Bab-el-Mandeb Strait with

¹⁴ On the Periphery Alliance or Periphery Policy, see: Ehud Golan, *Secret Diplomacy and Its Limitations: Israel and Periphery Policy 1957–1969*, MA thesis, Department of International Relations, Hebrew University, 2003, pp. 13–28 (Hebrew). On Israel-Ethiopia relations, see Ehrlich, *Alliance and Fracture: Ethiopia and Israel in the Age of Hilla-Salassa* (Tel Aviv: Moshe Dayan Center for Middle Eastern and African Studies, 2013) (Hebrew); Golan, *Secret Diplomacy and Its Limitations*, pp. 25–26, 57–66.

¹⁵ Oren, *History of the Yom Kippur War* (Tel Aviv: IDF – History Department, 2013), pp. 41–42 (Hebrew); Testimony of Major General Benjamin Telem, Commander of the Navy, at the Agranat Commission, December 26, 1973, IDF Archives, pp. 30–32; Navy Headquarters, Department 21, History Section, *Naval Operations in the Yom Kippur War*, January 10, 1974, A.C. 26/102/1974, p. 35.

¹⁶ Mordechai Abir, "Shareh al-Sheikh – Bab al Mandeb: The strategic balance and Israel's southern approaches", *Jerusalem Papers on Peace Problems*, No.5 (Leonard Davis Institute for International Relations 1974), pp. 19–20.

destroyers.¹⁷ In a discussion held at the General Staff during the "Blue and White" readiness phase on April 25, 1973, the Israeli Navy's war plans were presented to the Chief of Staff. The Israeli Navy Commander raised the possibility of action against the Egyptian destroyers that would impose a blockade at Bab-el-Mandeb, probably using Flotilla (Shayetet) 13 (many parts of the minutes of the presentation of the plans are censored). The Chief of Staff determined that in the event that destroyers block the Bab-el-Mandeb Strait, the Air Force, and not the Navy, will act against the naval blockade.¹⁸

The Egyptian War Plan: Between Bab-el-Mandeb and Sharm El-Sheikh

The Egyptian goal in imposing the naval blockade in the southern Red Sea was strategic, to block the shipping lane and the transportation of oil to Israel, but also political, to refute Israel's argument that Israeli control of Sharm El-Sheikh would ensure freedom of navigation to and from Eilat.

South Sinai, known in Israel as "Merhav Shlomo", was an area of 33,140 km² where a regional headquarters, military government, and small forces were established, as well as the "Ras Sedr" and "Sharm El-Sheikh" naval bases. At the beginning of the war, senior Israeli officials, including Defense Minister Moshe Dayan and Chief of Staff David Elazar (Dado), expressed concern that the Egyptians would attempt to conquer Sharm El-Sheikh. There were also reports from the Military Intelligence about this, and it was decided to reinforce the forces in Merhav Shlomo with tanks and a paratroopers force.¹⁹ Naval Captain Ze'ev Almog, naval commander of the Red Sea area, was concerned about an

¹⁷ For an analysis of the intelligence aspect, see: Ehud Golan, The Warning that Came from the Sea: Naval Intelligence in the Yom Kippur War, in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2023), pp. 356–357.

¹⁸ Discussion on presenting operational plans of the Navy to the Chief of Staff, held at the Operations Command, April 25, 1973, 7:30 p.m. – transcript, A.C. 2/823/1975; see Shimon Golan, The Yom Kippur War: Decision-Making in the High Command in the Yom Kippur War. Moshav Ben Shemen: Modan, 2013, pp. 99–100. The subject also came up in the presentation of Air Force plans and the presentation of IDF plans to the government. See: "Blue and White" Presentation of Plans to the Prime Minister, Operations Command, May 9, 1973, A.C. 41-264/2016, p. 22; [Presentation of Army Plans to the General Staff, May 9, 1973](#), The Yom Kippur War Center, pp. 13–15.

¹⁹ For the statements of Defense Minister Dayan, see: Kedem, Minister of Defense, October 6, 1100, IDF Archive 101/383/1975; for the statements of the Chief of Staff, see: Golan, War on Yom Kippur, pp. 605–606.

Egyptian attempt to conquer South Sinai and Sharm El-Sheikh and about infiltrations by sea to the area.²⁰

With the outbreak of war in October 1973, an Egyptian air attack was carried out on the air force and navy bases in Sharm El-Sheikh. The Egyptians infiltrated commando forces into Merhav Shlomo by helicopters, some of which were shot down by the Israeli Air Force, and planned to transport forces and equipment in fishing boats. Two reduced battalions of Egyptian commando fighters and additional forces that managed to infiltrate southern Sinai were killed or captured by IDF forces, and did not cause significant damage. An Egyptian armored force began moving south from the Suez Canal area, but was stopped by the air force. The Egyptian navy was offensive and active in the Red Sea area, conducting patrols and firing from missile boats and torpedo boats at Israeli Navy ships and targets on the Merhav Shlomo coast, but without hitting or damaging them.²¹

The occupation of Sharm El-Sheikh is inconsistent with the Egyptian plan to block the Bab-el-Mandeb Strait in order to refute Israel's claim about the importance of its control over the place. Egyptian sources indicate that a plan to occupy Sharm El-Sheikh was proposed before the war, but was not adopted by Sadat. According to an analysis based on captured documents of the Egyptian offensive plan "Revised Granite 2" conducted by the Enemy Investigation Team in the IDF History Department and published in 1981, the plan for the attack in southern Sinai/Merhav Shlomo was: "In phase one of the attack, commando forces will be launched from the sea and landed from helicopters, in the late hours of the D-Day onwards, on the eastern coast of the Gulf of Suez. These forces will take control of the "Ras Mle'b"–"Ras Shartiv" coast and secure the road axis for the 1st Mechanized Brigade to the south. It will cross the canal in the morning hours of D-Day+1, pass through the southern bridgehead of the 3rd Army towards "Ras Masala". From there, under the responsibility of the Red Sea Command, the brigade will advance south, capture "Ras Sedr", and take control of the oil fields and the coastal strip up to a distance of 10km south to "A-Tur", where it will prepare for defense".²²

²⁰ Almog, Commander of the Shayetet 13, Volume 2 (Or Yehuda: Kineret Zmora Bitan, 2014), pp. 836–837, 842–846 (Hebrew).

²¹ Golan, Yom Kippur War, pp. 615, 618; Egyptian commando activities in Merhav Shlomo in the Yom Kippur War, 1139/1041/1984; Regarding the Egyptian Navy's activities in the Gulf of Suez, see: Naval Command, Intelligence Department, Research Branch, [Activities of Arab and Great Power Fleets in the Yom Kippur War](#), pp. 1–2, 4–6–857, January 1974, Yom Kippur War Center, pp. 21–23, 27, 30–33.

²² The work was written by Lt. Col. Yona Bandman. AGM, History Division, Enemy Investigation Team, Yom Kippur War, Egypt – War Objectives and Offensive Plan, April 14, 1981, pp. 39–40. See additional details on pp. 67–69.

The Israeli Navy operated in the Gulf of Suez using Dabur class patrol boats, landing ships, and Shayetet 13 forces. Despite having inferior vessels compared to the Egyptian navy, which operated "Komar" class missile boats and patrol boats, the Israeli Navy adopted an offensive approach, and succeeded in its actions in sinking a "De Castro" patrol boat, attacking Egyptian anchorages, and disrupting the Egyptian intention to move forces via fishing boats to the Merhav Shlomo/South Sinai area. Shayetet 13 fighters infiltrated the "Hurghada" port four times and sank two Egyptian missile boats. The navy achieved "situational sea control"²³ in the Gulf of Suez, but the sea landing operation, "Green Light", for which preparations had already been made and planned, was not given, first because the main effort that developed was to the north from there, crossing the Suez Canal, and later, when on October 22 operational conditions were created for carrying out the landing operation, the Israeli government had already agreed to a ceasefire, and Defense Minister Dayan refused to approve its implementation.²⁴

The Egyptian maritime blockade

The Egyptians planned a naval blockade in the southern Red Sea, out of range of the Israeli Air Force, using a force of a frigate and two destroyers that patrolled the southern Red Sea about 200 nautical miles north of the Bab-el-Mandeb Strait, and two "Romeo" class submarines that patrolled the central Red Sea while basing themselves in Port Sudan.

In February 2024, the Egyptian Ministry of Defense released several documents about the Yom Kippur War, including the operational order given to the destroyer force that carried out the blockade in the Bab-el-Mandeb Strait. According to the order, the two destroyers would leave the port of Safaga on August 13, 1973, and sail to the port of Aden. Another order from October 1, 1973, stated: "The mission: Attacking the enemy's maritime transportation lines south of latitude 16" degrees to Bab-el-Mandeb using 2 destroyers". The method of execution section stated: The ships "A-T'afar" and "Al-Fateh" would leave the port of Aden and seize the patrol lines specified in the attached slide no later than 12:00 on October 6, so that their mission would begin at 16:00 on October 6. A. The mission will begin in the following manner: Destroy ships carrying the Israeli flag

²³ Situational Sea control means control of a limited area for a limited time. See: Shaul Chorev, "The Importance of Conception and Correct Terminology in the Operational Concept of the Navy", *Between the Poles*, (December 2022) pp. 5–6 (Hebrew); Chorev, *The Maritime Domain*, pp. 188–189.

²⁴ Regarding the Navy's activity in the Gulf of Suez theater, see: Navy Headquarters, Red Sea Area, Intelligence Division, Yom Kippur War – Red Sea Theater, IDF Archive 235/652/2020; Guetta, "The Naval Theater", pp. 650–652.

(warships or merchant ships) entering or leaving the Red Sea. B. Do not attack neutral merchant ships heading south (leaving the Red Sea).²⁵

On October 7, an Egyptian submarine fired a volley of apparently three YU-1 torpedoes, at the Israeli tanker *Samson*, which was sailing from Iran to Eilat. The torpedoes missed, the tanker continued sailing and arrived safely in Eilat.²⁶ After the incident, Israel decided to stop shipping from and to Eilat, which was effectively under a naval blockade, although the Egyptians did not openly declare it for various reasons. Since the Suez Canal was closed to shipping from 1967 to 1974, blocking the Red Sea to shipping was mainly an Israeli problem, although ships from other countries also sailed in the area.

Operation "Kishroni": An improvised response

As mentioned, there were no missile boats in the Red Sea. The achievements and victory of the Navy in the northern Red Sea did not affect the Egyptian naval blockade in the southern Red Sea. The Navy Headquarters initiated Operation "Kishroni", during which detection means and "Gabriel" missiles were installed on a civilian ship that was in Eilat – the tugboat "Shay". It was manned by a crew from the missile boats fleet and Shayetet 13 and navigated from Sharm El-Sheikh on the night of October 19 to reach the southern Red Sea and strike the destroyers that had imposed the blockade. On two occasions, on October 23 and 25, the "Shay" crew identified one of the Egyptian destroyers (a Z-class destroyer) on radar, but authorization to open fire was not given.

On October 25, the IDF surrounded the Egyptian Third Army. An armored force from the IDF 401st Brigade captured the port of Adabia, which was the headquarters for the Egyptian navy in the Red sea. The Dabur boats completed the encirclement of the Third Army with a naval blockade and patrolled to prevent escape or the transfer of supplies to it from the sea.²⁷ These events created a kind of counterweight to the Egyptian naval blockade of the Strait of Bab-el-Mandeb. In the ceasefire negotiations between Israel and Egypt, the lifting of the blockade of the Third Army was linked to the lifting of the naval blockade of the Bab-el-Mandab Strait.

²⁵ Orders given to the destroyer force that carried out the naval blockade in the Red Sea during the Yom Kippur War (October War 1973). Translated by Doron Sekel and Yitzhak Vardi. Edited by Shlomo Guetta (Hebrew).

²⁶ Eli Rahav, Kochavi Azran and Nir Maor, "Interview with the Captain of the Tanker *Samson* – Ze'ev Tirosh", Naval Heritage Guard, April 29, 2016; Golan, War on Yom Kippur, p. 397 (Hebrew).

²⁷ Amiram Ezov, *Deciding Who Won the Yom Kippur War?* (Havel Modi'in: Dvir, 2020), pp. 174–175, 274, 302 (Hebrew); Ze'ev Drori, *Dan Shomron Quiet Leadership*, Rishon LeZion: Mashqel? 2016, pp. 154–157; Rabinowitz, *Ships of Cherbourg*, pp. 243–244 (Hebrew); Ze'ev Almog, *Commander of Flotilla 13*, pp. 891–898.

The impact of the naval blockade

According to reports by Zvi Dinstein, the Deputy Minister of Finance who was an expert on Israel's oil industry, Israel had fuel distillates for three months, so there was no shortage of fuel in Israel during the war. The tankers from Iran did not enter the Red Sea but navigated around Africa to the fuel terminal in Ashkelon. Dinstein noted that the voyage around the Cape (Cape of Good Hope, i.e. around Africa) takes 65 days, while via the pipeline it takes only 20 days. According to Dinstein, Israel's oil supply before the war was two-thirds from Abou Redis oil fields and one-third from Persia (Iran). He noted that we closed Abou Redis on the first day of the war.²⁸

The Egyptians presented the blockade of the Bab-el-Mandeb Strait as a strategic achievement of the Egyptian Navy. In an interview conducted by Muhammad Hassanin Heikhal with the Egyptian Minister of War Ahmed Ismail, which was published in the Lebanese newspaper "Al-Anwar" on November 18, 1973, the minister listed a number of strategic results of the war, including: "The war proved conclusively that Sharm El-Sheikh does not have the great importance that Israel believed and based its ambitions in Sinai on. Sharm El-Sheikh is not the key to Eilat, but the key moved down to the far south, when we discovered an Arab strategy in the Red Sea, according to which Bab-el-Mandeb was closed (blocked)".²⁹ After the war, Sadat awarded decorations to the destroyers and submarines that participated in the naval blockade of Bab-el-Mandeb.³⁰

The Israeli leadership viewed the naval blockade with severity. Minister Yigal Allon said that from a strategic perspective, the blockade was more serious than the issue of the prisoners of war.³¹ The issue came up in internal government discussions and in discussions with Kissinger and Nixon. Prime Minister Golda Meir emphasized that the lifting of the blockade on Bab-el-Mandeb should be demanded as part of the ceasefire.³²

²⁸ The data is from Zvi Dinstein's reports to the Ministerial Committee on Economic Affairs and to Prime Minister Golda Meir. See: [Dinstein's remarks in the minutes of the Ministerial Committee on Economic Affairs](#), Office of the Minister of Finance, Tel Aviv, October 9, 1973, p. 20, A-305/3; Prime Minister's Office Diary, October 16, 1973, Yom Kippur War Center.

²⁹ Heichal's interview with the Egyptian Minister of War, "Anwar", Lebanon, November 18, 1973, in Hatzav, special article, Statements of the Egyptian leadership on the subject of the war, 527/12, December 27, 1973.

³⁰ "Sadat will award decorations to ships that imposed the blockade of Bab-el-Mandeb", Yediot Ahronot, June 24, 1974 (Hebrew).

³¹ Minutes of the consultation prior to the Prime Minister's concluding conversation with Kissinger, 3.11.1973, ISA, A-7244/14.

³² Minutes of the 19th Cabinet Meeting – Monday – 21.10.73 (midnight in the Prime Minister's Office in Tel Aviv), State Archives, p. 61 References in the discussion to the issue of closing the Straits on pp. 51, 56–57, pp. 85–87; Golda Meir, My Life (Tel Aviv: Maariv Library, 1975), p. 321.

The Israeli security and political leadership continued to argue that control of Sharm El-Sheikh was essential. In a speech on November 23, 1973, Dayan said that security guarantees could supplement defensible borders, but not replace them. He also argued that Israel could not withdraw from the Golan Heights or the Jordan Valley, and when the Arabs were talking of blockading the Bab-el-Mandeb Strait between the Red Sea and the Indian Ocean, it was unthinkable to surrender Sharm El-Sheikh, which controls the passage between the Red Sea and the Gulf of Aqaba.³³ In an article written by Foreign Minister Yigal Alon for the journal *Foreign Affairs* in 1976, he presented Israel's argument on the subject of "defensible borders", and continued to argue that control of Sharm El-Sheikh was essential because Egypt had twice imposed blockades on freedom of navigation to Israel from this place, and Israel was forced to capture the place. Alon further argued that because of the threat of a blockade of the Bab-el-Mandeb Strait, Israeli control of Sharm El-Sheikh might serve as a countervailing deterrent against such blockade attempts.³⁴ Israel evacuated Sharm El-Sheikh and the naval base there as part of the peace agreement with Egypt only in 1982.

In the United States, different conclusions were reached following the Egyptian blockade of the Bab-el-Mandeb Strait. In a conversation between Kissinger and Sadat in May 1974, in the context of Israel's withdrawal and a possible settlement, Kissinger noted that the Israelis have this obsession with Sharm El-Sheikh" and later told Sadat, "If you want to close Eilat, you'll do it at Bab-el-Mandeb. You did it".³⁵

Starting on November 16, 1973, a silent understanding was formed that Israel would provide Egypt, via the United States, with information about ships that were to pass through the Bab-el-Mandeb Strait from or on their way to Eilat, and Egypt would allow the ships to pass through the Strait. This arrangement was implemented and ships were allowed to pass in November, but there was still concern that the blockade would be renewed.³⁶ In April 1974, two Israeli missile boats that navigated around Africa and entered through the Bab-el-Mandeb Strait reached the Red Sea and began operating in

³³ See Dayan's words: "Dayan is opposed to yielding land vital to security", *New York Times*, November 24, 1973.

³⁴ Yigal Alon, "Israel: The Case for Defensible Borders", *Foreign Affairs*, October 1976, pp. 46–49. For further analysis justifying the importance of Sharm El-Sheikh even after the Egyptian blockade of Bab-el-Mandeb, see: Abir, "Sharm El-Sheikh", pp. 25–27.

³⁵ Memorandum of conversation, 30 May 1974, [Meeting between President Sadat, Foreign Minister Fahmi and Secretary Kissinger](#).

³⁶ By Shalev El Gazit, Bab-el-Mandeb, November 16, 1973, ISA, A-7036/7. There were references to this in the press: Yosef Kharif, "Within a few days, a ship will attempt to pass through Bab-el-Mandeb", *Maariv*, November 12, 1973; Baruch Meiri, "A foreign ship anchored in Eilat is about to navigate to Bab-el-Mandeb", *Maariv*, November 13, 1973 (Hebrew).

this arena. They were then reinforced with additional missile boats and established the Israeli presence in the Red Sea area.³⁷

As part of the first Egypt-Israel disengagement agreement ("Sinai I") signed on January 18, 1974, President Nixon wrote a letter to Prime Minister Meir, stating that the Egyptian government affirmed that it viewed the Bab-el-Mandeb Strait as an international waterway for ships of all flags, and that it would not interfere with the free passage of Israeli ships or cargoes.³⁸ An accompanying memorandum sent by the United States to Israel stated that "the United States views the Bab-el-Mandeb Strait as an international waterway, and will support, and join with others, to secure general recognition of the right of free and innocent passage through those straits. The United States will strongly support free passage of Israeli ships and cargoes through the straits. In the event of interference with such passage, the United States will consult with Israel on how best to ensure the maintenance and exercise of such right".³⁹ The "Sinai II Agreement", the Interim agreement between Israel and Egypt from September 1975, included a clause according to which "the parties hereby undertake not to resort to the threat or use of force or military blockade against each other".⁴⁰

Summary

The Egyptian naval blockade of the Red Sea during the Yom Kippur War raises several lessons, especially in light of the fact that 50 years later, in the 2023 Israel-Hamas War, the Houthis blocked the Bab-el-Mandeb Strait and shipping to and from Eilat was halted:

- The importance of geography and geopolitics – the Bab-el-Mandeb Strait as a problematic choke point and a vulnerability to blocking shipping during wartime 50 years ago and today. Additional choke points could become important flashpoints in regional and global conflicts. In the spring of 2022, in the wake of the Ukraine-Russia war, the Turks closed the Bosphorus and Dardanelles for the passage of war ships

³⁷ Brigadier General (res.) Gideon Raz, Operation Reputation, Naval Heritage Guard, December 18, 2015; Dror Isman and Ofer Raz, "Military Privates Tell About Their Lives", Between Waves, Issue 157, April 1982, pp. 25–27.

³⁸ The letter is cited in Golan, Separation of Forces next to Attrition (Ben Shemen: Modan and the Ministry of Defense, 2019), p. 115.

³⁹ [Memorandum of Understanding between the U.S Government and the Government of Israel](#) (18 January 1974).

⁴⁰ Ruth Lapidot, "Passage Through the strait of Bab-el-Mandeb", Israel Law Review, 13(2), (1978), 190–193.

from any country, in accordance with the 1936 Montreux Convention.⁴¹ The Strait of Malacca is mentioned as a key point in a possible future conflict between the United States and China over Taiwan.

- The Egyptian naval blockade of the Bab-el-Mandeb Strait demonstrated the strategic importance of freedom of navigation and the maritime domain for the State of Israel.
- Egypt, using outdated vessels, and without sinking an Israeli ship, succeeded in achieving strategic influence through a naval blockade, a classic means of naval strategy. It prevented Israel from using the Red Sea and gained a bargaining chip that it used in the ceasefire negotiations and in the subsequent diplomatic contacts. Sadat used the naval blockade of the Bab-el-Mandeb Strait as a military tool designed to convey a message and advance a political goal, to make it clear to Israel that its military control of Sharm El-Sheikh did not guarantee freedom of navigation.

The Israeli security-and political establishment was aware of the threat to shipping in the Red Sea, and took means to prepare a response to the threat: relations with Ethiopia, the construction of 'Saar-4' missile boats that were planned to operate in the Red Sea, and the Chief of Staff's instruction in May 1973 to prepare for the possibility of an air force operation in Bab-el-Mandeb. But when the Yom Kippur War broke out, these responses were not relevant. Ethiopia severed diplomatic relations with Israel at the end of the war, the air force was under heavy strain, and there were no Israeli missile boats in the Red Sea. The navy formulated an improvised response, Operation "Kishroni".

In Operation "Kishroni", the Israeli Navy demonstrated the ability to operate independently at long ranges in a targeted manner, but an operation to ensure freedom of navigation over long periods of time in remote areas is problematic. After the war, Israel relied on diplomatic arrangements with the United States and Egypt to ensure freedom of navigation in the Bab-el-Mandeb Strait.

Today, the Houthis, without a navy, are imposing a naval blockade on the Bab-el-Mandeb Strait through asymmetric warfare, missiles, and drones. This is a change in naval warfare. The current blockade is no longer just an Israeli problem, but a regional and international problem. Countries in the region such as Egypt and Jordan are being harmed – Egypt is the main victim due to ships avoiding transit through the Suez Canal, and Jordan due to the blocking of the shipping lane to the kingdom's only port in Aqaba. And from an international perspective, the Houthi blockade has an impact on the principle of freedom of navigation and harms international trade and supply chains.

⁴¹ Segell, G. (2023). The Regime of the Straits (Montreux Convention 1936) and the Russia and Ukraine War. In: S. Chorev and Z. Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2022/23*, 255–271, Maritime Policy & Strategy Research Center.

The US Navy and other navies operated against the Houthis primarily defensively and to a limited extent offensively, but the naval blockade in Bab-el-Mandeb continued. Israel will need to ensure that its interests are protected in a future security or political arrangement that resolves the issue of freedom of navigation in the Bab-el-Mandeb Strait.

Operation 'Kishroni'

Operation 'Kishroni' was created with the initiative of Naval Captain Akiva Peggy, head of the Israeli Navy's equipment department. As part of it, detection means and Gabriel missiles were installed on a civilian ship in Eilat: the tugboat "Shay" was equipped with a crew from the missile ship fleet under the command of Naval Commander Zvi Givati ("Caruso"), his deputy was Lt. Commander Shaul Chorev, as well as six fighters from Shayetet 13 with dwarf submarines called "pigs". The mission of the "Shay" was to navigate to the Bab-el-Mandeb area with the aim of attacking the destroyers that imposed the blockade. If it turns out that the Egyptian vessels are in the port, the men of Shayetet 13 will act against them.¹

Installing the equipment on the ship took several days. The ship "Shay" set sail on the night of October 19–20 and sailed close to the Saudi coast to avoid contact with Egyptian missile boats. The ship navigated secretly alone, without escort and without air support.²

The "Shay" arrived in the destroyer's area of activity about 200 nautical miles from the Bab-el-Mandeb Strait. The Egyptian destroyers and frigate that imposed the blockade were in poor condition and spent part of the time in port. For several days, no contact was made between the "Shay" and the Egyptian force. On October 23, permission to fire was given, but a few hours later it was canceled because at that time they expected the ceasefire to come into effect.

A ceasefire was already established on October 23. On that day, at 15:10, the "Shay" came within radar range of the destroyer that had imposed the blockade. The Israeli

¹ The Navy Commander, October 14, 10:00 AM, in the Kedmi book, pp. 146–148; Eli Rahav, "Interview with Col. Ret. Zvi Givati", Naval Heritage Guard, January 12, 2020; Shaul Chorev, in Aryeh Rona and Kochavi Azran, "The Israeli Navy in the Yom Kippur War", pp. 36–37; Eldar, Shayetet 11: The medal of honor Battle, Or Yehuda: Hed Artzi, 1996, pp. 353–354.

² Oren, History of the Yom Kippur War, pp. 480, 532–533; Chorev in Rona and Ezran, "The Israeli Navy in the Yom Kippur War", in Yoram Dinstein and Avraham Zohar (eds.), 40 Years Later, The Israel War Research Institute, 2014, pp. 36–37; Summary of Navy Operations, p. 26.

Navy Commander requested permission to engage, and the Minister of Defense and Prime Minister Golda Meir granted it before 7:00 PM, but the permission was revoked after midnight, in view of the expectation of a Security Council decision to enforce the ceasefire and fears of political entanglement.³

The Chief of Staff decided not to authorize the "Shay" to fire, but instructions were given that if the Egyptian destroyers approached and threatened the ship "Shay", it could fire. On October 25 at 12:15, the ship "Shay" detected an Egyptian destroyer on its radar. Permission to fire was granted if the destroyer came within a range of 12,000 yards (about 7 nautical miles). The destroyer began to reduce its range towards the "Shay".⁴

The General Staff – October 25 at 12:35, the Israeli Navy Commander called the Chief of Staff, reporting that the ship "Shay" in the Bab-el-Mandeb Strait had apparently been discovered and that an Egyptian destroyer, located 24 km away, was moving toward it. The Chief of Staff agreed with the Prime Minister's Military Secretary that he would order the Israeli Navy Commander to cut off contact, and if the ship was unable to do so, it could fire to sink it, in order to defend itself.⁵

Israeli Navy Commander Tellem – in a lecture at a seminar in 2000, said: "In the last days of the war, we made an attempt to reach Bab-el-Mandeb with some kind of improvised means in order to hit the destroyers. I think we can tell this secret today. We got there. The commander of this operation told me, 'Bini, I have the destroyers in my sights and I gave him the order not to fire and to return'. I was already under pressure from all sorts of factors at that time that I should stop operations, but I'm not sure I would have given in to the pressure. I had the feeling that the Israeli Navy had done its job, had done it successfully, and it's not good to push our luck too far".⁶

Conveying a message about the "Shay" to the Americans – On October 25 at 1:30 PM, an urgent telegram was sent from Mordechai Gazit to Ambassador Dinitz, which

³ Oren, *History of the Yom Kippur War*, pp. 532–533.

⁴ For instructions to the "Shay" see: Golan, *The Yom Kippur War*, pp. 1191–1192. For the "Shay" second contact with the destroyer see: Arie Rona and Kochavi Azran, "The Israeli Navy in the Yom Kippur War", in Yoram Dinstein and Avraham Zohar (Eds.), *40 Years Later: (Tel Aviv: The Institute for Study of Israel's Wars, 2014)*, pp. 34–35.

⁵ Golan, *War on Yom Kippur*, p. 1236.

⁶ Bini Telem's remarks at the Israeli Navy Seminar on the Yom Kippur War, June 1, 2000.

read: "Please bring to the attention of Naftali (Secretary of State Henry Kissinger's codename in Israeli documents) the following facts as a matter of urgency:

- A. The Israeli merchant ship "Shay" is a 900-ton oil tanker operating in the Red Sea. For its own defense and in view of the Egyptian threat to Israeli vessels in the Bab-el-Mandeb Strait, the ship was equipped with a Gabriel sea-to-sea missile system and an electronic system that enables the effective use of this weapon. The ship left on the 19th of the month and is located approximately 200 miles from the Bab-el-Mandeb Strait near Massawa.

Tonight at 250100, radar contact was made with a vessel, possibly an Egyptian destroyer, and we ordered "Shay" to break contact. At 250655, we ordered it to move away from the area and move to latitude 18 degrees.

At 250920 contact was made again. At 251015 an Egyptian destroyer that apparently had started to pursue the "Shay" was identified. We ordered "Shay" to try to evade, but if the destroyer, whose speed was over 18 knots (the "Shay's" speed was 9 knots), came within 12 km, "Shay" was to open fire. This order stems from the fact that the destroyer's firing range is 14 km, while "Shay" has a much longer range, but its minimum range is 8 km, so if the destroyer gets too close, "Shay" will be left without any possibility to defend itself. The encounter could occur within the next hour.

- B. There is an American destroyer nearby and the area is where an Egyptian destroyer fired warning shots at the American merchant ship La Salle last night.⁷

At 14:45, another urgent telegram was sent from Gazit to Dinitz, reporting, following on from the previous telegram, that "Shay" had managed to move away to a range of 30 km at 251200. It is assumed that it managed to evade the Egyptian destroyer.⁸ It is not known whether Dinitz passed on the information about "Shay" to the Americans or whether, after it had left danger range, this was avoided.

According to the report in Oren's book, in the early hours of October 25, "Shay" almost made contact with an Egyptian ship: its radar detected a rapidly approaching warship, and it managed to get away. On the night between October 26–27, "Shay" was returned from the Red Sea, arriving at the Merhav Shlomo Base on the 29th.⁹

⁷ October 25, 1973, by Gazit El Dinitz, ISA, A 7049/9.

⁸ By Gazit El Dinitz 251445 October 1973, ISA, A 7049/9.

⁹ Oren, *History of the Yom Kippur War*, pp. 532–533.

The Red Sea Region and the State of Israel – A Historical Review

Nir Maor

This chapter deals with the 'southern gate' of Israel (the Port of Eilat) and the sea routes leading to and from it, as well as Israel's maritime trade routes from Asia through the Suez Canal to the ports of Haifa and Ashdod. The chapter focuses on the historical, geopolitical, military, legal, and economic aspects of those routes and that gate.

In the years of the state's establishment, the 'southern gate' was part of the vision and intuition of the founding fathers, but there was no practical justification for it. Later, in the 1950s, the first shipping lines began operating in the region and the Port of Eilat began to fulfill its purpose as a southern gateway to the young State of Israel, but then the State of Israel was exposed to the problem of freedom of navigation in the Straits of Tiran and, even more so, in the Suez Canal. The Sinai War and the Six-Day War solved the problem of Egyptian harassment in the Straits of Tiran, but in the wars that followed (the War of Attrition and the Yom Kippur War), the State of Israel was exposed to the sensitivity and vulnerability of the southern part of the route in the Bab-el-Mandeb Strait area, to terrorism and siege. The peace with Egypt, which was signed a few years after the Yom Kippur War, brought a boom in shipping, trade, and tourism, but the State of Israel has not yet reached its resting place. These days, the shipping lanes in the Red Sea are once again exposed to harassment, not to mention siege, by the Houthi organization operated by Iran. This article suggests examining solutions and ideas that have already been proposed in the past and examining whether they are still applicable today.

Introduction

At the end of 2023, with the outbreak of the 'Israel-Hamas' war, something happened in the southern Red Sea. The State of Israel, accustomed to friction near its borders, found itself affected and damaged by hostile activity by the Houthi organization located 1,000 miles from its shores. The Houthi attacks are affecting Israel's maritime trade routes from Asia through the Suez Canal to the ports of Haifa and Ashdod, which have been diverted to the long route around Africa, and the operation of the Port of Eilat, which has almost completely stopped. History shows that although in recent decades the maritime orientation of the State of Israel has been towards the Mediterranean, the maritime transport of the State of Israel is also linked to what is happening in the Red Sea, and this arena has a significant impact on Israel's security and economy. Issues related to the Israeli presence on the shores of the Red Sea and the freedom of Israeli navigation and trade in it have appeared in four full-scale wars between Israel and its neighbors (the War of Independence, Sinai, the Six-Day War, and Yom Kippur).

In light of the fact that this is not the first time that the southern border of the State of Israel has been exposed to harassment of shipping to the point of a naval blockade, we propose examining the impact of the Houthi threat in a broad historical perspective.

Days of Vision (1948–1956)

The connection of the Land of Israel to the Red Sea has historical roots that date back to biblical times. The coast of Eilat, Etzion Geber in its biblical name, is mentioned as a harbor as early as the 10th century BCE, during the time of the Kingdom of Israel, when King Solomon established a fleet of ships there to import gold from Sheba and Ophir. "*And king Solomon made a navy of ships in Eziongeber, which is beside Eloth, on the shore of the Red Sea, in the land of Edom.*" (1 Kings 9:26).

This connection remains valid even in modern times. The Ottomans, who ruled the country for nearly 400 years, strove to preserve and maintain the continuity between the Land of Israel, the Gulf of Aqaba, and the Hejaz region as a single territorial contiguous area.¹ The British, who conquered the region from the Turks in World War I, also made sure in their plans and agreements to preserve for the Land of Israel an outlet to the Red Sea.² Towards the end of the British Mandate and the declaration of the UN resolution regarding the Partition of the country, the Zionist movement also succeeded in convincing that the Jewish state must have access to the Red Sea.³

In the Zionist movement, which was established at the end of the 19th century, the Gulf of Eilat was an inseparable part of the dream and vision.⁴ The chairman of the Jewish Agency and the leader of the state in the making, David Ben-Gurion, set his sights on the southern gate even at a stage when it was doubtful whether the State of Israel would ever be established. In May 1948, in the shadow of the invasion of the Arab armies into the land, Ben-Gurion determined that the first warship of the navy would be named the 'INS

¹ Shpanier, B. (2017). Fifty Years After the Six-Day War: freedom of navigation in the Straits of Tiran in the Light of the Law of the Sea – Not Done and Not Completed, Chaikin Chair of Geostrategy, University of Haifa, p. 12.

² Fedá, B. (1993). Determining the political boundaries in the Gulf of Eilat area, in: M. Cohen and A. Schiller (eds.), Eilat, Man, Sea and Desert, Eilat Municipality, pp. 193–199.

³ On the eve of the vote on Resolution 181 at the UN, some members of the American delegation were of the opinion that the Negev should be part of the Arab state. Weizmann was sent by Ben-Gurion to convince President Truman of the matter. Gavison, R. (2009). Sixty Years of the November 29, 1947 Resolution: The Partition Resolution and the Controversy Surrounding It. Sources and Studies, Matzilah, Jerusalem, p. 320.

⁴ "Eilat in different ruling periods", [Eilat city website](#), expires on February 6, 2024.

Eilat'.⁵ Haifa was already in the hands of the Yishuv, as was Jaffa, and yet Ben-Gurion went further and chose for the ship the name of an undefined port even before the Negev had been conquered. In this way, Ben-Gurion thought of implementing the vision. The conquest of Eilat and the raising of the 'ink flag' by the Negev Brigade in Umm Rashrash, Eilat of today, was only aided at the end of the war, in March 1949. In fact, it can be said that the conquest of Eilat made it possible to end the war.⁶ Eilat was a distant vision at that time, it had no settlement and no port, but only a small Jordanian border post called Umm Rashrash in the language of the local Bedouins.

In documents of the period, the place was called the 'Southern Gate' and due to its importance, several military outposts (tents) were established there immediately after its conquest, the main of which was the Navy.⁷ At first, the camp's personnel only had a large wooden rowboat. In January 1951, a Tugboat was brought down by land from the port of Jaffa, which was the only motorized naval ship in the area.⁸



Figure 1: David Ben-Gurion and his wife Paula, Umm Rashrash 1936 (Navy Association collection)

⁵ INS (Israeli Navy Ship) This was an improvised warship – in the past it was an illegal immigrant ship called the 'Jewish State'.

⁶ The occupation operation is called 'Operation Uvda' and is intended to establish a fact before the ceasefire talks with Jordan.

⁷ Ran, D., and Ben-Yami, M. (2009). Between Hostile Shores, and Red Sea Fishermen. Israel, p. 10. Hereinafter: Ran and Ben-Yami – Shores.

⁸ Ben Tzur, Y., Eilat and the Maritime Domain in the Red Sea: Genesis, the Palyam website, illegal immigration and procurement, will be available on February 1, 2024.

The sailors in the camp had no real occupation, as there was no ship traffic in the gulf at the time, and there was no maritime threat. Therefore, the sailors were employed in fishing, both in navy boats and in the boats of a number of Hebrew fishermen who had begun operating there.⁹ This conduct was not unusual in those days; Nahal soldiers were then scattered in many small agricultural settlements in the country, and agricultural work on the farms as part of their daily routine. This fishing activity was institutionalized and received assistance from an institutional body called Shahal (Fighting pioneer service). In order to regulate the military-civilian activity from a financial perspective, a joint cooperative was established by the IDF and the Ministry of Agriculture in the Red Sea.¹⁰ In addition, the Ministry of Agriculture's fisheries department managed to bring a number of fishermen from Sardinia and Sicily to Eilat who engaged in fishing and instructing fishermen there.¹¹ The rule according to which the border line on land was determined by the furrows of the plow was transferred to the sea, with the fishing basket replacing the plow, and Israeli fishing boats were regularly seen in the northern part of the gulf.

In 1950, a year after the occupation of the place, construction of a port dock began in Eilat. There was no real economic need yet, only a vision and intuition. In many places in the young country, settlements and factories were established for security and other reasons, so the establishment of the port before there was a need was not an unusual act. The first ship visited the port, even before its construction was completed, on June 26, 1950.¹² The ship anchored some distance from the port under construction and was unloaded using barges and with the assistance of naval boats. During 1951, the first anchor piles were driven in place as a base for the dock. In the early 1950s, a few fishing boats operated in the northern Gulf of Eilat, only a small part of which was motorized. The number of ships visiting the port of Eilat, which was being built, did not exceed two per year. This was an artificial and forced movement with weak economic justification.¹³ This movement, although extremely sparse, presented the young state with a geopolitical problem – freedom of navigation.

The armistice agreements with the Egyptians did not deal with the Gulf of Eilat, as the place was occupied a month after the agreement was signed. According to the International Convention on the Law of the Sea, the Straits of Tiran are free waterways for all – but

⁹ Ran and Ben Yami – Coasts, p. 11. (See note 7)

¹⁰ Ibid.

¹¹ Ibid.

¹² Customs officer Gabriel Oren (1950), signs the customs documents of the ship Luce, the first to dock at the port of Eilat, Wikimedia website, dated February 8, 2024.

¹³ Herman, C. (1978). *The Conquerors in the Netiva Sea: A History of Hebrew Shipping*. p. 347.

with a number of restrictions.¹⁴ The Egyptians found in these restrictions an opportunity to harass and restrict Israeli shipping. The islands of Tiran and Sanafir, which border the straits to the east, belonged to the Saudis, and the Egyptians asked their permission to station a police force there. This force began stopping and inspecting ships passing through the Straits as early as 1950. In 1953, the Egyptians stationed 3" naval guns at Ras Natsrani (a point in southeastern Sinai that controls the Straits of Tiran) and deployed a frigate at Sharm el-Sheikh (Figure 2). Now Egypt had the ability to pose a real threat to shipping in the straits. This did not cause significant economic damage to Israel, but the matter was of principle and disturbing. At the request of the Ministry of Defense, the ZIM Company operated a line of two ships through the Dutch Poseidon Company, without any real economic justification, just to demonstrate a presence in the straits.¹⁵ The State of Israel approached the United Nations on the matter several times – but the UN did not resolve the problem. More serious and economically significant was the problem of transit through the Suez Canal. The Egyptians, despite the 1888 Treaty of Constantinople, prevented Israeli and foreign cargo ships from calling at Israeli ports, from going through the canal.¹⁶ In October 1954, the Israeli government decided to bring the issue of freedom of navigation in the canal to an intentional crisis.¹⁷ For this purpose, a ship was purchased in the port of Massawa (now in the state of Eritrea), renamed Bat Galim, and an Israeli crew was deployed aboard it, which was supposed to pass through the Suez Canal on its way to Haifa. The Egyptians arrested and confiscated the ship, and its crew was arrested and imprisoned for many months on false charges. The crisis unfolded but did not bring

¹⁴ Shpainer, 2017, p. 25, states that "this period preceded the 'Sea Convention' signed in 1958. In those days, the straits region and the Gulf of Eilat were governed according to norms that were customary before the legislation ('customary law'). Arab countries claimed that: The Gulf of Eilat is an 'internal sea' for the Arab countries along its shores, that the Eilat coast is an 'occupied territory' and is not considered permanent sovereignty, and that the Arab countries have a 'historical right' to the place."

¹⁵ Herman, 1978, p. 347.

¹⁶ The Convention of Constantinople, signed in 1888, is an international treaty that guarantees free passage through the Suez Canal, in times of peace and war, establishes the canal's status as an international waterway, and allows free passage for all ships regardless of national affiliation, type of ship, or cargo.

¹⁷ The Suez Canal had been owned by the British and French since the 19th century, and as such, Britain maintained military forces in Egypt. The presence of the forces was backed by an agreement that was set to expire in 1956. In July 1954, Egypt and Britain agreed that the latter would withdraw its forces and evacuate its bases from Egypt by June 18, 1956, an agreement known as the "Canal Base Agreement." The Israeli government was concerned about Britain's agreement to transfer the canal to Egyptian control without requiring guarantees of freedom of navigation, and sought a way to obtain them.

about the desired result – the Suez Canal remained closed to Israeli navigation for many more years. An attempt to transport Israeli cargo on a Swedish ship also failed.¹⁸



Figure 2: Straits of Tiran and the islands of Tiran and Sanafir

The Awakening of Shipping/Navigation (1956–1967)

On July 18, 1956, British military forces evacuated the Suez Canal in accordance with the earlier agreement with the Egyptians.¹⁹ A week later, Egypt announced the nationalization of the Suez Canal Company. Britain and France were not prepared to give up the property they owned and saw the nationalization as a reason to go to war. The State of Israel saw the two countries' attack on Egypt as an opportunity to lift the blockade of the Straits of Tiran, along with other security objectives, and joined the alliance in the attack, which was given the name "Operation Musketeer" and was later called in Israel the "Sinai War" or "Operation Kadesh." The attack by Britain and France on Egyptian territory around the canal area was unsuccessful, but Israel managed to conquer the Sinai Peninsula within four days. The Israeli Navy participated in the effort – a force of marines accompanied the IDF 9th Brigade on its way along the eastern coast of Sinai, assisted it in landing reinforcements and later landing a ground force to occupy the islands of Tiran and Sanafir.

¹⁸ The canal was only opened to Israeli navigation in 1979, with the signing of the peace treaties between Israel and Egypt.

¹⁹ The Suez Canal Base Agreement of 1954.

The occupation of Sinai led to the deployment of Israeli ground forces on the peninsula and also required the presence of naval forces in the gulfs bordering it – the Gulf of Eilat and the Gulf of Suez. The Navy assigned to the mission two outdated RIVER frigates (INS 'Mivtach' and INS 'Miznak') that were in the process of being decommissioned in Haifa. The frigates set off, circled the African continent and anchored in Sharm el-Sheikh, but Israel did not hold Sinai for long. The British and French, the initiators of the attack, received harsh criticism and threats from the United States and the Soviet Union and were required to withdraw their forces from Egypt, Israel was also required to evacuate the territory it had occupied. However, this withdrawal brought with it an achievement: the withdrawal agreement included both a special clause dealing with freedom of navigation in the Straits of Tiran and guarantees for this – the United States pledged to guarantee Israel's freedom of passage in the Straits of Tiran.²⁰ In addition, a multinational UN force was stationed on the Egyptian side of the border with Israel and in Sharm el-Sheikh. The Suez Canal, on the other hand, remained closed to Israeli shipping – contrary to the Treaty of Constantinople.

The opening of the Straits of Tiran following the Sinai War was an important political achievement, but Israel had difficulty realizing it. In fact, there was almost no shipping in the Gulf, as there was no economic need for it. Trade with Asian countries was limited, and transporting cargo by land from Eilat to the center of the country was difficult and expensive. In Israel, there was growing concern that if the right was not exercised, it would be lost. The answer was given by government initiatives, not necessarily economic ones. The Ministry of Agriculture encouraged a number of fishing vessel owners to go fishing on the Eritrean coast in the southern Red Sea, thereby realizing the navigation of Israeli ships in the Red Sea and the Straits of Tiran.²¹ In the summer of 1957, three large fishing vessels left the Kishon Port in Haifa for a long voyage around the African continent. Two other, smaller ones were transported on trucks to Eilat and from there sailed south. The fishing grounds in Eritrea were rich in fish and the navigation of ships through the Straits of Tiran, laden with booty on their way to Eilat, was commonplace.²²

Another government initiative was the preparation for the flow of oil. To demonstrate to the world the importance of the southern shipping lane, the State of Israel began the accelerated construction of an oil pipeline from Eilat to Beersheba (from Beersheba, the oil was planned to be transported, in the first stage, by trucks and trains to the refineries

²⁰ Lorch, N. (1997). *Today is turning*, Systems, p. 248.

²¹ Eritrea was then a province of Ethiopia and is now an independent country.

²² Ran and Ben Yami – *Coasts*, p. 16.

in Haifa).²³ In Israel, it was assumed that dependence on oil was a clear and tangible concept in Western countries, and it would be easy to explain why the lane must be free. The government also assumed that the pipeline would enable the transfer of oil to European countries, thus involving them in the need to keep the sea lane open.²⁴ This step was not taken lightly, since transporting oil from Iran to Israel and from there to Europe was both practical and economic feasible.²⁵

The oil pipeline from Eilat to Beersheba, only 8" in diameter, was inaugurated on April 8, 1957, and immediately aroused the interest of foreign investors – just as the government had hoped.²⁶ It soon became clear that Israel's presence on both the Mediterranean and Red Sea coasts had advantages in international trade between Asia and Europe that were not directly related to the foreign trade of the Israeli economy itself. The oil lines not only helped keep the Straits open, but were also seen as a significant profitable opportunity for the state treasury. Three years later, a pipeline with a double diameter (16") was inaugurated from Eilat to Haifa.

The demand for phosphates in East Asia also increased, and in 1959, two years after the opening of the straits, loading of phosphates, transported by truck from the Dead Sea region, began at the port of Eilat.²⁷ Following the increase in traffic volume at the port and the signing of trade agreements with Far Eastern countries, it was decided to build a new port, slightly south of the port built in 1951.²⁸ Construction began in 1962 and was completed in 1965. A year later, a new pier for unloading oil tankers was also inaugurated.

The increase in the volume of shipping obliged the Israeli Navy to provide a response and security support. In fact, as early as the mid-1950s and even before the Sinai operation, the Navy decided to respond to the challenge of Egyptian harassment in the Straits of Tiran. For this purpose, small torpedo boats were designed that could be transported on trucks and stored in Eilat. The ships were built in Italy and arrived in Israel at the end of 1956. During January 1957, the ships were unloaded and prepared in Eilat.²⁹ Now Israel

²³ Editorial, *Oil Flows into Tanks in Eilat*, Hatzofe (April 8, 1957), p. 1.

²⁴ Editorial article, *The Oil Pipeline to Eilat*, Lamerhav (December 23, 1956), p. 2.

²⁵ Iran was at that time the main supplier of fuel to Israel (through shell companies and indirect contracts). Bialer, A. (1998). *Fuel from Iran – Zvi Doriel's Mission in Tehran 1953–1956, Part I: Laying the Foundations*, Studies in the Rebirth of Israel, p. 165.

²⁶ Special Writer, (1957). *The Oil Pipeline from Eilat to Beer Sheva*. Hatzofe (April 8, 1957), p. 2.

²⁷ Editorial, (1959). *Loading of phosphates has begun at the port of Eilat*. Haaretz (April 2, 1959), p. 5.

²⁸ The 'military port' today.

²⁹ Editorial, (1957). *The Red Sea received reinforcements*. Herut (February 15, 1957), p. 3.

had a certain naval force that allowed it to maintain sovereignty and also constituted some kind of adversary to the Egyptian ships stationed in Sharm el-Sheikh.

Blue and White Flag – In the Straits of Tiran (1967–1973)

The agreements and guarantees that followed the Sinai War gradually eroded. The Egyptians continued to harass Israeli shipping in the Straits of Tiran under various pretexts.³⁰ In early 1967, Israel's neighbors formed alliances and began preparing for war. In May 1967, Egyptian ruler Nasser ordered the commander of the UN force stationed in Sinai to evacuate his forces. Egyptian forces seized the area and were stationed near the Israeli border. On May 22, Nasser announced the closure of the Straits of Tiran to Israeli shipping. The concentration of forces along the borders and the closure of the straits was a *Casus belli* for war for Israel. Israel launched a preemptive attack on June 5. From Israel's perspective, the attack was highly successful. The air forces of its neighbors were destroyed and within six days, IDF forces captured the Sinai Peninsula from the Egyptians, the West Bank of the Jordan from the Jordanians, and the Golan Heights from the Syrians. The navy contributed in the southern arena by capturing Sharm el-Sheikh, which was captured virtually without a fight.³¹ The islands of Tiran and Sanafir were also captured, and before the war was over, a merchant ship passed through Egypt on its way to Eilat.³²

Following the war, the maritime borders of the State of Israel were greatly extended. In the Red Sea arena, the Gulf of Eilat and the Gulf of Suez were added to the Israeli Navy's responsibilities. The force transferred a number of patrol boats and landing craft from its bases in the Mediterranean Sea and prepared to purchase additional ships and landing crafts. The patrol ships were intended to demonstrate a presence and maintain Israeli sovereignty in the new maritime areas that were added to Israel after the war. The landing craft allowed for the ability to transfer troops, armored personnel carriers (armored combat vehicles), and armor for attack – if fighting resumed. In addition to this purchase, the navy designed a special type of Missile boat designated for the Red Sea, as will be detailed below.

Following the Six-Day War, the Straits of Tiran remained under complete Israeli control and passage through them was free – but the country was not quiet. The rulers of Syria and Egypt decided to change strategy and exhaust the State of Israel in a prolonged war

³⁰ Lorch, 1997, p. 248.

³¹ Erel, S. (1998). *The Sea Before You – The Story of a Sailor Commander and Warrior*, Ministry of Defense, p. 277.

³² This was the ship *Dolphin*, which was purchased for a trial mission, but by the time it reached its destination the straits, the war had ended. Editorial note, *Dolphin enters Eilat*, *Al Hamishmar* (June 13, 1967), p. 4.

(the 'War of Attrition' 1967–1970). The Egyptians concentrated their operations in the Suez Canal area, while Israel expanded its responses and also operated in the Gulf of Suez. The Israeli naval commandos were integrated into these operations, raiding Egyptian bases and sinking several naval crafts. As part of that exchange of blows, an Egyptian naval commando force attacked the port of Eilat and during the years 1969 and 1970 hit Israeli ships anchored there three times, using the Jordanian port of Aqaba as a point of departure.

The Six-Day War and its aftermath also provoked terrorist acts by the Palestinian population, and these acts did not spare the city of Eilat. On April 8, 1969, about 30 Katyusha rockets were fired from the Aqaba area at Eilat, causing damage and casualties.³³ A different type of operation was carried out by a terrorist organization called the Popular Front for the Liberation of Palestine. A squad of members of the organization was organized in the southern Red Sea and attacked the tanker "Coral Sea" of the El-Yam Company. The tanker was transporting crude oil from Iran to the port of Eilat and was attacked on June 11, 1971, in the Bab-el-Mandeb Strait. The terrorists approached the tanker in a speedboat, fired RPG and hit it. The damage was minor and the ship continued on its way.³⁴ The attempted attack in the southern Red Sea was not repeated, nor was the rocket fire in the northern part of the gulf. The War of Attrition with Egypt ended with a ceasefire on August 7, 1970. The peace that prevailed after the war, especially in the south of the country and the Sinai Peninsula, allowed for prosperity at the southern gate. It is important to note that on the other hand, on the Egyptian side, the Suez Canal was closed to shipping from June 1967 to June 1975 (see below), and as a result, Egypt suffered serious economic damage.

With the conquest of the Sinai Peninsula in the Six-Day War, the Egyptian oil fields in Sinai and the Gulf of Suez fell into the hands of the State of Israel, and it prepared to exploit them. Israel began pumping crude oil from the wells and transporting it to Eilat in tankers and from there through the Trans-Israel pipeline to the center of the country (direct passage through the Suez Canal was of course impossible). These fields then supplied about half of the country's consumption, the shipping route by which the oil was transported from the Gulf of Suez to Eilat was called the 'short line'. But Israel had a bigger plan for the 'long line' – oil from Iran that would pass through Israel and continue to Europe. 10 years earlier, after the Sinai operation, the Israeli Oil Lines Company had laid an 8" diameter oil pipeline from Eilat to Beersheba, three years later another 16" diameter line was laid from Eilat to Haifa. Now it seemed possible to expand the project further. Due to Sinai occupation, passage through the Straits of Tiran was free for Israeli ships and

³³ Editorial (1969). Ten injured in Katyusha rocket attack on Eilat. *Lemerhav* (April 10, 1969), p. 1.

³⁴ Ziv A. (1971). The clashes at Bab-el-Mandeb. *Davar*, p. 9.

for the same reason (the Sinai occupation) the Suez Canal was closed, the pipeline from Eilat to the north became an alternative to the canal. In addition to this, and this is also in the interest of the matter, the option the pipeline made it possible to transport oil from Iran in huge tankers to Eilat and transfer it to the northern end of the pipe to smaller tankers suitable for shallow ports in Europe – a process that was necessary anyway.

Israel actually purchased Iranian oil as early as the 1950s. This oil was transported to the refineries in Haifa by chartered tankers operated by private American companies, and for this purpose they circumnavigated the African continent.³⁵ Until the Sinai Operation, the countries of the Soviet bloc also supplied oil to Israel, but following the war, relations between Israel and the Soviet Union worsened, and Iran became the main source of crude oil. Iran was then under the rule of the Shah Pahlavi, who was pro-Israel for various reasons, but the sale of oil to Israel embarrassed his government in the eyes of the Arab countries. The Iranian government tried to hide the sale and disguise it by using American companies or shell companies with American names.³⁶

After the Six-Day War, the feasibility and attractiveness of the Israeli pipeline increased, and a number of investors (some Iranian) joined forces to expand the venture. The Oil Lines Company became the Trans-Israel pipeline (Eilat pipeline), the fuel port in Eilat was expanded, and a new fuel port was built in Ashkelon. In 1969, when the pipeline was connected to Ashkelon, the company's name was changed to Trans-Israel pipeline (Eilat Ashkelon Pipeline). Huge tankers began visiting Eilat once a week. The fuel was pumped north to Ashkelon, and from there it was transported by smaller tankers to European ports. In the 1970s, over 30 million tons of oil were pumped through the pipeline annually.³⁷

In the face of the growing interest in the Red Sea and its northern gulfs, the Israeli Navy's strength in the theater was meager.³⁸ In fact, after the Six-Day War and the occupation of Sharm el-Sheikh, it was clear to the heads of the defense establishment that in order to maintain Israeli interests, a significant naval force must be deployed in the Red Sea. The Navy designated for this purpose a new and advanced model of missile boat built at the Israeli shipyards in Haifa based on the experience gained in building missile boats in France. This model, the Saar-4, was originally designed to operate in the Red Sea and also south of it. But before the Saar-4 ships were deployed in Sharm el-Sheikh, the Yom Kippur War broke out, and the ships that were planned to circumnavigate the African continent

³⁵ Herman, 1978, p. 351.

³⁶ Bialer, 1998, p. 132.

³⁷ Ran, D. (2008). *Between Ship and Dock: History of the Shipping Chamber*, Pardes, p. 174.

³⁸ On the eve of the Yom Kippur War, the Navy's order of forces in the theater consisted of 4 Dabur-type patrol ships and 7 landing crafts of various types.

on their way to this arena, remained in the Mediterranean theater and operated there throughout the war.

War and Peace

On October 6, 1973, Syria and Egypt attacked Israel by surprise. Syrian ground forces penetrated the Golan Heights and Egyptian forces crossed the Suez Canal and captured the line of Israeli outposts east of it. In the Mediterranean Sea, naval ships managed to deal a decisive blow to the Syrian and Egyptian fleets early in the war. Israel's ports and shipping lanes to and from them remained open. This was not the case in the Red Sea. With the start of the war, the Egyptian navy prepared for a naval blockade of Israel. An Egyptian surface force consisting of a frigate and two destroyers was deployed in the Bab-el-Mandeb area, and an Egyptian submarine was deployed in the middle of the red sea, west of Jeddah. The Israeli navy had no answer to this naval blockade, which was imposed at a great distance from its bases in the Red Sea (Eilat and Sharm el-Sheikh).³⁹ On October 7, the submarine attacked the tanker 'Samson', which was loaded with crude oil from Iran and was making its way to Eilat. The submarine fired a torpedo, the captain noticed the torpedo trails and began evasive maneuvers – the torpedoes missed. Following the firing, the Israeli government stopped Israeli shipping in the Red Sea. Two weeks later, the Israeli Navy managed to improvise and install on a civilian tugboat a Gabriel missile system and several supporting systems that would allow it to deal with the Egyptian naval surface force. The ship was sent to the Bab-el-Mandeb Strait, came into contact with the Egyptian force, but then the ceasefire went into effect and the Israeli government ordered the ship to lay down its weapons. In the northern Red Sea, in the Gulf of Suez, the Navy's small vessels and naval commandos gained control of the battlefield. The landing crafts were preparing for a naval outflanking operation through the Gulf of Suez, but ultimately Israeli armored forces successfully crossed the Suez Canal in its center with the help of combat engineering forces. The day after the war, the Israeli tanker 'Siris' struck a naval mine in the straits of Yuval in the southern Gulf of Suez, which is how Israel learned that during the war the Egyptians had mined the Gulf.⁴⁰ Israeli shipping returned to the Red Sea only after the ceasefire agreements. One of Israel's conditions for the ceasefire was the lifting of the blockade in the Red Sea, in exchange Israel lifted the blockade of the Egyptian Third Army, which was besieged east of the canal.⁴¹

³⁹ The missile ships (Saar-4 model) that were intended for the theater and were planned to depart in mid-October remained in the Mediterranean Sea due to the outbreak of war.

⁴⁰ Guetta, S. (2021). The Egyptian Sea Mining Surprise during the Yom Kippur War (October War 1973). In: S. Chorev and A. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, Center for Naval Policy and Strategy Research, University of Haifa, p. 212.

⁴¹ Ben Yehuda, S. (1973). Bab-el-Mandeb is the Gate of Tears, *Al Hamishmar*, p. 3.

In mid-1974, after the war and according to the early planning, the first pair of missile ships, the INS Reshef and the INS Keshet, were stationed at the Solomon Base (Sharm el-Sheikh). Later, the Israeli Navy stationed four additional missile ships in the theater. These ships regularly navigated along the length of the Red Sea and to its south. Their presence at sea, their deployment at the permanent base in Sharm el-Sheikh, and the superiority they demonstrated a few years earlier, in the Yom Kippur War, allowed for free navigation of Israeli shipping in the Red Sea – shipping that increased with the import of oil from Iran and the expansion of trade.⁴² Since the Yom Kippur War (1973) and until October 2023, there has been no disruption to Israeli shipping in the theater.

Prosperity

The ceasefire talks between Israel and Egypt after the Yom Kippur War subsequently led to the separation of forces agreements and interim agreements. Israel withdrew from both banks of the canal and pledged to return to Egypt the oil fields captured in the Six-Day War. A UN force was stationed in the Sinai Peninsula. The Suez Canal was prepared and opened to navigation in June 1975, although not yet to Israeli shipping.⁴³ In September 1978, the Camp David Accords were signed; a Framework Agreement for Peace in the Middle East and a Framework Agreement for Peace between Egypt and Israel. The agreement ordered the end of the state of war and determined the border between the two countries. Article 5 of the agreement states:⁴⁴

1. Israeli ships and cargo destined for or coming from Israel shall enjoy the right of free passage through the Suez Canal and its inlets, through the Gulf of Suez and the Mediterranean Sea, on the basis of the Convention of Constantinople of 1888, which applies to all nations. Israeli citizens, its ships and cargo, as well as persons, vessels and cargo destined for or coming from Israel, shall be accorded non-discriminatory treatment in all matters relating to the use of the Canal.
2. The Parties consider the Straits of Tiran and the Gulf of Aqaba (Eilat) to be international waterways open to all nations for freedom of navigation and uninterrupted flight, which is unimpeded and unsuspended. Each Party shall respect the right of the other to navigate and overflight for the purpose of accessing either country through the Straits of Tiran and the Gulf of Aqaba (Eilat).

⁴² Several years later, with the signing of the peace treaty with Egypt, the Israeli Navy evacuated its forces from the Red Sea bases, but the freedom of navigation through the canal allows it to deploy missile ships and submarines from time to time and when necessary.

⁴³ Editorial (1975). The Suez Canal is reopened. Davar, p. 5.

⁴⁴ The Government of Israel and the Government of Egypt (1979). [Peace Treaty between the State of Israel and the Arab Republic of Egypt](#). Knesset website, accessed February 13, 2024.

The opening of the Suez Canal to Israeli shipping led to the expansion of the State of Israel's trade with the countries of East Africa, India, Oceania and the Far East. (Most of Israel's trade with these countries is carried out through Israel's Mediterranean ports and passes through the Suez Canal). Market forces and economic considerations were now the main factor in choosing the preferred route and port. Trade developed over the years and in 2023, goods totaling 3% of Israeli exports and 16% of imports to Israel passed through the Suez Canal.⁴⁵

Traffic in the Gulf of Eilat and the Port of Eilat also stabilized according to these considerations, and the Port of Eilat was exposed to competition free from security constraints. Oil imports from Iran stopped in 1979 after the fall of the Shah and the rise of a fundamentalist regime that severed all ties with Israel, while imports of cars from East Asia increased. Imports of cars and exports of phosphates (about two million tons per year) constitute the bulk of activity at the Port of Eilat. In total, the port handles about 5% of the shipping volume in Israel.⁴⁶ In order to ensure employment at the port and prevent excessive volatility in the city's labor market, the Israeli government required car importers from Asia to unload their vehicles at the Port of Eilat.⁴⁷ In recent years, the port has served about 120 ship calls per year.⁴⁸

In 1994, less than 20 years after signing the peace agreement with Egypt, the State of Israel signed a peace treaty with Jordan. It was preceded by the 'Oslo Accords' with the Palestinian Authority. The agreement provided a solution to a territorial dispute (over a small area) and a dispute over the diversion of the Jordan River waters as well as a number of springs in the Arava desert. Following the agreement, diplomatic relations were established between the countries, embassies were opened, and mutual freedom of access to seaports was decided. As part of the agreement, a procedure for cooperation in defense against terrorism was established, as well as cooperation and mutual assistance in the event of a maritime environmental disaster, such as a polluting spill from a tanker.⁴⁹ The southern border of the State of Israel, which has been located a few kilometers from enemy countries since the establishment of the state and has been repeatedly affected

⁴⁵ Ministry of Economy, (2024). The Israeli Economy and the Business Sector in the Israel-Hamas War, p. 25.

⁴⁶ Ganzersky, N. (1990). Eilat in the Light of the National Strategy. Zim Magazine, p. 26.

⁴⁷ Hazelkorn, S. (June 10, 2013). For approval: Eilat Port will remain a monopoly on vehicle imports, Ynet Economy Section.

⁴⁸ Ministry of Transportation, Shipping and Ports Statistical Yearbook 2021.

⁴⁹ State of Israel, (1994). Peace Treaty between the State of Israel and the Hashemite Kingdom of Jordan) Article 23.

by acts of maritime sabotage and terrorism, now stands in a triangle of borders between the border with Egypt and the border with Jordan – borders of peace.

In parallel with the development of the port in Eilat, and without any direct relation, a thriving tourism industry developed in the city, which currently accounts for about 80% of the economic activity taking place there. The city has about 53,000 residents, half of whom are engaged in tourism directly and indirectly. There are about 50 hotels in and around the city, containing about 11,000 rooms and about 3,500 guest apartments.⁵⁰ In successful years, Eilat records about 7 million overnight stays per year.⁵¹ The combination of landscapes between the sea and the desert offers a variety of tourist attractions, and the coral reefs spread along the coast attract many tourists. Developing the city as a gateway to the country with all its components (port, railroads, and airports), and especially the oil port, poses a challenge to the city's financiers and its future planners, as expanding trade, and especially oil imports, could endanger the desert and seascapes and harm the city's main employment sector – tourism, if appropriate attention is not given to it.

Restless sea

At the beginning of this century, Israel began to face new challenges in the Red Sea that required new intelligence capabilities and the ability to operate far from the country's borders.

In the 1990s, Israel recognized an autonomous Palestinian Authority in the West Bank and Gaza Strip. The Authority established a limited military force as part of the agreement with the State of Israel, but constantly tried, in covert ways, to strengthen its power. In 2002, the Israeli Navy intercepted the merchant ship 'Karin A' in the Red Sea. A large ship that was hiding large quantities of smuggled weapons for the Palestinian Authority in its stores.⁵²

In 1997, the Hamas organization in the Gaza Strip in the Palestinian Authority revolted and began to establish its own militia. Iran, which supports this militia, began sending arms shipments to it via the Red Sea. Some were unloaded at ports and some were dropped off

⁵⁰ Central Bureau of Statistics (2003). Statistical Quarterly for Tourism and Hospitality Services, Quarter 4.

⁵¹ Gilad, A. (January 2020) [Summary of 2019 in hotels: Record number of tourist overnight stays](#). HON Financial Guides.

⁵² Levy, T. and Stein R. (2002). In a short time and without the use of weapons, the Shayetet fighters took control of the ship. Haaretz.

on remote beaches in northeastern Africa. From there, the shipments were transferred and smuggled overland to the Gaza Strip.⁵³

The Israeli Navy was deployed to thwart these shipments, and there is at least one known case in 2014, in which the merchant ship 'Klos C' was intercepted and confiscated in the Red Sea with a large amount of ammunition and long-range missiles on board.⁵⁴ These interceptions were legal, and the State of Israel was able to prove that the voyage was not carried out in 'good faith' but for terrorist purposes.

While the peace treaties between Israel and Egypt and later between Israel and Jordan removed threats to Israeli shipping in the Straits of Tiran and the Suez Canal and now allow the State of Israel free trade in the routes to its southern gates, new threats to freedom of navigation have arisen in the southern part of the Red Sea. The first of these is the threat of piracy, mainly from Somalia. This threat is not focused only on shipping to Israel and is being addressed by a task force of Western countries with the support of the UN Security Council.⁵⁵

A second threat is the result of the Shadow War between Israel and Iran. In this exchange of blows, Iran has found a way to attack Israeli shipping in the Persian Gulf region, to its south, and in other places. These attacks have been and are still being carried out in various ways.⁵⁶

A third threat is the Houthi threat in Yemen. The Houthi organization, supported by Iran, joined the 'Axis of Resistance' against Israel with the beginning of the Israel-Hamas War and operates in two parallel channels: the first, starting in November 2023, launching ballistic missiles and drones into Israeli territory and mainly into the city of Eilat. The second is firing activity at ships in the maritime domain around the Bab-el-Mandeb Strait and the area of the port city of Hodeidah, which it controls. The organization strives to disrupt shipping related to the State of Israel.⁵⁷ The shipping profile these days makes it very difficult to ascertain which ship is related to Israel, since the owners, crews,

⁵³ Harel, E. and Yissacharoff, A. (2011). Sudan: There is no doubt that Israel bombed our territory. Haaretz.

⁵⁴ Cohen, G. (2014). The IDF seized a ship in the Sudan region that was carrying a shipment of missiles to Gaza. Haaretz.

⁵⁵ Tardiman, M. (July 2018). The Red Sea as a Potion, Struggles over Israel's Powers and Interests in the Red Sea Basin. Outlines, p. 4.

⁵⁶ Chorev, S. (2021). Global Developments in the Maritime Domain, In: S. Chorev and A. Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21*, Center for Naval Policy and Strategy Research, University of Haifa, p. 40.

⁵⁷ Tardiman, 2018, p. 5.

cargo, and shipping lines are global. The Houthis have chosen not to deal with the issue of identification and affiliation and are attacking ships almost indiscriminately. Many shipping companies have changed their routes and their ships are circling the African continent on their way to the Mediterranean. Similar to dealing with the pirate threat, a broad coalition of Western countries has established a task force designed to protect shipping in the southern Red Sea.⁵⁸ In any case, at the time of writing, shipping to Eilat has completely stopped. For its part, Israel has moved through the Suez Canal and deployed surface forces and submarines in the northern Red Sea, but they are not part of that coalition.

Summary

The route to the southern gate of the State of Israel passes through two choke points, one – the Straits of Tiran and the other – the Bab-el-Mandeb Strait. The first is mainly connected to the port of Eilat and the second is connected to traffic in the Red Sea from the Suez Canal to the ports of the Mediterranean. Until recently, goods amounting to 3% of Israeli exports and 16% of imports to Israel passed through these routes. History has shown that these choke points are sensitive to geopolitical upheavals and their impact on the State of Israel – direct and immediate.

In the 1950s. After the Sinai War, when the Straits of Tiran were opened to Israeli shipping, Israel rushed to establish the achievement of building an oil pipeline from Eilat to the north. The oil pipeline was intended to establish and implement an argument that freedom of navigation in the Straits was a strategic need for the State of Israel. The action was intended to arouse the interest of other countries in the project in order to bring them into the circle of users as partners in interest – this move was successful.

Today, when the choke point in the southern Red Sea is threatened and effectively closed to Israeli shipping, it would be beneficial for Israel to take a similar initiative. The establishment of a land bridge from Eilat to the Mediterranean ports – not necessarily as a competitor but as a complement to the Suez Canal – could interest a group of additional countries and thus increase the number of those interested in free passage through the route. It is worth noting a number of initiatives for a land bridge between the Indian Ocean and the Mediterranean (such as the India–Middle East–Europe Economic Corridor – IMEC initiative, adopted by the G-20 countries at a conference held in New Delhi in 2023). In times of threat, Israel could use the collective economic, political or military pressure of those partners to remove the threat.

⁵⁸ Martinez, L. (December 19, 2023). US announces international task force to protect ships in Red Sea from Houthi strikes, *ABC News*.

Insights and Recommendations

Shaul Chorev

This chapter will summarize the insights that emerged from all chapters of the Strategic Maritime Review document. The first part of the summary will detail the insights at the level of the global system. The intensity of the influence of global processes on Israel is great. Israel's capabilities as a small (and socially and economically open) country to influence major trends such as political polarization in the international system or global climate change are limited, and policy is required to adapt itself to these worldwide processes. The second part will present the trends at the regional and local levels, the insights that emerge from these trends, and the recommendations for Israeli policy that stem from them.

Super trends: Global arena

Increasing polarization processes and increasing violence in the international political system

The main feature of the geopolitical environment in 2024 is the strengthening of multipolarity in the international system, a strengthening that is expressed in the increase in the number and influence of "revisionist" players who are trying to undermine the existing international order compared to the "status quo" countries. This dynamic is affecting the structure of the global system and making it more complex. The erosion of international norms has become more acute than ever, and events are becoming increasingly unpredictable.¹ The liberal agenda based on the centrality of international institutions has taken heavy blows, and questions about the validity of international law have severely damaged the credibility of the United Nations. The UN Security Council has become an entity paralyzed by mutual veto rights exploited by the interests of the old superpowers.

The three major powerful countries – the United States, China and Russia, and to some extent also the European Union countries – will try to increase their influence on shaping the global system environment. Geopolitically "swaying" countries such as India, Saudi Arabia, Turkey, South Africa and Brazil, which are not clearly identified with one of the major powers or blocs – will have greater maneuverability and influence on the global agenda.

¹ Colomina, C. (December 2023). [The World In 2024: Ten Issues That Will Shape the International Agenda](#), Barcelona Center for International Affairs.

The year 2023 and, subsequently, the year 2024, were characterized by being the years with the largest number of conflicts in the world since the end of World War II: the war in Ukraine, the war in Gaza, ongoing effects of the Corona pandemic, the Iranian nuclear program, the Chinese threat to Taiwan, signs of a slowdown in the global economy, inflation, the use of energy as a weapon, uncertainty in the global food market, climate problems and drought, and the intensifying competition between the superpowers – all of which raise concerns about a return to the Cold War atmosphere that followed World War II. Later in 2024 and in 2025, the main focus of attention may shift from the campaign between Russia and Ukraine to the one being waged in the Middle East, centered on Israel, which has been engaged since October 2023 in the 'Israel-Hamas' war, which is a multi-scene campaign with the potential to become a regional war.

Lowering the threshold for the use of nuclear weapons

Russian President Putin's frequent references to the potential use of nuclear weapons in the wake of Russia's war against Ukraine are deeply concerning, especially given the strained relations between Russia and the United States, tensions not seen since World War II. The international support Russia enjoys from China also makes the situation even more complex, even as China works to moderate Russian statements regarding the use of nuclear weapons. The Russians often state their red lines, but the Ukrainian experience indicates that these threats have not materialized so far. On the sidelines of the St. Petersburg International Economic Forum held in May 2024, Putin stated that "if someone's actions threaten our sovereignty and territorial integrity, we consider it possible to use all the means at our disposal", and if "for some reason, they believe in the West that Russia will never use it, then Russia's nuclear arsenal is much more powerful than what the United States used in Hiroshima and Nagasaki in Japan during World War II".² It is worth remembering that the most important achievement in American foreign policy during the Cold War, under the rule of all presidents who served at that time, was to ensure that such a situation would not occur (what was called the "policy of containment"), and one of the imperatives of any new American administration that will take office in early 2025 will be, despite the tense situation, to avoid this explosive situation from causing the outbreak of a third world war. Any new American administration will have to recognize that all three of the current global conflict's fault lines—Russia-Ukraine, Iran-Israel, and China-Taiwan—occur in areas that the American people would not be willing to go to war for. In the absence of public support and no legal obligation to do so, the United States will likely try to find levers of influence other than military ones, and convince its allies

² *Voice of America News*. (June 5, 2024). [Putin says Russia could use nuclear weapons if it is threatened](#).

that in the three areas of tension noted above, there are alternative ways to achieve security in their region.³

International regime in maritime domain

Sea lines of communication: The geopolitics of the oceans will feature more prominently in the global "Geist Zeit": Sea lines of communication in the oceans, through which more than 90% of the world's trade in goods go through, and especially their Choke Points, are at risk of disrupting the international norm of freedom of navigation. Of particular note is the Bab al-Mandeb Strait, where maritime traffic is subject to attacks by Houthis rebels from Yemen, as well as traffic in the Turkish Straits and the Black Sea.

Resources from the sea: In recent years, the technology to extract valuable raw materials and minerals from the seabed has become more available. At the same time, the economic incentive to extract them from under the water is becoming much more tempting than before: resources on land are depleting, material prices are rising, and demand for these products from the high-tech industry is increasing.⁴ Mining from the seabed is expected to provide at least a third of the supply of critical minerals needed, and companies will need to take ocean geopolitics into account when determining their supply chain and sustainability strategies.

Disruptive technologies and "dual-use" technologies used by armies and terrorist organizations

2023 and 2024 were the years in which a breakthrough occurred in the field of artificial intelligence (Generative AI). In December 2023, the G7 countries had already agreed on international guidelines for developers and users of artificial intelligence, especially for generative artificial intelligence, and mentioned the need to present measures to deal with disinformation, the use of which can create social and political instability, especially in an election year. In the case of the United States and China, the geopolitical race to lead technological innovation also affects military applications of artificial intelligence. China, for its part, continues to advance its goal of reaching 70% independence in critical technologies by 2025 while clearly increasing its presence in the main international standard-setting bodies related to this technology.

In contrast to the development of disruptive technologies, there is a growing trend (which is to some extent the opposite) of exploiting dual-use technologies (some of which are "off-the-shelf" technologies), which are cheap and available for military purposes. The

³ Rhodes, B. (June 18, 2024). [A Foreign Policy for the World as It Is](#), *Foreign Affairs*.

⁴ Auslander, V. (September 23, 2021). [Intoxication from the Depths](#), *Calcalist*.

most prominent examples of this in the naval context are the unmanned vessels used by Ukraine and the Houthis rebels. By using civilian platforms (speedboats, jet skis), civilian GPS-based navigation devices, and Internet communications, the Ukrainians were able to defeat the Russian fleet in the Black Sea, and the Houthis were able to disrupt global trade.

Climate and environmental risks

The attempt to mitigate climate change, and especially the use of fossil fuels, has not been very successful in recent years, and the International Energy Agency (IEA) predicts that global demand for oil, coal, and natural gas will peak precisely this decade. Countries that produce fossil fuels are ignoring climate warnings and even planning to increase coal, oil, and gas production.⁵ In this context, not only does humanity risk worsening climate impacts, it will also be accompanied by an unprecedented increase in social and political tensions between governments and companies over resource exploitation. Environmental risks could hit the point of no return for climate change mitigation. It seems that in the coming years, extreme weather will pose the greatest risk to most of humanity.

In early January 2024, the European Union's Copernicus observation program for climate change published a report stating that the program's data show that humanity is already experiencing the effects of climate change on a global scale. This is most evident in the measurement of record air temperatures, but also in high ocean surface temperatures and low sea ice levels. The Copernicus Climate Services (C3S) report noted that May 2024 was the warmest May on record, with an average global air temperature of 0.65° degrees Celsius above the 1991–2020 average, marking the 12th consecutive month in which the average global temperature reached a record. The report notes that while factors such as El Niño clearly contribute to some of the ocean surface temperatures, the decisive factor driving the changes is the concentration of greenhouse gases. In this context, it is worth noting that the shipping industry is the backbone of international trade, but it is also a carbon-intensive industry (similar to the global aviation industry), responsible for approximately 3% of global emissions (2022). The transport sector as a whole contributes 20.2% of all global CO₂ emissions, and shipping ranks third in terms of CO₂ emissions, which are 11% of the total, ahead of passenger cars at 39% and medium to heavy trucks at 23%. Due to the increase in global trade and the demand for maritime transport of goods, the carbon footprint of the shipping sector, mainly due to CO₂, could increase by 50% to 250% by 2050 if proactive measures are not taken to reduce emissions.⁶

⁵ [World Energy Outlook 2023](#), International Energy Agency, p. 17.

⁶ *Sinay Maritime Data Solution*. (September 22, 2023). [How much does the shipping industry contribute to global CO2 emissions?](#)

The International Maritime Organization (IMO) has begun work on implementing a Sulphur cap on marine fuels as part of its efforts to reduce emissions from the shipping sector. For example, the organization has established the Mediterranean Emission Control Areas (ECA) to regulate Sulphur Oxides and particulate matter emissions. In addition, the European Parliament has approved changes to the EU's Emission Trading System (EST), expanding its coverage to include all maritime emissions.

The cyber threat

The global economy is completely dependent on maritime trade, and the consequences of a disruption to the maritime supply chain following a cyber-attack are not limited to a few manufacturing industries dependent on raw materials, but rather affect a large number of consumer goods dependent on this supply chain. The emergence of the cyber threat as part of asymmetric and hybrid warfare in the maritime domain, both in terms of information technology and operational technology, and in doing so, the use of private actors and advanced technologies in order to achieve strategic value - make the maritime arena extremely vulnerable. In the last decade, the shipping sector, ports, gas and energy production facilities have become highly dependent on computer and control systems based on operational technologies that create difficulty in analyzing the consequences and losses actually caused by maritime cyber-attacks.

In recent years, advanced technologies such as artificial intelligence (AI), large language models (LLM), and deep fake have been developed and put into use. As a result, state and non-state actors, including Israel's adversaries, have already begun to integrate these technologies with the intention of carrying out cyberattacks and influence operations.⁷ The war between Russia and Ukraine, the damage to the Nord Stream infrastructure in the Baltic Sea, the proliferation of cyber-attacks on critical systems, and the recent gas discoveries in the Eastern Mediterranean in general, and off the coast of Israel in particular – all of these have put offshore energy infrastructure on the public agenda in strategic, security, economic, environmental, and state aspects, marking them as high-quality targets for cyberattack. Following technological developments in the maritime industry, the dependence and uniqueness of operational computer systems, most of which are not protected against cyber threats, the high level of connectivity between systems, the complexity of threats, and the strategic importance of maritime energy infrastructures to energy security and the Israeli economy, the geostrategic and geopolitical significance

⁷ *The Economist*. (February 6, 2024). [An AI-Risk Expert Thinks Governments Should Act to Combat Disinformation](#); Microsoft Threat Intelligence. (February 14, 2024). [Staying ahead of threat actors in the age of AI](#), *Microsoft Security*.

of the maritime cyber field and its implications for the entire region are becoming increasingly apparent.

Elections in the United States

The US presidential elections scheduled for November 2024 are expected to deal, among other things, with its policy in the Middle East. There is no doubt that the United States will not be able to continue its policy of "primacy", and it is no longer the global hegemon it was at the end of the first Iraq War. Therefore, internal pressures will increase to abandon this policy, or at most to adopt a combination of primacy and off shore balancing with mandatory conditions that avoid military involvement, a large financial burden on the budget, and a political burden on the shoulders of the US administration.⁸ The US administration will also attempt to reach a new agreement with Iran regarding its nuclear program.⁹

The state of the global economy

The COVID-19 pandemic, the war between Russia and Ukraine in the Black Sea, and the Houthis blockade of shipping in the southern Red Sea have all highlighted the global interdependence of countries and the challenges of achieving national resilience in supply chains, especially when production is concentrated in a small number of markets. In the wake of these crises, and against the backdrop of growing political polarization between the United States and China, many governments appear to be reengaging in industrial policy, or expanding their reliance on domestic industries. The implications of this are the formation of politically based trade blocs and the curtailment of globalization.

The economic consequences of the series of crises that occurred in 2022–2024 are, among other things, the largest jump in inflation in forty years and interest rate increases to deal with this situation.

China is experiencing its lowest economic growth in 35 years. The changing rules of globalization caused by strategic competition with the United States are also expected to hurt exports and China's ability to attract investment in an environment where the Chinese leadership prioritizes economic security over growth.

⁸ Tariq, H. (May 24, 2024). [Primacy or Offshore Balancing: A Conceptual Analysis of U.S. Foreign Policy](#), *Modern Diplomacy*.

⁹ Gambrell, J. (August 28, 2024). [Iran's supreme leader opens door to negotiations with US over Tehran's nuclear program](#), *AP*.

Emerging economies will likely experience a moderation in China's economic growth, especially economies characterized by greater trade and financial dependence on China. In terms of investment volume, the difficulty of several countries to repay loans they have received will be overshadowed. This fact led Chinese President Xi Jinping to announce a new phase of investment with smaller projects. However, in 2024, China will continue to fulfill its role as a "lender of last resort", and it will participate in the debt restructuring processes of countries in distress. This activity by China will have an impact on how it is perceived and its geopolitical influence on the "global south".

Israel

Regulation and governance in Israel's maritime domain

Maritime Policy and Strategy: In the past year, there has been no progress in formulating a policy and strategy regarding Israel's maritime domain in the Mediterranean and Red Seas, nor in constitutional regulation regarding this domain. Apart from the Eastern Mediterranean region, where changes are occurring that require the formulation of a maritime strategy, substantial changes are also occurring in the more distant sea areas, both in the Mediterranean and the Red Sea, that require redefining Israeli interests in the region and including them in the process of formulating Israel's maritime policy and strategy.

Regulation: Legally regulating marine areas through the approval of the Marine Areas Bill, 2017 in the Knesset and formulating a regulated policy for managing these areas should be a central interest of the state. Lack of regulation could expose Israel to claims in legal proceedings that will be required for the development of gas fields outside territorial waters. The coalition agreements of the 37th Israeli government, signed in December 2022 between the Likud party and the Otzma Yehudit party, stipulate that "the government will promote a legislative and planning package for marine protection that will include the National Plan for Preparedness and Response to Marine Spill Events Law, the Marine Areas Law (applying Israeli regulation to economic waters), but the issue has not been promoted.¹⁰

Emergency at sea: The 'Israel-Hamas' war has increased the risk of an emergency at sea. Of particular note is the vulnerability of infrastructure facilities (such as desalination and some electricity generation) to significant oil pollution in the water near the coast.¹¹

¹⁰ Coalition agreement to form a national government between the "Likud" party in the 25th Knesset and the "Religious Zionism" party in the Knesset, Article 72 of the agreement, December 28, 2022.

¹¹ The marine environmental protection organization "Tsalul" in collaboration with "Magama Yeruka", "Shomrei HaBait" and "EcoAction" urgently appealed to the chairman of the Knesset's

Damage to gas production rigs, desalination facilities, electricity generation, or damage to vessels whether inside a port or moored at its entrances, may lead to significant environmental emergencies. Unlike other countries, Israel does not have a "Coast Guard" that deals with policing, rescue, handling hazardous materials incidents, etc., and there is no government ministry responsible for handling this type of incident in all its stages (prevention, detection, damage reduction and mitigation, handling its consequences, and restoring the situation to normal).

Demarcation of Israel's maritime borders with its neighbors: The agreement reached between Israel and Lebanon on the maritime border between the two countries, signed in October 2022, severs the dependence between the starting point of the land border line and the maritime border line for the purposes of the agreement only, without the parties waiving their legal claims in this matter. This is the first time that a maritime border agreement has been signed with an enemy state, even though this agreement is not a peace agreement between the parties. The agreement states that the maritime border will be a "permanent and fair solution to the maritime conflict between the parties". Despite the attacks initiated by Hezbollah on strategic installations in the north of the country during the Israel-Hamas war (such as the air control unit on Mount Meron), the organization has not so far attacked the "Karish" (shark) rig, which is located in close proximity to the border line of Israel's and Lebanon's economic waters, and the drones intercepted by the IDF in the area were apparently on an intelligence mission. After regulating the demarcation of the maritime border between Israel and Lebanon, the Ministry of Energy published the fourth tender for gas exploration in Israel's economic waters in December 2022.

In our opinion, and despite the events of the Israel-Hamas War, the maritime border agreed upon between Israel and Lebanon upholds Israel's security interests at sea, creates certainty for investors, and enables the issuance of another exploration tender. Israel still has a long way to go in completing the delimitation of its maritime domain with its neighbors to the south – Egypt and the Palestinian Authority.

Interior and Environmental Protection Committee, demanding that he convene the committee for an emergency discussion on the state's unpreparedness for a sea pollution event with the potential to harm national security during wartime. The "Tsalul" organization simultaneously appealed to the chairman of the Knesset's Economics Committee ahead of the committee's discussion on the water sector's preparedness in a state of war to draw the committee's attention to the fact that the desalination facilities, or the water authority, have no way of detecting the arrival of pollution at the suction inlets, and therefore when there is information or concern about an oil spill near a desalination facility, it is shut down. (See: Authorities – The Israeli Portal for Local Authorities. (October 25, 2023). [Environmental Organizations: Israel is Unprepared for a Sea Pollution Event as a Result of the War](#)).

Recommendations

1. Israel is located on the coast and given the national implications of the maritime domain on the state's security and well-being, it must increase the "maritime awareness" of decision-makers, and not suffer from "maritime blindness".
2. Israel needs to define its borders and sovereignty at sea (including maritime borders in the south of the country), and show that the maritime medium is not open to anyone. This must be done by formulating a policy based on a broader maritime strategy, and promoting three legal procedures: the Maritime Areas Law, the National Plan for Preparedness and Response to Marine Oil Pollution Incidents,¹² and the Planning and Building Law, 1965 (in its current form, it is not appropriate for the nature of activity in the deep sea). The Planning Administration's 2022 "Vision and Policy for Israel's Maritime Domain - Mediterranean" document has not yet been approved by the Israeli government. The document must be a derivative of the Israeli government's maritime policy and strategy, which, as stated, has not yet been formulated and determined.
3. The National Security Council must complete a staff report that will determine the government's responsibility for the operational management of Israel's maritime domain and for building a maritime situational awareness. This body will be responsible for encompassing the policy for the maritime domain and for regulating activity in it on a routine basis, and it is also the one that should be responsible during an emergency. The Israeli government should assign this responsibility to the Minister of Defense, who will activate the National Emergency Authority to carry out the staff report on this issue. In light of the capabilities that the Israeli Navy has developed as part of its role in protecting the economic waters (including the resources allocated to it for this purpose), the Israeli Navy should be responsible for building the overall maritime situation awareness, while the "first responders"¹³ will act according to their areas of responsibility.

¹² The National Oil Pollution Preparedness and Response Plan (NPRP) is an organizational framework that brings together the various parties operating in response to an oil spill, which could cause pollution of the marine environment along the coasts of the State of Israel in the Mediterranean Sea and the Gulf of Eilat. This plan is part of a regional organization for joint treatment and mutual assistance during major pollution emergencies. Although the legal memorandum was published in March 2021 and closed to public comments in May 2021, as of this writing, a bill on the subject has not been placed on the Knesset table to complete the legislation. Furthermore, despite the government's decision from 2008 regarding the need to adopt the NPRP and anchor it in legislation, and despite actions taken by the government on the subject, there is no law that anchors the national plan or its budget.

¹³ First responders are the first professional forces to arrive at the scene of an emergency, such as the Israel Police, Fire and Rescue, MDA, Environmental Protection, and the like.

Naval arm

Protecting Israel's maritime domain in the 'Israel-Hamas' War: On the morning of October 7, the Israeli Navy (like the rest of the IDF) failed in its mission to fully protect the coasts of the State of Israel against terrorist activity from the sea,¹⁴ an activity that the Israeli Navy has thwarted impressively in the past three decades. The Tamar gas rig was proactively shut down by the security establishment with the start of the 'Israel-Hamas' War, even though many resources were invested in protecting the gas rigs in Israel's economic waters.¹⁵

The Maritime Domain in the Russia-Ukraine War: The war between Russia and Ukraine has entered its third year, and while the land battles have not yet been resolved, the Ukrainian Navy has so far achieved extraordinary achievements in the maritime domain of the Black Sea and the Sea of Azov. While adopting the "Fleet in Being" strategy, the Ukrainian Navy managed to sink at least 11 Russian warships and submarines by July 2024, including the cruiser "Moscow", the flagship of the Black Sea Fleet, and about five other ships that were hit or severely damaged. The attacks were carried out using cruise missiles, and advanced naval submarines with high maneuverability, and in some cases also operating in "swarm tactics".

The technologies used by terrorism are advanced civilian-naval technology that can be purchased on the civilian market, such as speedboats, sport diving equipment, and drones, as well as advanced military technology supplied to terrorist organizations by rogue states. These technologies include, among other things, advanced vessels, including midget submarines, various types of missiles, and unmanned aerial vehicles, as well as some local self-made development. The changing nature of naval warfare, along with asymmetric capabilities, can lead to critical negative consequences even against large war fleets. In addition to rockets and missiles, threats to surface vessels such as UAVs and USVs (such as the Magura-V5) are rapidly developing.

¹⁴ The functions of the Israeli Navy are defined as "the tasks of defending the State of Israel, its maritime sovereignty, and the IDF's areas of operation at sea, maintaining freedom of navigation to the State of Israel, protecting strategic facilities in the exclusive economic zone, and providing a security envelope for their continuous operation. This is alongside achieving maritime superiority, integrating into the IDF's deterrence and decisive force, building a maritime intelligence picture, and carrying out special missions and operations, including attack, intelligence gathering, rescue, and extrication". (Recruiters. Naval Forces website. [About the Naval Forces](#)).

¹⁵ The Institute for Maritime Policy and Strategy proposed in a work it conducted in 2021, to locate the production rigs in places where they are better protected (the work is also relevant to the location of the 'Karish' rig). See: Zarhi, N. (July 2018). Vulnerability analysis for alternatives to marine natural gas treatment systems.

The success of using the Area Denial Strategy in the Black Sea through naval mining indicates that the use of this strategy will increase greatly in the future, and may, among other things, serve as a threat to Israeli shipping in the southern Red Sea.

Israel's enemies in the maritime domain have an asymmetrical doctrine, such as Hezbollah in Lebanon, the Houthi movement in Yemen, and to a significant extent the naval branch of the Iranian Revolutionary Guards. Therefore, it is to be expected that the nature of the fighting in Ukraine and the Red Sea will be transferred to arenas closer to Israel.

Securing freedom of navigation to Israel and the maritime blockade imposed by the Houthis on the Bab al-Mandeb Strait: Securing freedom of navigation to and from Israel is one of the important functions of the Navy. While freedom of navigation to Israel and its ports is maintained in the Mediterranean, in the Red Sea, as of the end of November 2023, navigation to and from Israeli ports has been suspended, whether via the Suez Canal or directly to and from the port of Eilat, due to the blockade imposed by the Houthis on this trade in the southern Red Sea.

Without a navy and using asymmetric means, the Houthis imposed a maritime blockade on the port of Eilat, disrupting global trade and to Israel. The Iranian intelligence ship "Behshad" served the Iranian Revolutionary Guards as a command ship and intelligence transfer vessel for the Houthis, and it continued its mission in the region alongside other Iranian ships until April 2024¹⁶. Allowing the Iranian intelligence ships to continue operating in the southern Red Sea and assist the Houthis in enforcing the blockade without an Israeli response, or from the "Guardian of Prosperity" force, was, in our opinion, a mistake.

The State of Israel preferred (and rightly so in our opinion) that the maritime blockade imposed by the Houthis in the southern Red Sea be handled by a multinational task force led by the United States and other Western navies and without Israeli participation. In practice, the force led by the United States has so far failed to ensure freedom of navigation, and the Houthis have even expanded the criteria regarding the vessels that they threatened to attack them. The indirect assistance that the Iranians provided to the Houthis in maintaining the blockade, whether by supplying weapons to attack vessels, or by transferring intelligence on vessel movement in the Gulf of Aden and the southern Red Sea, has not been challenged, as far as is known, by the Israeli Navy. On July 20, 2024, the Air Force conducted Operation 'Yad Aruka' (Long Hand), attacking weapons depots,

¹⁶ *Maritime Executive*. (April 18, 2024). [As Israel-Iran Conflict Heats Up, Iranian Spy Ship Heads for Home](#).

oil depots, power plants, and other military targets of the Houthis in the port city of Al-Hudaydah in Yemen.¹⁷

While maintaining close cooperation between Israel and the US Central Command and the Fifth Fleet, the guarantees given to Israel by the United States in the September 1975 Israel-Egypt Separation Agreement for freedom of navigation in the Strait of Bab al-Mandeb (as well as Gibraltar), like those given at the end of Operation Kadesh (Suez Crisis) in 1956 regarding the Straits of Tiran, are limited in their ability to be implemented in a time of testing. International guarantees are a complementary tool to security arrangements and not an arrangement in itself.

In the Red Sea arena, Israel is required to determine that the goal for ending the war will be complete freedom of navigation to and from Israel. However, this is not enough: assuming that the Red Sea and Gulf of Aden areas will continue to be unstable and dangerous areas and the Israeli Navy will be required to secure the navigation of ships sailing to and from Israel, while cooperating with the US Fifth Fleet and other naval forces operating in the area. Since Iran has recently indicated its intention to expand its activities to the Mediterranean Sea, including its western part in the Strait of Gibraltar area,¹⁸ it must be taken into account that the Israeli Navy will be required to carry out the mission of securing navigation/sailing/movement in both arenas – which will require an increase in the total number of Navy vessels.

In order to fulfill the role that the Israeli Navy has set for itself regarding "integration into the IDF's deterrence and decisive force, and the execution of special missions and operations, including attacks", the Israeli Navy must be equipped with appropriate countermeasure weapons that will allow it to effectively attack targets on enemy coasts that are far from Israel's coasts.¹⁹

Landing craft acquisition: The Israeli Navy and amphibious operations. The Israeli Navy purchased two modern Logistic Support Vessels (LSV) from the United States, which were

¹⁷ The attack was carried out by a formation of fighter jets and reconnaissance aircraft accompanied by an aerial refueling aircraft. This was the first time Israel had attacked Yemen, and this was at a distance of 1,800 km. The attack is the longest carried out by the Israeli Air Force after the attack on the PLO headquarters in Tunisia – Operation Wooden Leg, October 1985, which was at a distance of 2,200 km.

¹⁸ Threat from the Iranian Revolutionary Guards' Commander for Coordination Affairs, Mohammad Reza Naqdi. Nziv.net (December 24, 2023). [Iranian senior official threatens to close the Mediterranean Sea via the Strait of Gibraltar to shipping.](#)

¹⁹ Chorev, S. (August 11, 2024). [Long-range missiles, destructive capabilities key to Israel's response to attacks abroad – opinion](#), *Jerusalem Post*.

named the 'INS Nachshon' and the 'INS Komemiut'. The landing craft are expected to be integrated into multi-armed warfare and enable the IDF to increase its operational ranges. Among other things, the landing craft will be used to transport equipment and fighters in near and far areas of operation. The addition of landing craft to the naval branch is a significant and strategic milestone in maintaining the IDF's operational superiority.²⁰ These landing craft are supposed to serve as a central pillar in a scenario in which a decision is made to conduct a naval flanking and landing operation from the sea, mainly on the Lebanese front. We are convinced that before approving an operation of this type, the Israeli security forces will conduct a situation assessment regarding the level of risk it is willing to take, and regarding the cost-benefit ratio of carrying it out. Against the backdrop of the Israeli Navy's equipping of new landing craft, the Institute for Maritime Policy and Strategy noted in previous works that "the decision to activate the capability of naval flanking and landing from the sea depends on here and now factors". Therefore, decision-makers need to be familiar with the challenges and carefully consider the risks before deciding to activate the option, which could have an impact on the entire campaign, for good and, above all, for bad.²¹

It is likely that today's decision-makers see before their eyes the successful model of a naval flanking operation as carried out in the First Lebanon War in 1982. It should be noted that the magnitude of the threat and risk that existed at the time against the landing force was marginal and negligible compared to the level of threats currently present on the Lebanese coast, and they have since increased tenfold. The main considerations regarding the implementation of a naval flanking operation and a landing from the sea include the following issues:

- The ability to perform sea flanking and landings from the sea is of strategic importance, and therefore the IDF and the Israeli Navy must develop and maintain this type of capability. Among other things, sea flanking and landings from the sea have advantages in transferring combat to the enemy's home front. In a combat scenario, the mere possibility of sea flanking and landings will force the enemy to allocate forces for defense that would not be allocated for combat in other sectors.
- Navy landing crafts are required to physically land on the enemy's coast ("lower the landing craft door onto the coast") and unload the combat ground force, in contrast to the capabilities of other navies that can do this using amphibious vessels.

²⁰ IDF website system, new marines have been accepted into the Israeli Navy and will join the operational activities of the branch, July 27, 2024.

²¹ Shpanier, B. (June 22, 2023). The challenges of naval flanking and landing from the sea for the Navy, Systems, 497, pp. 61–67.

- In any confrontation between a naval flanking force landing from the sea and a defensive force, the former will be in an inferior position.
- The technical data of the landing craft require suitable coasts. It appears that there are very few such coasts (if any) on the relevant Lebanese coasts. It is to be assumed that the enemy is aware of the landing data and the suitable coasts and will prepare accordingly. It is reasonable to assume that the enemy's preparations on the possible landing coasts will include the full range of means at its disposal on land, in the air and at sea.
- In a combat scenario off the coast of Lebanon, it would be difficult to impossible to carry out an effective process of deception regarding the movement of the naval flanking force. It is likely that the movement of the naval force to the landing beach would be discovered and allow the enemy to prepare to thwart the landing.
- As of today, achieving sea control in the classical sense by the Israeli Navy before carrying out the landing is challenging. Hezbollah has weapons that allow it to deny access to the territory, or the landing area (Anti-Access/Area Denial). Therefore, the ability to achieve sea control is the responsibility of the Air Force, and it will not be possible to enter into a process of naval flanking before achieving it.
- As for the weapons in Hezbollah's possession, it must be assumed that this weaponry (UAVs, USVs, UUVs, cruise missiles and ballistic missiles) is manufactured in Iran, and its performance is no less than, and even exceeds, those operated by the Houthis in the southern Red Sea. It must also be assumed that both the Iranians and Hezbollah commanders in Lebanon have monitored the Houthis' activities in the maritime domain, and have carefully analyzed the effectiveness of the various types of weapons used against naval targets, including merchant ships that are similar in size and sailing characteristics to the landing ships acquired by Israel.
- The potential damage in the event of a hit to one of the landing craft carrying forces intended for ground combat is very large, on both the operational and the cognitive level.

Procurement processes in the building of the Israeli Navy's force: The Israeli government decided in May 2022 to establish a state investigation committee regarding transactions or procurement processes for the Saar 6 defense ships, AIP submarines, anti-submarine ships, the privatization of the Navy's shipyards, as well as regarding Germany's agreement to sell submarines to a third party.²² On June 24, 2024, the state investigation committee

²² The committee is headed by former Supreme Court President Asher Grunis. The government's decision determined that the committee would examine the vessel procurement processes, and determined that the committee would investigate the professional work processes as well as the

regarding the vessels announced that it had sent warning notices to five individuals, including the former Navy commander.

Recommendations

1. The operational failure of the landing of some of Hamas' boats on the Zikim coast at the start of the 'Israel-Hamas' war must be investigated by the Israeli Navy, whether or not the Ashdod area received advance warning of unusual terrorist activity in the Gaza Strip.
2. One must take into account the Iranians' desire to expand their influence in the Mediterranean (possibly through Algeria or the rebel organizations in the territory of Western Sahara), which could in the future pose a threat to Israel's freedom of navigation in the central and western Mediterranean as well.
3. Consideration should be given to the intelligence excursions carried out by Hezbollah using drones, the first of which focused on prominent naval sites in Haifa Bay, including the area where the Israeli Navy's missile ships are anchored and infrastructure facilities in the Greater Haifa Port. In addition to the moral significance of such sorties, they should also be seen as a signal of recognition of their strategic value, and marked as possible targets for Hezbollah to attack if the situation escalates.
4. In order to secure shipping to and from Israel, both in the Red Sea and the Mediterranean, the Israeli Navy's naval force must be increased so that it can operate as an independent task force in each of the arenas, and the Navy's equipment must be approved with ships called "Reshef Replacement".²³ In recent years, the Israeli Navy commanders have expressed on several occasions their desire for the Israeli Navy to participate in missions such as the attack on Yemen.²⁴ To this end, the Israeli Navy must acquire standoff maritime-based firing capabilities for attacking targets of this type on the coast, build an appropriate combat doctrine (Military tactics) for this purpose, and fulfill its role as the long-range naval branch of the IDF.
5. It is essential that those responsible for the maritime domain in the State of Israel, including its naval branch, also draw the lessons from the events of the naval campaign between Russia and Ukraine (which has asymmetrical characteristics on the part of Ukraine, but also included other events such as: the failure of Russian

decision-making processes of the political echelon in all matters related to vessel procurement processes and transactions as detailed above, and would also give its opinion on the existing procedures relating to these matters.

²³ Rojkes Dombe, A. (July 27, 2024). [The Israeli Navy wants a replacement for the Saar 4.5 by 2027](#), *Israel Defense*.

²⁴ Sharvit, A. and Raz, D. (April 2018). "From the "Naval Service" to a Strategic Branch – Thoughts on the Naval Branch in 2048". *Systems*, Issue 477, pp. 19–25.

landing operations planned in Ukraine, the operation of submarine swarms to damage Russian surface vessels, and the attack and sinking of Russian vessels in ports, understand the changes in the nature of warfare in the maritime domain – and accordingly make the necessary changes in the structure of the naval force, and adapt its operating doctrine to the unique characteristics of Israel. It is fitting that an appropriate response will be developed to the changes in the nature of warfare. Such a response must find the appropriate balance between reliance on the technological component and the conceptual and organizational component, and in order to succeed in this type of process, the Israeli Navy is required, among other things, to invest in training those involved in the field to think strategically about the maritime arena.

6. The attack on an inactive Russian production rig in the Black Sea, which was used to disrupt navigation, as well as the sabotage of the 'Nord Stream' gas pipeline, must draw the Israeli Navy's attention to this type of scenario, as part of the Israeli Navy's role in protecting Israel's economic waters.
7. We believe that today, when weighing the opportunities and risks inherent in landing significant forces from the sea, the scales tip in favor of the latter. When deciding on this type of operation, the country's leaders need to be familiar with this scenario. We ask that the scenario presented to them will be true, clear, and, above all, balanced in relation to the complexity of the operation.
8. Implementing the conclusions and lessons of the investigation committee on the procurement of the defense ships and submarines is essential for the Israeli defense system in general, and for the Israeli Navy in particular. The Israeli Navy and the Israeli security forces must discuss this issue within the system itself, and implement these conclusions in the procedures for the development, procurement, and equipping of future platforms and weapons without waiting for the investigation committee to complete its work.

Maritime infrastructures and their protection

With the outbreak of the Israel-Hamas War and the threat to the Tamar production rig, the Israeli security forces ordered a temporary halt to the supply of natural gas from the reservoir. On November 9, approval was received to resume gas supplies from the Tamar reservoir²⁵. The implication of a longer future interruption of gas supplies is that it will not be possible to supply all of Israel's electricity consumption using coal reserves, and diesel will have to be used.

²⁵ Kofrak, N. (November 19, 2023). [Effects of the "Israel-Hamas" War on Natural Gas Supply and the Electricity Sector](#), Knesset Website, Research and Information Directorate, p. 1.

The Israeli Navy provided constant protection for the gas production facilities, and in the early stages of 'Israel-Hamas' war, it successfully worked to destroy Hamas' naval capabilities in the area.

On August 10, 2024, Ukrainian naval forces attacked and damaged a former offshore gas platform used by Russian forces in the Black Sea. In this context, it is also worth mentioning the sabotage of the 'Nord Stream' 1 and 2 gas facilities that occurred in late 2022 and was recently attributed to Ukraine. Damage to the production platforms and their transmission pipelines is one of the reference scenarios for which the Israeli Navy is supposed to prepare and prevent.

After the demarcation of the maritime border between Israel and Lebanon was settled, the Ministry of Energy published the fourth tender for gas exploration in Israel's economic waters in December 2022. The Ministry of Energy announced that all exploration will only be conducted more than 40 km from the coast, after a strategic-environmental survey has been conducted on the matter. Hence, it would be appropriate to continue additional offshore gas exploration alongside the development and construction of facilities for the production of renewable energy.

Recommendations

1. Testing of coal and diesel storage reserves for a situation in which all of Israel's natural gas reserves are shut down for an extended period. The test should also take into account the international supply chains of coal and diesel (according to the plan, the National Coal Company – a subsidiary of the IEC – is supposed to cease operations in 2025).
2. In addition to securing the existing gas fields carried out by the Israeli Navy, it is necessary to conduct an analysis of vulnerabilities to alternatives to offshore natural gas treatment systems, and to include additional possible scenarios following the discovery of additional gas deposits and the development of new threats.
3. It is necessary to examine the form of protection of underwater communication cables that connect Israel to Europe, and how they should be protected.
4. Examining the use of unmanned vessels, both overwater and underwater, which in other advanced navies have already passed the operational proof stage, and can serve as an effective operational response to protect infrastructure.
5. Relocating infrastructure to the sea. The operation of the 'Karish' rig on a floating platform proved the feasibility of placing national infrastructures on artificial islands and floating platforms. It is necessary to examine (in accordance with the government

decisions made on this issue) the relocation of additional infrastructure to the sea for the purpose of clearing land area.²⁶

6. The State of Israel must formulate a policy regarding the location of future rigs, while examining all relevant considerations. The State of Israel must make it clear to future franchisees that, since it is responsible for and finances the protection of the rigs, it will determine their location, and they will be forced to adapt to this.

The resilience of Israel's supply chains

In the past four years, supply chains around the world and in Israel have been challenged by three significant events. The first was the COVID-19 pandemic, the second was the war between Russia and Ukraine, and the third was the 'Israel-Hamas' war in Gaza, including in the Red Sea area. Israel depends on maritime trade (for example, food imports), and therefore the robustness of Israel's supply chains is part of national security. The supply chain is examined throughout, and parts of Israel's maritime supply chains are not necessarily related to the sea, such as boycotts or sanctions in the country of origin of the goods.

In the maritime section, several aspects can be described:

- Commercial logistics infrastructure: The logistics infrastructure includes three significant components: physical infrastructure (seaports and the equipment therein), mobile infrastructure (physical ships and maritime personnel) and administrative aspects (such as insurance, maritime law, lease agreements, etc.).
- Cyber Defense.
- Ensuring freedom of navigation and securing ports from kinetic damage (both in shipping lanes and in protecting ports from missiles, rockets, and UAVs).

The arrival of international shipping to Israel: In the era of precision missiles and drones, and in a multi dimensional war as developed in the 'Israel-Hamas' war, all of Israel's ports in the Mediterranean Sea and the Gulf of Eilat are under threat from this type of weapon. The development of the fighting and the threat to the ports could lead to a situation in which ship-owners will refuse to enter Israeli ports and unload their cargo.

The presence of international shipping in Israeli ports has been affected. Following the need for ships from the far east whose port of discharge was supposed to be Israel to

²⁶ Government Resolution No. 472 of October 25, 2020, which requires that within a decade, the preparations of all government agencies be completed so that the activity of the petrochemical industry in Haifa Bay is stopped, is an opportunity to determine which infrastructure will be located on artificial islands in the sea and to prepare accordingly.

choose a route around Africa, several companies decided to bypass Israeli ports and to tranship their containers at another port in the eastern Mediterranean (in a process known as "termination of voyage"). In early January 2024, the Chinese shipping company COSCO announced that it was joining its subsidiary, OOCL, in suspending maritime shipments to Israel. Before the suspension of shipments to Israel, COSCO had a weekly container service to the Haifa bay port, which is operated by a subsidiary of the Shanghai Port Group (SIPG).

In the Mediterranean, the port of Ashdod suffered from rocket fire in the first weeks of the war, which led to some ships scheduled to arrive at this port being diverted to unload their cargo at the port of Haifa. There was a significant increase in the premiums for war risks, mainly for ships calling at the ports of Ashdod but also at the ports of Haifa. Ships that were on their way to Israel loaded with grain, wheat and soybeans tried to cancel their contracts because they did not want to endanger their crews, and the ship-owners announced that they were activating a "force majeure" clause.²⁷

Following the war in the south and fears of a flare-up in the north, the Fuel Administration recommended allowing any ship intended to supply crude oil to the Israeli economy to pass through the Suez Canal and enter the Port of Eilat. However, the Houthis and Iraqi militia forces managed to launch missiles and drones towards the port, most of which were intercepted, and one of them managed to damage infrastructure inside the naval base in Eilat. Therefore, it appears that the solution for the Port of Eilat to serve as an emergency port to receive crude oil is not complete, and preparations must also be made to defend the Port of Eilat.

Recommendations

1. Israeli-controlled shipping appears to be a national necessity. The policy set at the time of the privatization of the Zim²⁸ company "has lost its appeal". Therefore, establishing a new policy on securing an "Iron Fleet" for the State of Israel must be accepted as part of the formulation of a maritime policy and strategy for Israel, and must address connectivity in emergency situations, both in the shipping and port sectors, and not allow matters to develop by default.

²⁷ Yefet, A. (October 19, 2023). [Concerns about food security in Israel: Grain ships refuse to arrive at ports](#), *Calcalist*; Etzion, A. (August 14, 2024). [Naval blockade of Israel even before the first missile: "Lack of functionality in ports in case of war"](#), *Walla*.

²⁸ In 2004, the Israel Corporation acquired the remaining government-owned shares of ZIM, thus completing the privatization process of ZIM. The current ownership structure was determined after extensive reorganization processes conducted in 2014.

2. Israel's seaports are its critical strategic infrastructure, and must not be entrusted to foreign ownership (in cases of foreign partnership, it must be ensured that the majority control [at least 51%] is in the hands of the Israeli company). The decision made by the government tender committee that disqualified the Turkish company 'Yilport Holdings' in 2022 from participating in the tender to operate the Haifa port was correct due to the unstable relations between Israel and Turkey.
3. A clear policy must be established on issues that remain open in the context of competition in ports (piers 7-8, 5% limits, etc.) in order to complete the transition to full competition between ports.
4. One of the roles of Israel Port Authority in the Ministry of Transportation is to "recruit, train and certify seafarers and ensure the existence of a training and certification infrastructure for seafarers". It appears that the authority is not fulfilling this role. A comprehensive program for training Israeli seafarers should be announced, and at the same time, exemptions from the Israeli crew requirement that were granted to shipping should be gradually abolished.²⁹
5. The National Emergency Authority, together with other relevant government ministries, should examine increasing the country's emergency stock to the point where it will not be possible to operate the ports for an extended period. In addition, the possibility of transporting goods using smaller vessels to harbors like Hadera, which are less threatened in a war scenario, or unloading via landing ships or barges (these are temporary measures for small trade volumes) should be developed.
6. The State of Israel must prepare a plan for insurance coverage for both the goods (implemented) and the ships themselves, based on negotiations with international insurers and budgeting for agreed bank guarantees from insurance companies.
7. It is appropriate that the Israel Port Authority investigate the events that occurred during the war, and update the Maritime Transport Authority's instructions in times of emergency, regarding its duties, its system of interactions with the National Emergency Authority and the Israeli Navy, and in light of the lessons learned, update its duties and responsibilities in times of emergency.

Preparing to deal with threats from cyberspace

The annual report of the National Cyber Directorate, published in early April 2024, shows a significant increase in reports of cyber incidents to the command compared to 2022. According to the command's calculations, this is an increase of approximately 43%. The

²⁹ According to the Shipping (Seafarers) Regulations (Ship and Tugboat Crews with Israeli Crew), 2016, it is mandatory to man the ship or tugboat with an Israeli safety crew, the composition of which will be determined according to the size and function of the vessel.

report also notes 800 cyber incidents with significant potential for damage that were prevented in the period between October 7 and December 31, 2023.³⁰

Recommendations

1. Regulation in the field must be made mandatory, while focusing on the main technological vulnerabilities, tightening the audits of the rig owners and energy companies operating in Israel's territorial and economic waters in the context of cyber defense, and building a multi-system and inter-ministerial work plan.
2. A plan must be devised that will enable national preparedness to deal with a reference scenario, starting with a cyber-attack on marine energy infrastructure operating off the coast of Israel, and ending with widespread damage and consequences in terms of human life, the environment, the economy, and security.
3. Planning for the response to the cyber threat in the maritime domain should be reflected in training, building counter-technical tools, and organizational operations necessary for cyber defense on that vessel. The thinking or planning should be integrated within the traditional fleet structure.³¹
4. The National Center for Blue Economy and Innovation, located in Haifa, has a vision to promote a strategic plan for the marine economy, investments in infrastructure, research and technologies, and recommendations for adapting regulation to existing needs and challenges - must include maritime cyber as one of the core topics for encouraging entrepreneurship in the field.

Regional development initiatives in the day after 'Israel-Hamas' war

The Israel-Hamas War indirectly caused a pause on regional initiatives that had developed in recent years, especially the Abraham Accords. Before October 7, 2023, it may have seemed that the United States' vision for the Middle East was being partially realized thanks to the Abraham Accords, the United States' defense agreement with Saudi Arabia that was supposed to lead the kingdom to normalize its relations with Israel, and the United States' implicit understandings with Tehran regarding its nuclear program (in which the Islamic Republic of Iran effectively halted further development in exchange for limited financial relief) – but all of these were halted. The joint announcement by the United States and India in August 2023 of plans for an ambitious trade corridor (India–

³⁰ National Cyber Directorate. (December 24, 2023). [A new report by the National Cyber Directorate, intended for cyber men and women, summarizes the first months of the Iron Sword War in the cyber dimension and states: An increase in the intensity of cyber-attacks against Israel.](#)

³¹ Dombrowski, P., and Demchak, C. C. (2014). Cyber War, Cybered Conflict, and The Maritime Domain, *Naval War College Review*, 67(2), p. 7.

Middle East–Europe Economic Corridor – IMEEC) that would connect India to Europe via the Middle East to offset China's rising influence through the Belt and Road Initiative (BRI) has also been put on hold for now, although recent events in the southern Red Sea only reinforce the commercial need for such a corridor.

Israel-Jordan Relations – In November 2022, a memorandum of understanding was signed between Israel, Jordan, the United States, and the United Arab Emirates to advance the solar power plant project in Jordan, and the water desalination plant in Israel for the purpose of sharing electricity and water between the countries. This is an important step that meets the interests of all parties, as Jordan's stability and addressing its water shortage are in Israel's interest, as is the ability to buy "clean" electricity from Jordan, and overcome the shortage of land in Israel for this purpose.³² In March 2024, Jordan asked Israel for a one-year extension of a separate water-for-energy agreement reached in 2021, which also includes the United Arab Emirates. The agreement stipulated that Israel would double its freshwater exports to Jordan in exchange for energy from a UAE-sponsored solar project in Jordan. The project was supposed to be officially launched at the UN COP28 climate conference in Dubai in December 2023. However, relations between Israel and Jordan deteriorated in late 2023 following the outbreak of the 'Israel-Hamas' war, and the various initiatives were paused. In order to get the water-for-solar energy deal back on track, Israel sought to reduce anti-Israeli statements and return Jordan's ambassador to Israel. In May 2024, Israel renewed the water transfer agreement to Jordan for six months. Jordan's dependence on gas and water from Israel is also very prominent during the war, and therefore it is likely that such and such statements from the Jordanians regarding the cessation of economic cooperation with Israel or the pausing of the renewable energy project are temporary "lip service" until the end of the war.

Israel-Egypt relations – The shutdown of the Tamar rig at the beginning of the war damaged exports to Egypt, and worsened the multiple power outages it has already been suffering from since the beginning of the summer due to a serious malfunction in the Egyptian 'Zohar' gas field. Egypt's dependence on Israeli gas has only increased this year, as has Egypt's desire to promote additional projects to expand gas exports to it. To this end, it must strive for stable and positive relations with Israel. The memorandum of understanding between Israel, Egypt and the European Union includes agreements to preserve Israel's interest in natural gas originating from reservoirs within its territory – 'Karish-Tanin', 'Leviathan' and 'Tamar' – in a way that preserves Israel's energy security, including prioritizing the needs of the local market. The agreement between Israel, Egypt,

³² Spokesperson's statement. (November 8, 2022). [The leading Israeli climate initiative has now been signed: The Ministry of Energy continues to promote the Prosperity projects \(purchasing green electricity from Jordan and selling water to Jordan\)](#), Ministry of Energy and Infrastructure.

and the European Union concerns the flow of natural gas from Israel to Egypt, where it will undergo a liquefaction process, and then be sent to Europe via tankers by sea, although as long as the difficulties in production from the Egyptian 'Zohar' field continue, most of the gas from Israel will be used by Egypt for its own needs.

Israel-Greece-Cyprus Relations – In October 2022, Cyprus and Greece inaugurated the construction phase of the EuroAsia Interconnector – an EU-funded submarine cable that will cross the Mediterranean Sea with up to 2,000 megawatts of electricity to eventually link grids from Israel and Cyprus to Greece. At this stage, only the first part of the project between Cyprus and Greece has been approved. The "EuroAsia Interconnector" is another major infrastructure project that strengthens the EU's energy security by connecting Cyprus to the EU's electricity grid.³³

Recommendations

1. Through regional development initiatives, it will be possible, "the day after" the 'Israel-Hamas' war, to strengthen the geopolitical axis headed by the United States and the Sunni Arab states (the United Arab Emirates, Jordan, Saudi Arabia, and Egypt) and Israel, through the economic well-being necessary for the countries of the region. Progress in regional initiatives and cooperation, especially in the areas of energy, water, and regional connectivity (such as the Eastern Mediterranean Gas Forum),³⁴ will make it possible to build a system of confidence-building measures, which may later lead to political solutions regarding which there are still deep disagreements between the countries of the region.
2. It seems that economic initiatives regarding improving the situation of the population in the Gaza Strip, related to the maritime domain and supported in the past by international entities and moderate Arab states (and in part also by government entities in Israel), such as a seaport in Gaza and the development of the offshore gas reservoir in the coastal waters of the Strip - will be raised again the "day after" the 'Israel-Hamas' war, and it is appropriate that they be taken into account by the entities dealing with the issue.

³³ Reuters. (October 14, 2022). [East Med gas could help ease Europe's energy crunch with right funding - officials](#).

³⁴ The East Mediterranean Gas Forum (EMGF) is an international organization, founded by Italy, Greece, Israel, Jordan, Egypt, France, Cyprus and the Palestinian Authority. The organization was informally established in 2019, its official charter was signed in September 2020, and it officially entered into force on March 9, 2021.

Israel-Turkey relations

Israeli-Turkey relations have had their ups and downs during Erdogan's 21-year rule, but the president has never harmed trade between the countries. The 'Israel-Hamas' war changed the trend from one end to the other, when the Turkish imposed a sweeping ban on trade with Israel, which also harmed many Turkish industrialists. The Turkish president's threat of military action against Israel – which will not win him many points with his NATO allies or the US Congress – is not the first time he has done so. Turkey has vetoed all NATO engagement with Israel, including joint meetings and exercises, since October 2023, and sees Israel's "massacre" of Palestinians in Gaza as a violation of NATO's founding principles.

Due to Turkey's control of the Turkish Straits and in addition to the oil pipeline system that passes through its territory, it can also harm the fuel supply to Israel.³⁵ In practice, Israel has become dependent on Caucasian and Kazakh oil, which currently provides it with about 60% of its consumption: Kazakhstan supplies 40% of Israel's oil imports through Russian-controlled ports on the Black Sea and from there through the Turkish Straits, and Azerbaijan supplies a little more than 20%, through the BTC pipeline that passes through Turkish territory.

Turkey has also increased its naval involvement in two areas in the southern Mediterranean and East Africa that give it influence in these regions: the first area is in Libya – as part of cooperation with the Government of National Accord (GNA), with which Turkey signed a memorandum of understanding for the economic waters between the two. In addition to this agreement, Turkish naval vessels have been stationed for certain periods in the Gulf of Syrtis, and have been assigned berths in the Misrata port.

The second area in which Turkey has increased its involvement over the past year is the maritime area of Somalia, an area for which Turkey signed an agreement for the protection and utilization of marine resources in the maritime area of Somalia.

Recommendations

1. On the economic front, it seems that the Israeli economy will be able to find the balance point, whether by finding alternative sources for goods imported from Turkey, or through indirect trade. However, we recommend avoiding a sweeping anti-Israel boycott on imports from Turkey as proposed by the Ministries of Finance and Economy, and carrying out reciprocal measures in coordination with Israeli industry and importers' associations.

³⁵ Feldman, N. (January 2, 2024). [Israel's Oil Trap: Will Erdogan Stop the Flow?](#) *TheMarker*.

2. On the security front, Israel must address a number of aspects stemming from the deterioration in relations, such as challenging Israel in maritime operations, for example flotillas to Gaza, or the use of the Turkish navy in operations against Israeli shipping in the eastern Mediterranean under the pretext of preventing security supplies that could be directed to Israeli military activity in Gaza, or against Hezbollah in Lebanon.
3. In an extreme scenario, Turkey could disrupt oil supplies, and for this, alternative sources must be prepared.

Climate change preparedness and a sustainable marine system

In recent years, various countries have shown increasing interest in the impacts of climate change, not only from a civilian perspective but also from a security perspective, and the issue is gaining high prominence among policymakers. The prevailing view in Western countries is that climate change must be perceived as an existential security crisis. The ongoing climate change and the implications it has for life on Earth cannot be ignored. The expansion of the 'Israel-Hamas' war and its transformation into an inter-power conflict could divert global attention from addressing the issue.

The maritime sector plays an important role in reducing greenhouse gas emissions, and technological innovation in new propulsion methods can contribute greatly to the issue. The campaign underway in the Red Sea is negatively affecting some of the issues, as the extension of shipping lanes and the need to meet delivery deadlines require the maritime industry sector to sail at higher speeds than before, and for longer periods of time, which has a negative impact on reducing emissions. European market initiatives such as 'InteReg Europe' aim to bring together various entrepreneurial audiences to share innovative and sustainable solutions to regional development challenges, and in particular in the "Green Transition" program: supporting the transition towards a sustainable, low-carbon economy and promoting environmental protection.³⁶ Israel in general, and the National Center for Blue Economy and Innovation and the Institute for Maritime Policy and Strategy Research in particular, should join the voices calling for innovative solutions in this area.

In July 2024, the Ministry of Environmental Protection published the first phase of the National Climate Change Preparedness Plan,³⁷ and is promoting the "Climate Law" that will provide a binding framework for preparing the government plan and ministerial

³⁶ [Interreg 2021-2027: Fostering Cooperation for a Stronger Europe](#)

³⁷ This plan is being promoted by virtue of Government Resolution No. 4079 of July 29, 2018: [Israel's Preparation for Climate Change Adaptation: Implementation of Recommendations to the Government for a National Strategy and Action Plan](#).

preparedness plans and monitoring their implementation, alongside mitigation and other climate efforts. The National Preparedness Plan is designed to locate and map the areas affected by climate change in Israel, identify how they are affected, and initially prioritize and formulate key measures to reduce risks and seize opportunities in these areas. The plan includes 48 steps/measures and approximately 200 tasks that approximately 30 ministries and government entities must promote and carry out in the coming years, with the aim of improving Israel's preparedness for the climate crisis.³⁸

About 80% of world trade is conducted at sea, and the maritime economy produces services and products worth three trillion dollars annually. Despite these impressive figures, the world of innovation and startups in Israel is still not fully utilizing the enormous resources that exist in this field worldwide.

Recommendations

- Developing marine technologies in the field of de-carbonization (reducing or eliminating carbon dioxide emissions from a process such as energy production or production) to integrate into the global trend of making the marine economy "greener".
- Implementing and budgeting the national climate change preparedness plan for its marine aspects, such as preparing coastal infrastructure for extreme events.

³⁸ Ministry of Environmental Protection. (July 1, 2024). [The Ministry of Environmental Protection publishes the first phase of the National Climate Change Preparedness Plan.](#)

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The Institute for Maritime Policy and Strategy (MPS) began its activities in 2024 within the framework of the Hi-Center company and Israel National Center for Blue Economy (operating with the support and funding of the Haifa Municipality Economic Company) after incorporating the activities of the Center for Maritime Policy and Strategy Research, which had operated at the University of Haifa since 2016. The Institute's vision is to be a leading and unique interdisciplinary Israeli research institute and knowledge center in the world in the fields of maritime policy and strategy in the broadest sense, with an emphasis on the Eastern Mediterranean and Red Sea regions. The Institute engages in research in the following eight core areas:

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Maritime Policy, Strategy and Maritime Security; Regional Security and Foreign Policy; Maritime Supply Chain; Maritime Law; Energy and Infrastructure; Blue Economy, Environment, Sustainability and Climate Change in the Maritime Space; Technology and Innovation in the Maritime Sphere; Cyber in Maritime Sphere

The 'Iron Swords' War, which broke out on October 7, 2023, continues to shape the reality in Israel and the entire region. The Strategic Assessment 2023/24 offers an initial analysis of the events, focusing on the maritime space, with the understanding that the full picture of the consequences of the war – which has not yet ended – will be numerous and profound and will become clearer over time.

The report was written by researchers from the MPS and Strategy, research fellows of the Institute, and other researchers with unique knowledge of these issues.

