

# **MAKING WAVES**

*A maritime news brief covering:*

- **MARITIME SECURITY**
- **MARITIME FORCES**
- **SHIPPING, PORTS AND OCEAN ECONOMY**
- **MARINE ENVIRONMENT**
- **GEOPOLITICS**

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# MARITIME SECURITY

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## NAVY CHIEF TO VISIT UNIT DISPATCHED TO STRAIT OF HORMUZ

Chief of Naval Operations Adm. Sim Seung-seob will embark on a trip to Oman and Thailand next week and visit an anti-piracy unit deployed to the Strait of Hormuz, the Navy said Friday.

The six-day visit, which will kick off Sunday, is aimed at boosting maritime security cooperation with the two countries and supporting South Korea's broader pitch to expand exchanges with Southeast Asia, it said.

During his stay in Oman, Sim will visit the 4,400-ton destroyer Wang Geon of the 300-strong Cheonghae Unit and meet the soldiers dispatched there.

The Cheonghae Unit has been on an anti-piracy mission in the Gulf of Aden off Somalia since 2009 and broadened its mission areas into the Gulf of Oman and the Persian Gulf last month amid heightening tensions in the region.

This expansion followed Washington's request for contributions to its campaign to secure the waters off Iran. Seoul decided not to join a U.S.-led coalition but is operating independently, in apparent consideration of its relations with Tehran.

While in Thailand, Sim will meet with military officials to discuss ways to expand defense cooperation between the two sides and seek understanding for scaling down the number of South Korean soldiers participating in the 39th Cobra Gold exercise, set to kick off in the Southeast Asian country later this month.

South Korea has decided to send just over two dozen soldiers to the multinational exercise due to the new coronavirus, modifying its earlier plan to send 400 service personnel and eight assault amphibious vehicles.

**Source:** [en.yna.co.kr](http://en.yna.co.kr); 14 February 2020

## BOXSHIP MAERSK TEMA ATTACKED BY PIRATES IN GULF OF GUINEA

The container ship *Maersk Tema* has been attacked by pirates off the coast of Guinea, confirmed ship manager BSM on Friday.

AIS tracking shows that on Friday morning, the *Maersk Tema* was under way and making 20 knots off São Tomé in the Gulf of Guinea. At about 0805 hours GMT, at a position about 100 nm to the northwest of São Tomé, she dropped speed to 3.5 knots. She then drifted northeast at half a knot for the remainder of the day.

A BSM spokesperson told Ekstra Bladet that two small vessels approached *Maersk Tema* while she was under way, and the crew initiated emergency procedures. The local authorities have been alerted.

*Maersk Tema* is a 2015-built container ship managed by BSM, and she has a capacity of about 5,000 TEU. Her ownership transferred from Oaktree Capital Management to a holding company in 2019. According to Maersk Group, she is not a Maersk ship, and photos show that she does not wear the Maersk livery.

**Source:** [maritime-executive.com](http://maritime-executive.com); 14 January 2020

## JAPANESE PANEL PROPOSES USING RED AND WHITE FLAG AS TSUNAMI WARNING

- JIJI

An expert panel of the Meteorological Agency has proposed that a red and white checkered flag be used to swiftly convey tsunami warnings to people with hearing impairments at seaside resorts.

A test conducted at a beach in Yokohama found that a red and white checkered flag is easy to see for people with color vision deficiency, the panel said Thursday.

The panel said the flag is also effective for evacuating people from abroad as it has the same design as an international maritime signal flag warning of danger.

The shorter side of the flag should be at least 1 meter long so people can see it from a long distance away, the panel said.

The agency will revise related regulations around June to call for the use of flags with this design. Possible examples include the flag being waved by lifeguards and raised at tsunami evacuation towers.

“The flag will be effective not only for the hearing impaired, but a wide range of people at noisy beaches,” said Atsushi Tanaka, a professor at the University of Tokyo and head of the panel.

**Source:** [japantimes.co.jp](http://japantimes.co.jp); 14 January 2020

# **JAPAN INTERCEPTS CHINESE MILITARY AIRCRAFT 523 TIMES IN 9 MONTHS**

- **Franz-Stefan Gady**

Japan has seen a rise in the number of Chinese military aircraft approaching Japanese airspace over the last nine months.

Japan Air Self Defense Force (JASDF) fighter jets scrambled fighter jets 523 times to intercept Chinese People's Liberation Army Air Force (PLAAF) and People's Liberation Army Navy Air Force (PLANAF) aircraft between April 1 and December 31, 2019, the Ministry of Defense (MoD) in Tokyo announced on January 29.

The 523 scrambles by the JASDF constitute a 9.9 percent increase compared to last year and are the second highest total for the period. The peak year for JASDF scrambles against foreign military aircraft remains 2016 with 1,168 reported sorties. Out of the 1,168 scrambles that year, 851 were conducted against PLAAF and PLANAF aircraft.

As in previous years, most interceptions of Chinese planes took place over the East China Sea. Japan reported an uptick in surveillance missions by Shaanxi Y-9JB (GX-8) electronic warfare and surveillance planes through international airspace between the Japanese islands of Okinawa and Miyako in the East China Sea in June 2019.

The PLAAF and PLANAF also repeatedly flew Xian H-6K long-range bombers and Xian H-6G maritime strike bombers over the Miyako Strait in 2019. The strait is a principal entryway for the People's Liberation Army Navy (PLAN) into the Pacific Ocean.

Chinese military aircraft intercepts constitute 70 percent of the total number of JASDF scrambles.

JASDF fighter jets also responded 216 times to Russian military aircraft approaching Japanese airspace, down from 270 times during the same period in 2018.

In 2018, 64 percent of the total, or 638 scrambles were against PLAAF and PLANAF aircraft, up from 500 in 2017. The JASDF conducted a total of 343 scrambles in 2018, or 34 percent of the total against Russian military aircraft, down from 390 in 2017.

Russian military aircraft conduct the majority of their missions along the eastern rim of the Sea of Japan and north of Hokkaido. Russian long-range bombers — principally nuclear-capable Russian Tupolev Tu-95MS strategic bombers — have also periodically circumvented the main Japanese islands during long-range patrols.

Russian Air Force aircraft — two Tu-95MS bombers and one Beriev A-50 airborne early warning and control aircraft — have reportedly also violated Japanese airspace on three occasions between April and December 2019.

Scrambles against Chinese and Russian military aircraft were conducted by the JASDF's Northern Air Defense Force, the Western Air Defense Force, the Central Air Defense Force,, and the Southwestern Composite Air Division.

The JASDF uses Mitsubishi F-15J/Kai all-weather air superiority fighters, F-2 multirole fighter jets, a Mitsubishi license-produced variant of Lockheed Martin's F-16, and F-4EJ/RF-4 Phantom II fighter aircraft for intercepts.

In total, the JASDF scrambled its fighters 742 times during the last nine months of 2019 in response to foreign aircraft and a total of 983 times between January 1 and December 31, 2019.

**Source:** [diplomat.com](http://diplomat.com); 4 February 2020

## TWO MORE PIRACY INCIDENTS IN SINGAPORE STRAIT

ReCAAP Information Sharing Centre issued an Incident Alert on Sunday regarding incidents involving ships while underway in the eastbound lane of Singapore Strait.

Two incidents occurred on February 9 within an hour to ships while underway in the eastbound lane of the Traffic Separation Scheme (TSS).

At about 0220 hrs the bulk carrier *New Spirit* was boarded by six perpetrators while underway at about 5.1 nautical miles from Nongsa Point, Indonesia. They were armed with knives when seen in the engine room but ran onto the deck when they saw the crew. The master mustered the crew in the bridge, and no perpetrators were found when the ship was later inspected by the Singapore Police. Nothing was reported stolen.

At about 0252 hrs the tanker *Swarna Jayanti* was underway at about 6.2 nautical miles from Nongsa Point when the crew sighted one perpetrator in the engine room. The master raised the alarm, mustered the crew and conducted search. Some valves (engine spares) were reported missing from the engine room.

As no arrests were made, there may be further incidents, warns ReCAAP ISC.

These incidents bring the tally to six incidents reported in the Singapore Strait since January 2020, all in the eastbound lane of the TSS.

31 incidents were reported in the Singapore Strait in 2019. Of these, 17 occurred to ships while underway in the eastbound lane of the TSS and 14 occurred in the westbound lane. All ships are advised to exercise utmost vigilance, adopt extra precautionary measures and report all incidents immediately to the nearest coastal State.

**Source:** [maritime-executive.com](http://maritime-executive.com); 9 February 2020

# MARITIME FORCE

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## MODERNIZED NAVY ADDS FURTHER MUSCLE TO TURKEY'S ASPIRATION TO PROTECT NATIONAL INTERESTS

- AYŞE BETÜL BAL

Recent global developments, including the ones concerning the Eastern Mediterranean, have once again brought power and capabilities of the navies of coastal states to mind and the Turkish navy is no exception.

Ankara has placed itself at the center of the latest discussions due to its determination to protect its rights both on land and offshore amid interdependent geopolitical and military developments encircling the country and has been expanding and modernizing its navy by leaps and bounds by taking steps to transform the defense industry with domestic projects.

In an exclusive interview with Daily Sabah, Ret. Navy Capt. Alp Kırıkkanat, a maritime defense and security consultant said several developments in the near past, including the Cyprus Peace Operation and the arms embargoes implemented on Turkey, following it appeared as a big step pushing Turkey toward locally modernizing its navy, despite its success with limited capacity at the time.

Within the following process, the Turkish navy "in addition to the national activities in the surrounding seas, has also carried out NATO duties in the remote seas and served with ships and other combat elements in the United Nations peace support activities," he said, by benefiting from the domestic projects.

Most recently, the Turkish Presidency of Defense Industries (SSB) released video footage showing the Multi-Purpose Amphibious Assault Ship TCG Anadolu anchoring to side dock at Sedef Shipyard in Istanbul's Tuzla district for harbor competency tests.

The TCG Anadolu is a landing helicopter dock (LHD) type amphibious assault ship that was modeled on Spanish LHD Juan Carlos and is expected to enter the Turkish Naval Forces' fleet toward the end of this year, further contributing to the aim of steadily modernizing the navy fleet while reducing its outside dependency by replacing the already-existing vessels with domestically produced ones.

The Anadolu, the navy's flagship-to-be vessel, often dubbed "Blue Homeland," will surely strengthen Turkey's hand in regional politics, concerning its maritime borders. Along with enabling the country to operate overseas when needed, it will safeguard Turkish-flagged vessels anywhere they sail. It will also participate in the humanitarian missions that the navy carries out.

The Turkish LHD will be able to host a battalion-sized force along with flight and command personnel and although the length of its flight deck is not long enough for classic warplanes to land and take off, the Anadolu has six spots where medium load transport, assault or general-purpose helicopters can land and take off along with other two spots that provide a landing platform for heavy cargo transport helicopters.

The TCG Anadolu will be able to carry many light and heavy armored vehicles, including the wheeled and tracked ones. It will have the capacity to carry up to 30 wheeled vehicles, including armored amphibious vehicles and armored personnel carriers on its light vehicle deck. The vessel's hangar enables at least 12 medium load helicopters to be transported, while the number can be increased with additional helicopters carried on the light vehicle deck, depending on the vessels' mission. The heavy vehicle deck at the top of the carrier's pool provides the transportation of heavy and tracked vehicles such as tanks along with other kinds of armored heavy vehicles.

The Anadolu provides the transportation of up to nearly 45 tanks, again, depending on how the vehicles are positioned on it and the vessel's mission—ranging from amphibious war to power transfer, along with the non-military tasks such as humanitarian aid, search and rescue, medical assistance or natural disaster support in variety of areas, including in the Aegean, Black Sea and Mediterranean and, if necessary, in the Indian Ocean (north of the Arabian Peninsula, west of India) and the Atlantic Ocean (west of Europe, northwest of Africa).

The launchpad constructed on the Anadolu's deck provides a vertical landing for aircraft, such as the Lockheed Martin's STOVL (Short Take-Off / Vertical Landing) F-35Bs. This proved to be a deadlock issue between the U.S. and Turkey as it was announced previously by U.S. President Donald Trump that Turkey would be expelled from the joint F-35 program over disputes between Washington and Ankara. This means it will be capable of assisting air operations as well, though limited, such as performing close air support.

Though the country's first domestically made warplane TF-X National Combat Aircraft (MMU) is being developed in a move to replace the F-16 fighter jets, the dispute between Turkey and its NATO ally on the F-35s, including the world's one of two STOVL aircraft F-35B, appears to be an object of interest, considering the Anadolu, once again highlighting the importance and urgency of overall nationalization process in defense industries.

The U.S.' removal of Turkey from the F-35 program, in which Ankara was both manufacturer and buyer, came as a move after Turkey purchased Russian S-400 air and missile defense systems, which Washington argues could be used by Moscow to obtain classified details on the jet, along with its being incompatible with NATO systems. Turkey, however, counters that the S-400 would not be integrated into NATO systems and would not pose a threat to the alliance, underlining that the U.S. has initially pushed Ankara toward deciding to pursue alternative sellers after the U.S. refused to sell its Patriot systems.

## **Projects for mid-scale global capability**

In 2015, Turkish Naval Forces in their strategy report announced the aim to bring the Turkish Navy to the upper league, from a navy capable of medium-scale regional power transfer to a "Navy with Medium-Scale Global Power Transfer Capability."

The 48-page report lays down a path for the modernization of the navy. It outlines the regional and global developments, in which the construction of an LHD was included in six to 10 years of plans, along with Air Defense War Frigates, Combat Support Ship, New Generation Mine Hunting Ships and Submarines with Air Independent Drive Systems. A project for the construction of TF-2000 air defense frigate was also included in the navy's strategy plans, first of which will be added to the navy's inventory by 2023. The air defense frigate is one significant step for a country located in between three seas, all of which may face, different, yet interdependent escalations.

One crucial project that gave acceleration to the domestication of navy was the MİLGEM project that was initiated in 2000 to locally design and built a new line of multi-purpose frigates and corvettes that will replace the older ones. TCG-Heybeliada, which is one of the pride ships designed and built nationally within the scope of the project, was commissioned by the Naval Forces Command in 2011, TCG-Büyükada in 2013, TCG-Burgazada in 2018 and lastly the TCG-Kınalıada in 2019. The MİLGEM project has enabled the design of a corvette type military ship to be nationalized for the first time, thereby reducing external dependence in ship design, shipbuilding and system integration while bringing the participation of local industry up to 70% and providing job opportunities to more than 50 local companies.

In an interview with Daily Sabah, naval architect and marine engineer Semih Zorlu from Istanbul-based SEFT ship design & engineering said that this project can be considered as a milestone for the nationalization and replacement process of the navy vessels, which also brought up the cooperation and knowledge and experience sharing of military and the private sector which not only sped up the process but also made it open to further steps of exporting the local designs.

Evaluating the military-private sector cooperation on joint production of navy vessels or other naval equipment, Zorlu said the private sector can be considered "more dominant in technology and innovations, competitive solutions, cost-effective and high-quality products, which are advancing rapidly due to its dynamic and competition intensive structure," thus it is the best way to reach a good design and product with low initial investment is to cooperate with the industry.

Coast Guard Search and Rescue Ship Project carried out by the RMK Shipyard, New Type Patrol Boats Project carried out by the DEARSAN Shipyard, Landing Ship Project by the ADIK Shipyard, Submarine Rescue Ship, Rescue and Backup Vessels and Seismic Research Vessel by Istanbul Denizcilik can be included within the projects that were carried out by the private sector shipyards and then delivered to the Naval Forces. Zorlu gave the examples, noting that several others are still underway such as the fleet replenishment vessel (DIMDEG) Construction Project, together which can increase the domestication rate up to 85% in near future.

Similar to Kırıkkanat, Zorlu also said: "Despite the limited capabilities of our navy, it played a key role in the Cyprus Peace Operation in 1974 by successfully carrying out the amphibious operation, which was considered to be the most arguably militarily undisputed operation, and ensured that the amphibious and ground troops landed in Cyprus at the same time, along with naval gunfire support," arguing that the navy was using old vessels back than some of which had already completed their economic lives when purchased, and now the country is capable of "designing and producing its own frigates. We do not have to buy the ships that foreign countries have already used."

In 1974, following a coup aimed at Cyprus' annexation by Greece, Ankara had to intervene as a guarantor power. In 1983, the Turkish Republic of Northern Cyprus (TRNC) was founded. The operation, which was Turkey's first military operation abroad in the Republican era, followed two-decades of intercommunal violence where Turkish Cypriots were targeted by Greek Cypriot pro-independence militia during the British colonial rule, and after independence, Turkish Cypriots were confined to enclaves starting from 1963 to protect themselves against Greek militia groups.

### **Local contractors supply missiles, sensory equipment**

Weaponry and sensory systems and command control software have also been on the top list of the defense industry's agenda, to domestically meet the needs of the navy, along with other command forces. One such system, the New Generation Network-Assisted Data Integrated Combat Management System (ADVENT SYS), developed in cooperation with Turkey's leading military systems developer HAVELSAN and the Naval Forces Command Research Center Command (ARMERKOM), is being installed on the TCG Anadolu, making the warship the second vessel to use the homegrown system after the TCG Kınalıada. Weapon and sensor systems of the TCG Kınalıada was also domestically developed by the leading defense contractor ASELSAN.

The country's first domestic maritime missile ATMACA, developed by the major defense contractor Roketsan, will also be equipped on Turkish ships soon, in a bid to replace currently used Harpoon missiles.

Tests on ASELSAN's Multipurpose Phased Array Radar ÇAFRAD is expected to be completed soon, which will be used on the national air defense frigates.

### **Modernized navy for maritime trade**

Turkish Navy, apart from safeguarding its geostrategic rights, with a mission to protect any Turkish-flagged merchant ships, as well, as to operate on behalf of a country surrounded by sea on three sides with 8,985 kilometer of coastline with an advantage in maritime trade and transportation, along with transnational pipelines passing through its territorial waters.

Zorlu highlighted the importance of naval capabilities in this regard, in all areas from transportation to fishing and scientific research, saying that the country now has two seismic research vessels and two drill vessels.

"Among these, MTA Oruç Reis seismic research vessel was designed by SEFT Ship Design company entirely by Turkish engineers and was built in the Istanbul Shipyard. The ship has the capability of 3-dimensional seismic research with 8 seismic cables, each 8000 meters long, and it is also capable of conducting geology, hydrography and oceanography studies," he noted.

Although those currently operating in Eastern Mediterranean, namely the Yavuz and Fatih drilling ships were purchased from other countries due to the necessity of fast action, Zorlu noted, "Turkey has shipyards that export these kinds of ships to Norway to operate in the northern sea which means, under the scope of a planned projects, those operations can also be carried out by domestic vessels in the future."

### **Strongest navy in the Eastern Mediterranean**

Among the other three regional countries with strong navies, namely Egypt, Greece and Israel, in the eastern Mediterranean where Turkey has been conducting drilling activities with two seismic vessels under the scope of its territorial rights, Turkey has the strongest navy, though there are several different aspects of such a comparison. Not only it has the largest navy, quantitatively, next to Egypt, whose navy is large but mostly out serviced thus still can't outnumber that of Turkey's, Turkish navy is also one of the most modern navies in the region.

"With 16 frigates, 10 corvettes, 19 armed fast patrol boats, 12 submarines and other auxiliary elements, we have a considerable fleet in the region," Kırıkkanat evaluated. Four İ-class frigates are also under construction to be added to the fleet, among others.

Kırıkkanat noted that the numbers are not always the indicators of power all alone, however, the Turkish navy with its current fleet "can successfully carry out national and alliance missions in several different seas at the same time," adding the logistics support infrastructure is very strong with experienced shipyard and maintenance units.

Turkish Naval Forces have conducted the Blue Homeland-2019 naval exercise between Feb. 27 to March 8, 2019, with 103 ships in the Black Sea, the Aegean and the Mediterranean simultaneously.

Commenting on the navies of Eastern Mediterranean coastal states, Kırıkkanat stressed: "The Greek and Egyptian navies are different from each other at first glance but one common thing is that they have many foreign warfare weapons, vehicles and equipment. This is a major disadvantage in terms of logistics integrity, repair capability and possible modernization plans," adding that the Greek navy is old and the economic crisis and foreign debts that must be paid by 2060 pose a significant obstacle to the implementation of many defense projects in the neighboring country, along with creating an obstacle for the modernization of already existing vessels.

Kırıkkanat said that similar to Greece's, the Egyptian navy also needs modernization while the new purchases do attract quite an attention.

"Although two multi-purpose amphibious ships, one frigate and one corvette from France, along with two submarines of German origin added a certain strength to the navy; it seems quite difficult for them to create a concept with ships purchased from U.S., Russia, Germany, England, France and South Korea," he said.

Egypt has purchased its first multi-purpose amphibious ship from France which was originally intended for Russia but was not delivered due to sanctions imposed upon Moscow, following its annexation of Crimea.

Israeli Navy, with advanced submarines and indigenous advanced sensors, electronic warfare and weapon systems, on the other hand, is quite at the fore especially when compared to those of the Egyptian and Greek navies, though it is the smallest of all four relevant navies, including Turkish, with 3 corvettes, 8 assault boats and 5 submarines, Kırıkkanat said.

Recent disputes arising from the share of exploration rights of offshore natural gas fields in the Eastern Mediterranean, which has only accelerated after the Greek Cypriot unilaterally declared its Exclusive Economic Zones (EEZs) by illegally crossing into Turkey's territorial waters, has only been escalated tensions between the Turkish Republic of Northern Cyprus (TRNC), the Greek Cyprus, Turkey, Greece, Egypt and Israel. Meanwhile, Turkey, though having come a long way, should maintain its focus on domestically developing the needs of its command forces, experts say, the Navy being the forefront.

**Source:** [dailysabah.com](https://www.dailysabah.com);9 February 2020

## **PHOTO REVEALS TURKISH SUBMARINE IS FIRST WITH NEW CAPABILITY**

- **Hi Sutton**

Turkey is emerging as a new player in the international submarine business. A Turkish Navy submarine was spotted passing through Istanbul on January 30 with new equipment. Trained eyes spotted an array of twelve white circles just above the waterline. This appears to be the business end of the locally developed Zargana anti-torpedo defense system.

Ship spotters often report interesting vessels transiting between the Mediterranean and Black Seas. The Bosphorus Strait goes through Istanbul where the photographers have easy access to the waterfront. A lot of Russian military hardware destined for Syria goes that way for example. Thanks to an international law known as the Montreux Convention, foreign submarines are forbidden to transit there under most

circumstances. So the submarines which pass the waiting cameras are invariably Turkish.

This submarine is believed to be TCG *Anafartalar* (S356), a German designed Type 209/1400 Preveze Class submarine. It is one of four of the class which was built locally at the Gölcük Naval Shipyard. They are going to be given a Turkish developed mid-life upgrade (MLU) over the next few years so this new defensive system may be part of that.

The Zargana Countermeasure System has been developed by Aselsan to protect submarines from incoming torpedoes. It does this by launching salvos of acoustic 'deceptors' and 'jammers.' These are small torpedo-like objects which are launched from tubes under the submarine's casing. The deceptors imitate the acoustic and movement characteristics of the targeted submarine. This misleads the torpedo into homing in on the wrong target. Meanwhile the jammers emit a broadband high-level noise that drowns out the operating frequencies of most acoustic (sonar) homing torpedoes. This sort of decoy system is known as 'soft kill' in defense circles.

Other countries also load torpedo countermeasures aboard submarines, although information is hard to come by about this secretive aspect of underwater warfare. The Russian Navy has fielded the much larger 'Barrier' system since the Cold War. This has decoys similar to the Zargana, and may now also include actual mini-torpedoes which try to hit the incoming torpedo.

Turkey is actively marketing the Zargana system. It is known to have been exported to Indonesia for their own Type-209 submarines. And Turkey is upgrading some of Pakistan's Agosta class submarines with the system. These French designed boats will carry part of Pakistan's nuclear deterrent in the form of the Babur cruise missile.

Turkey is also developing an indigenous submarine which may use the system

**Source:** [forbes.com](https://www.forbes.com); 2 February 2020

## **SCANDAL-RIDDEN NAVAL SHIP TONGYEONG TO GET NEW SONAR**

A Navy rescue ship will be equipped with a British-made, brand-new sonar system, officials said Thursday, six years after the vessel's system was found to be unfit for military operations amid criticism it's no better than a fish finder.

The issue of the substandard sonar system for the 3,500-ton Tongyeong came to light in 2014, when it was to be mobilized for search and rescue operations following the deadly sinking of the Sewol ferry in April of that year.

Investigators later found corruption cases involved in the course of selecting its parts suppliers.

"The Defense Acquisition Program Administration is now putting a sonar system made by Thales Group in the Tongyeong, which is to be completed this week," a Navy officer said. "Then the Navy will test it until early March."

The ship was completed in 2012, but the Navy had refused to accept delivery, complaining that it did not work properly.

Except for hull-mounted sonar systems and remotely operated underwater vehicles, however, the ship turned out to have met military requirements, so the Navy accepted it in 2015 and has put it into operation.

"The new sonar system is expected to enable the ship to fully carry out its due role," another official said.

**Source:** [en.yna.co.kr](http://en.yna.co.kr); 13 February 2020

## **QATAR MAY BECOME FIRST PERSIAN GULF ARAB STATE TO OPERATE SUBMARINES**

- Julia Simpson

Qatar has signed a new memorandum of understanding (MoU) with Italian firm ob supplying the submarines to the Middle Eastern country. Thus, Qatar could be the first-ever Arabian state to operate those watercraft, according to Forbes USA.

Qatar is reportedly strengthening its naval forces. The Arab country expected to acquire submarines from NATO member Italy and turn into the first Persian Gulf Arab country with such cutting-edge naval vessels. So far, Iran is the only submarine operator in the Persian Gulf.

The company Fincantieri, one of the most powerful European shipbuilders, covers the "supply of cutting-edge naval vessels and submarines" to the Qatari Emiri Navy

As the state report reads, the Qatari submarines, which are likely to be relatively small light ones, could become an integral part of a much larger EUR 5 billion deal with Italy which was agreed in 2017.

The accord, it noted, included a large helicopter carrier, called a Landing Platform Dock (LPD), four warships and two patrol boats as well as shore support and help with a new offshore naval base. Arab world countries are intensifying their military readiness

It further said that Saudi Arabia and the UAE, two of Qatar's neighbours embroiled in a diplomatic crisis with Doha, have both stated needs to acquire submarines.

The roots of the regional tensions are in 2017 conflict between Persian Gulf countries. Then, Saudi Arabia, Egypt, Bahrain, and the UAE imposed a land, naval and air blockade on import-dependent Qatar, accusing Doha of supporting terrorism. Any kind of this allegation strongly denied by Doha.

The Saudi-led bloc presented Qatar with a list of demands and gave it an ultimatum to comply with them or face consequences. Meanwhile, Doha is steadily refusing the demands and stressed that it would not abandon its independent foreign policy.

**Source:** [politicallore.com](http://politicallore.com); 10 February, 2020

## **BOLLINGER DELIVERS USCGC EDGAR CULBERTSON, THE 37TH FAST-RESPONSE BOAT**

Bollinger Shipyards delivered the USCGC Edgar Culbertson, the 37th fast-response cutter (FRC), to the U.S. Coast Guard on Feb. 6 in Key West, Florida, the company said in a release.

Each FRC is named for an enlisted Coast Guard hero who distinguished himself or herself in the line of duty. The Culbertson is named after the boatswain's mate first class petty officer who died in the line of duty while trying to rescue three teenage brothers during a fierce storm in Duluth, Minnesota, in April 1967. Culbertson was posthumously awarded the Coast Guard Medal for his bravery and heroism.

"We are very pleased to announce the latest FRC delivery," said Ben Bordelon, Bollinger's president and CEO. "The USCGC Edgar Culbertson is the second of three fast-response cutters to be home-ported in Galveston, Texas. The industrial base of over 600 local men and women at Bollinger constructing these high-quality vessels have consistently delivered over half of the program of record to date, with the highest quality, on schedule and within budget."

"While providing the United States Coast Guard with an extremely capable and affordable asset, the Bollinger FRC program also provides tremendous benefits to ... Louisiana, not only through highly skilled and well-paying jobs, but also through its direct and indirect spending, resulting in millions of dollars of economic benefits to the state," Rep. Steve Scalise (R-La.) said.

The 154-foot Sentinel-class has a flank speed of 28 knots, state-of-the-art command, control, communications and computer technology and a stern launch system for the vessel's 26-foot cutter boat.

Senior Coast Guard officials have described the FRC as an operational "game-changer." The cutters have been deployed as far as 4,400 nautical miles from homeport, highlighting the FRC's operational reach and capability.

**Source:** [seapowermagazine.org](http://seapowermagazine.org); 14 FEBRUARY 2020

# SHIPPING, PORTS AND OCEAN ECONOMY

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## EURONAV PURCHASES THREE VLCCS OFF-THE-BLOCKS

- Craig Jallal

Euronav has used its healthy balance sheet to purchase three VLCCs currently under construction at DSME for an aggregate purchase price of US\$280.5M

Euronav has stated that the three VLCC newbuildings will be financed by existing borrowing facilities and debt capacity. There will be an increase in leverage but the company feels this will be in line with corporate policy.

Euronav chief executive Hugo De Stoop said “The large tanker fundamentals remain constructive despite substantial headwinds surrounding economic activity linked to the novel coronavirus [Covid-19] that we believe and hope will be temporary. Current disruptions to the freight market have provided an opening for Euronav to be opportunistic and deliver what we believe will be long-term value for our stakeholders. This transaction demonstrates our flexibility and our capacity to seize opportunities thanks to a strong balance sheet and a robust liquidity position.”

Some observers might see the acquisition of scrubber-equipped VLCCs as going against reported Euronav philosophy but the company has been clear that it would purchase scrubber technology if there was a business case. Also, it would be difficult to purchase ECO VLCCs off-the-blocks that were not already equipped with scrubbers. Euronav stated the purchase would lower the average age of the fleet and the company recently sold and lease-backed three older tankers.

Euronav has not identified the specific VLCCs other than to report delivery will be in Q4 2020 and in January and February 2021 respectively and will therefore have exposure to the key winter freight markets in 2020/2021.

DSME currently has 14 VLCCs on order or recently launched (2020 and 2021), according to VesselsValue. Four VLCCs are allocated to the Hunter Group, three to Oman Shipping Company, four to Sinokor, two to Maran Tankers and one to an undisclosed contractor.

**Source:** [rivieramm.com](http://rivieramm.com); 12 February 2020

## **GLOBAL OIL AND IRON ORE DEMAND HIT HARD BY CORONAVIRUS**

Global demand for oil and iron ore is falling as the coronavirus epidemic has brought industrial activity to a standstill in China, the manufacturing hub of the world.

Global oil demand is expected to shrink by 435,000 barrels a day on the year in the three months to March, the first quarterly decrease in more than a decade, the International Energy Agency said in a report Thursday. The IEA also slashed its 2020 growth outlook by 365,000 barrels a day from its January forecast to 825,000 barrels a day, the lowest since 2011.

China accounts for 14% of worldwide oil demand. Global demand has been “hit hard by the novel coronavirus (COVID-19) and the widespread shutdown of China’s economy,” the latest report said.

The virus outbreak will likely weaken global demand by 1.1 million barrels a day, or a little over 1%, in the first quarter and by 345,000 barrels in the second quarter, the IEA predicted. These forecasts are based on the assumption that demand will gradually normalize starting in the second quarter. But the energy watchdog warned that the epidemic is ongoing and an accurate analysis is difficult.

The jet-fuel market has been hurt by suspension of China flights. Singapore’s jet fuel, the benchmark for Asia, is trading at around \$65 a barrel, down 10% from before the Lunar New Year holiday in late January and the lowest in about two and a half years.

Crude oil futures are trading around \$52 a barrel in New York, sliding more than 20% from early January — when tensions heightened between the U.S. and Iran — to the lowest level in a year.

Producers are growing wary. The Organization of the Petroleum Exporting Countries on Wednesday slashed its 2020 global demand growth forecast to 990,000 barrels per day, down 230,000 barrels per day from its January projection.

The downgrade came after a technical committee of the OPEC members and their allies — a group known as OPEC Plus — recommended a production cut of 600,000 barrels per day at the end of their Feb. 4-6 meeting. This followed a reduction of 1.7 million barrels per day that the group had agreed to implement starting in January.

Russia, a member of OPEC Plus, has not indicated its support for the recommendation. “A suspected lack of the group’s unity might push prices down further,” said Tomomichi Akuta, chief researcher at Mitsubishi UFJ Research and Consulting.

As for iron ore, China imported 1.06 billion tons in 2019, an estimated 70% of worldwide imports.

Chinese demand had been expected to stay flat in 2020, but the virus epidemic has thrown this prospect into doubt. Spot prices on Australian iron ore heading to northern China have fallen to \$85-90 a ton, down \$8 from before the Lunar New Year break.

Iron-ore brokers are growing cautious, anticipating a slowdown in China's steel output.

Hunan Valin Steel says many of its business partners remain closed while it continues to run blast furnaces. This makes it impossible for the steelmaker to decide on the scale of a production cut, a company official says.

"The current situation forces steelmakers to adjust output, which loosens the supply-demand balance for iron ore," said an official at a trading company.

**Source:** [hellenicshippingnews.com](http://hellenicshippingnews.com); 17 February 2020

## **LIBYA'S OIL BLOCKADE LOSSES AT US\$ 1.4 BN: NOC**

- Sami Zaptia

In its latest information bulletin on the oil blockade of ports and pipelines released yesterday, Libya's state National Oil Corporation (NOC) confirmed a drop in production to the current level of 191,475 b/d, as of Wednesday February 12, 2020, with losses at US\$ 1,380,468,480.

The NOC renewed its call for all blockades to be lifted to allow it "to resume production immediately, for the sake of Libya and its people".

It reported that it continues to supply hydrocarbons to the Central and Eastern regions in sufficient quantities to meet the transport and domestic needs of citizens. A gasoline tanker was unloading yesterday at Benghazi port. The city of Tobruk and the rest of the Eastern region is being supplied directly from Benghazi.

Storage facilities in Tripoli and some surrounding areas, as well as in Southern regions, are still facing supply shortages due to the security situation, it added.

The NOC said that it was very concerned about supply to the power stations in the area (North Benghazi and Zueitina). Crude oil storage at Zueitina port is full, resulting in the shutdown of the Faregh oil field resulting in the loss of 100 million cubic feet of gas per day, it explained.

The NOC warned about disinformation regarding the current fuel situation, published by non-NOC sources.

The NOC also welcomed the adoption by the UN Security Council of Resolution 2509 authorizing measures against the illicit export of crude oil and other petroleum products from Libya, continuing to allow member states to inspect designated vessels on the high seas.

It also condemned attempts by the eastern based “Libyan Government” to take control of its General Administration of Inspection and Measurement. It stressed that this body plays a crucial role in the oil export process and answers to the NOC in Tripoli. Attempting to interfere with its work is illegal under Libyan law. Successive resolutions by the UN Security Council have condemned attempts by parallel institutions to export Libyan oil and warned of UN sanctions against those individuals responsible, it concluded.

It will be recalled that the NOC had declared a state of force majeure at all its major oilfields and ports on 18 January blaming the move on “blockades on oil exports” imposed by the Khalifa Haftar-led Libyan National Army (LNA).

**Source:** [libyaherald.com](http://libyaherald.com); 13 February 2020

## SMART LNG SIGNS AGREEMENT FOR FINANCING OF ICEBREAKING LNG CARRIERS

- David Rowlands

Sovcomflot has announced that SMART LNG, LLC – a joint venture (JV) of Sovcomflot and NOVATEK – has signed an agreement with VEB.RF Group for lease financing of four Arc7 icebreaking LNG carriers for the Arctic LNG 2 project.

SMART LNG has also signed long-term time charter agreements for these tankers with Arctic LNG 2 LLC. In October last year, SCF Group signed financing and long-term time charter agreements for the lead vessel in this series.

According to the statement, these vessels will be constructed at Zvezda Shipbuilding Complex, taking into account the experience gained from operating *Christophe de Margerie* – the world’s first icebreaking LNG carrier, which was introduced in 2017.

This has led to the integration of numerous advanced engineering solutions into the vessels’ design. These will provide higher icebreaking capabilities and manoeuvrability when operating in the challenging conditions across both the Western and the Eastern sectors of the Russian Arctic, compared with Arc7 gas carriers serving the Yamal LNG project. According to the statement, the vessels will be operated under the Russian Federation flag. The Russian Maritime Register of Shipping (RS) will provide technical supervision during the construction of the vessel series

**Source:** [lngindustry.com](http://lngindustry.com); 11 February 2020

# **CABINET GIVES IN-PRINCIPLE APPROVAL FOR SETTING UP A NEW MAJOR PORT AT VADHAVAN IN MAHARASHTRA**

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has given its 'in-principle' approval for setting up a Major Port at Vadhavan near Dahanu in Maharashtra.

Total cost of the project is likely to be Rs.65,544.54 crore.

Vadhavan port will be developed on "land lord model". A Special Purpose Vehicle (SPV) will be formed with Jawaharlal Nehru Port Trust (JNPT) as the lead partner with equity participation equal to or more than 50% to implement the project. The SPV will develop the port infrastructure including reclamation, construction of breakwater, besides establishing connectivity to the hinterland. All the business activities would be undertaken under PPP mode by private developers.

The position of JN Port, the biggest container port in India is 28<sup>th</sup> in the world with a traffic of 5.1 million TEUs (Twenty-Foot Equivalent Units). Even after the completion of 4<sup>th</sup> terminal at JN Port with a capacity increase upto 10 million TEUs by 2023, it will stand as the 17<sup>th</sup> largest container port in the world. With the development of Vadhavan port, India will break into the countries with top 10 container ports in the world.

Maharashtra has India's largest container port at JNPT which caters to the hinterland of Maharashtra, North Karnataka, Telangana and secondary hinterland of Gujarat, Madhya Pradesh, Rajasthan, NCR, Punjab and Uttar Pradesh. There is a need for a deep draft port that will accommodate the largest Container Ships in the world and also cater to the spill over traffic from JNPT port once its planned capacity of 10 million TEUs is fully utilized. JNPT and Mundra, the two largest container handling ports of the country (for mid size container ships only), have drafts of 15 M and 16 M respectively, while the world's largest container handling modern deep draft ports require a draft of 18M-20M. The Vadhavan port has a natural draft of about 20 meters close to the shore, making it possible for it to handle bigger vessels at the port. Development of Vadhavan port will enable call of container vessels of 16,000-25,000 TEUs capacity, giving advantages of economies of scale & reducing logistics cost.

The ever increasing size of container ships makes it imperative that a deep draft container port in West Coast of India is developed. Increasing containerization of cargo in the wake of value-added manufacturing sector makes it important to prepare our port infrastructure for handling value-added import and export to facilitate manufacturing activity. Container traffic in the JNPT hinterland is expected to grow

from 4.5 MTEUs currently to 10.1 MTEUs by 2022-25 when JNPT's potential will be fully exhausted. The demand for container traffic will further accelerate after the plans for improving logistic infrastructure fructify and the 'Make in India' push drives greater exports and manufacture sourcing to India.

**Source:** [pib.gov.in](http://pib.gov.in); 5 February 2020

# MARINE ENVIRONMENT

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## STUDY: HOW CHANGES IN SHIPPING PATTERNS AFFECT WHALES

- Dr Jessica V. Redfern

Understanding how changes in shipping traffic and distributions of fin, humpback, and blue whales in the Pacific Ocean affect the risk of whales being struck by ships is the focus of a new study published in the scientific journal, *Frontiers*. The findings also have implications for highly endangered North Atlantic right whales in the Atlantic Ocean.

Off the West Coast, ship strikes are one of the biggest risks for fin, humpback, and blue whales. Unlike other studies that assess risk using a single year of ship traffic data, this study looked at multiple years of both ship traffic data and predicted fin, humpback, and blue whale distributions off California.

Among the findings, the location of shipping traffic determined risk. Since blue and humpback whales tend to occur nearshore, risk was higher for them when ships travelled close to the coast. Fin whales, however, tend to occur farther offshore so the risk was higher for them in most regions off California when ships travelled farther away from the coast. Redfern and her colleagues also found that the traffic pattern with the highest risk (i.e., ships traveling close to or far from the coast) was the same across all years of predicted whale distributions. The risk didn't change because the whales were returning to the same feeding grounds.

“This result caught me by surprise,” said Redfern. “I was expecting to see more variability in the whale distributions. I found it really interesting that the locations with the highest predicted number of whales were the same among years.”

The consistency in risk is the key to finding management solutions. It means shipping lanes, speed limits, or no-go zones could help minimize risk as long as they are planned in relation to these areas with consistently higher numbers of whales. But, it is complicated by the fact that the risk from shipping traffic depends on each whale species' distribution.

“My research is about identifying areas where we expect there to be lots of whales and planning our human activities in areas where there will be fewer whales. This planning ensures that we are using the ocean wisely and sustainably,” Redfern said. Her work began in La Jolla, California, at the National Oceanic and Atmospheric Administration's Southwest Fisheries Science Center. There she developed models to

map the spatial distribution of many ocean species, helping the U.S. Navy plan training exercises so that they minimized impacts on marine life.

On the East Coast, since the Gulf of Maine is warming faster than most of the world's oceans, whale feeding patterns and distributions are changing. As water temperatures rise, some whales are moving farther north to find food. These changes could expose them to new risks, including increased ship strike risk. The locations of shipping lanes have been moved in the past to accommodate and protect endangered North Atlantic right whales as they migrate from Florida up to Canada. Redfern is excited about the tools she has developed to assess risks to marine species and looks forward to using them to solve conservation challenges on the East Coast.

**Source:** [marinelink.com](http://marinelink.com); 7 February 2020

## **MITSUBISHI JOINS SCRUBBER CLUB WITH FIRST INSTALLATIONS**

- Malcolm Latarche

Japanese shipbuilder and marine equipment manufacturer Mitsubishi Shipbuilding has reported that it has successfully installed its first two exhaust gas cleaning systems with its DIA-SOx R series fitted to two container vessels.

The first two units of the scrubber were retrofitted onboard ultra-large container ships of 20,000teu and 14,000teu capacity and received approvals from classification societies, Lloyd's Register and ClassNK and consequently from the Panama and Singapore as the flag states involved.

The two units were tested and proved to remove at least 97% of the SOx content from the exhaust gas meeting the requirements for equivalence to using 0.1% sulphur fuel.

The DIA-SOx R series was jointly developed by Mitsubishi Shipbuilding and Mitsubishi Hitachi Power Systems, (MHPS). Its rectangular tower design is claimed as the most suitable for ultra-large container ships, and its multi-stream configuration can simultaneously treat with a single tower, exhaust gas discharged from multiple engines, including main engines with outputs over 75,000kW. Moreover, its simplified configuration helps the ship crews to conduct the maintenance work easier.

For the drydock installations on the two vessels, Mitsubishi Shipbuilding and MHPS jointly dispatched professional teams in parallel to a repair yard located in Zhoushan, China, and completed the commissioning work in five days. Much smoother and shorter than originally planned through collaboration with the ship owner, the yard and the classification societies despite the congested site condition.

**Source:** [hipinsight.com](http://hipinsight.com); 6 February 2020

## END OF FISHING BAN THREATENS AMAZON'S PINK DOLPHINS

The Amazon river dolphin is an intelligent and friendly mammal that appears to grin and flush like a human blushing when it gets excited.

But some are concerned about the world's largest freshwater dolphin coming under threat again in Brazil, where fishermen hunt and kill it illegally to make bait for a catfish called piracatinga.

A legal moratorium on fishing the piracatinga ended last month, prompting calls for its renewal from environmentalists and researchers such as biologist Vera da Silva, who has worked to preserve the so-called pink river dolphins for 25 years.

"I never stop being amazed by them. They are fascinating animals," Silva said as her team used a net to bring in dolphins to be examined, measured, marked and released again in the Mamiraua Sustainable Development Reserve.

"We captured a dolphin mother and her calf today and saw them calling out to each other. They have a very strong relation until the calf becomes independent after three years. Like other dolphins, they make whistling sounds through blowholes to communicate underwater.

What sets them apart is a slow transformation from gray to pink as they age. Behavior and exposure to sunlight also influence color changes in the "boto vermelho" or "red dolphin," as the creatures are known in Brazil. They can turn as bright pink as a flamingo.

Their active courting and mating gave rise to a legend in the Amazon that the pink dolphin morphs into a handsome man at night to seduce village women.

The Mamiraua reserve, run by the Amazon research institute INPA, spans 11,000 square kilometers (4,300 square miles) of flooded rainforest and wetlands and is located three days up the Amazon by boat from Manaus, the capital of Amazonas state.

With their elongated beaks tied carefully, the dolphins are brought to a floating research center in the Mamiraua reserve, where members of Silva's team take blood samples and use a syringe to suction milk from dolphin mothers for testing.

A dolphin's pregnancy typically lasts 13 months and then it feeds a calf underwater for two years. Due to the long nursing period, females only reproduce every three to five years, Silva said.

That makes them more vulnerable to extinction if their population is depleted. Prosecutors in Amazonas state, who asked for the catfish ban in 2015, warned then that as many as 2,500 dolphins were being killed each year for bait.

Though they are relatively abundant, and found across South America's vast Amazon and Orinoco river basins, Silva fears the Amazon dolphins could disappear like the

Yangtze river dolphin did in China in 2006, following years of overfishing and pollution.

“We don’t want the dolphins to become just a legend of Amazonia,” Silva said.

**Source:** [japantimes.co.jp](http://japantimes.co.jp); 8 February 2020

## OCEAN CONFERENCE HAS POTENTIAL TO BE A ‘GLOBAL GAME- CHANGER’

- Ulla Nordlinder

The second global Ocean Conference taking place in Portugal in a few months’ time promises to be “a critical moment” for the health of life under water and on land, the President of the UN General Assembly said on Tuesday, as preparations got underway.

“Life under water is essential to life on land”, said Tijjani Muhammad-Bande. The ocean produces “half of the oxygen we breathe” and provides food for millions of around the world, playing a “fundamental role in mitigating climate change as a major heat and carbon sink”.

The Ocean Conference, which will run in Lisbon from 2 to 6 June, aims to propel science-based innovative solutions in the form of global ocean action.

The worldwide ocean economy is valued at around \$1.5 trillion dollars annually, as aquaculture is the fastest growing food sector and 350 million jobs world-wide are linked to fisheries.

“A healthy marine environment holds untold potential for achieving the entirety of the Sustainable Development Agenda”, he said. “Yet the unsustainable use – and misuse – of ocean resources, climate change, and pollution all threaten the ability of our ocean to provide for us all”.

### **Boosting life under water**

In this first year of the Decade of Action and Delivery, acceleration is needed on the Sustainable Development Goal (SDGs) targets that are due to be met this year, two-thirds of which relate to the health of our environment.

Mr. Muhammad-Bande spelled out: “We must reach several targets related to SDG 14: Life Under Water...to reframe our understanding of nature as an accelerator for implementing the 2030 Agenda”.

Life under water and on land have a “symbiotic relationship”, he said, noting that “pollution hampers the ocean’s ability to provide for people”.

He referred to last year’s UN Environment Assembly’s ministerial declaration calling for a reduction of single-use plastic products by 2030 as demonstrating “multilateral commitment to forging a better world” and maintained the importance of emulating

this leadership at the Ocean Conference “to ensure that the declaration has a transformative impact on life under water”.

### **Ocean health**

While coral reefs are home to a quarter of all marine life, half have been lost, adversely impacting global food security. And illegal, unreported and unregulated fishing further burdens ecosystems.

Moreover, sea level rise induced by climate-change poses an existential threat, with small island developing States at the frontline.

“We must stand with them in solidarity and support. This is for us all”, the Assembly President stated, further emphasizing improving ocean health as “key to safeguarding our future”.

Transitioning to a green economy is “essential to protect our oceans and our world”, he said, recalling that next year marks the beginning of the Decade of Ocean Science for Sustainable Development.

### **Sustainable use of the ocean**

Peter Thomson, Special Envoy for the Ocean, and himself a former President of the General Assembly, outlined five major problems facing the oceans.

Pollution – from plastics to industrial agricultural sewerage – and the sustainability of fisheries in the face of harmful practices, are both “eminently fixable by 2030”.

However, more difficult to fix are problems associated with acidification, deoxygenation and ocean warming, all of which are linked to greenhouse gas emissions.

“We find ourselves in a much longer fixing period when it comes to those three”, he said, noting that although they would continue for hundreds of years “even if we do the right thing tomorrow”, indeed we must start doing, so “we can start turning the corner”.

### **‘Positive tipping points’**

Mr. Thomson urged everyone to focus on the “positive tipping points”, claiming they “are closer than you think”.

These include “scaling up of science and innovation” and other solutions “that we will be concentrating on in Lisbon”, he elaborated.

The UN envoy spoke about the “strong will” of developing countries to participate in sustainable agriculture, windfarms and the greening of shipping, stating that “we are now on the cusp of a great positive revolution”.

### **Vicious climate crisis cycle**

And speaking at a press conference for correspondents in New York, UN chief António Guterres highlighted the importance of oceans to the on-going climate crisis, and solutions to alleviate it.

He explained that “as oceans warm, ice melts and we lose the vital service the ice sheets perform – reflecting sunlight, thus further increasing ocean warming”.

And, as ice melts and the oceans warm, sea levels rise and more water evaporates, “fueling ever greater rainfall, threatening coastal cities and deltas”.

The UN chief pointed out that last year, ocean heat and mean-sea level reached “their highest on record”, revealing that scientists now say “that ocean temperatures are now rising at the equivalent of five Hiroshima bombs a second.”

**Source:** [news.un.org](https://news.un.org); 4 February 2020

## **ILLEGAL INDUSTRIAL FISHING HAMPER SMALL-SCALE AFRICAN FISHERIES**

- John C. Cannon

A new analysis shows that industrial fishing fleets operating in the waters of African countries and territories spend an average of nearly 6% of their fishing effort inside zones set aside for small-scale fisheries.

In some countries, foreign fleets spend the bulk of their time — more than 90% in Somalia, for example — within the prohibited zone.

Communities along Africa’s coasts are often dependent on fish as a source of food and protein.

But incursions by large-scale fishing vessels, called “the most common form of illegal fishing in the region,” can threaten the sustainability of the resource, create conflict over it, and endanger the lives of fishers themselves.

Fish are an indispensable source of food and protein for communities in many African countries. But the growth in industrial-scale fishing fleets around the continent has put that resource and the livelihoods it supports at risk, according to a recent analysis.

In a study published Dec. 30 in the journal *Fish and Fisheries*, a team of researchers shows that nearly 6% of the industrial fishing effort in the waters around 33 African countries and territories occurs in zones reserved for small-scale fishing communities. In some places, that figure is much higher in what the authors describe as “the most common form of illegal fishing in the region.”

These incursions threaten the sustainability of fish stocks, create conflict over those resources, and endanger the lives of the fishers themselves, said Dyhia Belhabib, the study’s lead author.

“In West Africa, for example, 250 people every year die in collisions with industrial vessels within their artisanal waters,” Belhabib, principal investigator for fisheries at the NGO Ecotrust Canada, said in an interview. “And this is not a small number.”

The study builds on data from the research platform Global Fishing Watch, which tracks the positions of fishing vessels through their onboard automatic identification system, or AIS. This system was initially designed to keep ships from running into each other. But it has since become an indispensable tool for authorities and conservation groups to verify that fleets are complying with the laws of the country in whose waters they’re operating.

In 2018, researchers developed an algorithm based on how a fishing vessel moves through the water that uses the satellite-relayed AIS information to pinpoint when and where it’s actually hauling in fish. For this study, Belhabib and her colleagues compared this information with maps of the slice of the ocean that each country or territory controls — what is known as an exclusive economic zone, or EEZ — along with the boundaries of any designated artisanal fishing areas. Most, but not all, of the coastal countries and territories in Africa set aside part of their marine environment for local fishing communities. In general, such regulations prohibit some or all forms of industrial fishing within a specific range, up to 44.4 kilometers (24 nautical miles) from shore.

The team calculated fishing effort in kilowatt-hours using the time spent fishing and the size of the vessels. In their analysis of where that effort occurred between 2012 and 2016, the researchers found that large fishing boats have levied a heavy toll on some countries’ artisanal zones. In Somalia’s waters, for example, 93% of industrial-scale fishing happened in a zone where the law prohibits fishing by these boats.

“This is massive,” Belhabib said. “It means that they barely fish outside of the prohibited zone.”

The team also verified each ship’s name and country of origin using data from Global Fishing Watch along with official records and media reports. It can be tricky to parse this information, since vessels sometimes fly a different country’s flag to disguise their origins: A Chinese ship might fly a Ghanaian flag, for example. But the data showed that South Korean, European Union — of which most were Greek, Spanish and French — and Chinese flags were most common after flags from African countries.

Belhabib said the origin countries must follow through on sanctioning their ships caught breaking the law to deal with this often-unchecked illegal fishing.

“The flag state is heavily responsible and accountable for what their fleets are doing in these waters and anywhere in the world,” she said.

Belhabib said each African country faces a unique set of challenges, ranging from their capacity for monitoring to their stage of development to the political will behind enforcement. Even with those hurdles, though, several have made strides toward protecting their homegrown, small-scale fisheries.

Madagascar recently ended an agreement that would have allowed 300 Chinese fishing vessels into its waters. Sierra Leone requires that ships use their AIS and be licensed to operate in the country's territorial waters. And consortiums such as the Fisheries Committee for the West Central Gulf of Guinea aim to ensure sustainable fisheries for their West African member states.

Still, Belhabib said, more must be done.

“As far as political engagement goes, I think there needs to be much, much more done to be able to address this issue.”

**Source:** [news.mongabay.com](https://news.mongabay.com); 3 February 2020

# GEOPOLITICS

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## JOSTLING IN THE BAY OF BENGAL

- Udayan Das

During the recent state visit to Myanmar, the first by a Chinese President in 19 years, President Xi Jinping made new promises to take the “Pauk-Phaw” (mutual fraternity) and comprehensive strategic cooperation to newer heights. The visit, also marking 70 years of diplomatic relations between Beijing and Nay Pyi Taw, was centred on promising the full-fledged support of China to Myanmar through multiple avenues – investment, infrastructure and governance, reflected in the signing of 33 mutual agreements

In the blueprint for bilateral relations from here on, what stands out is the impetus on the completion of the China–Myanmar Economic Corridor (CMEC), a core component of the Belt and Road Initiative. China’s CMEC plan revolves around three pillars – development of the Kyaukphyu port and the Special Economic Zone (SEZ); the China–Myanmar Border Economic Zone; and the development of Yangon city. For India, once the CMEC is completed, New Delhi would find itself right in between two Chinese bridgeheads, the other one being Gwadar in Pakistan, the mouth of the China–Pakistan Economic Corridor (CPEC).

The Chinese objectives for entering into the Bay of Bengal are fairly simple. While China lacks direct access to the Indian Ocean, its massive energy imports travel across the stretch of the enclosed ocean to Chinese shores via the Straits of Malacca. A string of port facilities, (occasionally also interpreted as the “String of Pearls” by the US and India) across Djibouti, Hambantota, Gwadar and now Kyaukphyu, is an effort to mitigate the geographical handicap. Another aspect is overcoming the sole dependency on the Straits of Malacca, which has also been quoted in the past to be China’s “Malacca Dilemma.” A strategy to transcend that over-dependency has been to explore newer routes – connecting China with the Indian Ocean and the Bay of Bengal through a combination of multi-modal transport network using the coastal states of Pakistan and Myanmar. China coming down to the shores of the Andaman Sea and its burgeoning relations with Myanmar have deeper implications for New Delhi in two ways.

First, Chinese presence is directly competitive for India within the range of its immediate neighbourhood. Second, China-Myanmar relations also depict how the regional order is shaping up, adversarial to New Delhi’s interests. A functional CMEC means China becoming a stakeholder in the Bay of Bengal with increased militarised presence. With greater energy imports passing the Bay of Bengal, overlooking the Straits of Malacca, an intensified Chinese security presence follows in the region. The

Indian apprehensions are drawn from Chinese actions in the South China Sea. In the Indian Ocean and Bay of Bengal, Beijing is likely to undertake gradual measures to develop sea control and sea denial capabilities. Already, the forays of Chinese submarines into the Andaman Sea have been a steady activity. An incremental Chinese presence directly negates India's operational space in the region and its aspiration to be a net-security provider. China's growing foray into the Bay of Bengal also has implications for shaping the regional order.

In a region devoid of connectivity infrastructure and facing severe investment crunch, China's economic offensive is likely to be received and accommodated, its predatory nature notwithstanding. Deeper partnerships between China and the Bay of Bengal littoral states would mean a shrinking space for India. Additionally, India's efforts to build a sub-regional framework, primarily through the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) might not gather steam. As the dependency on Beijing grows, India's own centrality in the region would take a hit. Turning the Chinese tide backwards in the subcontinent is beyond India's options currently. Its options range from strengthening regional bilateral relations, underplaying its own 'big brother' image and facilitating a sub-regional agency exclusive of China along with speeding up its deliverables and commitments in the region to accentuate credibility. For instance, constant engagement and speeding deliverables in Myanmar is crucial if India wants to infuse life into its 'Neighbourhood First' as well as 'Act East' policies. If left out in the cold, history will repeat itself. China is likely to take advantage of the vacuum as it did during the period of Myanmar's international isolation. Xi's Myanmar visit was also crucially timed when Myanmar has been internationally cornered because of its large-scale human rights violations against the Rohingyas.

What would be interesting in this Sino-Indian jostling in the Bay of Bengal is how the regional actors will react. While discarding the economic and infrastructure gains from China seems unlikely to happen, states like Sri Lanka, Bangladesh and Myanmar will also be wary of India's geographical proximity and using New Delhi to counter-balance China. Amidst the security dilemma that India and China are locked in in the Bay of Bengal and the Indian Ocean, balancing act of the regional actors might convert the Bay of Bengal into a competitive space, if not necessarily a hostile one. A space in which India and China would be vying for influence but neither can afford to risk their core interests escalates the chances of confrontation.

**Source:** [deccanherald.com](http://deccanherald.com); 10 February 2020

# JAPAN TAKES SECOND COMPLAINT TO WTO OVER SOUTH KOREAN SHIPBUILDING

Japan launched a second complaint at the World Trade Organization on Monday over support South Korea gives its shipbuilding industry, intensifying a wider dispute between the two Asian countries.

Japan said in its filing that it had complained to South Korea on Jan. 31 over measures related to the development, production, marketing and sales of commercial vessels. Japan circulated it to other WTO members Monday.

Washington's two biggest Asian allies are embroiled in a widening political and economic dispute, which erupted over the issue of forced labor during Japan's colonial rule of the Korean Peninsula from 1910 to 1945.

South Korea's shipbuilding and shipping companies have undergone massive restructuring in recent years amid a slowdown in demand and rising competition from China.

Japan said the contested measures include loans below market cost and equity infusions, loans and refund guarantees on terms that are not commercially reasonable, as well as unfair subsidies for vessels complying with environmental standards.

The complaint mirrors Japan's filing with the WTO in November 2018, which also took aim at Korean measures to help shipbuilders, including financing to enable them to stay in business during prolonged periods of low prices.

Japan and South Korea have 60 days of "consultations" to settle the dispute, after which Japan can ask the WTO to adjudicate. The two are technically still in consultations over the 2018 complaint.

In the wider dispute, Japan has enraged South Korea with a plan to "normalize" trade procedures, effectively curbing exports to South Korea and erecting a barrier that could disrupt the global supply of semiconductors.

That followed a ruling in 2018 by South Korea's top court that Japanese companies had to pay compensation to South Koreans forced to work in Japanese factories during Japan's colonial rule of the Korean Peninsula.

**Source:** [japantimes.co.jp](http://japantimes.co.jp); 11 February 2020

# **CORONAVIRUS: CHINA'S OIL DEMAND DROPS FOR 1ST TIME SINCE 2009**

The rippling effect of the spread of the coronavirus is being felt across the shipping markets, the tanker and cruise sectors being at the front line.

The impact of the virus outbreak is already being felt on oil markets as China, the world's largest importer of oil, scrambles to curb the spread of the virus while trying to maintain business activities.

The country's oil demand is already down amid efforts to contain the outbreak, including flight cancellations.

According to a comment from Wood Mackenzie, the near-term impact of the coronavirus outbreak on oil demand remains uncertain as much depends upon when and how China's manufacturing industry restarts after the currently extended Lunar New Year public holiday.

Wood Mackenzie has lowered its oil demand forecast for Q1 2020 by nearly 900,000 barrels per day (b/d) to 98.8 million b/d.

"The Q1 2020 fall in Chinese demand – a 200,000 b/d drop to 13 million b/d – is the first year-on-year decline in the country's demand since 2009," Ann-Louise Hittle, Vice President, Macro Oils, said.

"OPEC is holding emergency talks to consider an additional 500,000 b/d cut, on top of its already agreed steep output quotas in a bid to balance the market and shore up crude prices.

"It's a dilemma for the group because the duration of the hit to oil demand – particularly from China, the world's largest oil importer – is not clear.

"Yet, without a further production cut, crude oil prices will remain under pressure and struggle to hold the mid-\$50 per barrel price for Brent, let alone recover to above USD 60 per barrel before Q2 2020."

Fitch Ratings believes that the coronavirus outbreak could curb oil demand growth if it continues to spread, leading to an extended production surplus as production grows in Brazil, Norway, and the US.

The surplus magnitude will depend on the duration of the outbreak and the ability of OPEC+ countries to adjust production levels, if required.

"We expect oil prices to remain highly volatile in 2020, with geopolitical tensions and economic sentiment being other key drivers," the rating agency stressed.

Oil prices have been under pressure since the start of the coronavirus outbreak with Brent crude falling from just under USD70 a barrel in early January to about USD56/bbl in early February.

“In a scenario of materially lower oil prices than assumed in our price deck and weaker market sentiment it could become more challenging for the ‘B’-category oil and gas issuers to access capital markets, potentially resulting in a higher default rate in the sector. Ratings of Chinese national oil companies, namely CNPC/PetroChina, Sinopec, and CNOOC are linked to China’s sovereign rating and would therefore not be immediately affected, despite weakening credit metrics. Asian refiners could see further softening of refining margins due to lower demand and utilization rates,” Fitch said.

“The impact on Chinese domestic oil products consumption will depend on how quickly transportation and industrial activities will return to normal levels. Demand for imported oil could take even longer to recover, as refineries, which were facing a capacity surplus before the outbreak, will need to absorb excess inventories. The WHO’s declaration of a public health emergency of international concern could dampen China’s trade activities and further reduce domestic fuel consumption, with a more tangible impact on global oil supply-demand balance.”

China accounts for about 15% of global oil consumption and is the main driver of global demand growth. Its contribution to global consumption growth averaged 36% over the past five years and should have been close to 40% in 2020, according to the US Energy Information Administration (EIA). A further 30% of demand growth is driven by other Asian countries, including India.

Even without potential consequences from coronavirus, the oil market was expected to be well supplied in 2020. EIA expected supply to exceed demand by about 250,000 barrels a day due to growing production in the US, Brazil, Norway, and Guyana. The additional OPEC+ production cuts agreed for 1Q20 may not fully offset this.

As explained by Fitch, if the coronavirus outbreak deteriorates, the oversupply could become more significant, particularly in 1H20, potentially leading to more short-term pressure on oil prices.

“A drop in production in Libya following the military conflict in the country could mitigate oversupply, although it is not clear how long Libyan production will remain depressed. OPEC+ policies to manage production in line with demand and price sensitivity of US shale make a protracted dip of oil prices below USD50/bbl for Brent not very likely even in a stress-case scenario. However, OPEC+ may need to cut production further if the outbreak lasts for several months,” the rating agency concludes.

**Source:** [worldmaritimeneews.com](http://worldmaritimeneews.com); 5 February 2020

## **S.KOREA ANNOUNCES \$690M SHIPPING AID**

- Laxman Pai

South Korea's Financial Services Commission has announced 820 billion won (\$690 million) in funding to help modernize aging passenger boats and cargo ships.

According to a Yonhap, the package is meant to help smaller shipping companies build 59 new ships -- 21 passenger boats and 38 cargo vessels.

The Financial Services Commission announced that shipping companies will be reimbursed for up to 60 percent of the cost of the new vessels, and South Korea's state-run Korea Ocean Business Corp. will guarantee more than 95 percent of the loans.

The Korea Development Bank will also fund 20 percent of the cost needed for building a ship.

According to the report, the move is part of South Korea's efforts to strengthen maritime safety and boost the economy.

Finance Minister Hong Nam-ki said the financial package will provide opportunities for local small and medium-sized shipbuilders, which have been struggling with falling orders.

Currently, 58 smaller shipping companies operate 166 passenger vessels, including ferries, to transport about 15 million people between the South Korean mainland and its islands per year, the commission said.

**Source:** [maritimeprofessional.com](http://maritimeprofessional.com); 5 February 2020

## **CHINA STARTS GIVING 'FORCE MAJEURE' SLIPS TO VIRUS-HIT COMPANIES**

A car-parts supplier became one of the earliest known companies to obtain a "force majeure" certificate in China that may help it avoid penalties for breaching contractual obligations because of the coronavirus outbreak.

The manufacturer, eastern China-based Huida Manufacturing (Huzhou) Co., supplies steering-system components to a plant of Peugeot maker PSA Group in Africa, a Chinese trade body said Tuesday.

The organization, China Council for the Promotion of International Trade, said it issued the certificate on Feb. 2. More companies have since received the document, which is recognized by enterprises, governments, trade associations and customs officials in more than 200 places around the world, CCPIT said.

The certificate can excuse companies from not performing or partially performing contractual duties because of extraordinary circumstances beyond their control. The coronavirus contagion has shuttered plants across China -- a disruption that could get much worse if rolling quarantines and suspended rail and air links prevent the return of the millions of blue-collar laborers to workstations.

### **‘Nightmare’ for Global Tech: Virus Fallout Is Just Beginning**

Huida Manufacturing produces components for engines as well as transmission and steering systems, according to its website. Huida representatives didn’t immediately respond to requests for comment.

The company may incur a direct loss of 2.4 million yuan (\$344,000) from failing to meet contractual obligations with PSA, and faces a potential compensation claim of 30 million yuan because of a two-week production halt at the carmaker, CCPIT said.

**Source:** [bloomberg.com](https://www.bloomberg.com); 11 February 2020

# ACKNOWLEDGEMENTS

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