



INFORMATION
FUSION CENTRE

ANNUAL REPORT

2024



WITH CONTRIBUTIONS FROM

UKMTO
Underhill Maritime Trade Operations



HAFNIA
Member of BW Group



AMBREY



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FOREWORD



Dear Partners and Friends,

I am pleased to present the IFC's Annual Report for 2024, which is a collective effort by our International Liaison Officer (ILO) corp. This year, the IFC recorded a total of 2,983 incidents across our eight MARSEC categories, which is comparable to 2023 with 3,003 incidents. I hope that this report will be useful in shedding light on the overall Maritime Security (MARSEC) situation within IFC's Area of Interest (AOI), including any new observations and/or changes in trends.

Beyond data trending and analysis, the IFC remained steadfast in promoting capacity-building and multilateral collaboration amongst partners to address MARSEC challenges in 2024. Over the past year, political instability and natural disasters, such as the Houthi attacks in the Red Sea and the typhoon activities in Southeast Asia, have led to significant loss of life and property at sea, and also disrupted economic activity. These challenges, compounded by evolving maritime threats, highlight the importance of sustained cooperation amongst all maritime stakeholders as no single entity can do it alone.

The unique expertise and domain knowledge of our ILOs continue to be a cornerstone of our efforts as they bring significant operational value

to our networks. With the addition of ILOs from the United States Naval Criminal Investigative Service and the Vietnam Border Guard in 2024, the IFC's ILO corp now comprises 26 officers from 20 countries, our largest representation to date. This year, we also successfully deployed our IFC Forward-deployed Analysis and Support Team (IFAST) to Bahrain, supporting multinational efforts to facilitate continued global shipping operations amidst instability in the Red Sea. These developments demonstrate the IFC's commitment to cooperate with like-minded MARSEC partners and bring value to the shipping community.

We also continued enhancing our capacity-building efforts through our flagship events, which saw record participation – 140 personnel from 36 countries participated in the 12th Regional MARSEC Practitioners' Program (RMPP), and over 450 participants collectively, from navies, coast guards, and the shipping community, attended the 45th and 46th Shared Awareness Meetings (SAMs). In 2024, the IFC also supported the success of our partners' key initiatives such as the Pacific & Indian Ocean Shipping Working Group (PACIOSWG), Exercise BellBuoy, Exercise SEACAT, 18th ASEAN Navy Chiefs' Meeting (ANCM), and the 20th Virtual-Regional Maritime Traffic Centre (VRMTC) and

Trans-Regional Maritime Network Annual Meeting. These initiatives strengthened operational linkages and mutual trust amongst MARSEC stakeholders.

The IFC continued to strengthen partnerships globally through working visits and engagements with partners such as the International Maritime Organisation, UK Maritime Domain Awareness Programme (MDAP), MICA Center, and Joint Maritime Information Center (JMIC). The IFC also renewed our info-sharing MOU with the Royal Navy, and spoke at key MARSEC conferences in Brest and Hamburg.

We also achieved many "firsts" with the shipping industry through our inaugural participation in key initiatives like the Malaysia Maritime Week in Kuala Lumpur, and the Annual General Meetings of both the Federation of ASEAN Shipowners' Association and the Asian Shipowners' Association in Indonesia and Hong Kong, respectively.

As we look ahead to 2025, I am confident that it will be an equally fulfilling year. The IFC will be organising the 9th Maritime Information Sharing Exercise (MARISX) in May, the 13th RMPP in July. Partners can also look forward to our regular SAM sessions in February and July, and many more initiatives that we will be announcing soon, once ready.

We look forward to the continued support of our MARSEC and shipping partners to achieve these goals.

In closing, I would like to extend my heartfelt gratitude to the IFC's ILOs for their efforts in research and data compilation, and to our partner agencies who contributed MARSEC write-ups on their respective AOs. I sincerely hope all readers will find the information provided useful and relevant, and we look forward to greater collaboration in 2025. Together, we can achieve Safe and Secure Seas For All!

SLTC Lester Yong
Head
Information Fusion Centre

"I would like to extend my heartfelt gratitude to the IFC's ILOs for their efforts in research and data compilation, and to our partner agencies who contributed MARSEC write-ups on their respective AOs. We look forward to greater collaboration towards Safe and Secure Seas For All."



ABOUT US



The IFC was established in 2009 to collate and sense-make relevant commercial shipping and maritime information to increase MARSEC awareness. Through the strong support of our partners, the IFC has established itself as a regional maritime security (MARSEC) info-sharing hub, providing actionable information to cue operational responses for MARSEC incidents, which include Theft, Robbery, And Piracy At Sea (TRAPS), Maritime Terrorism (MT), Maritime Incidents (MI), Illegal, Unreported, and Unregulated Fishing (IUUF), Contraband Smuggling (CS), Irregular Human Migration (IHM), Environmental Security (ENVSEC), and Cyber Security (CYBSEC).

As of December 2024, the IFC has 26 International Liaison Officers (ILOs) from 20 countries deployed at the centre. The ILOs bring with them unique professional experiences, domain knowledge, and understanding of local waters in their respective home countries, helping to enrich the quality of IFC's products. Besides daily responsibilities at the IFC, the ILOs also take on leading roles in key MARSEC events. As Subject Matter Experts, they lead discussions amongst MARSEC stakeholders at events such as the IFC's Shared Awareness Meetings and other international conferences.

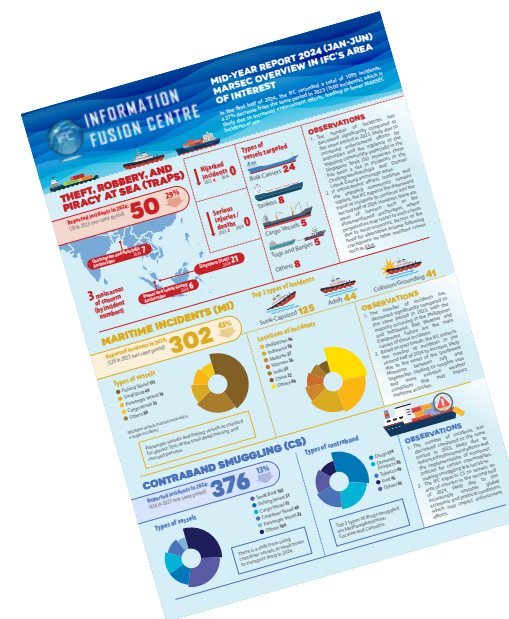
The IFC had also established worldwide linkages with 143 partners from 57 countries, which include navies, coastguards, maritime agencies, and influential shipping associations and companies enabling us to exchange MARSEC information across different regions.

OUR PRODUCTS

The IFC produces regular products and MARSEC advisories to provide our observations and analyses of MARSEC incident trends to our partners.

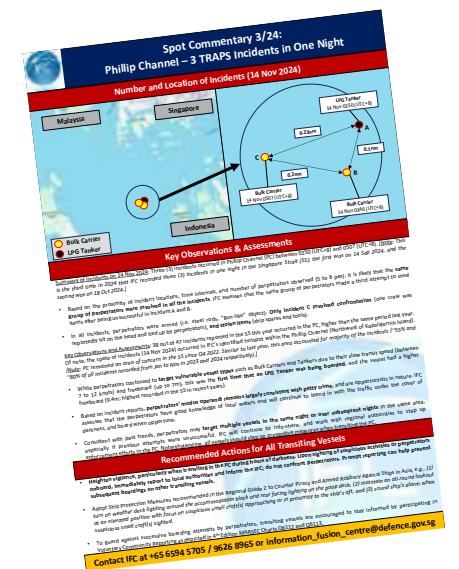
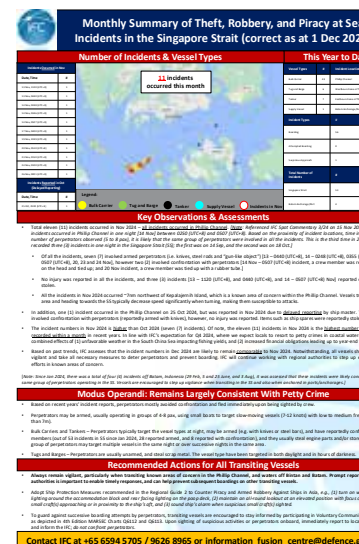
Find all IFC products in the following link:

https://www.ifc.org.sg/ifc2web/app_pages/User/commonv2/pubsProducts.cshtml



MID-YEAR INFOGRAPHIC

MONTHLY INFOGRAPHIC



SPOT COMMENTARY



MONTHLY REPORT



IFC OPS FEATURE 02/24 - MMEA COORDINATES SUCCESSFUL MEDICAL EVACUATION IN WATERS OFF KUANTAN, MALAYSIA

1. On 14 Oct 24, 1352H, the IFC's India International Liaison Officer (ILO) shared that the Chief Engineer onboard an India-flagged bulk carrier had collapsed and required emergency medical assistance. Given the location of the bulk carrier, the IFC, through the Enforcement Agency (MMEA) Putrajaya and Maritime Rescue Sub-Centre (MRSC) Kuantan on the MEDEVAC request, The IFC also contacted the ship's Company Security Officer (CSO) for closer coordination.

2. MMEA Putrajaya contacted the bulk carrier to link up with MRSC Kuantan support to the Chief Engineer. MRSC Kuantan coordinated with the bulk carrier and the CSO to advise on the most expedient manner to evacuate the Chief Engineer and transfer the Chief Engineer to an MMEA-arranged ambulance at Kuantan Port. The Chief Engineer was successfully conveyed to a local hospital in Kuantan, Malaysia, for medical treatment on 15 Oct 24, 0230H.

OPS FEATURE

THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS)

1 OVERVIEW

In 2024, the IFC recorded a total of 123 Theft, Robbery, and Piracy at Sea (TRAPS)¹ incidents in the IFC's AOI, which was comparable to 2023 (117 incidents), but 18% higher than 2022 (104 incidents). The high incident number in 2024 can be attributed to the combined effects of (a) global economic factors leading to increased cost of living and unemployment, and (b) challenging weather conditions affecting fishing yields, leading locals

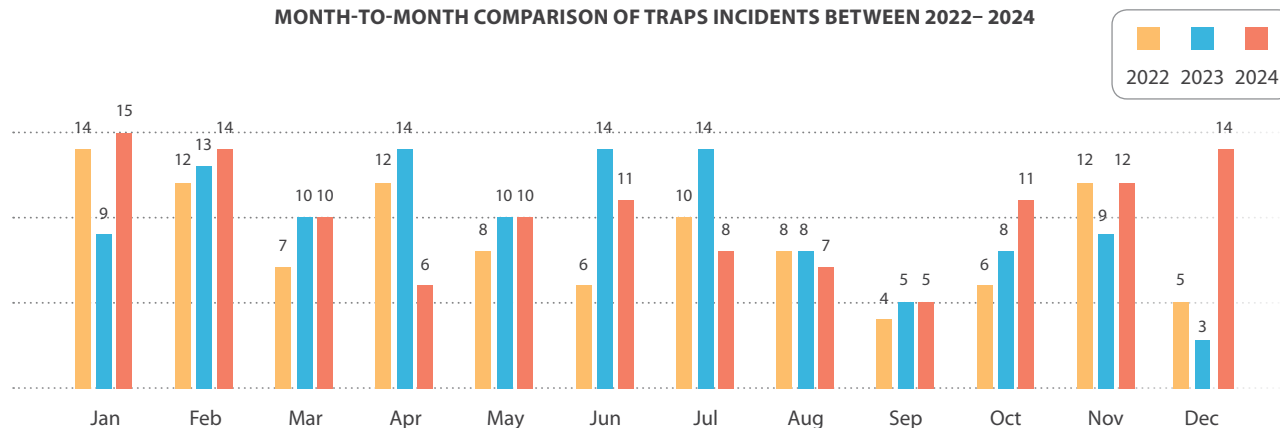
with requisite skillsets to resort to crimes at sea to supplement income for daily needs. As with past years, the Singapore Strait (SS) remains the main area of concern, accounting for almost 50% (62 incidents) of total TRAPS incidents in 2024. Overall, the IFC expects incident numbers in 2025 to remain within similar levels as 2024, unless more drastic enforcement measures are done on land and sea, to send a stronger deterrent message to would-be perpetrators.

2 KEY FACTS

The most frequent TRAPS incident types were (a) Boarding² (112 incidents, 91%), followed by (b) Attempted Boarding³ (8 incidents, 7%), (c) Suspicious Approach⁴ (2 incidents, 2%), and (d) Hijack⁵ (1 incident, 1%). The 3 key areas of concern

are (a) Singapore Strait, (b) Chattogram, and Kutubdia Anchorage Areas, and (c) Dumai Anchorage Area. Of note, the Manila Anchorage Area, which was an area of concern in the past, has seen a significant drop in incidents with only 2 in 2024, falling from 10 in 2023.

MONTH-TO-MONTH COMPARISON OF TRAPS INCIDENTS BETWEEN 2022– 2024



¹ This refers to the act of Sea Theft, Sea Robbery and Piracy conducted within the maritime domain.

² Refers to any act whereby the perpetrators have boarded a ship but HAVE NOT taken control. Command remains with the Master. This also includes unsuccessful attempts to rob or steal from vessels during boarding.

a Types of Vessels

Similar to past trends, the most targeted vessel type in the IFC's AOI is the Bulk Carrier, accounting for 50% (61 incidents) of all TRAPS incidents in 2024. This was followed by Tankers at 19% (23 incidents), and Tug and Barge at 11% (13 incidents). These vessel types were primarily targeted due to their lower freeboard and slow speed when transiting, especially when fully laden.

b Confrontation

Out of the 123 incidents in 2024, 18% (22 incidents) involved confrontation, which marked a decrease compared to 2023 with 23% (29 incidents) involving confrontation. 34% (42 incidents) of the incidents in 2024 involved perpetrators reportedly armed with weapons (e.g. steel rods, knives, machetes, and small arms), which is an increase from 2023 (34 incidents). Of note, 4 incidents involved perpetrators with small arms – located in waters off Indonesia (Lubuk Gaung Anchorage Area, Tanjung Malatayur, and Kalimantan), and the Philippines (Batangas Port); however, no firearms were discharged in these incidents.

The number of incidents with reported injury to crew also declined, with only 5 incidents resulting in minor injuries in 2024 – locations: waters off India (2 incidents), Kutubdia Anchorage (1 incident), Kabil Anchorage (1 incident), and Singapore Strait (1 incident). This was lower compared to 2023, which had 8 incidents involving minor injuries, 1 incident with serious injury, and 1 incident resulting in a death.

c Hijack

The IFC recorded 1 hijack incident involving a Tug and Barge in the waters off South Kalimantan on 2 February 2024. The perpetrators (reportedly armed with firearms and sharp weapons) held the crew captive for 27 hours. During the hijack, the vessel suffered losses, including its cargo of Fatty Acid Methyl Ester (FAME) carried by the barge, the crew's personal belongings, and ship's supplies.

Additionally, there was damage to the vessel's navigation equipment.

³ Refers to any suspicious act including but not limited to vessel(s); (1) having a very close closest point approach (CPA), or hull-to- hull contact with boarding paraphernalia employed or visible and/or (2) weapons clearly seen on display or use discharge as a show of force or threat against the against the merchant vessel.

⁴ Refers to any act of vessel(s) approaching close enough to warrant suspicion. No boarding paraphernalia or weapons are sighted onboard.

⁵ Refers to any illegal act of violence whereby perpetrators HAVE boarded AND taken control/detained a vessel and/or its crew against their will.

3 OBSERVATION/ASSESSMENT

Within the IFC's AOI, the 3 key areas of concern for TRAPS incidents are (a) Singapore Strait, (b) Chattogram, and Kutubdia Anchorage Areas, and (c) Dumai Anchorage Area.

a Singapore Strait

i) Trending

The 62 incidents recorded in 2024 in the SS is more than the 58 incidents and 55 recorded in 2023 and 2022 respectively. This may be attributed to the combined effects of (1) Northeast Monsoon and heightened typhoon activities⁶, which exacerbated the already unfavourable fishing conditions in the South China Sea (SCS) in Q3 and Q4 2024, severely affecting the fishing yield; and (2) increased financial obligations leading up to year-end festivities, causing more locals to resort to petty crime in coastal waters to supplement their income, despite continued enforcement efforts and risk of arrests.

Most of the incidents occurred in the Phillip Channel (53 incidents, 85%), mainly Northeast of Karimun Besar Island and Northwest of Kepalajernih Island, where vessels are known to decrease speed significantly when turning, making them more susceptible to attacks. The other areas of concern were the westbound lane of the Traffic Separation Scheme (TSS) in waters off Bintan and Batam islands (5 incidents), and the eastbound lane of the TSS in waters off Pengerang, Malaysia (4 incidents). The IFC assessed that the increased enforcement efforts by regional authorities on land and in the waters off Bintan and Batam islands had caused perpetrators to shift their operations further away to the Phillip Channel, where the AO's characteristics made enforcement and arrests more challenging. *[Note: In addition, there were 4 other incidents that occurred in Batam Anchorage/Port, Indonesia. The IFC assessed that these incidents were likely conducted by the same group of perpetrators operating in the Singapore Strait.]*

Of note, there was a 46% decrease in the number of incidents in the first half of 2024 (20 incidents) compared to the same period in 2023 (37 incidents). This is likely due to the deterrent effects of the Indonesian authorities' successful land operations in October 2023, which continued into the following two Quarters in 2024. However, the IFC assesses that this deterrent effect likely waned thereafter; as such, we observed a spike in incident numbers in the second half of 2024 (42 incidents).

⁶ There were heightened typhoon activities during the annual monsoon season, e.g. Typhoon Gaemi in July, Typhoon Yagi in September, and Typhoon Krathon in October.

ii) Modus Operandi

Bulk Carriers were the most frequently targeted vessel type in the SS, accounting for 77% (48 incidents) of the total incidents in the area. This was followed by Tankers (13%, 8 incidents), and Tugs and Barges (10%, 6 incidents). These vessels are typically targeted due to their slower speed (7 to 12 knots), and lower freeboard (less than 8m).

Based on incident reports, and in consultation with IFC's regional ILOs, the perpetrators are assessed to be familiar with the local waters and comfortable operating in periods of darkness, enabling them to blend in easily with local fishing concentration to avoid detection. They tend to operate in small boats with 4 – 8 pax.

- **Bulk Carriers and Tankers.** Perpetrators typically target these vessels at night, may carry small weapons (e.g. with knives or steel bars) to pry open locks and/or self defence (so as to buy enough time to flee without getting caught by crew), and usually steal engine parts and/or ship stores. Perpetrators typically avoid confrontation and choose to flee immediately upon being sighted; however, there have been incidents involving confrontation, leading to crew members being tied up, enabling the perpetrators to steal items and flee. Occasionally, such confrontations lead to minor injuries e.g. an incident in December resulted in 1 crew member sustaining multiple cut wounds that were non life-threatening.
- **Tugs and Barges.** Perpetrators were usually unarmed (likely as there are typically no crew on the Barges, and to keep both hands free to move faster) and typically stole scrap metal from the Barge. The vessel type had been targeted both in daylight and in hours of darkness. Given the nature of operations and distance between Tug and Barge, it is difficult to implement security measures on the Barge even in daylight, allowing nimble perpetrators to climb onto the Barge and throw scrap metal off into their small boats (alongside), thereafter escaping expeditiously before enforcement agencies arrive.

Of note, there were 3 separate occasions (14 September, 18 October, and 14 November) in 2024 where 3 TRAPS incidents occurred within the same night in the SS, and in close proximity. Based on the proximity of incident locations, time intervals, and the number of perpetrators reported, it is likely the same group of perpetrators targeted multiple vessels on the same night, particularly if earlier attempts were unsuccessful.

b Chattogram, and Kutubdia Anchorage Areas (Bangladesh)

i) Trending

12 incidents occurred in the Chattogram, and the Kutubdia Anchorage Areas in 2024. This is higher than those recorded in 2023 (1 incident) and 2022 (5 incidents). The increase in incident numbers may be due to local law enforcement agencies re-prioritising focus and resources on other more pressing security challenges, including border tensions and human migration issues, allowing the perpetrators to capitalise on the situation.

ii) Modus Operandi

All incidents in the Chattogram, and the Kutubdia Anchorage Areas occurred on vessels that were at anchor. Perpetrators typically operate in groups of 2 – 10 pax, often approaching vessels during periods of darkness using small boats. They usually target vessel types such as Container Vessels (3 incidents), and Tankers (3 incidents), and steal easily accessible items like personal items, spare parts, and ship's stores that were not properly stowed/locked away. While 3 of the incidents involved confrontations where ship crew were reportedly tied up, most of the incidents saw perpetrators fleeing upon detection.

C Dumai Anchorage Area (Indonesia)

i) Trending

7 incidents were recorded in 2024 off the Dumai Anchorage Area, which was higher than 2023 (6 incidents) and 2022 (0 incidents). The increase in incident numbers in recent years may be attributed to the global increase in the cost of living and unemployment rates, leading locals to resort to petty crimes to supplement their income.

ii) Modus Operandi

Perpetrators were generally unarmed and tended to operate in small groups of 3 – 4 pax. The most frequently targeted vessel types were Tankers (4 incidents), and Cargo Vessels (2 incidents), which were either anchored or underway but stationary. The incidents typically occurred during periods of darkness, and perpetrators frequently stole engine parts.

Amidst the rising number of incidents in recent years, Indonesian authorities have stepped up their enforcement efforts to deter and respond to incidents in the area leading to some operational successes. For example, on 29 February 2024, 4 perpetrators attempted to board a Cargo Vessel anchored off Dumai. The Dumai Naval Base's First Fleet Quick Response Team arrived promptly at the scene when alerted, causing the perpetrators to flee by jumping into the sea and escaping on a speedboat.

4 FORECAST/WAY AHEAD

The number of TRAPS incidents in 2025 is likely to remain within similar levels as 2024, unless more drastic security measures are taken on land and at sea. Notwithstanding the rise in incident numbers, severity/nature of TRAPS incidents in IFC's AOI remains consistent with past trends, involving petty crimes that are generally non-confrontational, and opportunistic in nature.

Incident frequency may increase during monsoon seasons and in months leading up to festive periods, a trend that is particularly evident in the SS.

Apart from the SS, the Anchorage Areas in Bangladesh and in Indonesia remain key areas of concern due to the significant increase in incidents reported in 2024. All vessels should maintain high vigilance as this trend is expected to persist in 2025.

The IFC would like to reiterate the important role of the shipping community in supporting authorities in enforcement efforts to prevent further incidents, and make better ground assessments in patrolling the areas. All vessels should follow the below recommendations, especially when transiting the SS:

- **Always remain vigilant**, particularly when transiting known areas of concern in the Phillip Channel, and waters off Bintan and Batam. Prompt reporting to local authorities is important to enable timely responses, and can help prevent subsequent boardings on other transiting vessels.
- **Adopt Ship Protection Measures** recommended in the Regional Guide 2 to Counter Piracy and Armed Robbery Against Ships in Asia, e.g.,
 - (1) turn on weather deck lighting around the accommodation block and rear facing lighting on the poop deck,
 - (2) maintain an all-round lookout at an elevated position with focus on suspicious small craft(s) approaching or in proximity to the ship's aft, and
 - (3) sound ship's alarm when suspicious small craft(s) sighted.
- To guard against successive boarding attempts by perpetrators, transiting vessels are encouraged to stay informed by participating in Voluntary Community Reporting as depicted in 4th Edition MARSEC Charts Q6112 and Q6113. Upon sighting of suspicious activities or perpetrators on board, immediately report to the local authorities, and inform the IFC; **do not confront perpetrators**.

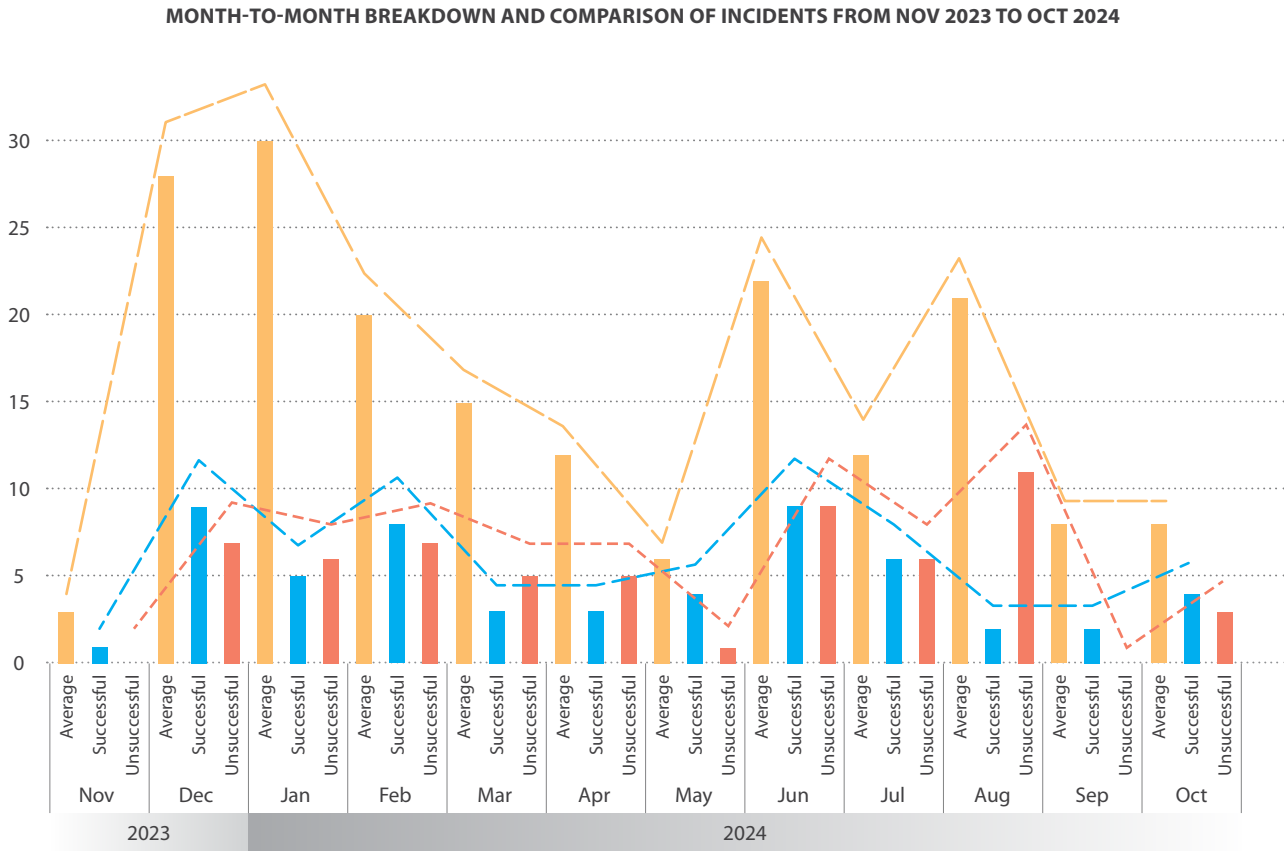


Maritime Security in the Indian Ocean Region

Writeup contributed by United Kingdom Maritime Trade Operations

The Indian Ocean region includes the Red Sea, Gulf of Aden, and Arabian Sea and is vital to global trade. In this region we face persistent maritime security challenges, such as piracy, and geopolitical instability, particularly in critical areas like the Bab el Mandeb Strait and the southern Red Sea.

UKMTO (United Kingdom Maritime Trade Operations – www.ukmto.org) plays a key role in supporting commercial shipping, acting as the primary link between vessels and naval forces to ensure safe navigation within these high-risk areas through the Voluntary Reporting Area (VRA) in the Indian Ocean. Our work is supported by Maritime Security Chart Q6099, which outlines transit corridors and threat areas, and Best Management Practices (BMP5), enabling us to release timely warnings and advisories while facilitating critical information sharing to address evolving risk.

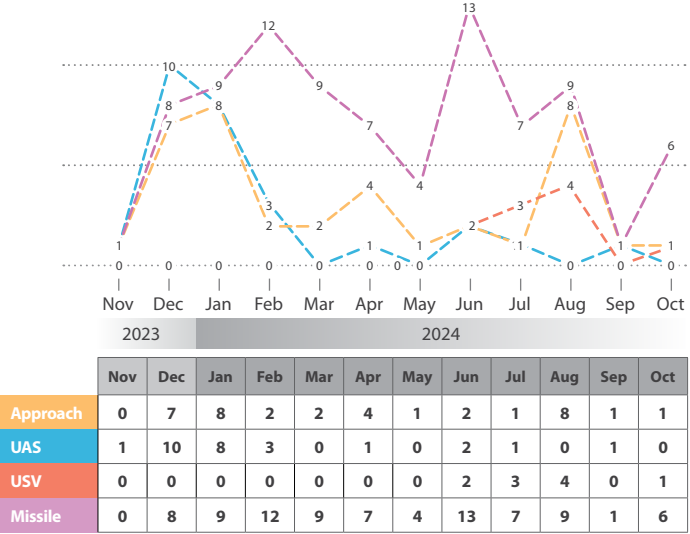


Trends and Statistics

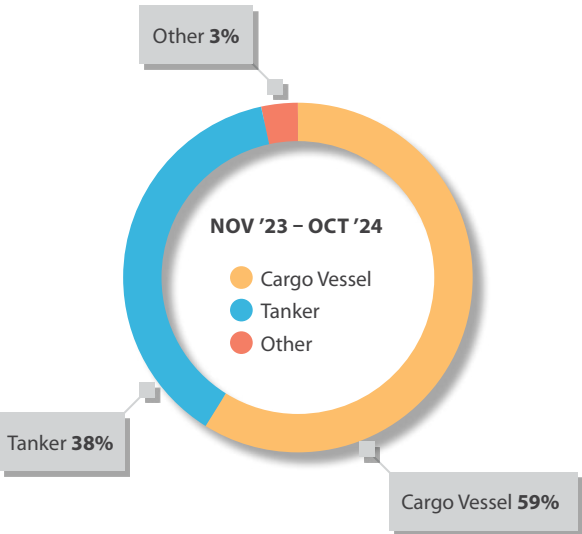
UKMTO reports consistently highlight maritime security threats. To highlight this, the graph below shows reports from November 2023 to November 2024. Significant spikes were seen in December 2023 and January 2024 due to increased Uncrewed Aerial System (UAS) attacks. Missile threats have remained constant throughout the Red Sea, Bab el Mandeb Strait, and Gulf of Aden, peaking mid-2024.

UKMTO has released 275 warnings and advisories (including updates) in 2024, an increase from previous years. Over 96% of commercial vessels reported compliance with recommended security practices from BMP5 within the UKMTO VRA. Vessel types from reported incidents include 110 cargo ships (59%), 71 tankers (38%), and 6% other.

LINE CHART & TABLE OF ATTACK EVENT TYPE NOV '23 – OCT '24



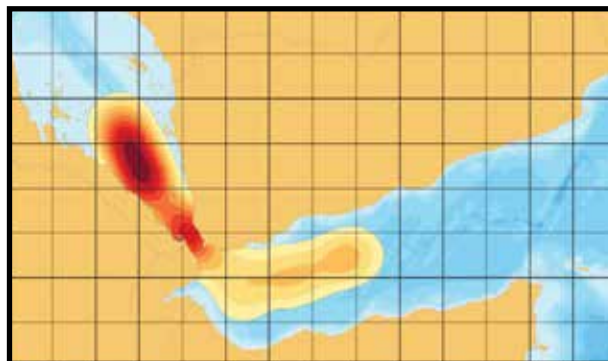
BREAKDOWN OF VESSELS ATTACKED FROM NOV 2023 TO OCT 2024



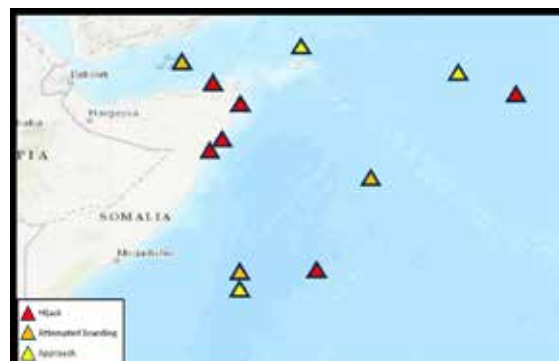
Piracy and Geopolitical Tensions

Piracy, though reduced since its peak, persists. Twelve piracy related incidents have been reported so far in 2024. Piracy incidents reported to UKMTO have occurred predominantly in the wider Indian ocean east of Somalia. The majority of MarSec incident information handled by UKMTO consists of geopolitical conflict overspill incidents that occur largely in the southern Red Sea, Bab el Mandeb Strait and Gulf of Aden.

THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS)



HEATMAP OF REPORTED INCIDENTS IN RED SEA & GULF OF ADEN TO UKMTO NOV '23 – OCT '24

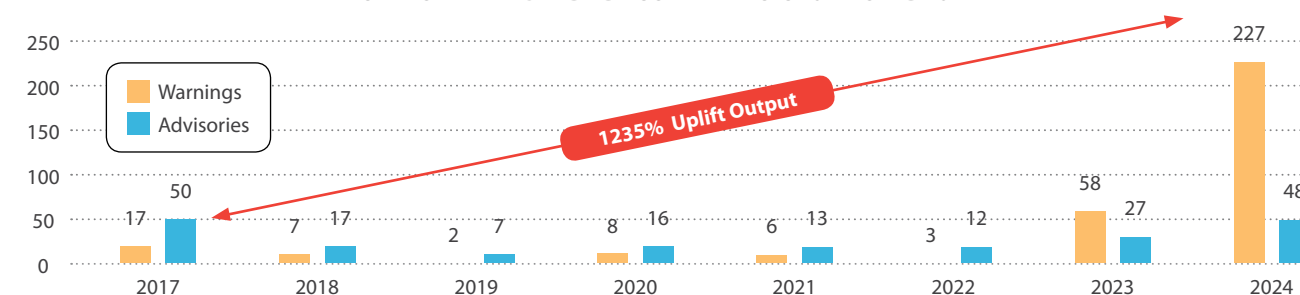


MAP OF PIRACY RELATED EVENTS REPORTED TO UKMTO

UKMTO Outputs

In addition to alert outputs, UKMTO has handled 630,000+ email reports and 2700+ calls to ships and partners YTD 2024. UKMTO has also assisted commercial shipping in non-traditional events such as Breakdowns, Safety of Life at Sea (SOLAS), and medical emergencies. UKMTO has also participated in 118 company-initiated exercises and drills in 2024, further enhancing preparedness to maritime risks.

UKMTO WARNING AND ADVISORY RELEASES 2017 TO YTD 2024



Conclusion

Maritime security in the Indian Ocean region remains dynamic, with evolving threats like piracy and geopolitical tensions. UKMTO continues to play a critical role in monitoring and issuing warnings, ensuring compliance with security best practices to protect vessels operating within the UKMTO Voluntary Reporting Area.

Caveats

- The data provided are based solely on information reported by commercial shipping to the United Kingdom Maritime Trade Operations (UKMTO). As such this summary reflects only those incidents and trends reported through UKMTO channels. It does not account for events that were not reported or incidents outside the scope of UKMTO's monitoring. The figures and observations should be interpreted with this limitation in mind.
- Graph 1: Aggregate includes all reported events, including Missile; UAS; USV attack, suspicious approaches, and irregular activity, related to geopolitical conflict overspill this is not an exhaustive list. Successful includes any vessel involved in an event reporting damage to the vessel or injury to crew. Unsuccessful includes any vessel involved in an event reporting no damage to vessel or injury to crew.
- Product uplift illustrates % increase on warning output in 2017 vs 2024
- All graphs and images produced from UKMTO held data.



Pillage, Armed Robbery and Piracy at Sea: A Regional Analysis

Writeup contributed by IFC Peru – Latin America Maritime Information Fusion Center

The Maritime Information Fusion Center for Latin America (IFC-Peru) plays a key role in the collection and analysis of relevant, accurate, and timely maritime data. This center acts as a point of convergence for the countries in the region and the International Maritime Community, promoting the exchange of information and strengthening the collective capacity to face common threats in the maritime domain.

Trends in Maritime Incidents: Theft and Piracy

According to IFC-Peru reports, most thefts at sea are concentrated along the Pacific Ocean coast of South America, particularly near the equator. Although cases are also reported in river areas, the central Pacific Ocean region of Latin America is a hotspot for criminal activity..

Key Data on Pillage and Piracy

- **Frequency of incidents:** In 2023, 56 incidents were reported, while in 2024 this number dropped to 36, reflecting a 43.3% decrease. Despite this reduction, the annual average for the last three years remains at approximately 48 incidents, demonstrating a steady fluctuation in maritime security.
- **Seasonality:** 81.25% of incidents occur during the night (26 events), in contrast to 18.75% during the day (6 events). This underscores the importance of strengthening nighttime prevention measures.
- **Types of robberies:**
 - o Non-violent robberies: 50% (some with shots fired).
 - o Violent robberies: 43.75%.
 - o Attempted robberies: 3.13%.

Scopes and Geographic Distribution

- **Crime Scenarios:** Most incidents (78.125%) occur in ports, while 21.875% take place during navigation.
- **Regional distribution:** South America accounts for 83% of incidents, followed by Central America (13%), with no cases reported in North America.

Conclusions and Recommendations

According to IFC-Peru reports, most thefts at sea are concentrated along the Pacific Ocean coast of South America, particularly near the equator. Although cases are also reported in river areas, the central Pacific Ocean region of Latin America is a hotspot for criminal activity.

- 1 Strengthening measures in ports: Given that over 78% of incidents occur in these environments, it is recommended to implement more robust surveillance systems, enhanced access controls, and specific training for port personnel.
- 2 Nighttime prevention: Increasing lighting and surveillance at night on vessels and in ports could deter criminal activity.
- 3 Regional collaboration: Efforts to strengthen interoperability between IFC-Peru and other international fusion centers should continue, improving the joint response to maritime threats.



1 OVERVIEW

No Maritime Terrorism (MT)¹ incident was recorded in 2024 in the IFC's AOI, which was the same as in 2023. The last MT incident reported was in 2021, in Maldives.

2 KEY FACTS

Initiatives such as the Trilateral Cooperation Arrangement between Indonesia, Malaysia, and the Philippines continue to have a positive deterrent effect against terrorist activities in IFC's AOI through the regular conduct of joint patrols in their respective areas.

3 FORECAST/WAY AHEAD

Although no MT incident was reported in 2024, all countries and the maritime community should remain vigilant and continue to share relevant information for effective monitoring on MT incidents.



¹ This refers to the undertaking of any acts of terrorism within the maritime domain; involving vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, at coastal facilities or settlements, including tourist resorts, port areas and port towns or cities. Kidnapping for ransom claimed by a known terrorist group or terror group will also be placed in this category.



Reassurance Efforts in the Red Sea

Writeup contributed by Capt. Lee Stuart, Naval Cooperation and Guidance for Shipping (NCAGS)
Maritime Liaison Officer, COMUSNAVCENT & Head Joint Maritime Information Center (JMIC)

The Houthis are disrupting the free flow of commerce across the region, posing a threat to every nation, not just those bordering Yemen. This threat remains under their control, and the Houthis can choose to stop their malign actions at any time. The continued reckless behaviour by the Iranian-backed Houthis threatens regional stability and endangers the lives of mariners across the Red Sea and Gulf of Aden.

Our primary focus is on preserving freedom of navigation, and saving lives and livelihoods of individuals in the region. This is not only an issue of navigational freedom but also a significant health and economic issue, especially for those in the region. The Houthis claim to act in support of Palestinians in Gaza, yet they target and threaten the lives of mariners from as many as sixty countries, all of whom have nothing to do with the Gaza conflict. In response, the United States will continue to collaborate with its partners to hold the Houthis accountable and degrade their military capabilities.

The U.S. Navy and partner forces are working hand-in-hand with the maritime shipping industry and like-minded partners committed to preserving the rules-based international order and freedom of navigation. U.S. and coalition forces remain highly prepared and postured to defend both U.S. and allied interests in the region. A key part of these efforts is the CMF-led Operation Prosperity Guardian, which has strengthened our coalition building activities and facilitated presence and information sharing missions to preserve freedom of navigation in the Southern Red Sea, Bab-el-Mandeb strait, and the

Western Gulf of Aden. The Joint Maritime Information Center (JMIC) plays a vital role in providing stakeholders with factual and timely information relating to the Houthi attacks on merchant vessels. By sharing ground truth information and offering guidance, JMIC assists the maritime industry in making informed operational decisions, and regular communication ensures all stakeholders are engaged in two-way dialogue.

Furthermore, CENTCOM forces have conducted numerous self-defence strikes into Houthi-controlled areas of Yemen. Recently, CENTCOM forces conducted multiple airstrikes targeting Iranian-backed Houthi weapons storage facilities containing advanced conventional weapons, which were intended for use against military and civilian vessels navigating international waters in the Red Sea and Gulf of Aden.

CENTCOM forces targeted the Houthis' hardened underground facilities housing missiles, weapon components, and other munitions used to target military and civilian vessels throughout the region. U.S. Air Force and U.S. Navy assets, including U.S. Air Force B-2 Spirit long-range stealth bombers, played a key role in these strikes. Additionally, CENTCOM forces successfully destroyed 15 one-way attack uncrewed aerial systems (OWAUAS), Land Attack Cruise Missiles (LACMs), and Surface-to-Air Missiles (SAMs) in the CENTCOM area of responsibility (AOR). These Iranian-supplied weapons, launched episodically by the Houthis, posed a significant threat to all in the region, especially innocent civilian mariners simply carrying out their jobs.

1

OVERVIEW

In 2024, the IFC recorded a total of 1,018 Maritime Incidents (MI)¹ in the IFC's AOI, which was similar to 2023 (1,025 incidents) and 2022 (999 incidents). The majority of MI were reported in waters off Indonesia, the Philippines, and Vietnam. Consistent with past years, most of these incidents involved

Fishing Vessels sinking or capsizing; these incidents also accounted for the most dead and missing persons in 2024. The IFC expects the number of MI in 2025 to remain high given the growing volume of maritime activity and extreme/erratic weather conditions caused by climate change.

2

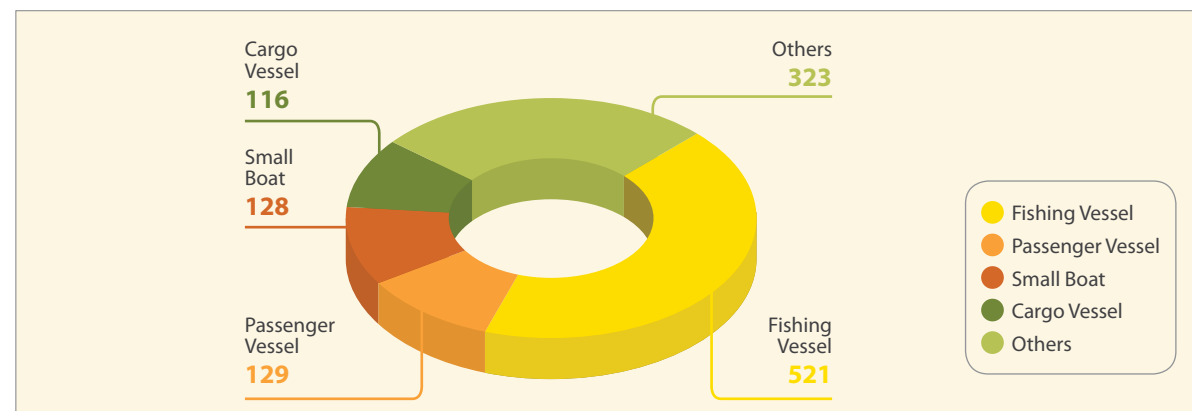
KEY FACTS

The top 3 most reported MI in 2024 involved vessels sinking/capsizing (375 incidents, 37%), vessels colliding/grounding (159 incidents, 16%), and vessels adrift (149 incidents, 15%). The majority of incidents involved Fishing Vessels (521 vessels, 43%), followed by Passenger Vessels (129 vessels,

11%) and Small Boats (128 vessels, 11%).

Of note, the 3 leading causes of MI were bad weather (272 incidents, 27%), equipment failure (166 incidents, 16%), and collisions/grounding impacts (136 incidents, 13%).

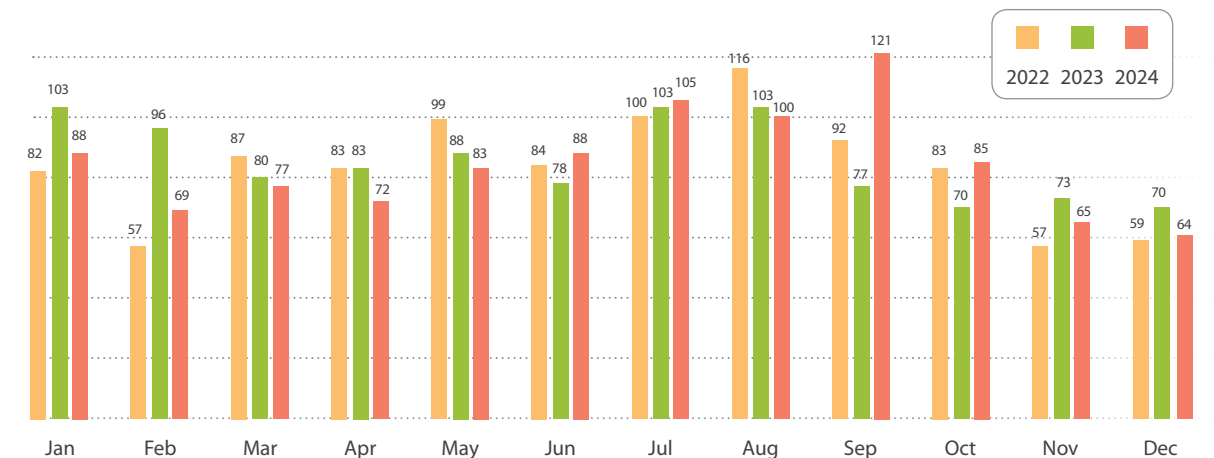
TYPES OF VESSELS INVOLVED IN MARITIME INCIDENTS



A total of 7,981 persons were rescued at sea in 2024, a 26% drop compared to 2023 (10,773 persons). Of the 7,981 persons rescued at sea, 3,940 (49%) were passengers onboard Passenger Vessels and 1,718 (22%) were from Fishing Vessels. Similarly, the number of incidents involving dead/missing persons mirrored the downward trend, with 793 persons in 2024, compared to 1,501 persons in

2023. MI numbers peaked during the months of July to September in 2024. This is consistent with historical trends, with the surge in incident numbers predominantly attributed to inclement weather and adverse sea conditions caused by the monsoon season (typically in the third quarter of the year), impacting vessels out at sea.

MONTH-TO-MONTH COMPARISON OF INCIDENTS BETWEEN 2022 – 2024



3

OBSESSION/ASSESSMENT

a General Insights

i) Low number of incidents from February to April 2024

The region saw a 16% decline in the number of MI from February to April 2024, compared to the same period in 2023. This could be attributed to the drier conditions caused by the “El Nino”² weather phenomenon during the period. This naturally occurring climate pattern, characterised by the warming of ocean surfaces in the central and eastern tropical Pacific Ocean, typically results in drier conditions across parts of Asia, particularly in South and Southeast Asia, leading to reduced rainfall and calmer seas. Most countries in South and Southeast reported decreases in MI numbers, with Vietnam and Malaysia both reporting a reduction of more than 50% in incident numbers during the 3 months (as compared to 2023).

ii) High number of incidents from July to September 2024

The region experienced a higher number of incidents from July to September 2024 primarily due to heightened typhoon activities during the annual monsoon season, which worsened the weather/sea conditions and intensified the risks for all vessels operating in the region. Notably, Super Typhoon Yagi, one of the most powerful storms to hit the region in years, caused widespread damage to vessels, and contributed to hazardous conditions for vessels navigating

¹ This refers to general incidents in the maritime domain such as collisions, groundings, vessels sinking etc.

² Reference from source – <https://www.eurasiagroup.net/live-post/risk-9-el-nino-is-back>

the region in September, particularly in waters off Myanmar, the Philippines, Thailand, and Vietnam. Research indicates that climate change has exacerbated the frequency and intensity of these back-to-back storms³.

iii) Vessel Detentions

In 2024, 75 incidents involving Vessel Detentions were recorded, which was similar to 2023. These detentions were primarily related to unauthorised anchoring, with the majority occurring in waters off Malaysia. The shipping community is strongly advised to thoroughly verify and comply with local regulations before anchoring.

b Vessel Types

i) Fishing Vessels and Small Boats

The number of incidents involving Fishing Vessels and Small Boats remain high, with 535 incidents reported in 2024 compared to 540 in 2023. These incidents accounted for 616 dead/missing persons, representing 78% of the total in 2024, and closely mirroring the 627 persons reported in 2023. Indonesia and the Philippines reported the highest number of such incidents.

The primary causes continue to be bad weather and equipment failures. Many Fishing Vessels, particularly smaller ones with wooden hulls, are particularly vulnerable to severe weather conditions, especially in the open sea. Conversely, larger Fishing Vessels often experience equipment failure due to prolonged exposure to harsh environmental conditions during long periods at sea, leading to frequent breakdowns and increased risk of incidents.

ii) Container/Cargo/Bulk/Tanker Vessels

Incidents involving such Merchant Vessels decreased slightly from 264 in 2023 to 240 in 2024, with collision/grounding the most common type of MI. Of note, Tankers *Hafnia Nile* and *Ceres I* collided and caught fire in the South China Sea in July 2024. All 22 crew members aboard *Hafnia Nile* were successfully rescued by the Republic of Singapore Navy's Frigate, *RSS Supreme*. A Supply Vessel rescued 14 crew members from *Ceres I*, with the remaining 26 crew staying on board to combat

the fire. Information sharing between the Company Security Officer (CSO) and the IFC facilitated the prompt coordination of response efforts and enabled the cueing of operational responses, highlighting the importance of the shipping community's continued collaboration with MARSEC agencies to address such situations effectively.

iii) Passenger Vessels

Passenger Vessels were involved in 129 incidents in 2024, similar to 2023 with 125 incidents. The majority of these incidents took place in Indonesia and the Philippines, 2 archipelagic nations with extensive networks of passenger vessels plying their waters to serve their dispersed populations. The primary causes were equipment failures and collision/grounding.

Of note, the number of dead/missing persons reported in 2024 (39) saw a 68% drop, compared to the 123 in 2023. Similarly, the number of rescued persons also declined by 28%, from 5,478 persons in 2023 to 3,940 persons in 2024.

While the number of persons involved in passenger vessel incidents is higher compared to other vessel types, it is important to note that Passenger Vessels are generally equipped with more **safety features and emergency response systems** to mitigate risks and ensure passenger well-being. As a result, the number of casualties tends to be comparatively lower than incidents involving Small Boats and Fishing Vessels. The decrease in incidents, as well as the reduced number of dead/missing and rescued, could be attributed to the response efforts consistently reinforced by regional authorities in Indonesia and the Philippines.

4 FORECAST/WAY AHEAD

The IFC expects MI numbers in 2025 to remain high, as maritime activities increase and weather patterns become more unpredictable due to climate change. As regional monsoons have traditionally caused major disruptions to maritime activities in IFC's AOI, seafarers transiting should step up their vigilance during these months and adhere to safety advice from local authorities.

³ Reference from source – <https://www.straitstimes.com/asia/se-asia/climate-change-supercharged-deadly-string-of-philippines-storms-study>



Collision Incident Between *Hafnia Nile* and *Ceres I*: A Display of Heroism and Collaboration

Writeup contributed by Mr Ray Lee, Security Manager, Hafnia

On July 19, 2024, a maritime accident occurred when the oil tanker *Hafnia Nile* collided with another oil tanker *Ceres I* in a congested shipping lane in the South China Sea. Around 0600 hrs, both vessels caught fire because of the collision. The crew, led by the captain, sounded the general alarm and immediately broadcast a distress call over the VHF channel 16. Faced with thick smoke and rapidly spreading flames and the risk of an imminent explosion due to the nature of the cargo, the captain made an evacuation order, and the crew quickly launched three life rafts from the starboard side. Thanks to their swift decisive and organised actions, all 22 crew members were safely rescued by the Republic of Singapore Navy's warship, *RSS Supreme*.



RSS Supreme, a formidable-class frigate, safely rescued all 22 crew members involved in the fiery mishap.



Commendable Actions of the *Hafnia Nile* Crew

The *Hafnia Nile* crew demonstrated extraordinary professionalism during the incident. Despite the escalating danger, they acted decisively and with remarkable composure. With flames engulfing the accommodation block and dense smoke making large parts of the ship inaccessible, the crew executed their emergency protocols flawlessly. The decision to launch life rafts from the starboard side, where smoke

was lighter, was a critical move that ensured a safe evacuation. Their training, discipline, and calm under pressure were pivotal in preventing further casualties or environmental hazards. During the incident, the Master took proactive steps to ensure no lives were lost. The crew response serves as a prime example of how essential emergency preparedness and drills are for seafarers, especially in high-risk situations like these.

Collaborative Rescue Efforts

The rescue mission that followed was an outstanding example of interagency collaboration. Upon receiving the distress signal, the Maritime Rescue Coordination Centre (MRCC) Singapore quickly alerted the necessary authorities and coordinated a rapid response.

The Republic of Singapore Navy (RSN) and the Maritime and Port Authority of Singapore (MPA) were both instrumental in the rescue efforts. The RSN warship *RSS Supreme* was dispatched to the scene and successfully rescued all 22 crew members. The quick mobilisation of the MPA resources and medical support aboard the *RSS Supreme* ensured the crew's

safe transfer to Changi Naval Base. This operation was a great example of Singapore's robust maritime rescue capabilities, particularly in the busy shipping lanes of the South China Sea.

The involvement of the Information Fusion Centre (IFC), which coordinated information and provided expertise in managing the crisis, further emphasized the critical role of cooperation between maritime agencies. Their joint efforts ensured the rescue operation was efficient, despite the difficult conditions posed by the fire and the damage to the vessels.

Successful Outcome

Due to the professionalism and preparedness of the *Hafnia Nile* crew, along with the swift and coordinated actions of the RSN and MPA, the situation aboard the *Hafnia Nile* was managed effectively without any loss of life or serious injury. The successful rescue of all crew

members is a testament to the importance of rigorous training, strong leadership, and interagency collaboration in maritime safety. Although the fires on both ships were significant, the prompt response helped prevent the incident from escalating into a larger disaster.

Conclusion

The collision between *Hafnia Nile* and *Ceres I* on July 19, 2024, is a poignant reminder of the challenges and dangers inherent in maritime navigation, particularly in high-traffic areas like the South China Sea. However, it also highlights the critical value of

preparation, training, and collaboration in managing maritime crises. This incident additionally reinforces the importance of maintaining high safety standards, effective communication, and rigorous drills to prepare for the unexpected at sea.

1 OVERVIEW

In 2024, the IFC recorded a total of 760 Illegal, Unreported, and Unregulated Fishing (IUUF)¹ incidents in the IFC's AOI, reflecting a continued upward trend from 2023 (715 incidents) and 2022 (591 incidents). The rise may be attributed to the combination of strong global demand for seafood,

and enhanced education and enforcement efforts by authorities, which have likely improved the detection and reporting practices for such incidents. Such factors are expected to continue in 2025 resulting in continued high IUUF incident numbers in IFC's AOI.

2 KEY FACTS

IUUF incidents were highest in waters off Australia, making up 23% (177 incidents) of the total incidents in 2024 within the IFC's AOI.

This is followed by incidents in waters off Malaysia (23%, 173 incidents) and Sri Lanka (15%, 112 incidents).

TOP 3 IUUF LOCATIONS (NUMBER OF INCIDENTS)

Australia	177
Malaysia	173
Sri Lanka	112

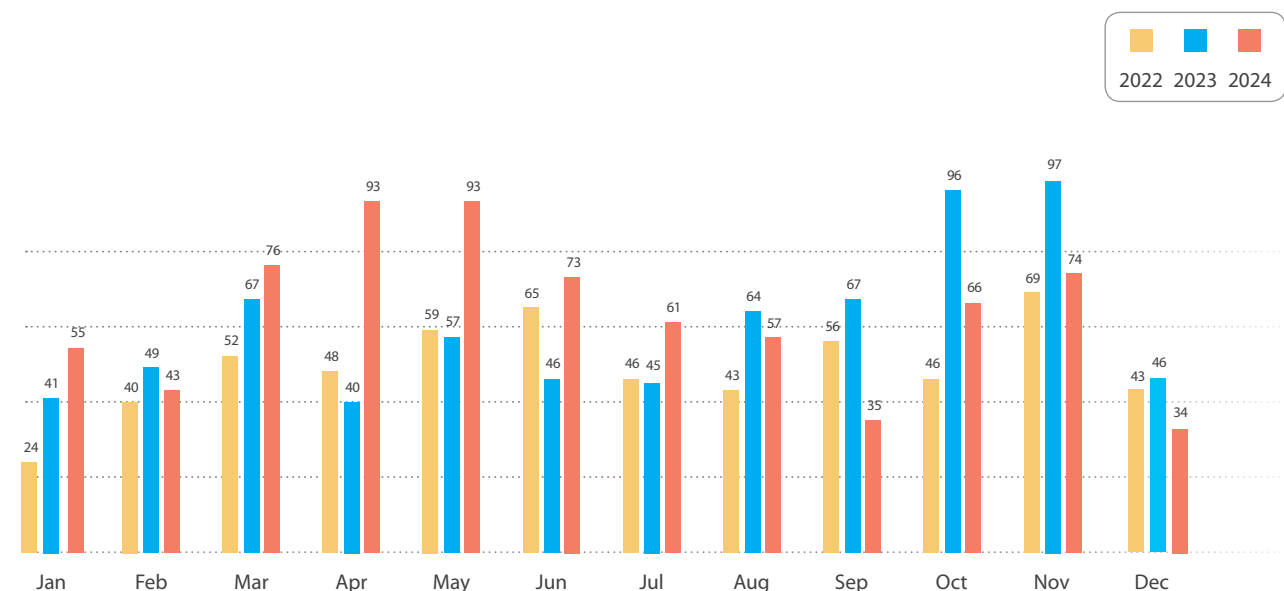
The number of IUUF incidents peaked in April and May, with 93 incidents reported each month. This surge could be contributed to the drier conditions caused by the "El Niño"² weather phenomenon, which negatively impacted agricultural crop yields in the region.

The reduced land harvest likely increased demand for seafood as an alternative food source, driving up fishing activities. Of note, most countries in South and Southeast Asia reported significant increases in IUUF incidents compared to the same period in 2023.

¹ This refers to fishing incidents that flout the rules of legal conservation and managements measures put in place by the respective authorities.

² Reference from source – <https://www.eurasiagroup.net/live-post/risk-9-el-nino-is-back>

MONTH-TO-MONTH COMPARISON OF IUUF INCIDENTS BETWEEN 2022 – 2024

3 OBSERVATION/ASSESSMENT
a Local IUUF

TOP 3 LOCAL IUUF LOCATIONS (NUMBER OF INCIDENTS)

Malaysia	136	Sri Lanka	78	Philippines	62
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The 412 reported Local IUUF incidents³ in the IFC's AOI in 2024 was 15% higher than the 359 incidents recorded in 2023. Local IUUF incidents in waters off Malaysia made up 33% (136 incidents) of total incidents, contributing to majority of total Local IUUF incidents, followed by Sri Lanka and the Philippines, contributing to 19% (78 incidents) and 15% (62 incidents) respectively.

³ Conducted IUU fishing by national vessels, or foreign vessels which have a license to fish, in waters under the jurisdiction of a state, in contravention of its laws and regulations.

b Poaching IUUF

TOP 3 LOCAL POACHING LOCATIONS (NUMBER OF INCIDENTS)

Australia	177	Republic of Korea (ROK)	52	Malaysia	37
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The 348 reported Poaching IUUF⁴ Incidents in 2024 were comparable to the 355 incidents reported in 2023. The main areas of concern for Poaching IUUF incidents in 2024 were waters off Australia (51%, 177 incidents), Republic of Korea (ROK) (15%, 52 incidents), and Malaysia (11%, 37 incidents).

While waters off Australia continued to report the highest number of Poaching IUUF incidents, there was a 15% decrease in incident numbers compared to 2023 (208 incidents). This decline may reflect the success of the collaborative efforts between regional MARSEC agencies like the Australian Border Force (ABF) and Indonesia Coast Guard (BAKAMLA) to combat IUUF⁵ through joint patrols and intelligence sharing. Such efforts have enhanced surveillance and deterrence measures, making it more difficult for IUUF to occur unnoticed, and thus strengthening the deterrent effect.

In contrast, the waters off the ROK saw an increase in the number of reported incidents, continuing an upward trend from the previous year (34 incidents). This is likely due to the ongoing collaboration between the authorities of ROK and China, which has enabled them to step up enforcement efforts and take more effective action against vessels in unauthorised fishing areas. Collaboration is expected to intensify in the foreseeable future as the ROK and China have committed to holding more IUUF dialogues⁶, as well as ROK announcing plans to expand the scope of penalties for IUUF activities⁷.

⁴ Conducted IUU fishing by foreign vessels in waters under the jurisdiction of a state, without the permission of that state, or in contravention of its laws and regulations.

⁵ Reference from source – www.abf.gov.au/newsroom-subsite/Pages/Indonesia-and-Australia-conclude-joint-maritime-operation-30-09-2022.aspx

⁶ Reference from source – https://www.news1.com/view/NISX20240925_0002899397

⁷ Reference from source – <https://www.yna.co.kr/view/AKR20240430061351065>



4 FORECAST/WAY AHEAD

The warming oceanic climate has shifted the distribution of fish, pushing them further from their traditional habitats⁸. As a result, fishermen who have historically relied on these fish stocks for their livelihoods may resort to IUUF activities to sustain their income. With the growing global demand for seafood⁹, the pressure to access these resources is expected to increase, driving a rise in IUUF incidents. The IFC anticipates that this trend will continue into 2025, even as regional authorities step up efforts to educate fishermen and cooperate against IUUF.

⁸ Reference from source – <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/04/10/new-report-predicts-how-climate-change-and-illegal-fishing-could-threaten-global-ocean>

⁹ Reference from source – <https://www.statista.com/outlook/cmo/food/fish-seafood/southeast-asia>



EFFORTS OF VIETNAM TO COMBAT IUUF

Writeup contributed by MAJ Tran Duc Khanh, Vietnam Coast Guard ILO, IFC & LT Nguyen Viet Cuong, Vietnam Navy ILO, IFC

After seven years of efforts to combat Illegal, Unreported, and Unregulated Fishing (IUUF), Vietnam has achieved significant and commendable results. To reach these outcomes, the Vietnamese government has directed relevant authorities at both the central and local levels to strengthen measures to combat IUUF.



Vietnam's Coast Guard vessels patrol, inspect, and monitor fishing vessels at sea.

In recent years, Vietnam has developed a comprehensive and stringent legal system to support the fight against IUUF. The Ministry of Agriculture and Rural Development has conducted reviews and improvements of legal documents while also enforcing stricter regulations on fishing activities. Agencies such as the Ministry of Public Security, the Ministry of National Defence, and the Ministry of Agriculture and Rural Development have worked closely with local authorities. Vietnam has also strengthened the implementation of the Vessel Monitoring System (VMS) to track Vietnamese fishing vessels and fishermen at sea, ensuring that fishing vessels do not infringe on foreign waters or engage in illegal fishing activities.

The Vietnamese government has directed key forces in the fight against IUUF, such as the Coast Guard, Border Guard, Fisheries Surveillance, Fisheries Inspectorate,

and the Police, to actively patrol, control, and address IUUF violations in key areas, including waters bordering Malaysia, Thailand, and Indonesia.

These forces work to detect and handle Vietnamese fishing vessels that violate fishing regulations. Violations such as tampering with Vessel Monitoring System (VMS) devices or fishing in foreign waters are strictly dealt with. The government is determined not to allow fishing vessels without registration, certification, or fishing permits (referred to as the “three no’s”) to engage in fishing activities at sea.

In addition to strictly enforcing the law, Vietnam has launched widespread awareness campaigns to educate fishermen on the harmful impacts of participating in IUUF. Educational and training programs on international regulations and the benefits of protecting marine resources have been organised to further raise awareness. Vietnam has also actively participated in international forums and organisations to promote cooperation in combating IUUF, particularly with countries in Southeast Asia, such as Malaysia, Thailand, and Indonesia, to ensure coordination in protecting shared marine areas.

These efforts by Vietnam have been recognised by the international community, including the European Union (EU), and Vietnam continues its efforts to eliminate IUU violations with the goal of having the EU’s yellow card removed.



1 OVERVIEW

In 2024, the IFC recorded a total of 844 Contraband Smuggling (CS)¹ incidents in the IFC's AOI, which was similar to 2023 (852 incidents) and 2022 (839 incidents). The consistently high number of incidents in recent years was likely due to rising costs globally, which in turn drove locals to supplement their income sources through illegal means and the black market. Enhanced enforcement efforts have also contributed to

the high number of reported incidents. Drugs, domestic products, and tobacco contributed to the majority of the reported incidents, with Southeast Asia accounting for the majority of CS incidents.

As global economic uncertainty and regional political instability continues, the IFC expects the number of CS incidents to remain high in 2025.

2 KEY FACTS

In 2024, drugs accounted for the most reported incidents with 240 incidents, followed by domestic products with 178 incidents. Compared to 2023, drug smuggling incidents saw a 14% increase, while domestic product smuggling incidents

decreased by 16%. Tobacco smuggling incidents were the third most smuggled contraband with 130 incidents, which was comparable to the previous year.

TYPES OF CONTRABAND SMUGGLED

Types of Contraband	Number of incidents		
	2024	2023	2022
Drugs	240	210	233
Domestic Products	178	211	223
Tobacco	130	126	113
Fuel	121	137	124
Others	175	168	146

¹ This refers to the act of conducting trade or business of an illicit kind, of goods that are prohibited by law from being exported or imported; illegally imported or exported goods, and any transfer of illicit goods within a country via the maritime domain may be treated as CS.

3a OBSERVATION/ASSESSMENT

The top three most smuggled contrabands were (i) Drugs, (ii) Domestic Products, and (iii) Tobacco.

Drugs

The IFC recorded 240 drug smuggling incidents in 2024, which was 14% higher than in 2023 (210 incidents) and comparable to 2022 (233 incidents). The increase in 2024 was mainly attributed to the increased enforcement efforts by authorities in Southeast Asia, leading to more arrests/busts.

Methamphetamine (Meth) and its derivatives, including Yaba, accounted for half of the recorded drug smuggling incidents, making it the most smuggled drug by number of incidents. This is due to its continued popularity and high demand on the black market. While the number of Meth smuggling incidents rose 17% from 100 in 2023 to 117 in 2024, the overall number of Drug smuggling incidents in 2024 decreased by 6% compared to 2023. These incidents were recorded predominantly in the waters off Malaysia/Indonesia, India/Sri Lanka, and the Philippines. Meth continues to flow from various regions including the Golden Triangle (Southeast Asia), the Golden Crescent (South Asia), Central America, and North America.

The most used vessel types for drug smuggling activities were Small Boats, Fishing Vessels, and Container Vessels. Of note, there has been a decrease in incidents involving Small Boats and Fishing Vessels in 2024, likely due to more extensive checks by enforcement agencies on these vessels, resulting in perpetrators increasingly turning to alternative smuggling methods and vessel types such as Passenger Vessels, which have been involved in more incidents in 2024 (18 incidents), compared to 2023 (12 incidents). Of note, the size (and many compartments to hide) of the larger vessel types make detection and enforcement more challenging.

b Domestic Products

The IFC recorded 178 incidents of domestic products smuggling in 2024, which accounted for approximately 21% of overall contraband smuggling incidents. The number of such incidents in 2024 decreased by 16% as compared to 2023 (211 incidents), and 20% lower than in 2022 (223 incidents). Of note, both the total volume and value of domestic products smuggled have also declined significantly ². This may suggest that smugglers are becoming more cautious, potentially due to increased enforcement efforts, leading them to smuggle smaller quantities each time to avoid detection.

Smuggled products include frozen animal products, often intended for food or medicinal use, which were often mislabelled or concealed to evade import duties (notably in China and West Asia). Other frequently smuggled items include cooking oil (in Malaysia), alcohol, food, and agricultural products (across Southeast Asia and Sri Lanka).

² Excluding the 1 smuggling incident of 38,000 tonnes of rice, the overall volume in 2024 dropped by 83% to 2,400 tonnes, while the value decreased by 80% to USD85M compared to 2023.

C Tobacco

The IFC recorded 130 tobacco smuggling incidents in 2024, comparable to 2023 (126 incidents), and 2022 (113 incidents). The consistently high numbers in 2024 were likely due to lucrative opportunities for smugglers, driven by sustained high demand and reduced supply from stricter tobacco control measures in the region. Tobacco smuggling from the Philippines was the most prevalent, followed by Hong Kong, Malaysia, and Indonesia. This trend is likely due to the comparatively lower purchase costs and taxes imposed on tobacco products in these regions.

While Small Boats remain the most used vessel type for smuggling tobacco and related products, the number of incidents involving such vessels has decreased, dropping from 53 incidents in 2023 to 40 incidents in 2024. Like other contraband types, this reduction likely reflects increased enhancement efforts targeting Small Boats and known modus operandi, prompting smugglers to adopt alternative smuggling methods.

d Others

The IFC recorded 121 fuel smuggling incidents in 2024, a 12% decrease from 2023 (137 incidents), and comparable to 2022 (124 incidents), primarily due to a decrease in incidents off Vietnam and Malaysia. However, the number is still more than twice that of 2021 (49 incidents), possibly due to the ongoing political and energy instability (e.g. Russia-Ukraine conflict), resulting in more illicit ship-to-ship transfers of sanctioned oil from countries such as Iran and Russia. Smuggling of other goods such as weapons, natural resources, and chemical substances constituted 24% of reported CS incidents. Wildlife smuggling, predominantly in Southeast Asia, has increased from 49 incidents in 2023 to 61 incidents in 2024. The number of natural resource smuggling incidents in 2024 (98 incidents) has increased as compared to 2023 (68 incidents).

4 FORECAST/WAY AHEAD

The IFC expects the overall number of CS incidents to remain high in 2025, with the possibility of an increase (compared to 2024) due to two key factors. First, ongoing inflation continues to make the smuggling of domestic products very lucrative. Second, while enforcement efforts have generally increased, ongoing instability in regions such as Afghanistan and the Golden Triangle, where enforcement is more challenging,

may encourage the large-scale production and subsequent distribution of Meth regionally.

Separately, the impact of ongoing wars and resulting sanctions will continue to have a destabilising impact on the energy market and be a significant factor in the cost of energy around the globe. This may also lead to increased illicit oil transfer activities in 2025.



Challenges and Efforts of the Malaysian Maritime Enforcement Agency (MMEA) in Tackling CONTRABAND SMUGGLING Activities in the Malaysian Maritime Zone

Writeup contributed by Capt. Maritime Mohd Shah Rulashari bin Ahmad Omar, Deputy Director of Maritime Criminal Investigation Div. (MCID), MMEA and LCDR Commander Maritime Nurul Syuhada Hafeeza bt Abd Karim, Sr Asst Director, Maritime Criminal Investigation Div. (MCID), MMEA

Challenges Faced by MMEA

1. VAST MARITIME ZONE

Malaysia's maritime jurisdiction encompasses a vast area, including the Strait of Malacca, the South China Sea, the Sulu Sea and Celebes Sea. The expansive coastlines and territorial waters present a formidable challenge to the MMEA in terms of surveillance and patrolling. The sheer size and strategic maritime location of Malaysia make it a hotspot for contraband activities.

2. SOPHISTICATED SMUGGLING TECHNIQUES

Contraband smugglers frequently deploy advanced and sophisticated techniques to evade detection. These include using high-speed boats or submersibles, operating under the cover of darkness, and employing complex logistics networks that involve multiple transit points. Such high levels of coordination and technological advancement make it exceedingly difficult for MMEA to intercept illegal consignments.

3. INSUFFICIENT RESOURCES

Despite commendable efforts, the MMEA faces constraints in terms of manpower, vessels, and

technological resources. The agency requires continuous investment to upgrade its fleet, enhance surveillance capabilities, and train personnel. Limited resources hinder consistent patrolling and can affect response times during real-time smuggling operations.

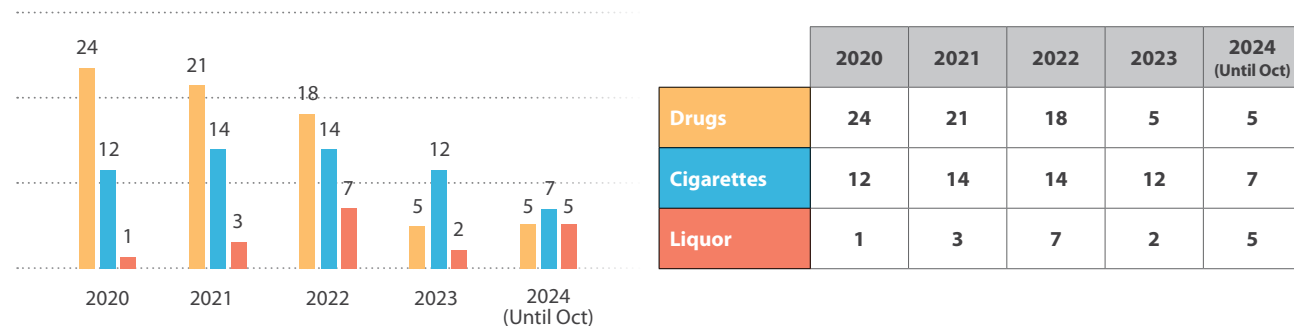
4. COORDINATION AND INTELLIGENCE SHARING

Effective contraband interdiction necessitates seamless coordination and intelligence sharing among various national and international agencies. These include the Royal Malaysian Police, Customs Department, and international partners. The complexity of inter-agency communication can sometimes lead to delays and operational inefficiencies.

5. GEOPOLITICAL AND LEGAL CONSTRAINTS

Maritime law enforcement operates within the ambit of international laws and treaties, which can sometimes limit the actions of the MMEA. Navigating diplomatic sensitivities and ensuring compliance with international norms add layers of complexity to enforcement actions.

CASES OF CONTRABAND SMUGGLING BY MMEA FROM 2020 UNTIL 31 OCTOBER 2024



Efforts by MMEA

1. ENHANCED SURVEILLANCE AND PATROLLING

The MMEA has ramped up its surveillance and patrolling activities by employing a mix of sea, air, and land assets. Modern radar systems, drones, and satellite imagery are increasingly utilised to monitor vast maritime areas. Regular joint patrols with neighbouring countries ensure a cooperative monitoring system, bolstering overall maritime security.

2. TECHNOLOGICAL INTEGRATION

The adoption of cutting-edge technology is at the forefront of MMEA's strategy to combat smuggling. Advanced vessel tracking systems, automated identification systems (AIS), and artificial intelligence (AI)-driven analytics help in identifying suspicious movements and potential threats. These technological tools augment MMEA's capability to predict, detect, and intercept illegal activities efficiently.

3. STRENGTHENING LEGAL FRAMEWORKS

The MMEA continuously works towards strengthening legal frameworks to ensure stringent penalties for smuggling activities.

Collaborations with legislative bodies help in revising existing laws and enacting new regulations that deter contraband operations. This sustained legislative support ensures that smugglers face significant legal repercussions, thereby reducing incidences of recurrence.

4. INTERNATIONAL COOPERATION

Recognising the transnational nature of smuggling, the MMEA actively collaborates with international maritime agencies through information sharing and joint operations. Partnerships with organisations such as the International Maritime Organization (IMO) and ASEAN maritime forces enhance intelligence sharing and foster a unified approach to tackling smuggling.

5. CAPACITY BUILDING AND TRAINING

Investing in human capital is a cornerstone of MMEA's approach. Regular training programs, workshops, and international exchange programs are organised to enhance the skills and expertise of maritime officers. Specialised training in areas such as search and rescue operations, intelligence

analysis, and counter-smuggling techniques ensures a highly skilled and responsive enforcement team.

6. PUBLIC AWARENESS CAMPAIGNS

Public participation is crucial in combating smuggling. The MMEA conducts regular awareness campaigns to educate coastal communities about the adverse effects of contraband activities and the importance of reporting suspicious activities. Informed and vigilant citizens serve as an additional layer of surveillance and contribute significantly to enforcement efforts.

7. INTELLIGENCE LED POLICY

Intelligence-led policing is one of the most enduring approaches to crime control and is

the most effective way to combat organised crime. These factors include recognising that the standard model of policing was not working, along with the decreasing budgets and increasing workloads. The MMEA has refined the definition of intelligence to include reliance on both tactical intelligence (operational) and strategic intelligence (prioritisation and resource allocation). The Intelligence Division plays an important role in crime mapping and spatial analysis, particularly in identifying crime hotspots, as well as in strategic analysis and the evidence-based approach to crime problems. By leveraging intelligence and data-driven insights, Intelligence-Led Policy enhances the ability to manage risks, allocate resources effectively, and address the complex challenges faced by the MMEA.

Conclusion

The MMEA's battle against contraband smuggling is marked by formidable challenges. However, through a blend of advanced technology, strengthened legal frameworks, international cooperation, and capacity building, the agency strives to safeguard Malaysia's maritime zones. Persistent adaptation and resilience are key as the MMEA continues to innovate and enhance its capabilities to protect national interests and uphold maritime security. The collective efforts of the MMEA and its partners ensure a robust security against the ever-evolving threats posed by contraband smugglers.

1 OVERVIEW

In 2024, the IFC recorded a total of 119 Irregular Human Migration (IHM)¹ incidents in the IFC's AOI, which is 45% lower than 2023 (218 incidents) and 54% lower than 2022 (257 incidents). The number of people involved in IHM also decreased significantly, with 2,665 people involved in incidents in 2024 compared to 6,946 in 2023. This decrease was primarily driven by a sharp reduction

in movements from Myanmar/Bangladesh and incidents involving Illegal Documentation². However, the regular movement of workers and fishermen travelling between Indonesia, Malaysia, and the Philippines continues to be a significant contributor to IHM. The IFC expects the number of IHM incidents in 2025 to likely remain similar to 2024 as current trends persist.

2 KEY FACTS

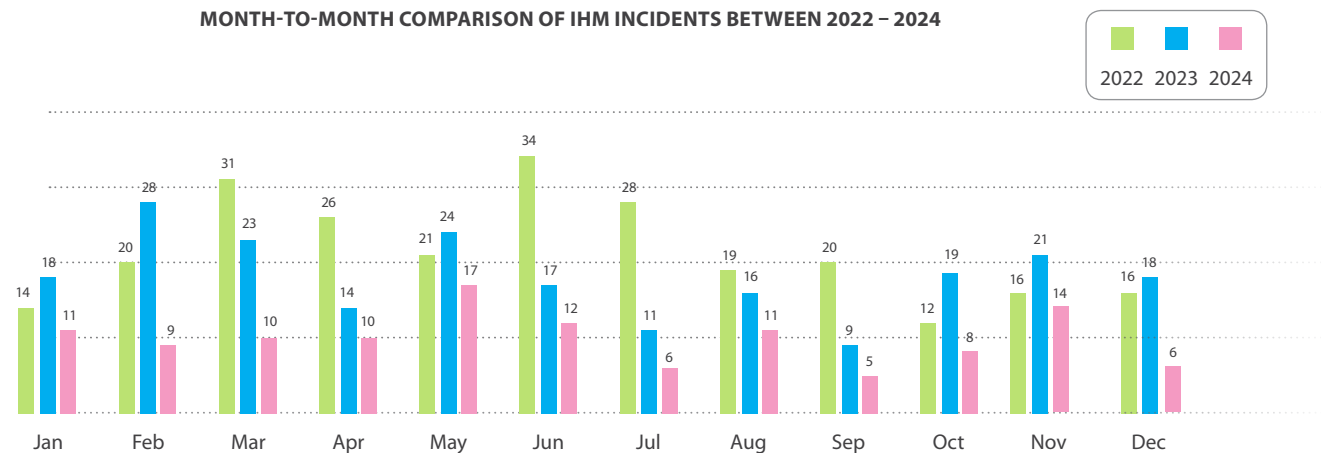
The majority of incidents recorded in 2024 involved Irregular Human Migration³ (89 incidents), which accounted for 75% of all IHM incidents; in comparison to 2023, this was 39% lower (with 147 incidents in 2023), due to a reduction in migration from Bangladesh/Myanmar⁴. Incidents involving Illegal Documentation also saw a significant reduction, with only 12 cases reported in 2024 – an 80% drop from the 58 incidents in 2023.

This is attributed to a significant drop in incidents involving illegal or missing documentation among

fishermen working on foreign fishing vessels, which fell from 52 incidents in 2023 to just 8 in 2024.

Similar to trends observed in 2023, incident numbers peaked during the Northeast monsoon period (February to June), which provided more favourable sea conditions for transit. The second half of the year showed a general decline in incidents, likely due to increased enforcement efforts by authorities combined with unfavourable transit conditions during the monsoons between July to November.

MONTH-TO-MONTH COMPARISON OF IHM INCIDENTS BETWEEN 2022 – 2024



3 OBSERVATION/ASSESSMENT

a General Insights

Malaysia remains the top destination country for IHM within the IFC's AOI. Many migrant workers travelled to Malaysia for job opportunities and returned home for festive occasions. The demand for trade and labour continues to attract illegal migrant workers, particularly men, traveling from Indonesia to Malaysia via unofficial/illegal means⁵. Malaysian authorities have maintained rigorous patrols to tackle IHM activity, complemented by increased enforcement on land⁶.

The decrease in IHM activity from Sri Lanka continued from last year, dropping from 164 migrants in 2023 to 0 in 2024. This decrease is likely due to the stabilising economic and political situation in Sri Lanka following an economic downturn in 2020 – 21, and a political crisis in 2022⁷. Measures taken in 2023 have stabilised Sri Lanka's economy, reduced inflation and rebuilt reserves. This has likely reduced IHM outflow from the country, despite continued food shortages and poverty.

The IHM attempts transiting towards Australia have more than doubled, from 5 in 2023 to 12 in 2024. These incidents were predominantly reported in the first half of the year. It is possible that migrants were drawn by the Australian High Court decision in late 2023 that ruled indefinite offshore detention illegal⁸. Criminal syndicates likely exploited this decision, using it as a lure to convince migrants that they could settle in Australia⁹ even if apprehended enroute.

¹ This refers to all channels of wilful and un-wilful irregular migration through illegal means.

² When a person(s) are discovered working in a maritime industry without the necessary documentation, or authority to be working. The person(s) are not reported to be exploited but just working illegally.

³ Irregular Human Migration is one of the four subcategories within the IHM cluster. It is defined as - When persons are implicit and wilful in their irregular/illegal migration (Based on economic; filial reasons; or migration associated with the UN definitions for Refugees, Asylum Seekers, Displaced persons and Stateless persons). Refer to Annex for definitions of the other subcategories - Human Trafficking, Human Exploitation, and Illegal Documentation.

⁴ Incidents dropped from 31 incidents in 2023 to 10 in 2024.

⁵ Reference from source – <https://www.channelnewsasia.com/asia/malaysia-foreign-worker-dependence-jobs-labour-4034881>

⁶ 30,000 illegal foreigners were arrested in Malaysia between January and August 2024, as well as almost 1000 employers - <https://www.hcamag.com/asia/specialisation/employment-law/almost-1000-malaysian-employers-apprehended-for-employing-illegal-foreigners/502415>

⁷ Reference from source – <https://www.worldbank.org/en/country/srilanka/publication/sri-lanka-development-update-2024#:~:text=Sri%20Lanka's%20recent%20economic%20stabilization,fully%20benefit%20from%20this%20moment.>

⁸ Reference from source – <https://www.hrw.org/news/2023/11/09/landmark-australian-ruling-rejects-indefinite-immigration-detention>

⁹ Reference from source – <https://www.smh.com.au/politics/federal/boat-from-indonesia-arrives-on-australian-shores-20231123-p5emf5.html>

b Key IHM Routes

There were three notable IHM routes within the IFC AOI, together accounting for 61% of all incidents (72) and 73% of all people (1,947).

i) Between Indonesia and Malaysia (In Both Directions)

In 2024, this route recorded 46 incidents involving 875¹⁰ people, which is lower than 2023, which saw 55 incidents involving 1,124 people. While 2023 saw significantly more IHM attempts flowing from Indonesia towards Malaysia, 2024 presented a more balanced distribution in both directions.

For the Indonesia to Malaysia route, the number of incidents has dropped significantly from 44 incidents involving 625 people in 2023 to 24 incidents involving 347 people in 2024. These ventures typically consisted of small groups, with half comprising 10 or fewer people. They were often facilitated by human smugglers using Small Boats and Fishing Vessels during periods of darkness.

Conversely, the number of incidents on the Malaysia to Indonesia route doubled from 11 incidents involving 499 people in 2023, to 22 incidents involving 528 people in 2024. These were primarily illegal Indonesian migrants returning home, facilitated by human smugglers using various vessel types, such as Small Boats, Fishing Vessels, and Passenger Boats. IHM activities frequently took place at night and with poorly equipped or unsafe vessels. Of note, the biggest incident involved 172 migrants drifting in the waters of North Sumatra on board two barges for more than a day before being rescued by local fishermen.

ii) Philippines to Malaysia

The route recorded 17 incidents involving 211 people, which was comparable to 2023 (18 incidents). However, the number of people involved decreased 32% compared to 2023 (312 people), primarily due to one major incident in 2023 involving 123 migrants¹¹. The majority of the incidents in 2024 were discovered aboard Passenger Vessels at the Port of Bongao in the Philippines. Many of the incidents were reported as Human Trafficking¹² by the Filipino authorities, where criminal syndicates trafficked people to Malaysia to work in low wage labour or menial domestic jobs.

iii) Myanmar/Bangladesh to Malaysia/Indonesia

This route recorded 9 incidents involving 861 people, which is a sharp decrease in incidents compared to 2023 (31 incidents involving 3,705 people). In 2024, the incidents accounted for 32% of migrants within the IFC AOI. The people involved in these ventures often chose Malaysia/Indonesia as a preferred destination due to proximity, to seek asylum and/or work illegally.

¹⁰ Majority of incidents involved less than 20 people.
¹¹ The incident took place on September 23 off Tubalubac Island, Philippines.
¹² When persons are coerced and moved/migrated against their will (forced or deceived into doing so)

Small Boats and Fishing Vessels were the most common types of vessels used to transport people from Myanmar/Bangladesh to Malaysia/Indonesia. Consistent with previous years, incidents typically took place in the start and end of the year, when weather conditions were most favourable to Small Boats in the eastern Indian Ocean.

These IHM ventures are considerably dangerous, frequently involving poorly maintained vessels attempting journeys in challenging weather conditions. Reports often highlight boats becoming inoperable, forcing migrants to swim ashore unassisted, which have resulted in numerous deaths and missing persons.

c Efforts from Regional Enforcement Agencies

Over the years, Vietnam has consistently recorded some of the lowest numbers of incidents (3) within IFC's AOI. This can be attributed to the government's strong enforcement of international and domestic laws, supported by severe penalties for offenders. Public engagement has also played a crucial role, raising awareness about the risks of IHM and exposing the methods used by criminal syndicates to exploit individuals. Furthermore, Vietnam worked closely with other governments and international organisations to combat IHM.

4 FORECAST/WAY AHEAD

With current trends expected to persist, the number of IHM incidents in 2025 is likely to remain similar to 2024 levels. Work-related IHM will likely continue in similar numbers, with Malaysia remaining the most popular destination due to its economic opportunities, attracting migrants primarily from Indonesia and the Philippines. Without significant policy changes to address the root causes of IHM, enforcement efforts at sea are unlikely to resolve the issue effectively.

Although declining, the flow of people from Myanmar and Bangladesh via maritime routes will likely continue in 2025 as long as civil unrest and targeted violence continue in the region.

Around the wider region, the displacement of minorities, state-on-state conflict, civil war, communal violence, extreme weather events, and economic insecurity will continue to drive mass movement of people in 2025 at similar levels to 2024, even if departure and destination areas change according to geographic trends.

The IFC requests the shipping community to report any sighting of overcrowded vessels to local authorities.

The shipping community can remain up to date on IHM insights through IFC products and Voluntary Community Reporting (VCR) messages.



Challenges and Efforts of Indonesia to combat IHM

Writeup contributed by Indonesia Maritime Information Centre BAKAMLA RI



Indonesia is an archipelagic nation, consisting of thousands of islands that share maritime borders with several neighbouring countries. This geographical complexity inherently increases its vulnerability to various forms of violations in its territorial waters and jurisdiction. Among these, irregular human migration stands out as one of the most prevalent challenges.

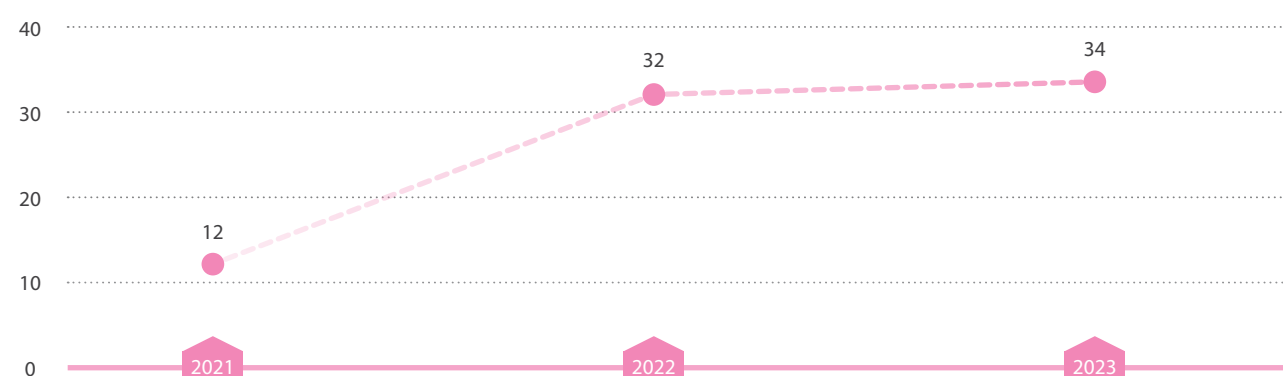
Irregular human migration refers to the unauthorised movement of individuals across national borders, often facilitated by organised crime or driven by socio-economic and political pressures. Between 2021 and 2023, cases of irregular human migration have shown a steady and alarming increase, with a significant spike observed from 2021 to 2022. This trend underscores the broader global challenges faced by Indonesia, shaped by a combination of internal and external factors.

Above: Refugees stranded in Aceh, Indonesia.

Opposite, 1st and 2nd from left: The Indonesia Coast Guard helping to evacuate refugees.

Opposite, 3rd from left: The Volunteer Sea Guard (RAPALA) Program.

NUMBER OF IRREGULAR HUMAN MIGRATION CASES (2021 – 2023)



Geographically, Indonesia's position between the continents of Asia and Australia makes it a strategic transit route for refugees and migrants. One of the most notable groups involved comprise the foreign countries' refugees, who flee due to instability in their homeland, often aiming to reach more stable and prosperous countries. However, many of these migrants find themselves stranded in Indonesia for extended periods, unable to continue their journeys. Adding to this issue are human trafficking syndicates operating in the Southeast Asian region.



These criminal networks exploit vulnerable migrants by offering so-called "safe passage" or expedited routes to their desired destinations. Indonesia often serves as a key transit point in their operations, with syndicates facilitating the movement of migrants from their countries of origin to Indonesia and then connecting them to illegal transportation channels heading to other nations. These syndicates are highly organised and operate through extensive networks, posing a significant challenge to law enforcement and maritime security forces.

The COVID-19 pandemic has further complicated efforts to manage irregular human migration. Strict travel restrictions, quarantine measures, and border closures have left many migrants stranded in Indonesia, unable to proceed to their final destinations. This has created an additional burden for Indonesia, requiring the country to not only manage the security implications but also ensure the welfare of stranded migrants while adhering to public health protocols.

The Indonesia Coast Guard plays a pivotal role in addressing this complex issue. As the primary agency responsible for maritime security and safety, the Indonesia Coast Guard undertakes various measures to combat irregular human migration in Indonesian waters. They conduct routine patrols in areas deemed high-risk for illegal entry, particularly waters bordering Malaysia, Singapore, the Philippines, and Australia. These patrols are aimed at intercepting and preventing vessels carrying illegal migrants from entering or transiting through Indonesian waters.

To enhance their capabilities, the Indonesia Coast Guard employs advanced maritime monitoring technologies, including radar systems and the Automatic Identification System (AIS), to track vessel movements within its maritime jurisdiction. These technologies enable faster detection of suspicious

activities and allow authorities to map routes frequently used by irregular migrants. When a vessel carrying illegal migrants is detected, the Indonesia Coast Guard acts swiftly by intercepting, inspecting, and detaining the vessel. Migrants onboard are subject to further examination and legal processing in accordance with Indonesian law before being handed over to relevant agencies for follow-up action.

Collaboration is the cornerstone of Indonesia's strategy to combat irregular human migration. The Indonesia Coast Guard works closely with other key stakeholders, including the Indonesian Navy, the National Police, the Ministry of Foreign Affairs, and the Directorate General of Immigration. This inter-agency coordination is facilitated by the Indonesia Coast Guard's Command and Control Centre, which assigns liaison officers to ensure effective communication, intelligence sharing, and the development of joint strategies. Such cooperation allows for quicker and more coordinated responses to emerging threats.

On the international front, Indonesia continues to strengthen its partnerships with neighbouring countries and global maritime organisations to mitigate irregular human migration. These collaborations include data sharing, joint monitoring efforts, and coordinated strategies aimed at tracking and addressing migration flows across the Southeast Asian region.

Additionally, the Indonesia Coast Guard promotes awareness campaigns targeted at coastal communities, particularly fishermen, through the Volunteer Sea Guard (RAPALA) program. These campaigns educate local populations about the dangers and risks associated with irregular human migration and encourage them to report any suspicious activities. By involving these communities, Indonesia fosters a collective approach to safeguarding its waters and combating irregular migration effectively.

1 OVERVIEW

In 2024, the IFC recorded a total of 56 Environmental Security (ENVSEC)¹ incidents in IFC's AOI, which was similar to 2023 (54 incidents) but 70% higher than 2022 (33 incidents). As with past years, the majority of incidents involved Maritime Pollution (MARPOL)², with oil leaks

and the indiscriminate discharge of waste from merchant vessels prevalent. The IFC expects the number of ENVSEC incidents in 2025 to remain high due to the combined effects of increased maritime traffic, enhanced reporting and collation of data, and sustained high demand for oil supply.

2 KEY FACTS

49 incidents were classified as MARPOL, accounting for 88% of incidents reported; this was followed by Maritime Illegal Exploitation (MIE)³ (6 incidents) and Others⁴ (1 incident).

The months of July to October recorded the highest number of incidents due to a series of oil spills across Southeast Asia, including the South China Sea.

TYPES OF ENVSEC INCIDENTS

Maritime Pollution (MARPOL)	49
Maritime Illegal Exploitation (MIE)	6
Others	1

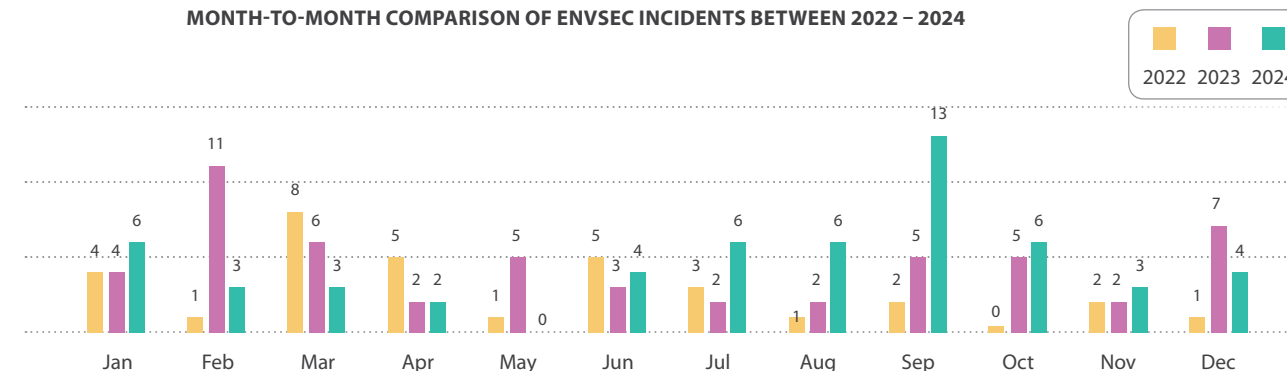
¹ This refers to the examination of threats posed by environmental events and trends to individuals, communities or nations, with a focus on the impact of human activities on the environment and societies.

² Refers to Liquid pollution (Oil spills, discharge / leak of oil or sewage); Air pollution; Solid pollution (illegal discharges of waste, garbage, plastic, etc.) which includes: on board record violation (as oil blending) and noise pollution.

³ Exploitation of Oil and gas, Flora and Biological and Mineral resources (nodules, etc.)

⁴ Any Maritime Environment Security incidents not explicitly fall into ENVSEC classifications such as, but not limit to, harmful or fatal incident of marine life, etc.

MONTH-TO-MONTH COMPARISON OF ENVSEC INCIDENTS BETWEEN 2022 – 2024



3 OBSERVATION/ASSESSMENT

Similar to the past 2 years, MARPOL continues to be the most commonly reported ENVSEC incident in the IFC's AOI as oil leakages from land-based infrastructure and damaged Tankers remain prevalent. Of the 49 MARPOL incidents recorded, 43 involved petrochemical spills. This trend is likely driven by the region's growing maritime traffic and high demand for petrochemical products, leading to more activities such as bunkering and Ship-to-Ship (STS) transfers, which heighten the risk of such incidents.

Compounding these challenges are the global rise in illegal STS transfers⁵, often conducted to bypass sanctions on nations like Iran, Russia, and Venezuela. These illicit operations frequently involve poorly maintained vessels, which significantly increases

the risk of oil spills and leaks. Additionally, these vessels involved in illegal STS transfer often disable their AIS transponders to evade detection, deviating from standard maritime routes and regulations. Such activities not only undermine maritime safety but also increase the likelihood of environmental security incidents. Mariners are advised to remain vigilant against these risks and report any suspicious activities for shared awareness and responses by local authorities.

The decrease in the number of MIE incidents in 2024 can be attributed to the increase in enforcement efforts of local authorities against the illicit sand mining activities, like The Marine Sand Watch⁶ launched by UNEP in late 2023.

4 FORECAST/WAY AHEAD

The IFC expects the number of incidents in 2025 to remain high due to the combined effects of increased maritime traffic, enhanced reporting and collation of data, and sustained high demand for oil supply. Furthermore, with global conflicts showing

no signs of resolution in the near term, the IFC expects illegal STS transfers to persist into 2025. These activities pose considerable navigational and environmental risks, which could further aggravate existing environmental challenges.

⁵ Reference from source – <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/shipping/113023-dark-tanker-oil-transfers-rise-further-with-suspected-sanctioned-trades>

⁶ Reference from source – <https://www.unep.org/news-and-stories/story/inside-high-tech-effort-save-worlds-dwindling-sand-reserves>



Salvage of MT SOUNION in the Red Sea

Writeup contributed by Mr John Thompson, Co-founder and CCO, Ambrey

On 21 August 2024 the Greek-owned, laden oil tanker MT SOUNION was targeted by Houthi militants in the southern Red Sea. The fast attack craft engaged the armed security team onboard and were repulsed before she was struck by three anti-ship missiles. These missiles destroyed critical control systems supporting her engine room and she lost propulsion with no hope of immediate repair. With the Houthi conducting further attacks, she dropped her anchor and the crew abandoned the vessel. A nearby French frigate, the *Chevalier Paul*, picked up the crew and were targeted by an unmanned surface vessel which was destroyed.

On 23 August the Houthis boarded the vessel before setting and blowing explosive charges on the main decks and bridge. A dramatic film released online by the Houthis was then widely circulated on international media. On 24 August the U.S. State Department stated that 'The Houthis' continued attacks threatened to spill a million barrels of oil into the Red Sea, an amount four times the size of the Exxon Valdez disaster.

The SOUNION was stricken 58 nautical miles off the Yemeni coast, under close watch by Houthi mother ships and in easy range of all their weapon systems ashore. The area was a busy battlespace with offensive U.S.-led military operations ongoing against Houthi targets and Operation Aspides, an EU Task Force under a defensive mandate providing escorts to merchant shipping alongside the presence of other international naval forces too. Houthi attacks on merchant shipping continued throughout the period of the salvage

operation. Major diplomatic efforts were required to ensure that any salvage operation was not attacked by the Houthis and to establish the level of military support required for the salvors to have the secure time and space needed to deal with the vessel.

The explosions started 19 separate fires fuelled by the vapours from the crude oil onboard. Many of SOUNION's systems were severely damaged or destroyed. Salvors had no certainty as to the integrity of the hull following the explosions and the fires. The extensive firefighting required to make her safe could not be undertaken in her anchored location. However, a tow of a laden tanker whilst on fire was not something that had ever been undertaken at this scale before. Salvage operations could only begin once engineers had inspected the vessel and cleared it of any unexploded ordnance or improvised explosive devices.

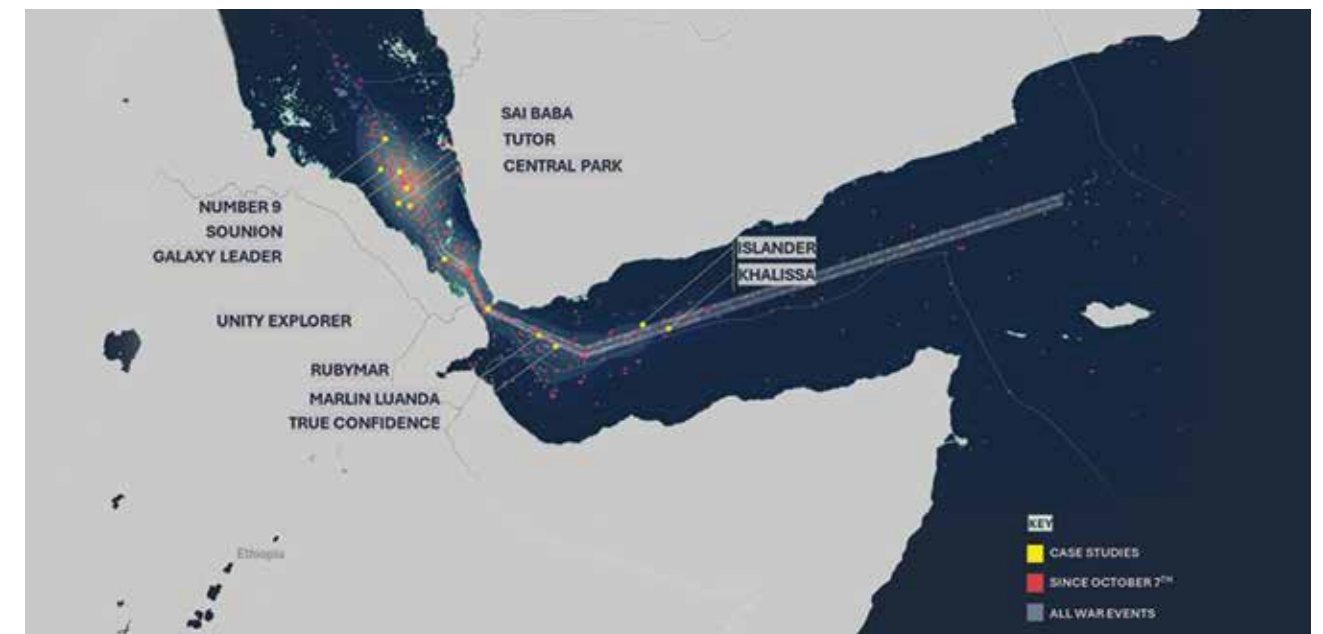
The availability of capable salvage and firefighting equipment within the southern Red Sea and Gulf of Aden is poor. Specialist tugs had to be mobilised from Europe and firefighting equipment flown in by air charter from around the world. Circumventing normal customs procedures to enable critical equipment to reach the SOUNION in time took diplomatic engagement at the highest levels.

The specialists required for the firefighting and oil spill response had to be prepared to conduct their already difficult and dangerous tasks in the midst of a war zone and potentially, under fire from Houthi attack.

In mid-September a flotilla of seven salvage vessels supported by three warships and close air support successfully reached SOUNION and towed her to a safe and secluded location 150 nautical miles to the north. Diplomatic efforts to engage with the Houthis ensured that the flotilla did not come under attack during the hook up and tow. Firefighting faced huge challenges with the heat and humidity of the Red Sea meaning operations could only occur in night time. Several firefighters were treated for heat exhaustion. Once the fires were put out in early October and the vessel declared safe, she was towed north to Suez for removal of her cargo and repair.

The project to save the SOUNION was a complex salvage operation inside a complex military and security operation. It prevented a major international disaster. The incident exposed significant gaps in salvage, firefighting and oil spill response capability in the region which do not match the intensity of the attacks currently being made on merchant ships. The shipping industry and international stakeholders must work quickly to close this gap as the conflict continues.

Ambrey offers our sincere thanks and gratitude to all of the brave military and civilian partners, suppliers and crew members involved.



A TIMELINE

- | | |
|---|--|
| 14 Nov 2023 General Houthi Threat Warning | 12 Jan 2024 Khalissa I First UK/US Affiliation |
| 19 Nov 2023 Galaxy Leader I First & Last Seizure | 26 Jan 2024 Marlin Luanda I Response Cooperation |
| 25 Nov 2023 Central Park I Last Boarding | 18 Feb 2024 Rubymar I Early Warning & First TCL |
| 03 Dec 2023 Unity Explorer I First UAS Strike | 22 Feb 2024 Islander I First Physical Crew Injuries |
| 03 Dec 2023 Number 9 I First Missile Strike | 06 Mar 2024 True Confidence I First Crew Fatalities |
| 23 Dec 2023 Sai Baba I First Houthi Mistake | 12 Jun 2024 Tutor I First RC-WBID/PMSC Failure |
| | 22 Aug 2024 SOUNION I Houthi FoM & Secure Salvage |

1

OVERVIEW

In 2024, the IFC recorded 63 Cyber Security (CYBSEC)¹ incidents in the IFC's AOI, representing a significant increase compared to 2023 (22 incidents) and 2022 (3 incidents). The majority (54 incidents) were AIS spoofing incidents that were identified during a trial that IFC conducted between September and November. During the trial, the IFC (supported by our partners) actively used commercially available satellite imagery tools/platforms to identify vessels engaged in AIS spoofing, enabling us to identify more incidents

that went unreported on open source.² Excluding the incidents from the trial, the IFC recorded 9 incidents, which was a more than 50% drop compared to 2023. In 2025, the IFC expects the number of reported CYBSEC incidents to remain at similar levels as 2024 as digitalisation (and thus threats) continues to develop within the maritime sector, and more shipping partners realise the importance of reporting/sharing when incidents occur for improved overall awareness within the industry.

2

KEY FACTS

In 2024, AIS spoofing incidents accounted for the most reported incidents with 54 incidents, followed by submarine cable damage with 3 incidents, and malware attack with 2 incidents. All 54 AIS spoofing incidents recorded in 2024 came from a short-term trial conducted by the IFC to identify AIS spoofing activities between September and November, within a specific area of the IFC's AOI.

This trial was initiated in response to the prevalence³ of unreported dark shipping activities in the region. Such incidents raise significant concerns for both the shipping industry and

regional enforcement agencies, as they increase the risk of maritime accidents and environmental disasters, and more importantly, because they may be used to hide more nefarious activities. During the trial, the IFC (supported by our partners) used commercially available satellite imagery tools/platforms to actively identify vessels that either failed to broadcast AIS data, or transmitted misleading or false information.

[Note: A key takeaway from this trial is that there are many such incidents/activities that go undetected and thus also unreported, which puts our region at risk of more nefarious activities.]

¹ This refers to illicit cyber/computer activities which compromise, corrupt, degrade or destroy important systems on vessels and/or critical shore based maritime infrastructure such as ports, container stocking yards, etc.

² The IFC's usual practice for tracking MARSEC incidents, including AIS spoofing, primarily relies on reports from open sources and/or MARSEC partners, which is less labour intensive.

³ Reference from source – <https://www.riotimesonline.com/the-dark-fleet-navigating-the-perils-of-sanctioned-oil-in-asian-waters/>

3

OBSERVATION/ASSESSMENT

a AIS Spoofing

Of the 54 incidents recorded in the AIS Spoofing trial, the majority involved the transmission of wrong location data (46 incidents). Remaining incidents involved the use of false vessel names, IMO numbers, and flags. Tankers were mostly involved in these incidents, possibly used by shipping companies attempting to circumvent oil sanctions on countries such as Iran, Russia, or Venezuela.

b Submarine Cable Damage

While reported incidents involving Submarine Cable Damage in IFC's AOI dropped in 2024, Vietnam continues to face frequent outages in its submarine cable infrastructure, severely impacting internet connectivity. The repeated failure of multiple cables in Vietnam may highlight the country's (and possibly the whole region's) reliance on a limited number of ageing cables. In response, Vietnam is actively focusing on strengthening its submarine cable resilience, including the establishment of a new connection in late December 2024, plans for a Singapore/Vietnam cable by 2027, and a goal to increase its submarine cable connections from the current 6 to 10 by 2030.

c Malware Attack

Malware Attack incidents also saw a decline in 2024, with no reported incidents involving commercial entities, marking an improvement from the 3 cases reported in 2023. The attacks in 2024 were limited to ransomware incidents targeting government agencies in Palau and Indonesia. Of note, Indonesia's Temporary National Data Centre, Pusat Data Nasional (PDN), was compromised by the latest LockBit 3.0 ransomware variant, which disrupted key services in the country, including licensing operations at the Coordinating Ministry for Maritime Affairs and Investment. (Cont'd on next page)

⁴ Reference from source – <https://www.bbc.com/news/articles/cpe3zgznwjno>



The Importance of International Law and Cooperation for Submarine Cables

Writeup contributed by Mr Kent Bressie, Legal Advisor at International Cable Protection Committee, and Partner at HWG LLP

Submarine cables are a wonder of technology and international cooperation. According to the consultancy TeleGeography, submarine cables carry approximately 99.4% of the world's intercontinental Internet, data, and voice traffic and backhaul almost all of its mobile traffic. Submarine cables support a full range of human activities – economic, social, and national security – in both developed and developing states. Originally built by telegraph and telephone companies, they are increasingly built by Internet hyperscalers. Cables are more reliable, secure, cheaper to build and maintain – and have much higher capacity – than satellites.

Submarine cables are long-term fixed infrastructure on the seabed that traverse jurisdictional areas of multiple coastal states and areas beyond national jurisdiction. Installation, operation, and repair of cables require some level of cooperation and coordination, or at least acquiescence, by and among states. Governments variously promote, protect, regulate or control, and sometimes neglect and/or target, submarine cables.

Installation, operation, and repair of cables depend on rule of law for the oceans. No intergovernmental organisation authorises or regulates cables globally. Instead, cables are authorised by coastal states in their areas of jurisdiction. Cable operators rely on treaties, customary international law, and measures of

individual states. The United Nations Convention on the Law of the Sea (UNCLOS) grants freedoms to states to install, operate, and repair cables on the high seas and seabed thereunder, and in exclusive economic zone and continental shelf areas of coastal states, and it requires states to adopt certain cable protection measures. UNCLOS includes only very general due and reasonable regard obligations for coordination of submarine cables and other marine activities.

Contrary to popular perception, most cable damage is not due to intentional attacks or to shark bite. Instead, more than 70 percent of global cable damage each year results from two human activities: commercial fishing and vessel anchoring. As the oceans are increasingly crowded places, damage can result from other human activities such as uncoordinated energy resource development (oil, gas, renewables) and mining (seabed minerals, sand, gravel); dredging and dumping; and unexploded ordnance. Intentional damage, equipment theft, and cyberattacks on network management systems are very rare but can have significant adverse impacts.

Cable damage can also result from natural causes, including earthquakes, typhoons, tsunamis; underwater landslides, turbidity currents, and on-shore flooding; sea floor geology and vulcanology; and weather and climate change. (Cont'd on next page)

While CYBSEC incidents accounted for only a small percentage of the total MARSEC incidents in 2024, the disruptive and far-reaching impact of such incidents underscores the critical need for robust defences across all internet-connected systems and devices. Regional authorities are actively addressing this challenge, implementing measures to enhance cybersecurity resilience in the maritime sector.

For example, in 2024, the Maritime and Port Authority of Singapore (MPA) intensified its efforts to strengthen cybersecurity in the maritime sector⁵ with shipping companies and various institutions to foster cooperation in cybersecurity exercises,⁶ research, and career development in the field. MPA also supported the Singapore Shipping Association on the development of the MaritimeSG Shipping CyberSafe Scorecard in April to help stakeholders evaluate their CYBSEC measures and identify areas for improvement. The IFC also intends to step up efforts to collaborate with our partners from both the MARSEC and shipping community to increase awareness and cooperate in this area moving forward.

4 FORECAST/WAY AHEAD

The IFC expects the number of CYBSEC incidents in 2025 to remain at similar levels as 2024, driven by the push for digitalisation and risk of cyberattacks targeting ships, maritime infrastructure, and shipping companies. To combat against such threats, authorities are taking proactive measures to enhance cybersecurity resilience across the maritime sector, and also to improve awareness through education and info-sharing.

The IFC will explore continuing the effort to proactively track AIS spoofing incidents in 2025, with the need to establish a more robust process to ensure effective implementation.

Through this initiative, the IFC aims to raise awareness of such dark shipping activities among MARSEC stakeholders, and support regional enforcement efforts.

⁵ Reference from source – https://www.mpa.gov.sg/docs/mpalibraries/media-releases/smw-2024---collective-efforts-to-strengthen-maritime-cybersecurity.pdf?sfvrsn=ee064d73_1

⁶ MPA organised the annual cybersecurity tabletop exercise (TTX), which brought together 40 participants across the maritime sector. The exercise simulated cyberattacks on various ports to assess existing capabilities and gather valuable feedback on how to strengthen CYBSEC measures.



FORECAST OF IFC ACTIVITIES 2025

Industry pursues cable protection and resilience both in cable project design and in extensive post-installation protection measures. But in many respects, government action is necessary to promote the rule of law, reduce cable damage, and promote network resilience. With malicious damage by state and non-state actors, governments have a key role to play in prevention, monitoring, and enforcement. Recognising this, in 2021, ICPC launched Government Best Practices for Cable Protection and Resilience (the “Best Practices”). These are designed to assist governments in developing laws, policies, and practices for submarine cable protection and resilience. The Best Practices identify both general principles and best practices in specific areas. General principles include:

- Wholistic and integrated approach to risks
- Transparent regulatory regimes that foster speedy installation and repair
- Promotion of rule of law for the oceans
- Consultation with industry
- Use of best available science
- Engagement between states on a regional and global basis.

ICPC’s Best Practices are intended to be adapted to particular national and regional circumstances. They are regularly updated to address developments with ocean activities, technology, the natural environment,

and geopolitics. Emerging challenges for submarine cable protection and resilience include: jurisdictional creep by coastal states, uncoordinated deep seabed mining, damage by dark fleet ships, BBNJ treaty implementation, and climate change.

Founded in 1958, the ICPC is the world’s leading organisation promoting submarine cable protection and resilience. As a non-governmental organisation, it works with its members, governments, international organisations, other marine industries, and the scientific community to:

- Mitigate risks of natural and human damage to cables
- Develop recommendations and best practices for industry and governments throughout the cable project life cycle
- Promote scientific research regarding cables in the marine environment
- Promote the rule of law for the oceans.

It represents submarine cable interests before the International Seabed Authority, in UNCLOS and BBNJ treaty processes, and many U.N. agencies. It has more than 235 members from more than 75 nations, including cable operators, owners, manufacturers, industry service providers, and governments. The ICPC welcomes the opportunity to work with interested stakeholders to foster submarine cable protection and resilience.

<u>JANUARY</u> • Annual Report & Infographic 2024 Release	<u>FEBRUARY</u> • 47 th Shared Awareness Meeting (SAM) (20 Feb)	<u>MARCH</u>	<u>APRIL</u> • Quarterly Infographic Release
<u>MAY</u> • 9 th Maritime Information Sharing Exercise (MARISX) (6 to 8 May) • 2 nd Shipping Leadership Program	<u>JUNE</u>	<u>JULY</u> • Mid-year Infographics Release • 13 th Regional MARSEC Practitioner Program (RMPP) (21 to 25 July) • 48 th SAM	<u>AUGUST</u>
<u>SEPTEMBER</u> • Maritime Awareness Week Campaign	<u>OCTOBER</u> • Quarterly Infographic Release	<u>NOVEMBER</u>	<u>DECEMBER</u>





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