

INFORMATION FUSION CENTRE



ANNUAL REPORT

2025

WITH CONTRIBUTIONS FROM





INFORMATION FUSION CENTRE

CONTENTS

FOREWORD	2
A THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS)	4
The Indonesian National Police (POLRI)	11
B MARITIME TERRORISM (MT)	14
Joint Maritime Information Centre – Situation in the Red Sea	16
C MARITIME INCIDENTS (MI)	18
Lt Cdr Deepak Sharma – Charting a Shared Course	22
Vanguard Technology – Salvage Operation: MT Njord	24
D ILLEGAL, UNREPORTED, AND UNREGULATED FISHING (IUUF)	26
Royal Thai Navy – CDR Kullmanoch Wanwarn - Navigating Forward - Thailand's Maritime Collaboration to Combat IUUF in Southeast Asia Navigating Forward	32
E CONTRABAND SMUGGLING (CS)	36
International Chamber of Shipping – Drug Smuggling Prevention	40
Australian Border Force – Australia Shutting Down Illicit Tobacco Markets	43
F IRREGULAR HUMAN MIGRATION (IHM)	46
Italian Coast Guard – Challenges of Irregular Migration by Sea in the Mediterranean	54
G ENVIRONMENTAL SECURITY (ENVSEC)	58
International Tanker Owners Pollution Federation (ITOPF) – Alternative Fuels	62
H CYBER SECURITY (CYBSEC)	64
Critical Underwater Infrastructure	68
ANNEX	70
IFC Classifications of MARSEC Categories	71
Forecast of IFC Activities 2026	75



FOREWORD



A word from SLTC Lester Yong, Head IFC

I am pleased to present the IFC's Annual Report for 2025, a testament to the commitment and year-long collaborative efforts of our International Liaison Officer (ILO) corp. This past year, the IFC recorded 2,514 incidents across our 8 Maritime Security (MARSEC) categories in IFC's Area of Interest (AOI), a notable decrease from the 2,960 incidents reported in 2024. I hope that this report will serve as a useful resource to identify MARSEC trends and evolving threats in our region.

Against the backdrop of an increasingly complex maritime environment, the IFC has stepped up efforts to promote cooperation and capacity building in 2025 through our flagship events, which saw record-breaking levels of participation. The 13th Regional MARSEC Practitioner Programme (RMPP) saw its highest attendance to date, with 157 personnel from 25 countries. For the first time, the RMPP included visits to institutes of higher education and expert-led discussions on newer areas of concern, such as Critical Underwater Infrastructure (CUI). Our Senior Commanders Dialogue also facilitated high-level insights from operational leaders, bridging the gap between strategy and execution. Similarly, the 9th Maritime Information Sharing Exercise (MARISX) achieved record participation with

151 personnel from 31 countries. This year's exercise gave a sneak peek at the upgraded IFC Real-time Info-sharing System (IRIS 2.0 in exercise mode), and featured the first-ever attempts at CUI-related scenarios co-designed in collaboration with the Italian Navy's Virtual Regional Maritime Traffic Centre (V-RMTC).

Our 47th and 48th Shared Awareness Meetings (SAM), which we co-organised with the Singapore Shipping Association (SSA) and Asian Shipowners' Association (ASA) also saw significant growth in participation levels, where we hosted over 200 partners from the regional MARSEC and shipping community. The SAMs enhanced collective awareness of emerging risks faced by all maritime stakeholders, including the safety and operational risks associated with adopting alternative fuels, as well as the potential security and safety challenges arising from the increased use of Artificial Intelligence in the maritime domain.

The SAMs also featured presentations from global stakeholders such as the French Maritime Information Cooperation & Awareness (MICA) Center, and the UK Maritime Trade Operations (UKMTO), who provided SME insights to their respective regions' security challenges and operational focus, helping our regional industry



INFORMATION FUSION CENTRE

“The IFC is planning to host the 14th RMPP in July, with 49th and 50th SAM scheduled for February and July respectively. These initiatives, alongside new projects, rely on the continued support of our MARSEC and shipping partners.”



and MARSEC partners better understand the MARSEC landscape beyond our immediate AOI.

The IFC’s ability to contribute operationally to MARSEC is underscored by robust operational linkages. To this end, we have continued to strengthen our network effect through formalising 4 new Cooperative Frameworks/Memorandum of Understanding (MOU) in 2025, with 14 more in progress. Such robust operational linkages have enabled the IFC to coordinate swift operational responses at sea, resulting in 5 “ops successes” in 2025 and saving lives of seafarers. The IFC and our close shipping partners also facilitated the sharing of CCTV evidence, which played a crucial role in supporting successful land operations by the Indonesian National Police (POLRI based in Batam), resulting in the bust of a local sea robbery syndicate responsible for the spike in sea robbery incidents in the Singapore Strait.

The IFC also continued to support overall defence relations efforts through hosting over 80 VIP visits from navies, coastguards, and other maritime law enforcement agencies all over the world, fostering mutual understanding and cooperation at all levels. This is important as we continue to expand international partnerships.

To strengthen mutual trust with the shipping community, we conducted 10 ship security drills and participated in multiple company visits and industry-led initiatives, reinforcing our role as a partner of choice to the industry.

As we look ahead to 2026, I am confident that it will be an equally fulfilling year. The IFC will conduct the 14th RMPP in July, with the 49th and 50th SAM scheduled in February and July respectively. Partners can also look forward to the official operationalisation of IRIS 2.0, which would be a key enabler to enhance maritime awareness and timely information sharing.

In closing, I extend my heartfelt gratitude to our ILOs for efforts in research and ops coordination, and to our partner agencies who contributed their expertise through MARSEC write-ups on their respective AOs. I sincerely hope that you will find the information provided in this Annual Report useful and relevant, and we look forward to greater collaboration in 2026. **Together, we can achieve Safe and Secure Seas For All!**

SLTC Lester Yong
Head Information Fusion Centre

2026

SECTION



A

THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS)

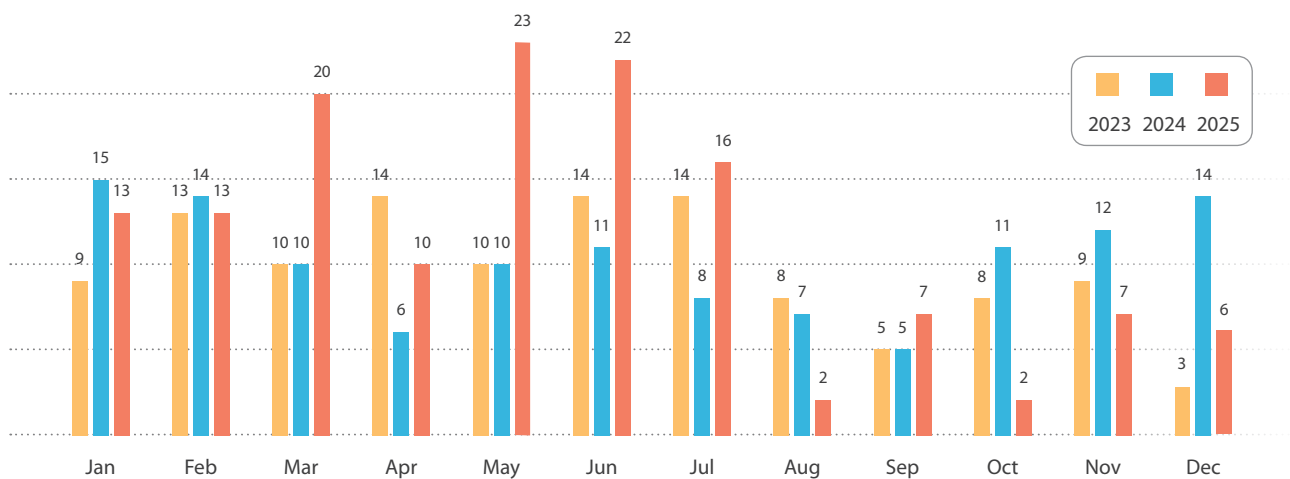


OVERVIEW

In 2025, the IFC recorded a total of 143 TRAPS¹ incidents in the IFC’s AOI, which was higher than 2024 (123 incidents), and 2023 (117 incidents). The high incident number in 2025 can be attributed to the combined effects of (a) global economic factors leading to increased cost of living and unemployment,

and exacerbated by (b) challenging weather conditions affecting fishing yields, leading locals with requisite skillsets to resort to crimes at sea to make ends meet. The IFC expects the number of TRAPS incidents to remain high in 2026 unless more land operations are conducted, with incidents remaining opportunistic and largely limited to petty theft.

MONTH-TO-MONTH COMPARISON OF TRAPS INCIDENTS BETWEEN 2023 – 2025



¹ This refers to the act of Theft, Robbery, or Piracy within and/or originating from the maritime domain.





KEY FACTS

The most frequent TRAPS incident types were (a) Boarding ² (136 incidents, 95%), followed by (b) Attempted Boarding ³ (6 incidents, 4%), and (c) Hijacked (1 incident, 1%).

Of note, there were no deaths recorded in 2025. [For Info: The Hijacked incident (involving a Fishing Vessel and 11 fishermen) was reported in Cox Bazar, Bangladesh.]

a Types of Vessels

Consistent with past trends, the most targeted vessel type in the IFC's AOI was Bulk Carrier, accounting for 47% (67 incidents) of all TRAPS incidents in 2025. This was followed by Tanker at 22% (31 incidents), Tug and Barge at 11% (16 incidents), and Container Vessel at 10% (15 incidents). These vessel types were primarily targeted due to their lower freeboard and slow speed when transiting, especially when fully laden.

b Confrontation and Crew Injury

Out of the 143 incidents in 2025, 8% (12 incidents) involved confrontation, which was lower than 2024 (18%, 22 incidents). 33% (47 incidents) of the incidents in 2025 involved perpetrators reportedly armed with weapons (i.e. steel rods, knives, machetes, and small arms), which was comparable with 2024 (43 incidents).

The number of incidents with reported injury to crew also declined, with only 4 incidents ⁴ resulting in minor injuries in 2025, compared to 5 incidents in 2024. They occurred in waters off Bangladesh – Patharghata (1 incident), and Pussur Channel (1 incident); and the Singapore Strait (SS – 2 incidents).

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.

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 merchant vessel.

⁴ In 2025 incidents, there were 2 incidents in SS that reported minor injury (non-life-threatening) to crew. In addition, there were incidents involving crew injury in Bangladesh – 50 fishermen were injured during a mass boarding by perpetrators, and 3 crew members of a Cargo Vessel were injured in an unauthorised boarding.



OBSERVATIONS / ASSESSMENTS

The 3 key areas of concern for TRAPS incidents were (a) SS (b) Indonesia Anchorage Areas (i.e. Jakarta, Kalimantan, and Belawan), and (c) Chattogram Anchorage Area, Bangladesh. Of these, the SS remained the main area of concern, accounting for almost 75% (107 incidents) of

total TRAPS incidents in 2025. Notwithstanding, overall Modus Operandi of perpetrators remain opportunistic and consistent with petty crime – minimal confrontation and/or injury, with only smaller items like engine and ship spares stolen.

a Singapore Strait (SS)

i) Trending

There were significantly more incidents recorded in the SS in 2025 (107 incidents) than in 2024 (62 incidents) and 2023 (58 incidents). This could be attributed to the combined effects of (a) Northeast Monsoon and heightened typhoon activities⁵, which exacerbated the already unfavourable fishing conditions in the South China Sea (SCS) in Q1 and Q4 2025, severely affecting the fishing activity and yield; and (b) increased financial obligations leading up to various festive periods throughout the year, causing more locals to resort to petty crime in coastal waters to supplement their income, despite continued enforcement efforts and risk of arrests.

Consistent with 2023 and 2024, most of the incidents occurred in the Phillip Channel (79 incidents, 74%), mainly Northeast of Karimun Besar Island and Northwest of Kepalajernih Island, where vessels were known to decrease speed significantly when turning, making them more susceptible to attacks. The other areas of concern were the Eastbound lane of the Traffic Separation Scheme (TSS) in waters off Bintan and Batam Islands (25 incidents), and the Westbound lane of the TSS in waters off Pengerang, Malaysia (3 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 AOI's characteristics made enforcement and arrests more challenging.

Of note, the majority of the incidents occurred in the first half of 2025 (79 incidents). Incident numbers dropped by 65% in the second half of 2025 (28 incidents); this is likely due to the effective land operations conducted by the Indonesian authorities in July 2025⁶, which resulted in multiple arrests and sent a strong deterrent message to any

⁵ There were tropical depressions in February and heightened typhoon activities during the annual monsoon season, e.g. Typhoon Podul in August and Typhoon Matmo in October.





newer would-be perpetrators. CCTV evidence submitted by the shipping community played a key role in this effort. Notwithstanding, based on past data, incident numbers may start to creep up about six months after land operations (i.e. 2023) as the deterrent effect wanes.

ii) **Modus Operandi**

Bulk Carrier was the most frequently targeted vessel type in the SS, accounting for 55% (59 incidents) of the total incidents in the area. This was followed by Tanker at 23% (25 incidents), Tug and Barge at 12% (13 incidents), and Container Vessel at 10% (10 incidents). These vessels are typically targeted due to their slower speed (7 to 12 knots), and lower freeboard (up to 8m), especially when fully laden. Of note, for the first time in more than 5 years, Container Vessels were targeted in the SS. Container Vessels typically transit the SS with freeboards more than 10m; however, the 10 Container Vessels that were targeted had freeboards between 3 to 8m, which possibly made them more susceptible to boarding.

Based on incident reports, and in consultation with IFC's regional ILOs, the perpetrators were assessed to be familiar with the local waters and were 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 to 8 pax.

- **Bulk Carriers, Tankers and Container Vessels.** Perpetrators typically target these vessels at night. Perpetrators might also be armed with small weapons, such as knives or steel bars, assessed for prying open locks and/or for self-defence in order to buy time to flee and prevent being apprehended by the crew. They usually steal engine parts and/or ship stores. Perpetrators typically avoid confrontation and choose to flee immediately upon being sighted; however, there were incidents involving confrontation, leading to crew members being tied up, enabling the perpetrators to steal items and flee. Occasionally, such confrontations lead to minor and non-life-threatening injuries (1 incident in February, and 1 in May respectively).

- **Tugs and Barges.** Perpetrators were usually unarmed (likely due to the absence of crew on board the Barges, and the need to keep both hands free to climb and move quickly), and typically stole scrap metal from the Barge. This vessel type can be targeted both in daylight and in hours of darkness. Given the nature of operations and distance between the Tug and the 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

⁶ On 9 and 10 July 2025, Indonesian authorities mounted a decisive land operation and arrested suspects allegedly involved in a series of sea robbery incidents in the Phillip Channel after IFC shared CCTV evidence from shipping companies, which enabled positive identification of perpetrators, equipment, and modus operandi that led to the arrests and possible prosecution. Indonesian authorities reportedly arrested a total of 13 perpetrators in July 2025.

into their small boats (alongside), thereafter escaping expeditiously before enforcement agencies arrive.

Of note, there were 5 separate occasions (28 February, 30 March, 7 May, 5 June, and 1 July) in 2025 where 3 TRAPS incidents occurred within the same night in the SS, and in close proximity. Based on the proximity of incident locations, time interval, and the number of perpetrators reported, it was likely that the same group of perpetrators targeted multiple vessels on the same night, particularly if earlier attempts were unsuccessful.

b Indonesia Anchorage Areas (Jakarta, Kalimantan & Belawan)

i) Trending

13 incidents recorded across various Anchorage Areas in Indonesia⁷, the majority of the incidents occurred in Jakarta (4 incidents), Kalimantan (3 incidents), and Belawan (3 incidents)⁸. This number was lower than 2024 (19 incidents) and 2023 (21 incidents). The decrease in incident numbers in 2025 could be attributed to stepped-up patrolling and operations conducted by local authorities, which exerted a deterrent effect on potential perpetrators. These targeted actions disrupted criminal networks, reduced their operational freedom, and sent a clear signal that enforcement pressure would extend beyond the maritime domain into their support bases ashore and at sea⁹.

ii) Modus Operandi

Perpetrators were generally unarmed and tended to operate in small groups of 3 to 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.

⁷ The majority of the incidents involved anchored vessels; 2 incidents involved vessels that were underway (off the ports/anchorage areas).

⁸ The remaining 3 incidents occurred in waters off smaller ports/anchorage areas in East Nusa Tenggara, East Sumatra, and West Java (with 1 incident each).

⁹ In 2025, Indonesian authorities apprehended perpetrators in multiple sea theft cases: off Banggai (29 June), 11 suspects in the Phillip Channel (9/10 July), 5 suspects via BAKAMLA onboard a tugboat (16 October), 3 arrested for tin sand theft in Jebus (17 March), and 2 suspects detained for theft aboard a foreign yacht off Sagita Island, Labuan Bajo (7 September).

C Chattogram Anchorage Area, Bangladesh

i) Trending

9 incidents occurred in the Chattogram Anchorage Area in 2025. This number was lower than those recorded in 2024 (11 incidents), but higher than 2023 (1 incident). Fluctuations in incident numbers within Bangladeshi waters may be attributed to shifting enforcement priorities, as local law enforcement agencies periodically reallocate resources to address other security concerns, including border tensions, transboundary migration, and internal stability. Such re-prioritisation may create operational gaps that opportunistic perpetrators could exploit, particularly in less-patrolled coastal and riverine areas.

ii) Modus Operandi

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



4

FORECAST / WAY AHEAD

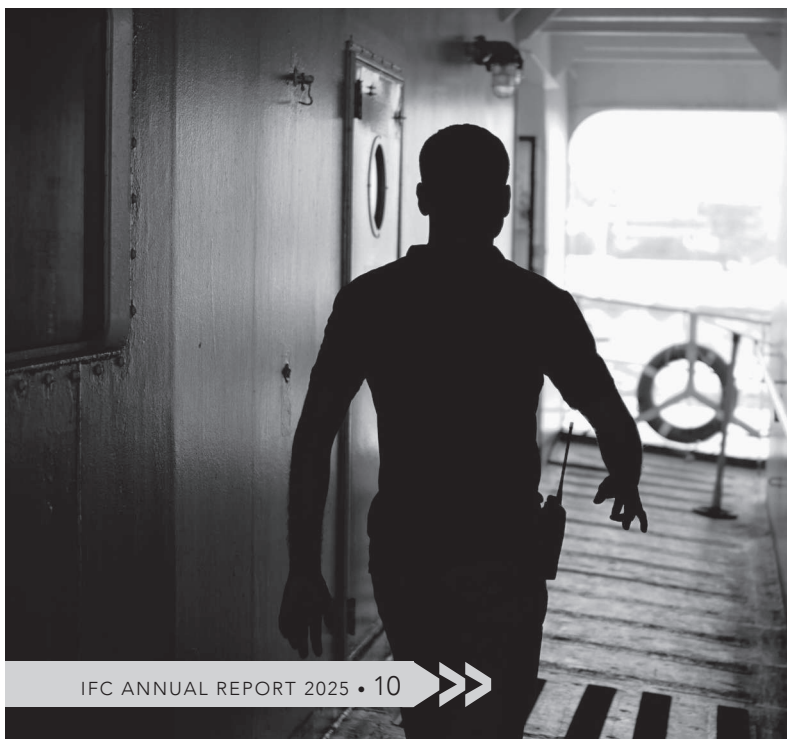
The number of TRAPS incidents in 2026 is expected to remain high, unless more robust security measures are implemented, particularly on land. The IFC also expects the severity and nature of TRAPS incidents within IFC's AOI to remain opportunistic and petty theft in nature.

Consistent with past years, we can expect incident frequency to increase during monsoon seasons and in the months preceding major festive periods, a pattern particularly evident in the SS. Beyond the SS, anchorage areas in Indonesia and Bangladesh are also expected to remain key areas of concern in 2026.

The IFC would thus 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 are recommended to implement the following measures, 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.
- All are highly encouraged to capture and share CCTV footage taken during the incidents with the regional authorities to support investigations.
- To guard against successive boarding attempts by perpetrators, transiting vessels are encouraged to stay informed by participating in Voluntary Community Reporting as depicted in 1st Edition MARSEC Charts Q6112 and Q6113 (dated 14 November 2024). Upon sighting of suspicious activities or perpetrators on board, immediately report to local authorities, and inform the IFC; **do not confront perpetrators.**





Article contributed by The Indonesian National Police

The Indonesian Marine and Air Police Corps (Korpolairud Baharkam Polri), as a specialised operational unit within the Indonesian National Police (INP), operates under a comprehensive legal framework that affirms its institutional authority and functional responsibilities.

This framework is anchored in Article 30 of the 1945 Constitution of the Republic of Indonesia, which mandates the police to maintain national security and public order; Law No. 2 of 2002 concerning the Indonesian National Police, which delineates the organisational structure, jurisdiction, and enforcement powers of the INP; and the Criminal Code (KUHP) alongside the Criminal Procedure Code (KUHAP), which provide the substantive and procedural basis for criminal investigation and prosecution. Collectively, these instruments position the Indonesian National Police as a central pillar of the national security architecture and the criminal justice system across the nation's sovereign territory, encompassing both land, air and maritime domains.

Korpolairud exercises a comprehensive range of policing functions particularly in safeguarding maritime and aerial jurisdictions including crime prevention and deterrence, intelligence gathering and analysis, repressive enforcement measures, search and rescue (SAR) operations, and investigative support for judicial processes.

Operating from its national headquarters in Jakarta, Korpolairud coordinates with 35 Regional Police Commands across Indonesia, each equipped with a fleet of patrol vessels (295 units of Type C3) and (257 units of Type C2) alongside various tactical and support vessels. At the national level, Korpolairud maintains 65 patrol vessels comprising Class A (± 87 metres), Class B (± 40 metres), and Class C (± 20 metres), strategically deployed to uphold maritime law enforcement across Indonesia's vast archipelagic waters.

Committed to addressing non-traditional security threats including transnational maritime crimes such as smuggling, trafficking, illegal fishing, and piracy, IMAP (Korpolairud Baharkam Polri) actively engages in regional cooperation. Recognising that maritime crime transcends national borders and that the ocean serves as both a conduit and a connector between islands and nations, Korpolairud affirms its institutional commitment to international collaboration. This is exemplified through its sustained participation in the Heads of Asian Coast Guard Agencies Meeting (HACGAM), a multilateral forum dedicated to enhancing maritime safety, security, and environmental protection across the Indo-Pacific. Through HACGAM and other cooperative mechanisms, Indonesia reinforces its strategic posture in promoting safe navigation, upholding maritime law, and protecting shared regional interests in an increasingly interconnected maritime domain.

Article contributed by The Indonesian National Police, cont'd

Recent operations in the Malacca Strait underscore the operational effectiveness of the IMAP, particularly in combating transnational maritime crime. In July 2025, the Riau Islands Regional Police's Water and Air Directorate (Ditpolairud) demonstrated strong enforcement capability by arresting 11 sea robbers targeting foreign cargo ships passing through the region's border waters.¹ The Riau Islands Regional Police's Water and Air Teams conducted patrols and discovered suspicious activities, including a 72-horsepower Yamaha-powered boat approaching a foreign vessel passing through the Nipah Strait. The perpetrators had used a 10-metre-long bamboo pole with a rope to climb on board slow-moving vessels. (They had heavily calloused feet from repeated illegal boardings.) Investigators also seized evidence such as stolen ship parts, methamphetamine, and a homemade high-explosive airsoft gun.

Another significant case was a coordinated interdiction on 5 September 2025 when Korpolaairud Headquarters, the Aceh Regional Police, and Bea Cukai (Indonesian Custom) Aceh successfully disrupted a narcotics trafficking network operating between Indonesia and Malaysia. The operation was executed at 00:30 WIB in the coastal area of Padang Kasah, East Aceh. During the raid, law enforcement officers seized:

- 155,000 ecstasy pills (MDMA) contained in 77 packages
- 4.3 kilograms (kg) of methamphetamine (*sabu*) contained in 4 packages
- Additional evidence including a small vessel and communications devices used by the perpetrators.

During the raid on 5 September 2025, law enforcement officers seized:

- **155,000 ecstasy pills (MDMA)** contained in 77 packages
- **4.3 kilograms of methamphetamine (*sabu*)** contained in 4 packages
- **Additional evidence** including a small vessel and communications devices used by the perpetrators

¹ **Novarina, Arie.** *Riau Islands Police Foil Foreign Vessel Piracy Operation.* Antara News, July 14, 2025. <https://en.antaranews.com/news/366185/riau-islands-police-foil-foreign-vessel-piracy-operation>.

² **Gito R.** *Penyelundupan 155 Ribu Butir Ekstasi dan 4,3 Kg Sabu di Aceh Timur Digagalkan.* Acehportal.com, September 9, 2025. <https://www.acehportal.com/news/penyelundupan-155-ribu-butir-ekstasi-dan-4-3-kg-sabu-di-aceh-timur-digagalkan/index.html>.

This interdiction highlights the strategic importance of *maritime patrols, intelligence coordination, and inter-agency collaboration* in securing Indonesia's maritime borders. The operation involved multiple national entities including *POLRI (INP) and Indonesia Custom*.²

In a separate and high-impact operation, the Bengkalis Police Resort (Polres Bengkalis), in collaboration with Bea Cukai Bengkalis and supported by IMAP, successfully disrupted a transnational narcotics smuggling attempt in the waters of the Malacca Strait. The interdiction took place on Wednesday, 12 February 2025 at approximately 00:30 WIB, in the maritime area of *Pantai Sepahat, Kecamatan Bandar Laksamana, Kabupaten Bengkalis, Riau Province*.³

The operation was spearheaded by the specialised narcotics task force known as *Tim Elang Malaka*, which had conducted a two-week surveillance and intelligence-gathering effort across the Bengkalis coastline. Acting on actionable intelligence, the team intercepted a vessel suspected of transporting narcotics from Malaysia. The seizure included:

- 90 packages of methamphetamine (*sabu*) weighing approximately 90 kg.
- 10 packages of ecstasy pills, estimated to contain tens of thousands of units
- Two suspects, identified as JM (35) and IF (21), were apprehended during the operation.

These cases affirm IMAP's dual commitment: external enforcement against maritime crime and internal accountability within the force. Together, they position IMAP (Korpolairud) as a cornerstone of Indonesia's maritime criminal justice system.

The seizure on 12 February 2025 included:

- **90 packages of methamphetamine (*sabu*)** weighing approximately 90 kilograms
- **10 packages of ecstasy pills**, estimated to contain tens of thousands of units
- **Two suspects**, identified as JM (35) and IF (21), were apprehended during the operation

³ **Kompas.com**. *Penyelundupan 90 Kg Sabu Jaringan Internasional, Polisi Buru Pelaku hingga Selat Malaka*. Kompas Regional, 13 February, 2025. <https://regional.kompas.com/read/2025/02/13/215922378/penyelundupan-90-kg-sabu-jaringan-internasional-polisi-buru-pelaku-hingga>.



OVERVIEW

No MT¹ incident was recorded in 2025 in the IFC's AOI. The last MT incident reported was in 2021 in Maldives.



OBSERVATION / ASSESSMENT

Southeast Asia's maritime domain remained a critical focus for regional security stakeholders due to the persistent threat of maritime terrorism. While no MT incident was reported, enforcement agencies assessed that maritime routes remain susceptible to be exploited by extremist networks for arms smuggling, and to conduct potential high-impact attacks on critical infrastructure such as ports, ferries, and offshore platforms.²

Notably, the Sulu-Celebes Seas and the Southern Philippine archipelago continued to be monitored as potential hotspots, with increased surveillance and interdiction operations conducted by the littoral states.

Initiatives by the littoral states within the region are:

a. The Trilateral Cooperative Arrangement (TCA) is a security framework established by **Indonesia, Malaysia, and the Philippines** to address maritime security threats – especially piracy, kidnapping, smuggling, and terrorism – in the Sulu and Celebes Seas.

b. Malaysia's Southeast Asia Regional Centre for Counter-Terrorism (SEARCCT) serves as a regional counter-terrorism hub focused on training, capacity-building, research, digital counter-messaging, and public awareness. These initiatives enhance the preparedness of medical personnel, emergency responders, and maritime enforcement agencies to respond to terrorism-related incidents involving hazardous materials, particularly in port cities and coastal areas.

c. The Eastern Sabah Security Command (ESSCOM) integrates maritime surveillance, intelligence coordination, and community engagement in eastern Sabah, supported by curfews and targeted operations against individuals linked to maritime terrorism.

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.

² RSIS Counter-Terrorist Trends and Analyses (CTTA) (2024) and Asia Maritime Transparency Initiatives (AMTI) (2023).





FORECAST / WAY AHEAD

The IFC expects MT incident numbers to remain nil/low as long as regional authorities maintain existing security postures. Notwithstanding, all enforcement agencies and the maritime community should maintain heightened vigilance to spot anomalies and continue to share relevant information for effective monitoring on MT incidents.

Looking ahead, the MT threat is expected to evolve with the use of unmanned systems and encrypted communications by extremist actors. To stay ahead, the region is encouraged to invest in AI-driven maritime domain awareness technology, expand counter-terrorism training, and strengthen multilateral cooperation — ensuring maritime commons remain secure and resilient.

SITUATION IN THE RED SEA

Article contributed by Joint Maritime Information Centre

In 2025, the Joint Maritime Information Centre (JMIC) continued to serve as an essential operational enabler to Combined Maritime Forces, supporting the information-sharing architecture and maritime domain awareness (MDA) foundations necessary for coordinated multinational action at sea.

By correlating and validating information from multiple sources, JMIC provides trusted information to the maritime industry. JMIC is committed to closing information gaps and increasing the fidelity of indications and warnings to inform safe transits for Seafarers in the Middle East.



JMIC hosted weekly industry touchpoints, covering geopolitical items of interest and addressing threats that projected into the maritime space. JMIC bridged the information gap between military and commercial stakeholders through its products; information notes, advisory notes, weekly dashboards, monthly statistics, and the bridge emergency reference card. All of these products work to distill complex threat data into concise, actionable insights.

Conflict in June 2025 marked a challenging period, yet JMIC remained active and sustained continuous industry information exchanges, giving commercial operators frequent updates to assist in their own risk assessment, route planning, and security posture. During the most dangerous period for shipping JMIC produced daily advisories and hosted daily industry information sessions.

Attacks on commercial vessels in the Red Sea and Gulf of Aden continued in 2025, marking an escalation and evolution of the maritime security crisis that began in late 2023. After a period of relative calm in early 2025, the attacks resumed with renewed intensity and sophistication in July. Notably, incidents in July resulted in multiple fatalities and the sinking of two commercial vessels, marking some of the most serious attacks to date.

An attack in October 2025 on a cargo ship in the Gulf of Aden highlighted malign actor capabilities to strike targets at greater distances.



During 2025, the JMIC has also in cooperation and through UKMTO, within the Single Information Framework, published in total:

- **18 Information Notes** providing verified and accurate information regarding SOLAS-events, suspicious events and maritime threats etc.
- **52 JMIC Weekly Dashboards** containing the Summary and analysis of recent incidents, overview and statistical trending as well as a threat assessment.
- **12 JMIC Monthly Statistics** with a Summary of recent incidents, overview and statistical trending with recommendations to the shipping industry.
- **30 JMIC Advisories/Advisory Notes** giving recommendations to the shipping industry.

In 2025, JMIC's highest priority was the continuous development and dissemination of maritime risk considerations related to various threats and hazards. Analysts, in cooperation with CMF and US NCAGS, monitored vessel movements to detect irregular behavior, high-risk transits, and trends related to illicit activity. Another transformational step for JMIC during 2025 was the incorporation as a standalone Directorate within CMF.

Supporting CMF modernisation, JMIC invested in advanced data-fusion and automated analytics.

JMIC introduced enhanced machine-learning anomaly detection models to quickly and accurately identify suspicious vessel behavior. These new capabilities significantly improved CMF's ability to pinpoint suspicious affiliations, stateless vessels, dark-shipping, fraudulent AIS transmissions, and other threats to maritime security.

JMIC innovation initiatives directly underpin CMF's transition to agile and predictive operational planning and supports CMF strategic goals.



OVERVIEW

In 2025, the IFC recorded a total of 775 MI¹ in the IFC’s AOI, which was significantly lower than 2024 (1,020 incidents) and 2023 (1,025 incidents). Similar to past years, the majority of MI were reported in waters off the Philippines, Indonesia, Republic of Korea (ROK), and

Vietnam. Most of these incidents also continued to involve Small Boat sinking or capsizing, which also accounted for the highest number of Dead/Missing Persons in 2025. MI numbers in 2026 is forecasted to remain high due to climate change and increased maritime activity.

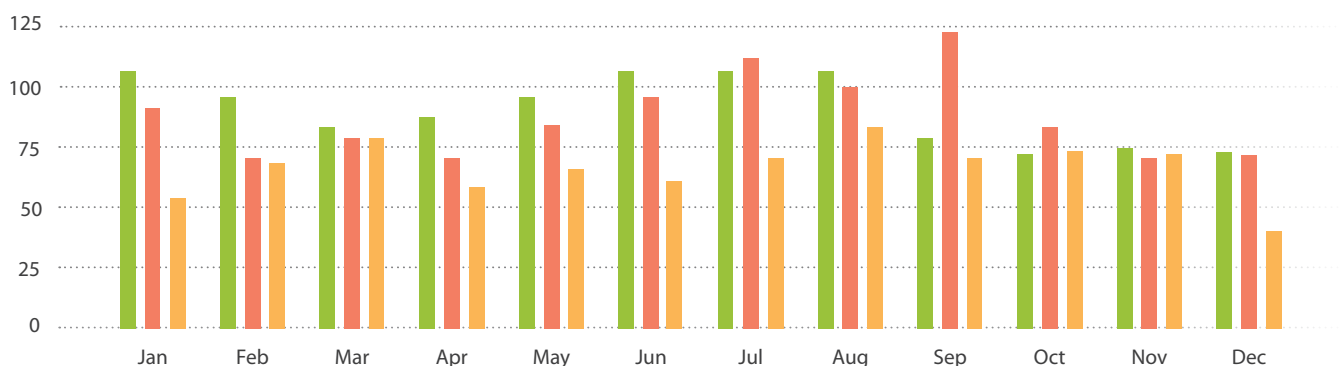


KEY FACTS

The top 3 most reported MI in 2025 involved vessels Sunk-Capsized (292 incidents, 38%), Collision/Grounding (136 incidents, 18%), and Adrift (119 incidents, 15%). Most incidents involved Fishing Vessel (396 vessels, 44% followed by Small Boat (172 vessels, 19%), and Cargo Vessel (98 vessels, 11%). The leading causes were Bad Weather (200 incidents, 26%), Equipment Failure (159 incidents, 21%), and Collision/Grounding (93 incidents, 12%).

A total of 8,879 persons were rescued at sea in 2025, representing an increase of 11% compared to 7,981 persons in 2024. Of the rescued, 4,678 persons (53%) were passengers onboard. Passenger Vessels, and 2,104 persons (24%) were crew from Fishing Vessels. Concurrently, MI involving Dead/Missing increased to 1,266 persons in 2025, up from 793 persons in 2024. This was largely due to a few incidents with high casualties, such as the sinking of two Small Boats in May 2025 involving 487 Dead/Missing.

OVERVIEW OF MI INCIDENTS 2023 – 2025



¹ This refers to general incidents in the maritime domain such as collisions and groundings, and incidents involving vessels engaged for recreational activities.





OBSERVATION/ASSESSMENT

a General Insights

i) Lower number of incidents compared to 2024

In 2025, the number of MI in the region decreased by 24% compared to 2024. This may also be attributable to a variety of reasons, including fewer incidents being reported online, or lower volume of reporting received from IFC's partners.

ii) Higher number of incidents in August 2025

August recorded the highest MI numbers in 2025, assessed to be due to intensified typhoon activities² during the Annual Monsoon Season – consistent months plagued by monsoon in 2024 and 2023. Weather and sea conditions were observed to be worsened, which increased the risk for vessels operating in the region. In particular, Typhoon Kajiki³ brought heavy rainfall and strong winds to Vietnam. Its interaction with the Southwest Monsoon also resulted in an increase in rainfall and wind speed in parts of the Philippines, causing flooding in low-lying areas. Research indicated that climate change had exacerbated the strength of such powerful storms.

iii) Vessel Detentions

In 2025, 65 incidents involving Vessel Detentions were recorded, a slight decrease from 2024 (75 incidents). These detentions were primarily related to unauthorised anchoring, with most occurring in waters off Malaysia. The shipping community is thus strongly advised to verify and comply with local regulations when anchoring or navigating.

b Vessel Types

i) Fishing Vessels and Small Boats

The number of MI involving Fishing Vessels and Small Boats remained high, with 568 incidents in 2025, comparable to the 649 in 2024. These incidents resulted in 1,092 Dead/Missing, representing 86% of total MI in 2025, much higher than 616 in 2024. The highest number of such incidents was reported in the Philippines. The main causes remain Bad Weather and Equipment Failure.

² Reference from source – United Nations News. *Deadly storms sweep South and Southeast Asia, leaving over 1,600 dead.* <https://news.un.org/en/story/2025/12/1166516>

³ Reference from source – Center for Strategic and International Studies. *The Latest on Southeast Asia: Typhoon Kajiki Updates.* <https://www.csis.org/blogs/latest-southeast-asia/latest-southeast-asia-typhoon-kajiki-updates>

ii) Container / Cargo / Bulk / Tanker Vessels

There were 150 incidents involving Merchant Vessels in 2025, down from 241 in 2024, with Collision/Grounding being the most common MI. Close coordination between the shipping community and MARSEC agencies remains essential to enhance maritime safety awareness and prevent MI.

iii) Passenger Vessels

There were 87 MI involving Passenger Vessels in 2025, down from 129 in 2024. The majority occurred in the Philippines and Indonesia, where extensive networks of Passenger Vessels operate. Primary causes were Equipment Failure and Bad Weather. Dead/Missing in 2025 reached 67 persons, up from 39 in 2024. The number of rescued persons was 4,678, showing an increase from 3,940 in 2024. Passenger Vessels were generally equipped with more safety and emergency response systems, resulting in relatively lower casualties. Notwithstanding, the decrease in MI in 2025 was likely due to the consistent/effective response efforts by authorities in Indonesia and the Philippines.

**4 FORECAST / WAY AHEAD**

In 2026, the IFC expects MI numbers to remain high due to increased maritime activity globally, and the growing unpredictability of weather patterns caused by climate change. In the IFC's

AOI, monsoon seasons have traditionally caused major disruptions to maritime operations. Mariners navigating during this period should remain vigilant and follow safety guidance issued by local authorities.



CHARTING A SHARED COURSE: MY THOUGHTS ON MARITIME COOPERATION

By Lt Cdr Deepak Sharma, International Liaison Officer at IFC

When I think about the vast Indian Ocean filled with ships that drive global trade, it's clear that safety isn't just about rules. It's about trust, transparency, and genuine teamwork. Nowhere is this spirit more evident than in the growing partnership between the Information Fusion Centre – Indian Ocean Region (IFC IOR) in Gurugram and its counterpart, IFC Singapore. To me, it feels like two strong anchors navigating a shared path toward a safer, more predictable maritime world.

This isn't just about strategic partnerships; it's personal. Both India and Singapore, with their rich maritime histories, recognise that the sea is safer when information flows freely, and nations collaborate rather than acting alone. They've built their centres based on a people-first vision. They serve not only as data hubs but also as reliable friends ready to help when it counts. From the

eastern coast of Africa to the crowded Malacca and Singapore Straits, this teamwork offers quiet reassurance to every seafarer, knowing someone is looking out for them.

A key part of this great synergy is the network of International Liaison Officers (ILOs). These committed people, stationed at the centres, turn formal communications into quick, effective responses. It's like having a direct line to help, cutting through red tape and ensuring critical information is shared swiftly and accurately. The personal connections among officers create a special bond – an assurance that a dependable partner is ready to assist.

I want to highlight two specific instances where both organisations showed synergy and helped seafarers. Take the Malaysian-flagged sailing yacht, BIT, for





example. With a Chinese crew, it was travelling from Sri Lanka to Thailand when safety concerns arose. IFC Singapore reached out to IFC IOR, and both organisations shared information resulting in deployment of aircraft and ships by IN and ensured timely refuelling, providing much-needed relief to the crew in distress.

Another case involved the distress call from MV Wan Hai 503, where the timely sharing of information and collaboration led to the rescue of all 18 crew members by IN and ICG. Five had injuries, two with severe burns, and received immediate medical attention. This response wasn't just professional; it saved lives.

These instances are not only operational successes; they remind us how trust, teamwork, and shared goals can turn uncertainty into rescue. Beyond these dramatic rescues, their work also includes

routine information exchange, joint monitoring, and collaborative assessments, keeping our maritime space predictable and secure. This continuous flow of communication benefits everyone, from navies and coast guards to shipping companies and, most importantly, the seafarers themselves.

As maritime activity grows in the Indo-Pacific, the roles of IFC IOR Gurugram and IFC Singapore will continue to expand. Their legacy is clear: when information flows, lives are saved; when nations work together, seas are safer; and when goals align, the maritime community thrives.

For all of us who travel, work, or simply love the ocean, this partnership stands as a quiet yet powerful promise – that no matter how vast the sea, help is always available. It shows what can be achieved when we truly collaborate, side by side, across the waves.



Photos: X@IndiaCoastGuard



VANGUARD TECH AND SEAGULL OFFSHORE SUCCESSFULLY LEAD CRITICAL SALVAGE OPERATION

Article contributed by Vanguard Technology

On 10 December, the Djibouti-flagged tanker NJORD suffered a catastrophic main engine failure, resulting in a loss of propulsion while transiting the South China Sea, leaving the vessel disabled and adrift. Vanguard Tech first identified the vessel's deteriorating situation through its continuous maritime risk-monitoring platform, following the crisis play out in real time. With the vessel drifting toward a nearby shoal, the fully laden VLCC faced an imminent risk of grounding or collision, raising the prospect of a major pollution incident. Vanguard Tech swiftly notified the client and was nominated to execute a salvage operation and ensure her safe delivery to the nearest suitable location for repair.

To mobilise the response, Vanguard Tech coordinated with Seagull Offshore's assets and established a real-time coordination channel, creating a unified operational environment for rapid decision-making and situational tracking. Vanguard immediately supplied all essential vessel documentation, including mooring arrangements, layout plans, and navigational data, to provide Seagull Offshore with full awareness of NJORD's condition and configuration prior to arrival.

Over the course of the following 3 weeks, the operation evolved into a complex open sea towage and escort effort conducted under worsening weather, traffic density, and mechanical uncertainty. Working alongside Seagull Offshore and the attending salvage tug, Vanguard Tech remained embedded in the operational loop as the coordinating and

monitoring layer, maintaining continuous oversight of vessel movements, weather trends, and risks as the situation developed. Decisions regarding tow configuration, routing, standby positions, and eventual disconnection were taken collaboratively, with Vanguard ensuring that all parties operated from a common, up-to-date operational picture.

Despite periods of heavy weather, single-line towage constraints, and the need to pause progress to avoid navigational hazards and traffic convergence, the NJORD was safely stabilised and repositioned offshore, allowing critical spare parts to be delivered and repairs to be undertaken at sea.

Vanguard supported these phases through persistent tracking, structured communications, and real-time coordination between the vessel, tug, and shore stakeholders, ensuring that each transition was executed in a controlled and deliberate manner. Once repairs were completed, the vessel was safely escorted while systems were tested, culminating in the successful conclusion of salvage services.

Through the combined and timely actions of all parties involved, a potential grounding or collision event was averted, and MT NJORD was stabilised, repaired, and returned to operational control without injury, pollution, or secondary incident. The operation stands as an example of how early risk recognition, close collaboration, and sustained operational oversight can decisively change outcomes in high-risk maritime scenarios.



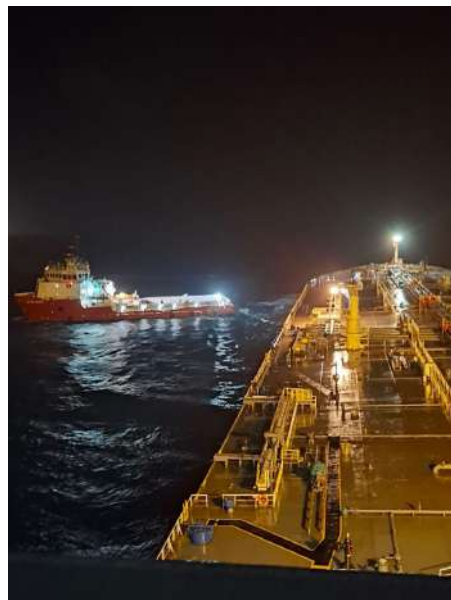


Vanguard

Vanguard Technology



The Vanguard Tech team brings together over 30 years of experience within commercial shipping and the maritime domain. We share a passion for providing a new digital approach – the 'Digital Ocean' to how the commercial shipping industry understands and then deals with maritime risk in its many guises.





OVERVIEW

In 2025, the IFC recorded a notable decline in IUUF¹ incidents within its AOI, with 603 incidents reported, compared to 760 in 2024 and 715 in 2023. The decrease can be attributed to intensified enforcement operations and enhanced cross-border coordination, including bilateral agreements between coastal states (e.g. Thailand and Vietnam). The IUUF activity peaked between late-2023 and mid-2024, before declining in 2025 as regional agencies strengthened patrols, improved data

coordination, and expanded use of satellite-based tools such as Global Fishing Watch (GFW)². These efforts likely contributed to reducing the intensity and frequency of IUUF incidents across the region. While seasonal fluctuations remained evident, particularly during peak fishing months, the overall pattern in 2025 suggests a more stable and controlled IUUF environment within the IFC's AOI, underscoring the growing maturity of regional maritime governance/education and enforcement collaboration.



KEY FACTS

In 2025, Southeast Asia continued to record the highest number of IUUF incidents, with 261 incidents (44%), followed by Australia and adjacent waters with 156 incidents (26%), South Asia with 126 incidents (21%), and East Asia with 55 incidents (9%). This regional distribution corroborates with Asia-Pacific's reputation as the epicentre of IUUF activity, where rich fishing grounds, overlapping maritime jurisdictions, and widespread artisanal operations collectively present both opportunities and enforcement challenges.

The IUUF incidents recorded in 2025 could be further categorised into Local IUUF (340 incidents) and Poaching IUUF (263 incidents). This breakdown shows that many violations occurred within domestic or nearshore waters, often reflecting compliance gaps, intense fishing pressure, and limited coastal enforcement, while a nearly comparable number involved cross-boundary or unauthorised incursions into foreign waters, underscoring the persistent complexity of IUUF activities across both national and adjacent maritime spaces.

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

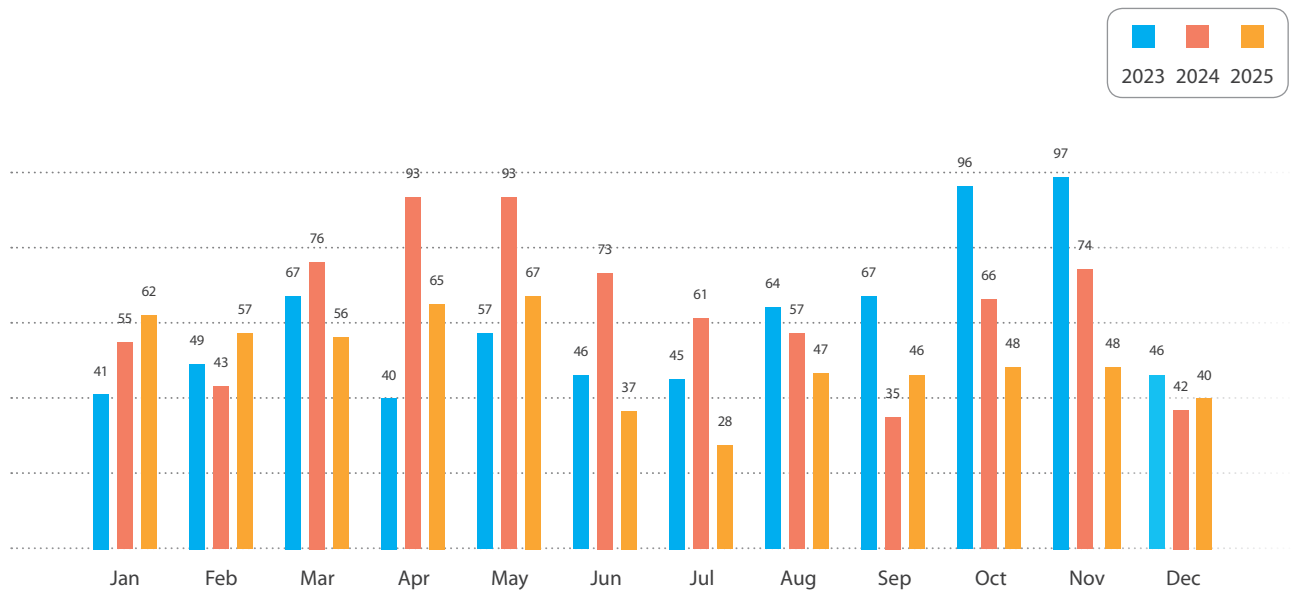
² Reference from source – Global Fishing Watch. *Vessel Viewer: Ensuring Data and Intelligence-Led Fisheries Monitoring and Management*. Accessed November 13, 2025. <https://globalfishingwatch.org/fact-sheet/vessel-viewer-ensuring-data-and-intelligence-led-fisheries-monitoring-and-management/>



By type of illegal activity, IUUF incidents in 2025 were most frequently associated with fishing in Prohibited Areas (268 incidents), underscoring persistent challenges in spatial compliance, and area-based management measures. This was followed by violations related to Fishing Vessel Licensing (228 incidents) and

Fishermen Licensing (109 incidents), reflecting continued gaps in administrative compliance and regulatory oversight across multiple jurisdictions. Additionally, use of illegal fishing gear (145 incidents) remained a significant concern, despite existing control mechanisms and deterrence efforts.

MONTH-TO-MONTH COMPARISON OF IUUF INCIDENTS BETWEEN 2023 – 2025





OBSERVATION/ASSESSMENT

a Main locations for IUUF incidents

The top 3 locations for IUUF incidents in 2025 were Australia (154 incidents), Malaysia (118 incidents), and Sri Lanka (53 incidents). Incident numbers declined significantly as compared to 2024 – Australia recorded 177 incidents, Malaysia 173 incidents, and Sri Lanka 112 incidents. The sharp drop across all 3 locations in 2025 may reflect improved surveillance, expanded inter-agency cooperation, and the residual impact of enforcement momentum from the previous year.

The early year surge in IUUF incidents coincided with the post–El Niño recovery phase, as residual warm-water anomalies in the equatorial Pacific continued to influence fish migration patterns and marine productivity across the Asia-Pacific.³ It was also observed that Brent crude fell over 12% year-on-year, while Asian bunker fuel prices stayed low due to ample refinery output⁴, resulting in reduced operational costs for fishing fleets which encourages increased fishing activity. When combined with the factor of favourable sea conditions, this explains the potential early year surge in IUUF incidents.

Conversely, the decline from June onwards corresponded with the onset of monsoon conditions, and the enforcement of seasonal fishing moratoria in several countries, including Bangladesh, China, India, Indonesia, Myanmar, Pakistan, the Philippines (notably in the Davao Gulf), and Republic of Korea (ROK). It is also aligned with the implementation of heightened surveillance measures, such as expanded joint patrols and satellite-based monitoring programmes, coordinated under regional frameworks like the Indian Ocean Tuna Commission (IOTC).⁵

Overall, 2025 displayed a distinctly front-loaded IUUF pattern, contrasting with the prolonged mid-year peaks observed in 2024. This shift indicates both stronger deterrence effects and a seasonal realignment of fishing dynamics within the IFC's AOI driven by ongoing economic normalisation, technological improvements in maritime surveillance, and the institutional strengthening of regional fisheries governance.⁶

³ Reference from source – National Oceanic and Atmospheric Administration (NOAA). *April 2025 ENSO Update: La Niña Has Ended*. Climate.gov, April 11, 2025. Accessed 13 November, 2025. <https://www.climate.gov/news-features/blogs/enso/april-2025-enso-update-la-nina-has-ended>

⁴ Reference from source – Trading Economics. *Brent Crude Oil*. Accessed November 13, 2025. <https://tradingeconomics.com/commodity/brent-crude-oil>

⁵ Reference from source – International Commission for the Conservation of Atlantic Tunas. *Global Fishing Watch's Position Statement for the 29th Regular Meeting of ICCAT (Seville, 2025)*, Commission document PLE-110/2025, November 2025, 3. Accessed 13 November, 2025. https://www.iccat.int/Documents/Meetings/Docs/2025/PLE-110_GFW_Position_Statement_ICCAT29.pdf

⁶ Reference from source – Food and Agriculture Organization of the United Nations. *From Policy to Action: Major Advances in the Fight Against IUU Fishing*. FAO/GFCM News Release, 5 June, 2025. Accessed 13 November, 2025. <https://www.fao.org/gfcm/news/detail/en/c/1738542>



b Local IUUF

The top 3 locations for Local IUUF incidents in 2025 were Malaysia (103 incidents), the Philippines (49 incidents), and Bangladesh (34 incidents). The pattern for local IUUF incidents underscores the persistent challenges posed by dense fishing communities, limited enforcement reach in nearshore zones, and the prevalence of small-scale fishing operations.

As compared to the top 3 locations in 2024, both Malaysia and the Philippines remained leading hotspots, while Sri Lanka saw a sharp decline in local IUUF incidents overall – from 78 incidents in 2024 to 27 in 2025. Bangladesh replaced Sri Lanka as one of the top 3 locations in 2025 with 34 incidents. This shift may reflect changes in local enforcement capacity, operational deterrence, or seasonal fleet behaviour across the AOI.

c Poaching IUUF

The top 3 locations for Poaching IUUF incidents in 2025 were Australia (154 incidents), Sri Lanka (26 incidents), and ROK (19 incidents). As compared to 2024, Sri Lanka replaced Malaysia as one of the top three locations for Poaching IUUF in 2025. This shift suggested a broader suppression of poaching activities in key areas, potentially reflecting enhanced enforcement cooperation, focused patrol efforts, and shifting patterns of cross-boundary fishing operations.

While Australia remained one of the key hotspots for Poaching IUUF activities within the IFC's AOI, incident numbers fell notably to 154 incidents in 2025, down from 177 in 2024. This continued decline underscores the effectiveness of regional maritime enforcement cooperation, particularly between the Australian Border Force (ABF), Indonesia Coast Guard (BAKAMLA),⁷ and Papua New Guinea Defence Force (PNGDF).⁸ Sustained joint patrols under Operations Gannet and Solania,⁹ supported by enhanced satellite surveillance and real-time intelligence sharing, have tightened maritime monitoring across Northern Australian waters and the Torres Strait, significantly restricting the operational freedom of foreign-flagged poaching vessels.

⁷ Reference from source – Australian Border Force. *Australia and Indonesia Wrap Up Maritime Security Operation*. Home Affairs Portfolio, 1 October, 2025. Accessed November 13, 2025. <https://www.abf.gov.au/newsroom-subsite/Pages/Australia-and-Indonesia-wrap-up-maritime-security-operation.aspx>

⁸ Reference from source – Australian Border Force. *Australian and Papua New Guinea Complete Joint Cross Border Patrol in the Torres Strait*. Home Affairs Portfolio, October 13, 2025. Accessed 13 November, 2025. <https://www.abf.gov.au/newsroom-subsite/Pages/Australian-and-PNG-complete-joint-patrol-Torres-Strait.aspx>

⁹ Reference from source – Australian Border Force. (2025). *ABF and BAKAMLA Continue Cooperation under Operation Gannet*. <https://www.abf.gov.au/newsroom>



C Poaching IUUF (cont'd)

Similarly, Poaching IUUF incidents in the ROK declined significantly overall – from 52 incidents in 2024 to 19 in 2025. Notwithstanding, there was still persistent activity observed along the Yellow Sea and East China Sea boundary zones. This residual presence is associated with intensified bilateral enforcement efforts and actions conducted by ROK and China.¹⁰ Deterrence was further reinforced through expanded administrative penalties and the formal maintenance of IUUF vessel lists, under which vessels with confirmed IUUF histories are recorded in national or regional registries and denied fishing licenses, port entry, and market access.¹¹



4 FORECAST/WAY AHEAD

The notable decline in IUUF incidents in 2025 from 760 (Jan to Nov; pending Dec numbers) cases in 2024 to 515 demonstrates the growing effectiveness of coordinated maritime enforcement and improved surveillance across the IFC's AOI. Regional efforts, particularly through joint patrols like Operations Gannet and Solania, have tightened maritime monitoring and reduced the operational space for illegal actors.¹² Enhanced satellite tracking, intelligence sharing, and increased legal penalties in key coastal states have further strengthened the regional deterrent posture.

Nonetheless, structural drivers of IUUF remain persistent. Climate driven changes in ocean temperatures and salinity continue to alter fish migration routes, pushing stocks into deeper or transboundary waters.¹³ When combined with strong global seafood demand, especially in Southeast Asia, it is projected to exceed USD 30 billion in 2025. With the limited economic alternatives in many coastal communities, these conditions may create renewed incentives for illegal fishing.¹⁴ Without sustained enforcement and socio-economic support, localised IUUF pressures could rebound despite current gains.

¹⁰ Reference from source – Maeil Business Newspaper. (2025, 12 August). *ROK and China Intensify Joint Action on Illegal Fishing*. <https://www.mk.co.kr/news/economy/11391760>

¹¹ Reference from source - Ministry of Oceans and Fisheries (Republic of Korea). *National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*. Sejong: Ministry of Oceans and Fisheries, 2014. https://www.fao.org/fishery/docs/DOCUMENT/IPOAS/national/KoreaRep/NPOA_IUU_Korea_Republic.pdf Reference from source – Trading Economics. “Brent Crude Oil.” Accessed 13 November, 2025. <https://tradingeconomics.com/commodity/brent-crude-oil>

¹² Reference from source – Australian Border Force. (2025). *ABF and BAKAMLA Continue Cooperation under Operation Gannet*. <https://www.abf.gov.au/newsroom>

¹³ Reference from source – Pew Charitable Trusts. (2025). *Climate Change and Illegal Fishing Threats to Global Oceans*. <https://www.pewtrusts.org>

¹⁴ Reference from source – Statista. (2025). *Fish and Seafood Market Outlook – Southeast Asia*. <https://www.statista.com/outlook/cmo/food/fish-seafood/southeast-asia>



Looking ahead to 2026, IUUF trends are assessed to remain moderate but highly sensitive to climatic and economic fluctuations. Regional frameworks such as ASEAN, Regional Plan of Action to Promote Responsible Fishing Practices including Combating Illegal, Unreported and Unregulated Fishing (RPOA-IUUF), and IOTC will remain central to enforcement,

supported by continued investment in real-time monitoring systems, community engagement, and cross-border legal harmonisation. The IFC anticipates that inter-agency cooperation and technological integration will be critical in preserving the downward trend while addressing the evolving nature of IUUF threats in the Indo-Pacific.



NAVIGATING FORWARD:

Thailand's Maritime Collaboration to Combat IUUF in Southeast Asia

By CDR Kullmanoch Wanwarn, International Liaison Officer at IFC

From Yellow Card to Reform

In 2015, Thailand faced a pivotal moment when the European Union (EU) issued a “yellow card” warning due to systemic weaknesses in fisheries governance.¹ Rather than viewing the decision as punitive, Thailand used it as a catalyst for strategic reform. The Royal Ordinance on Fisheries B.E. 2558 (2015) introduced mandatory Vessel Monitoring Systems (VMS), strengthened licensing procedures, and established comprehensive Port-In/Port-Out (PIPO) controls nationwide.²

These measures were enforced through a whole-of-government mechanism known as the Thai Maritime Enforcement Coordination Centre (Thai-MECC),

comprising the Royal Thai Navy (RTN), Department of Fisheries, Marine Department, Department of Marine and Coastal Resources, and the Royal Thai Marine Police, and working in close coordination with the Ministry of Labour.

As a result of these reforms, the European Commission lifted Thailand's yellow card in January 2019, acknowledging the country's “effective system” and strong political will to combat Illegal, Unreported, and Unregulated Fishing (IUUF).³ This milestone marked Thailand's transition from reactive compliance to long-term institutional strengthening.

Sustaining Domestic Governance

Building on this progress, Thailand reinforced its internal governance structure. The Command Centre for Combating Illegal Fishing (CCCIF), established in 2015, centralised cross-agency enforcement.⁴ In 2019, the Maritime National Interests Protection Act formalised the Thai Maritime Enforcement Command Centre (Thai-MECC) under the Prime Minister's Office. Thai-MECC – operationally led by the RTN – coordinates joint patrols, vessel inspections, and investigations that span coastal waters and the Exclusive Economic Zone (EEZ).⁵

The RTN plays a central operational role in national IUUF responses. Naval units conduct maritime patrols, interdictions, targeted inspections, and surveillance operations that support fisheries enforcement. Additionally, RTN officers seconded to the Information Fusion Centre (IFC) in Singapore significantly enhance Thailand's maritime domain awareness (MDA). They facilitate real-time intelligence exchange, early warning dissemination, and cross-border operational coordination – ensuring Thailand remains integrated into regional maritime-security networks.





Strengthening Bilateral Partnerships

At the bilateral level, Thailand continues to advance international cooperation that strengthens enforcement capacity. In 2023, Thailand approved a bilateral Memorandum of Understanding (MoU) with Vietnam to formalise coordinated patrols, data sharing, and improved port-state controls.⁶ This collaboration recognises IUUF as a transboundary challenge requiring harmonised responses.

Similarly, Thailand partnered with the Australian Fisheries Management Authority (AFMA) in February 2024 to deliver a Monitoring, Control, and Surveillance (MCS) workshop in Samut Prakan.⁷ The training emphasised practical technologies – such as drone-based observation, electronic monitoring systems, and advanced Vessel Monitoring System (VMS) analytics – demonstrating Thailand’s commitment to capability enhancement and operational interoperability with key partners.

- ¹ **European Commission.** *EU Acts on Illegal Fishing: Yellow Card Issued to Thailand, Korea and the Philippines Delisted.* EU Maritime Affairs and Fisheries (MARE) Newsroom. <https://ec.europa.eu/newsroom/mare/items/22708>
- ² **Government of Thailand.** *Royal Ordinance on Fisheries, B.E. 2558 (2015).* FAOLEX., <https://faolex.fao.org/docs/pdf/tha159730.pdf>
- ³ **European Commission.** *Commission takes action to fight illegal, unreported and unregulated fishing.* Press corner, European Commission, 16 January, 2019. https://ec.europa.eu/commission/presscorner/detail/en/ip_19_61
- ⁴ **Royal Thai Embassy, Budapest.** *Thailand’s Progress in Combating IUU Fishing.* Royal Thai Embassy, Budapest (Press Release), last updated 27 November, 2022. <https://budapest.thaiembassy.org/en/page/56498-thailands-progress-in-combating-iuu-fishing?menu=5d6634ef15e39c439c00058a>
- ⁵ **Thailand.** *Maritime National Interests Protection Act, B.E. 2562 (2019).* PDF document. Published 9 March, 2019, Government of Thailand. <https://shorturl.at/PnZwn>
- ⁶ **Government of Thailand, Government Public Relations Department.** *MOU on Maritime Law Enforcement Cooperation between Thailand and Vietnam.* Public Relations Department – Thailand (PRD) Official News Portal, 24 August, 2023. <https://thailand.prd.go.th/en/content/category/detail/id/48/iid/208796>
- ⁷ **Australian Fisheries Management Authority (AFMA).** *Australia–Thailand Workshop Strengthens Fisheries Partnership.* AFMA News, 23 February, 2024. <https://www.afma.gov.au/news/australia-thailand-workshop-strengthens-fisheries-partnership>

NAVIGATING FORWARD:

Thailand's Maritime Collaboration to Combat IUUF in Southeast Asia (cont'd)

Expanding Regional Cooperation

Regionally, Thailand has become one of the pioneering nations in the region in promoting sustainable and rules-based fisheries governance. As host of the ASEAN Network for Combating IUU Fishing (AN-IUU), Thailand convened the 2024 regional workshop in Bangkok, supported by the EU's E-READI (Enhanced Regional EU-ASEAN Dialogue Instrument) program.⁸ The workshop strengthened shared databases, inspection practices, and vessel-registration harmonisation across ASEAN.

Thailand remains an active contributor to Southeast Asian Fisheries Development Centre (SEAFDEC) initiatives, including the March 2024 Regional Workshop in Pattaya reviewing ASEAN National Plans of Action on IUUF and reaffirming commitments to the FAO (Food and Agriculture Organisation) Port State Measures Agreement (PSMA).⁹ Partnerships with Germany's BlueFairFish program¹⁰ and Japan's ASEAN-JICA (Japan International Cooperation Agency)¹¹ cooperation further boost Thailand's capacity in digital traceability and surveillance technologies.

Linking to Regional Trends (IFC Annual Report Context)

These collaborative frameworks – spanning domestic reforms, bilateral arrangements, and regional mechanisms – have directly contributed to the measurable decline in IUUF incidents across the Indo-Pacific in 2025, as reflected in the IFC's annual

assessment. Enhanced maritime domain awareness, coupled with real-time intelligence exchanges facilitated by IFC liaison officers, has strengthened joint patrol operations and reduced the operational freedom of illegal fishing vessels.

⁸ **Association of Southeast Asian Nations (ASEAN).** *ASEAN, EU Ramp Up Efforts to Fight Illegal Fishing.* ASEAN Official Website, 18 July, 2024. <https://asean.org/asean-eu-ramp-up-efforts-to-fight-illegal-fishing/>

⁹ **Southeast Asian Fisheries Development Center, Training Department (SEAFDEC/TD).** *Project End of Eliminate IUU Fishing in Southeast Asia Workshop.* SEAFDEC, 20 March, 2024. <https://www.seafdec.or.th/news/project-end-of-eliminate-iuu-fishing-in-southeast-asia-workshop/>

¹⁰ **German Corporation for International Cooperation (GIZ).** *BlueFairFish – Responsible Fisheries Management and Cross-Border Cooperation.* GIZ Projects. <https://www.giz.de/en/projects/bluefairfish-responsible-fisheries-management-cooperation>

¹¹ **Japan, Ministry of Foreign Affairs.** *Progress Report on Japan's Cooperation for the ASEAN Outlook on the Indo-Pacific (AOIP).* PDF document, October 2021. <https://www.mofa.go.jp/files/100253488.pdf>



Moving Forward

Looking ahead, sustaining momentum in combating IUUF will require continued collaboration, technological innovation, and regional solidarity. Engagement with platforms such as the Information Fusion Centre (IFC) will remain central to enhancing maritime domain awareness and coordinated responses to emerging threats.

With the Royal Thai Navy's operational leadership and Thai-MECC's whole-of government coordination, Thailand is well-positioned to balance national priorities with collective regional responsibilities. Ultimately, as ASEAN partners deepen cooperation and elevate institutional resilience, a sustainable, transparent, and IUUF-free Indo-Pacific becomes an achievable shared objective.





OVERVIEW

In 2025, the IFC recorded a total of 844 Contraband Smuggling (CS)¹ incidents in its AOI, which was similar to 2024 (872 incidents) and 2023 (852 incidents). The consistently high number of incidents in recent years was likely due to political instability and rising costs globally, which in turn drove locals to supplement their income sources through illegal means and the black market to circumvent sanctions. Enhanced

enforcement efforts have also contributed to the high number of reported incidents. The majority of reported incidents involved the smuggling of Domestic Products, Drugs, and Tobacco. Southeast Asia also accounted for the highest number of CS incidents in IFC's AOI. As global economic uncertainty and political instability continue, the IFC expects the number of CS incidents to remain high in 2026.



KEY FACTS

In 2025, Domestic Products accounted for the most reported incidents with 239 incidents, followed by Drugs with 201 incidents. Compared to 2024, Domestic Product Smuggling incidents

remained similar, but Drug Smuggling incidents decreased by 16%. Tobacco Smuggling incidents were the third most smuggled contraband with 130 incidents, which was similar to 2024.

TYPES OF CONTRABAND SMUGGLED

Types of Contraband	Number of Incidents		
	2025	2024	2023
Drugs	201	240	210
Domestic Products	239	178	211
Tobacco	130	130	126
Fuel	96	121	137
Others	178	175	168

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.





OBSERVATIONS / ASSESSMENTS

The top 3 most smuggled contrabands were (1) Drugs, (2) Domestic Products, and (3) Tobacco.

a Drugs

The IFC recorded 201 Drug Smuggling incidents in 2025, representing a 16% year-on-year reduction from 2024 (240 incidents) and a slight decrease from 2023 (210 incidents). This sustained downward trajectory was largely driven by heightened enforcement efforts across Southeast Asia, which resulted in increased arrests and operational disruptions to trafficking networks.

Methamphetamine (Meth) and its derivatives, including Yaba, continued to account for most smuggling cases (more than 50%) in 2025. Meth-related incidents remained stable in 2025 (114 incidents) compared to 2024 (117 incidents), despite a decline in overall drug smuggling activity. These incidents were concentrated primarily in the waters off Malaysia/Indonesia, India/Sri Lanka, and the Philippines, aligning with known trafficking flows originating from the Golden Triangle², Golden Crescent, Central America, and North America.

Small Boats, Fishing Vessels, and Passenger Vessels remained the primary conveyance methods used by traffickers. Notably, incidents involving Container and Cargo Vessels saw a significant drop in 2025, attributable to more rigorous checks by enforcement agencies³. This shift has prompted traffickers to diversify their methods and rely more heavily on smaller platforms. For example, Container Vessel linked incidents declined in 2024 (108 incidents) to 2025 (57 incidents). The smaller profile of Fishing Vessels and Small Boats continues to present detection challenges, reinforcing the need for sustained vigilance and targeted operational responses.

b Domestic Products

The IFC recorded 239 incidents of Domestic Products Smuggling in 2025, which accounted for approximately 28% of overall Contraband Smuggling incidents. This was 34% higher than

² UNODC Advocacy Section. Press Release. *Rise in production and trafficking of synthetic drugs from the Golden Triangle, new report shows*, 2025, <https://www.unodc.org/unodc/en/press/releases/2025/May/rise-in-production-and-trafficking-of-synthetic-drugs-from-the-golden-triangle--new-report-shows.html>. Accessed Wednesday May 2025.

³ *Indonesia BNN, Myanmar join forces to block Golden Triangle drug flow*. ANTARA News, 22 August 2025, <https://en.antaranews.com/news/374949/indonesia-bnn-myanmar-join-forces-to-block-golden-triangle-drug-flow>. Accessed 2 January 2026.

2024 (178 incidents), and 18% higher than 2023 (203 incidents). Of note, the total volume of Domestic Products smuggled have also decreased significantly ⁴.

Smuggled products include frozen animal products, often intended for food or medicinal use; they 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).

C Tobacco

The IFC recorded 130 Tobacco Smuggling incidents in 2025, same as 2024 (130 incidents) and slightly higher than 2023 (126 incidents). Tobacco remains a common trade due to lucrative opportunities for smugglers, driven by sustained high demand, reduced supply from stricter tobacco control measures in the region and increasing taxes on legally traded cigarettes.

Tobacco Smuggling incidents recorded in the Philippines was the most prevalent, followed by Indonesia, China, and Malaysia. This trend is likely due to the comparatively lower purchase costs and taxes imposed on tobacco products in these regions.

While Small Boats is the overall most used vessel type for Contraband Smuggling, Container Vessel is the most common vessel type specifically for Tobacco Smuggling, likely due to the size and compartments⁵ of Container Vessels to conceal the Tobacco (and in large amounts), making the enforcement more challenging.

d Others

The IFC recorded 96 Fuel Smuggling incidents in 2025, 20% lower than 2024 (121 incidents), and 29% lower than 2023 (137 incidents), primarily due to significant decrease in incidents off Vietnam and Malaysia. However, the number is still more than twice that of 2022 (43 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 ⁶ oil from countries such as Iran and Russia.

⁴ Total volume of Domestic Products has dropped significantly from 178 incidents amounting up to 40,432,944 kg in 2024 and 239 incidents amounting up to 2,704,918 kg in 2025.

⁵ Dixon, Gary. *Cocaine-busting underwater robot claims first drug seizure on a ship in Hong Kong*. TradeWinds, 17 December 2025, <https://www.tradewindsnews.com/containers/cocaine-busting-underwater-robot-claims-first-drug-seizure-on-a-ship-in-hong-kong/2-1-1918029>. Accessed 7 January 2026.

⁶ The incidents that IFC reported are UN sanctioned vessels.



Smuggling of other goods such as Weapons, Natural Resources, and Chemical Substances constituted 21% of total reported CS incidents. Wildlife smuggling, predominantly in Southeast Asia, has increased 18% from 61 incidents in 2024 to 72 incidents in 2025. This increase could be due to an increased demand in consumer markets for high-value wildlife⁷ products (e.g., exotic pets, traditional medicines), which creates pressure on trafficking networks to scale up operations. The number of natural resource smuggling incidents in 2025 (71 incidents) has declined at least 27% compared to 2024 (98 incidents).



FORECAST/WAY AHEAD

The IFC expects the overall number of CS incidents to remain high in 2026, with a possibility of increased incident numbers compared to 2025. Key drivers include persistent inflation sustaining the profitability of smuggling, ongoing instability in high-risk production zones, and the continued mass manufacture of narcotics in the Golden Triangle. While enforcement efforts have generally increased, instability in key regions and sustained drug production will continue to challenge interdiction efforts and facilitate the movement of illicit substances across the region. Additionally, geopolitical conflicts and associated sanctions may further disrupt global energy markets, potentially fuelling illicit oil-transfer activities in the maritime domain.

Tobacco will continue to be a highly smuggled commodity, with black markets responding to increasing taxation and enforcement pressure,

and containers of tobacco and vapes will provide high-income streams without the legal scrutiny of illicit drugs.

In parallel, 2025 saw the emergence of Etomidate, a new synthetic drug increasingly circulated through illicit e-vaporiser channels. The recent reclassification of Etomidate and its analogues under dangerous-drug legislation reflects mounting regional concern. Its growing popularity, coupled with reports of severe side effects and rising seizure volumes, signals an expanding threat profile that may shape enforcement dynamics in the coming year.

Collectively, these trends underscore the need for strengthened regional collaboration and info-sharing, sustained enforcement momentum, and enhanced monitoring of emerging synthetic drug threats to safeguard maritime security in the year ahead.

⁷ <https://cimsec.org/invisible-criminal-commodities-in-the-caribbean/>



DRUG SMUGGLING PREVENTION

Article contributed by International Chamber of Shipping

Criminal gangs are exploiting shipping to traffic illicit drugs worldwide. Nearly 90% of all cocaine, 45% of all cannabis, and 30% of all amphetamine type stimulants seized globally during January 2017 to April 2020 were trafficked via sea, despite the best efforts of the shipping industries to combat this activity. It is therefore clear that the industry shares a collective responsibility to help combat this illegal activity.

Shipping companies, organisations and ports should adopt a holistic and co-ordinated approach when crafting drug smuggling prevention plans. They should be broad enough to cover external, internal and emerging threats posed by drug smuggling and nimble enough to adapt to the unique circumstances of the ship or port in question.

How maritime drug trafficking works

Drugs are usually transported indirectly to evade detection by enforcement agencies. Ships and cargoes from drug producing countries are more likely to be intercepted in countries with strong enforcement agencies, such as in Europe. Often, traffickers will forward cargoes to countries that have weaker enforcement institutions and where officials can be bribed, or oversight is ineffectual,

and then ship that cargo to countries where the drugs will be discharged and sold. While many emerging economies offer attractive economic opportunities, they also represent significant corruption risk for traffickers to exploit. Ports in source countries, where drugs enter the supply chain, and transit countries, where drugs are transhipped and sent off to criminal associates in destination countries, are particularly high-risk.



Recommended Prevention Measures

Physical

Physical security measures are essential in denying unauthorised access to the port and ship and often act as the last line of defence against drug concealment on board. Multiple layers can prevent the placement of drugs on board. Ships are most vulnerable during port calls, meaning it is absolutely necessary to maintain a high level of security and vigilance for the entire port call.

Physical security considerations during a port call could include:

- Restrictions on the number of access points and who can use them
- Effective lighting around the ship to detect any unauthorised persons or unusual activity
- Procedures for deliveries to the ship
- Trustworthiness and identities of visitors
- Comprehensiveness of hull inspections

Digital

Crime networks are increasingly turning to cybercrime to facilitate drug trafficking, the infiltration of electronic cargo systems, altering of cargo plans, location/storage details of cargo and the provenance details of cargo. If a port's vulnerability is exposed and exploited, it could lead to significant economic, reputational and political damage to the country's maritime sector as well as the companies and organisations within it.

Previously, a criminal network successfully breached the container terminal operating systems at the Port of Antwerp and manipulated cargo management and tracking data by emailing malicious software to port employees to gain access to the system. Although this was discovered and a firewall put in place, hackers then broke into port offices and used key-logging devices to regain access to container operating systems and even keystrokes typed by staff. While the total quantity of drug trafficking through the port during the period of compromise is unknown, a series of raids afterwards uncovered more than a tonne of cocaine and heroin with a street value of £260 million.

This attack highlights how criminal organizations are using a combination of tactics to transit drugs. In the face of these, ships must consider both physical and digital security measures when seeking to prevent drug trafficking.

Recommended Prevention Measures (cont'd)

Dynamic

An even greater threat is insider activities. In a port environment, links between compromised staff and crime groups could cause considerable harm and can be established through previous associations or social engineering, wherein criminal organisations deliberately manipulate or deceive people to gain unauthorised access to locations, data or systems. Social engineering can occur in person or electronically, making it more dynamic and difficult to detect than purely physical or digital threats. The best way to prevent social engineering is to ensure crew are trained in identifying suspicious emails, calls text messages and are aware of the physical security measures when at port, especially pertaining to ship access.



Sources:

International Chamber of Shipping, *Drug Trafficking and Drug Abuse On Board Ship, 2025-2026 Edition* (2025, Witherbys, UK)



AUSTRALIA SHUTTING DOWN ILLICIT TOBACCO MARKETS

Article contributed by Australian Border Force

Australia is one of the most lucrative markets in the region for illicit tobacco and maritime routes are the primary vector for smuggling tobacco into Australia. In order to combat this, the Australian Border Force (ABF) is leading a dedicated multi-agency taskforce aimed at intercepting the increasing amount of tobacco smuggled into Australia and removing it from the hands of organised crime and black marketeers.

In 2026, through the IFC, the ABF will continue to highlight and report the threat to the region and maritime industry posed by criminal syndicates smuggling tobacco.

The ABF seized over 100 million illicit sticks attempting to be smuggled into Australia via maritime ports via sea routes in Asia in September 2025 alone. This resulted in over 100 detections across four major Australia ports in Sydney, Melbourne, Fremantle and Brisbane. Maritime smuggling remains the primary method of importation, and presents a threat to shipping companies in terms of concealments and mis-reporting, piggy backing legitimate trade, infiltration of the supply chain and pressure from criminal syndicates. The sticks seized for September carried a duty of over \$100 million USD.

Illicit tobacco presents a regional challenge, not just an Australian issue. World Health Organization reporting from 2024 indicates that in Southeast Asia the illicit cigarette market is 11.6%. From a trade perspective, this translates to 657 billion sticks a year

and approximately USD \$40.5 billion in lost revenue globally. The ABF will continue to engage closely with border agencies on intelligence sharing, operational cooperation and industry engagement to crack-down on the illicit tobacco trade in Asia and Australia.

In Australia, the ABF leads the coordination of the new Illicit Tobacco National Disruption Group (NDG), a first-of-its-kind whole-of-Government capability to



AUSTRALIA SHUTTING DOWN ILLICIT TOBACCO MARKETS (cont'd)

target and disrupt mid-level criminals and enablers operating in the illicit tobacco market.

The NDG brings together traditional and non-traditional federal, state and territory agencies such as police, tax, health, financial and other regulatory organisations to share intelligence and coordinate joint action against those importing, selling or distributing illicit tobacco.

The new group will focus on the mid-level criminals and enablers operating within small business, the retailer sector, intermediaries (such as couriers, property owners etc.) and sole traders – while the ABF-led Illicit Tobacco Taskforce (ITTF) will continue to target serious criminal syndicates importing or producing tobacco on a large scale. Together the intent is to disrupt the illicit tobacco business model to make it less profitable.



ABF Commander Greg Dowse said the Illicit Tobacco National Disruption Group, along with the other enforcement work ABF already is doing with partner agencies, will make it harder for criminals to profit from the illegal tobacco market.

“We are seizing record levels of illicit tobacco at our borders, and we are seeing great results with our international partners offshore, but we know the trade doesn’t stop there.

“Our goal is simple: to break the business model that makes illicit tobacco profitable. We will make the current operating environment hostile for anyone trading in illicit tobacco. That means continued focused action against organised syndicates and the smaller actors and enablers who fuel the market.”

The ABF will continue to collaborate and engage closely with international partners and the maritime industry within South East Asia, to support legitimate trade in the region. Continuing to work with international partners in the South East and North East Asia regions will strengthen illicit tobacco enforcement for the entire region, and ABF is exceptionally pleased to be able to coordinate with the IFC to better report and analyse illicit tobacco in the IFC’s area of interest.



“Our goal is simple: to break the business model that makes illicit tobacco profitable. We will make the current operating environment hostile for anyone trading in illicit tobacco. That means continued focused action against organised syndicates and the smaller actors and enablers who fuel the market.”

– Illicit Tobacco and Vape Enforcement Commander Greg Dowse





OVERVIEW

In 2025, the IFC recorded a total of 103 IHM¹ incidents in its AOI; this was 14% lower than 2024 (120 incidents) and 52% lower than 2023 (217 incidents). However, the number of people involved in IHM increased by 26%, with 3,375 people in 2025 compared to 2,683 in 2024, though it remains well below the 6,946 people recorded in 2023. The regular movement of workers and fishermen travelling between Indonesia, Malaysia, and the Philippines

continues to be a significant contributor to IHM incident numbers, accounting for 51% of all incidents, while the majority of migrants were transiting out of the Bay of Bengal region (71%).

The IFC expects the number of IHM incidents in 2026 to remain similar or slightly lower than 2025, following the trend of decreasing activity year-on-year due to regional improvements in economic, political, and law enforcement policies.



KEY FACTS

The majority of incidents recorded in 2025 involved Irregular Human Migration² (91 incidents), which accounted for 88% of all IHM incidents; this is similar to 2024 (90 incidents).

Overall, there was a consistent decrease in IHM activity across almost all routes, with most states in the AOI reporting less IHM incidents, with the exception of the Bay of Bengal. However, despite the drop in total IHM incident numbers, there was a 26% increase in the number of people involved in IHM.

The top 3 IHM routes were (1) between Indonesia and Malaysia (in both directions), (2) from the Philippines to Malaysia, and (3) from coastal nations³ of Bay of Bengal to Malaysia/Indonesia.

The majority (77%) of IHM activity involved Small Boats, including speedboats, runabouts, and local fishing boats. A further 15% occurred on Commercial Passenger Ferries, with passengers attempting to use false documentation or lying about visas/purpose for travel to gain illegal entry. The remainder were large Fishing Vessels, Cargo/Container Vessels or were unknown/unreported.

Month-to-month activity followed similar trends to previous years, with peak incidents occurring in April/May and August/September/October, with a primary low point in June/July. This broadly aligns to annual weather patterns, both when maritime journeys in Southeast Asia are safest, and more labour-based work is available.

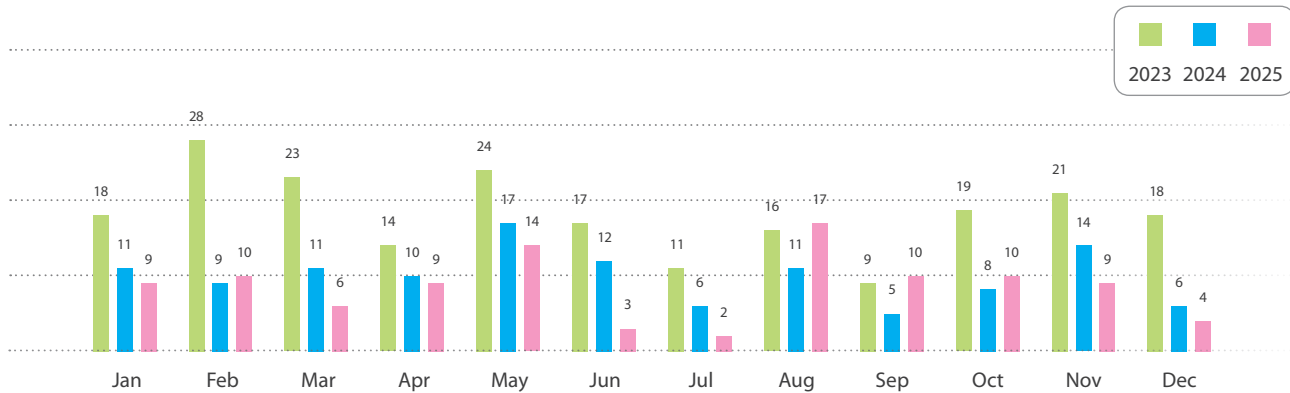
¹ This refers to all channels of willful and un-willful irregular migration through illegal means.

² Irregular Human Migration is 1 of the 4 subcategories that IFC uses to classify IHM and 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).”

³ Consisting of India, Sri Lanka, Bangladesh and Myanmar.



MONTH-TO-MONTH COMPARISON OF IHM INCIDENTS BETWEEN 2023 – 2025



OBSERVATION / ASSESSMENT

a General Insights

Malaysia remains the top destination country for IHM within the IFC's AOI. 64% of migrants transiting to Malaysia had travelled from the Bay of Bengal area. The remainder mainly comprised workers from Indonesia, the Philippines, or other Southeast Asian countries seeking job opportunities in Malaysia due to the high demand for trade and cheap labour⁴. Irregular migration remains a pathway for entry for those unable to transit legally, or for others who are transported as part of a criminal trafficking syndicate who are then extorted for money or forced labour.⁵

Despite the decrease in incident numbers, there was an overall increase in the number of people involved in IHM in 2025, assessed to be due to the 12 large-scale IHM ventures transiting south from Bay of Bengal coastal nations towards Indonesia and Malaysia. These 12 ventures alone (12% of total IHM ventures) are responsible for 2,122 people involved (63% of total people involved in IHM).

⁴ https://roasiapacific.iom.int/sites/g/files/tmzbdl671/files/documents/2025-11/labour-migration-profile_malaysia-november-2025.pdf

⁵ <https://www.lowyinstitute.org/the-interpreter/tackling-forced-labour-malaysia-begins-re-examining-its-migration-model>

Human Trafficking⁶ persists in Southeast Asia, alongside conventional voluntary IHM. Due to different national classifications of 'Trafficking', the trends of Human Trafficking are difficult to identify, but the IFC has reported 12 cases of maritime Human Trafficking in 2025, similar to 2024. This activity is predominantly located out of the Philippines, where people are trafficked to Malaysia and Indonesia, largely for domestic work, and where authorities are more likely to classify IHM as Human Trafficking due to the scope of domestic legislation.⁷

There were only 2 reported cases of Human Exploitation at Sea, however, IFC is aware of greater anecdotal evidence that suggest that higher-than-reported levels of exploitation, non-payment, and poor treatment of seafarers persists in the AOI.

b Key IHM Routes

There were 3 notable IHM routes within the IFC AOI, together accounting for 65% of all incidents (65) and 89% of all people (2755).

i) Between Indonesia and Malaysia (In Both Directions)

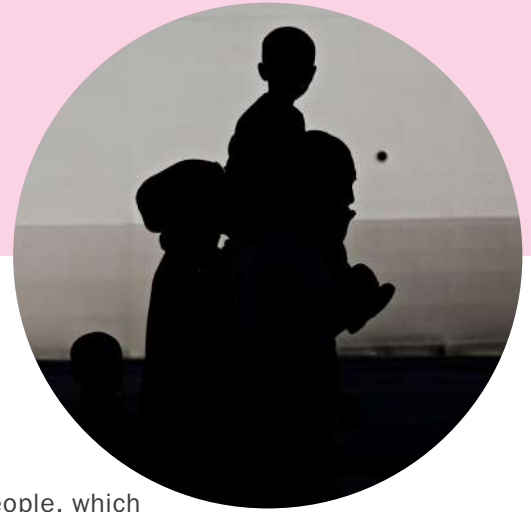
The most frequently used IHM route in the IFC's AOI was between Indonesia and Malaysia. In 2025, this route recorded 42 incidents involving 528 people, with almost all incidents involving fewer than 20 people. This is lower than 2024 (46 incidents involving 875 people). While 2024 saw almost equal movement in both directions, reported IHM incidents in 2025 were more heavily weighted towards flows from Indonesia towards Malaysia. Of note, ventures from Indonesia to Malaysia increased from 24 incidents in 2024, to 34 incidents in 2025 (42% increase); this is likely a result of recent changes in Malaysia prioritising efforts to curb incoming IHM, leading to more ventures detected. For these incidents, IFC notes that the number of people involved also increased slightly from 347 in 2024 to 364 in 2025. Similar to 2024, these ventures typically consisted of small groups, with half comprising 10 or fewer people each time. They were often facilitated by human smugglers using Small Boats and Fishing Vessels during periods of darkness.

For the Malaysia to Indonesia route, the number of reported incidents decreased sharply from 22 incidents involving 528 people in 2024, to only 8 incidents involving 156 people in 2025. These activities frequently took place at night, using poorly equipped or unsafe vessels, and primarily involved illegal Indonesian workers returning home, facilitated by human smugglers using Small Boats and Cargo Vessels. Of note, IFC has no credible explanation for the sharp drop in incident numbers for this route; it is likely that actual numbers remained similar to 2024 but lesser ventures were detected and thus unreported.

⁶ When persons are coerced and moved/migrated against their will (forced or deceived into doing so).

⁷ <https://www.state.gov/reports/2025-trafficking-in-persons-report/>





ii) Philippines to Malaysia

This route recorded 11 incidents involving 119 people, which was notably lower compared to 2024 (17 incidents involving 211 people). Several of these incidents involved people with false or missing identity documents onboard Passenger Vessels caught at the Port of Bongao in the Philippines. Of the 11 incidents, 6 were reported as Human Trafficking by the Filipino authorities, where criminal syndicates trafficked people to Malaysia to work in low wage labour or menial domestic jobs.

iii) Bay of Bengal nations to Malaysia/Indonesia

There has been a small increase in the number of IHM ventures transiting south from the Bay of Bengal region into Malaysia and Indonesia – from 9 incidents in 2024 to 12 incidents in 2025. More significantly, the number of people involved in these ventures has risen sharply, from 861 in 2024 to 2,122 in 2025, the majority of which are people departing either Bangladesh or Myanmar attempting to reach Indonesia or Malaysia as a preferred destination due to family and cultural ties, to seek asylum and/or work illegally. According to UNHCR, 2025 has seen the highest number of attempted maritime journeys since 2022.⁸

Small Boats and Fishing Vessels remain the vessel of choice for the route, and over half of the vessels were heavily crowded, with approximately 200 to 300 persons on board. Most of the ventures using such smaller vessels occurred in the beginning and end of the year, avoiding the mid-year monsoon and seeking favourable currents. Notably, however, in 2025 IFC recorded 3 ventures in May, much later in the season than historically noted. Unfortunately, 2 of these vessels are believed to have sunk, likely due to poor weather, accounting for 427 deaths according to UNHCR.⁹ Along with the increased number of migrants, 2025 has seen the highest number of deaths at sea in recent years.¹⁰

It is likely that the increase in this activity, including the higher-risk ventures in May, was driven by increasingly challenging conditions in the Rohingya UNHCR camp in Bangladesh. Over the past 4 to 5 years, reduced funding has affected services and support in these locations, with UNHCR receiving only around 30% of its funding target in 2024. This situation further tightened in early 2025 following the closure of USAID, leading to reduced food rations and the closure of several medical facilities.¹¹ These pressures have contributed to more IHM ventures originating from the Bay of Bengal,

⁸ UNHCR September 2025 Ops Update

⁹ <https://www.unhcr.org/news/press-releases/unhcr-fears-extreme-desperation-led-deaths-427-rohingya-sea>

¹⁰ <https://www.asyluminsight.com/round-ups>

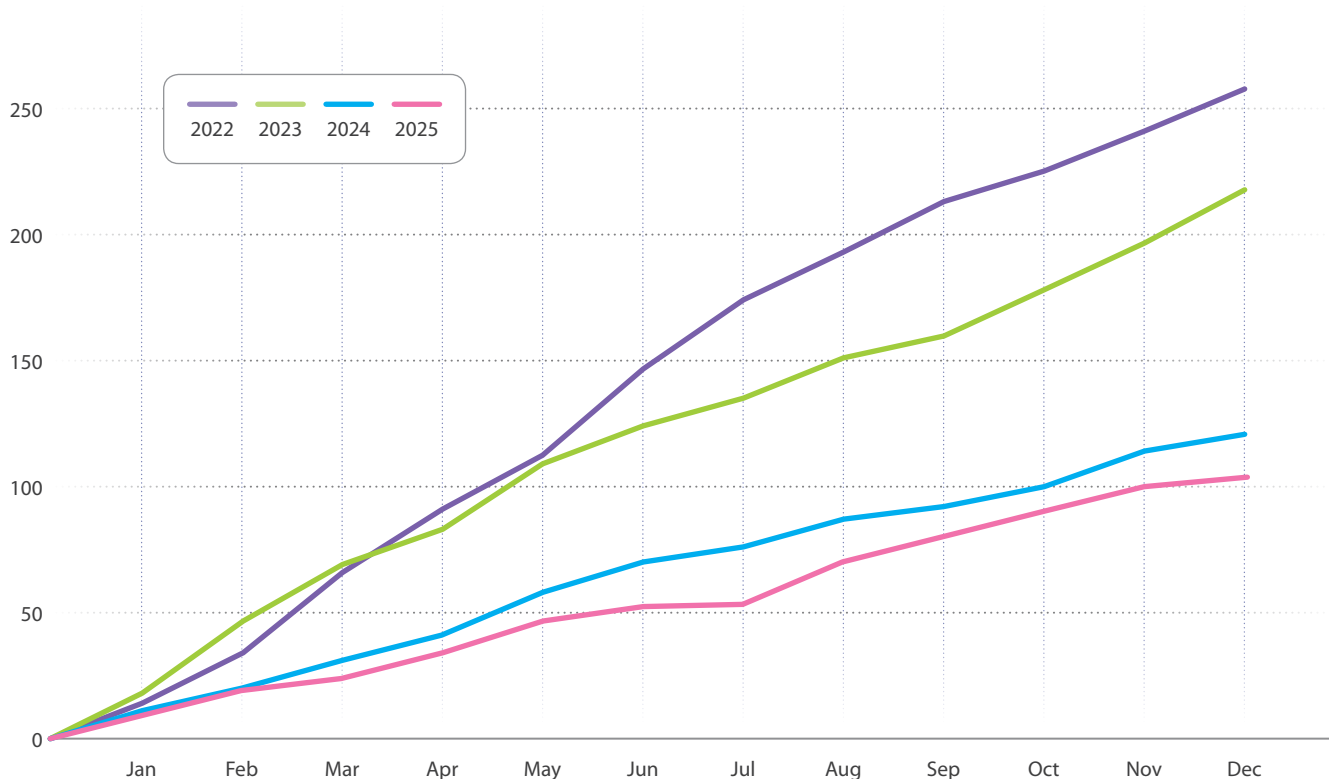
¹¹ <https://www.amnesty.org/en/latest/news/2025/03/bangladesh-international-community-must-act-to-avoid-devastating-aid-cuts-for-rohingya-refugees/>

despite the significant risks of crossing long distances, in adverse weather conditions, and on overcrowded, poorly maintained vessels. conditions, and on overcrowded, poorly maintained vessels.

C Observed Trends

Over the last 4 years, IHM activity in the IFC AOI has decreased steadily year-on-year, from over 250 incidents in 2022 down to just 103 incidents in 2025. This is likely the result of several factors, including changes in national policies, policing practices, and economic stabilisation post-COVID. In particular, Malaysia has strengthened its enforcement of labour laws in the last two years, focusing both on detaining illegal foreign workers as well as imposing stiffer fines on companies that hire these undocumented/illegal workers.¹² Indonesia is also increasing efforts to deter outward migration, particularly focusing on persons conducting Human Trafficking and job-scams.¹³ These efforts have likely complicated human smuggling/trafficking operations,

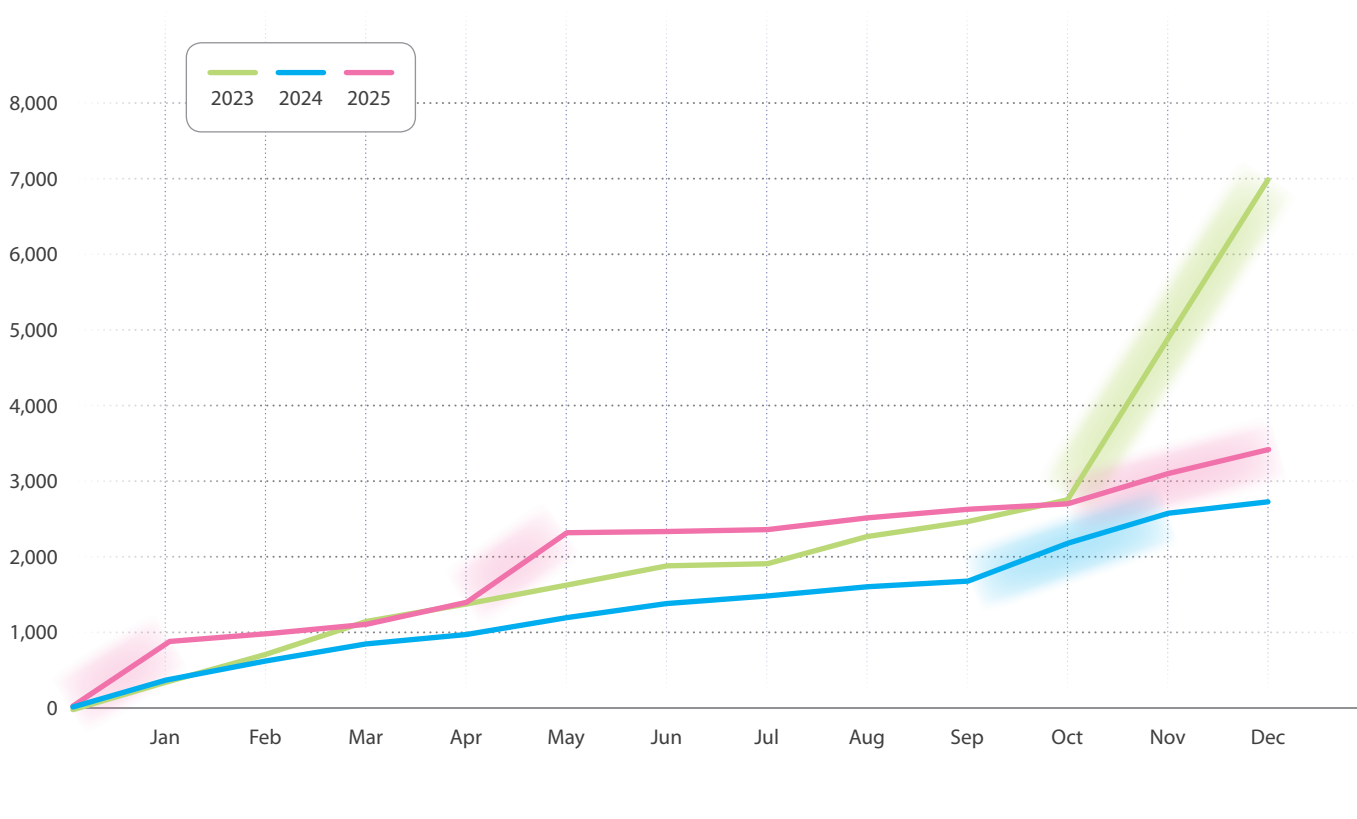
CUMULATIVE INCIDENTS BY MONTH AND YEAR



probably decreasing the number of IHM ventures, but also forcing them to adapt methods to avoid detection. This, coupled with the reduction from the peak in migration post-COVID, is likely responsible for the decrease seen since 2022.

Despite the overall decrease in incident numbers in 2025, there has been no corresponding decrease in the number of people involved in IHM incidents. The predominant factor in the number of IHM persons over the last 3 years has been the movement of large, overcrowded vessels departing from the Bay of Bengal region out of Bangladesh or Myanmar and travelling south towards Indonesia and Malaysia. These vessels routinely carry over 100 persons and accounted for 61% of the total IHM persons in the IFC's AOI over the last 3 years, despite making up only 13% of the total incident numbers. This trend can be seen in the graph below, where significant monthly jumps in IHM persons all correlate to arrivals of IHM ventures originating from the Bay of Bengal region.

CUMULATIVE PEOPLE BY MONTH AND YEAR



¹² <https://www.channelnewsasia.com/asia/malaysia-indonesia-illegal-migrant-workers-sea-land-journeys-dangerous-4745371>

¹³ Runturambi, J. S., & Ridwan, A. (2025, October). *New patterns and trends of migration: Hybrid-crimes among Indonesian migrant workers in Southeast Asia*. *Regional Science Policy & Practice*, 17(10).



FORECAST / WAY AHEAD

Based on the decreasing IHM incident totals from 2022-2025, the IFC expects to see a slight decrease in IHM incidents in 2026, with a small percentage drop in incidents compared to 2025. However, the number of people involved in IHM activity is expected to remain high. Large-scale IHM ventures are the driver of IHM people numbers, and these IHM ventures will almost certainly continue into 2026, especially with funding for UNHCR continuing to decrease.

Work-related IHM between Indonesia, Malaysia, and the Philippines will likely continue in 2026, with similar numbers to 2025. Malaysia will almost certainly remain the most popular IHM destination due to its economic opportunities, although a renewed focus on deterring illegal migrant workers may make attempts via maritime routes more challenging.



Based on the decreasing total number of IHM incidents from 2022-2025, the IFC expects to see a slight decrease in IHM incidents in 2026, with a small percentage drop in incidents compared to 2025.



In 2025, migrants from 12 different nations were reportedly involved in IHM, departing from 13 different countries and attempting to reach 14 destination countries, spread throughout Northeast Asia, Southeast Asia, South Asia, and Oceania. Even as respective law enforcement agencies cooperate to curb these activities,

it would remain challenging. As such, the IFC requests the shipping community to report any sighting of overcrowded vessels to local authorities and assist in their efforts. The shipping community can remain up to date on IHM insights through IFC products and Voluntary Community Reporting (VCR) messages.



THE CHALLENGES OF IRREGULAR MIGRATION BY SEA IN THE MEDITERRANEAN: The integrated approach of the Italian Coast Guard across SAR, Maritime Security and International Cooperation

Article contributed by Italian Coast Guard

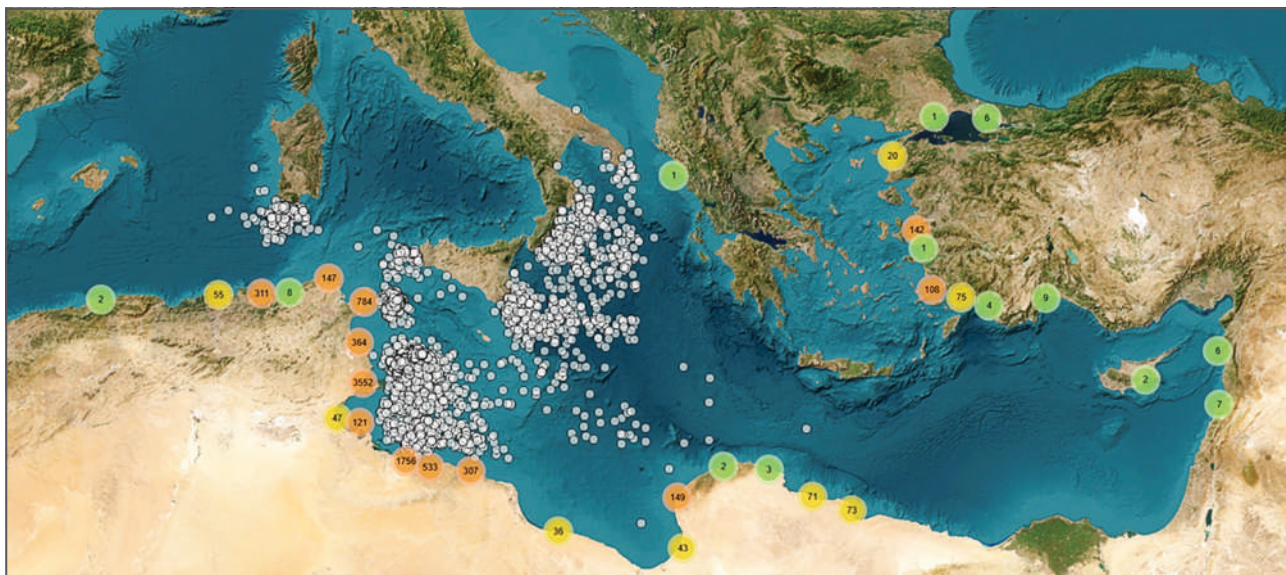
Irregular migration by sea in the Mediterranean is a structural phenomenon that has, for decades, shaped the geopolitical, social and operational dynamics of the region. It is a flow that originates far away, fuelled by broader regional instability and by the economic and demographic pressures shaping conditions in countries of origin. The Mediterranean, one of the densest maritime areas in the world, thus becomes the point where multiple pressures converge: since 2016, nearly 830,000 people have attempted the sea crossing toward Italy, relying on ruthless criminal networks that employ vessels lacking the most basic safety requirements.

In a geopolitical environment marked by strategic competition and instability, migration flows can also

be weaponised as a form of hybrid pressure, further increasing the complexity of their management. For Italy, located at the centre of the Mediterranean and serving as the main maritime gateway to Europe, this translates into an ongoing challenge involving national institutions, coastal communities and a wide-ranging security architecture. It is a challenge that simultaneously impacts the humanitarian dimension, operational response and maritime security.

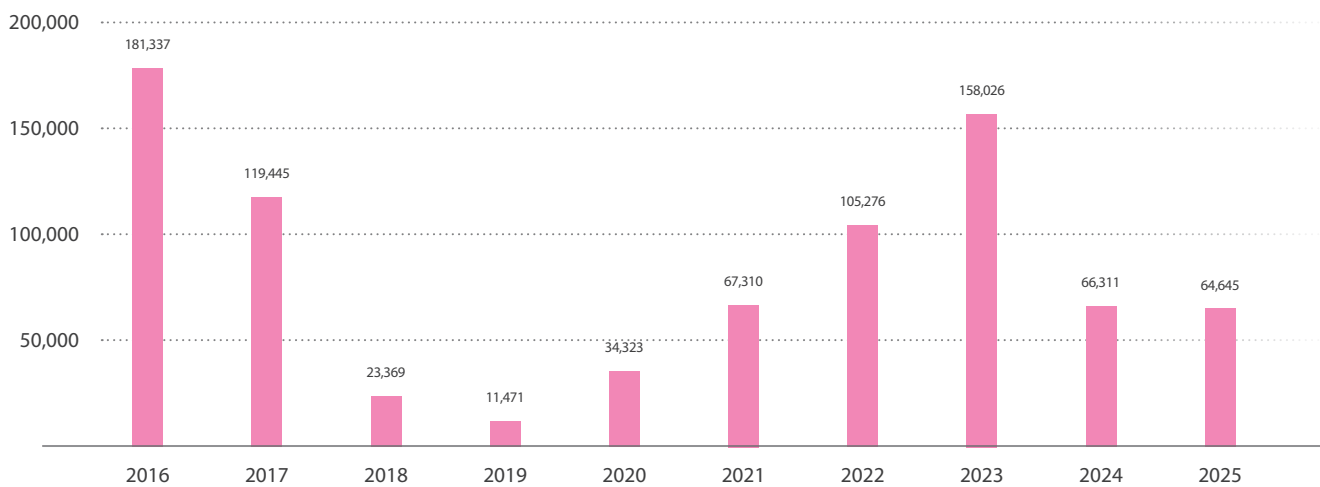
In this context, the Italian Coast Guard (ITCG) is called daily to ensure the safeguarding of human life at sea in one of the largest and busiest SAR Regions in Europe – approximately 500,000 km² – in full compliance with international conventions. At its core is MRCC Rome, which during peak periods has coordinated dozens of

GEOGRAPHICAL DISTRIBUTION OF SAR EVENTS





CUMULATIVE PEOPLE BY MONTH AND YEAR



simultaneous SAR events and managed days with up to 5,000 people rescued within 24 hours. The ability to make rapid decisions, coordinate state assets and civilian vessels, and operate even under extreme weather and sea conditions is an essential element of the national response.

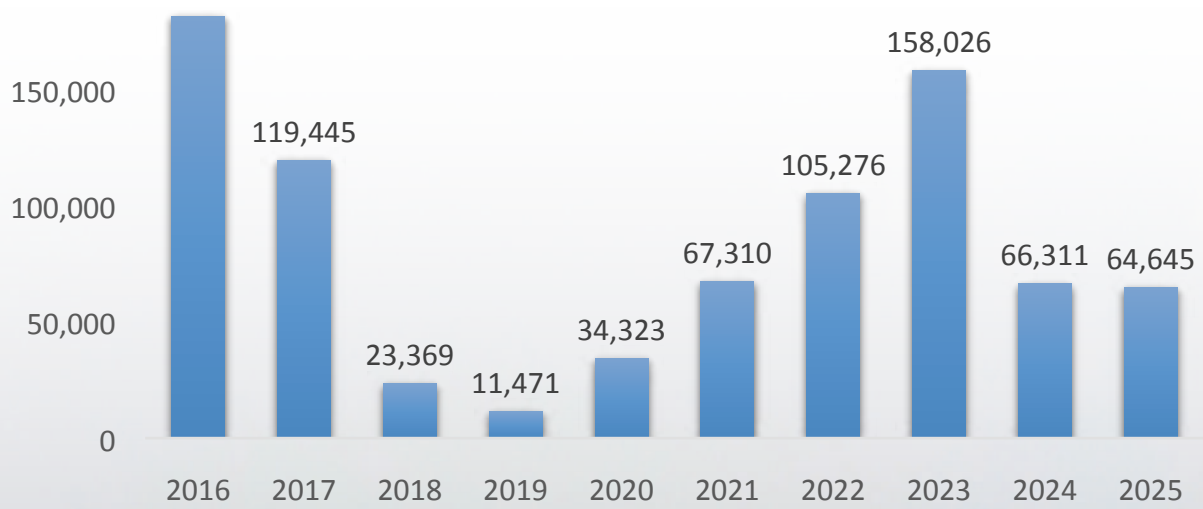
The pressure on SAR activities is closely linked to the nature of the departures organised by criminal networks. Smugglers use overloaded inflatable boats, deteriorated hulls, or even engineless craft, turning the crossing into a life-threatening gamble. In many areas, migrant smuggling generates substantial profits: fees range from around €1,000 for shorter routes to over €10,000 for longer ones, with variations depending on nationality and vulnerability. This exploitation model requires an

approach that integrates life-saving operations with the safety of navigation.

Irregular migration does not manifest solely through departures from North African shores. A distinct component involves stowaways hidden aboard commercial ships bound for European ports, a phenomenon that does not fall under SAR, but within maritime and port security. In this domain, Port Masters, Coast Guard officers serving as Designated Authorities for Port Security under the ISPS Code, ensure the implementation of prevention and control measures and manage security-related issues arising during a vessel's arrival and stay in port.

Alongside SAR and port security, the ITCG is also engaged in countering forms of maritime crime that

IRREGULAR MIGRATIONS BY SEA TOWARDS ITALY

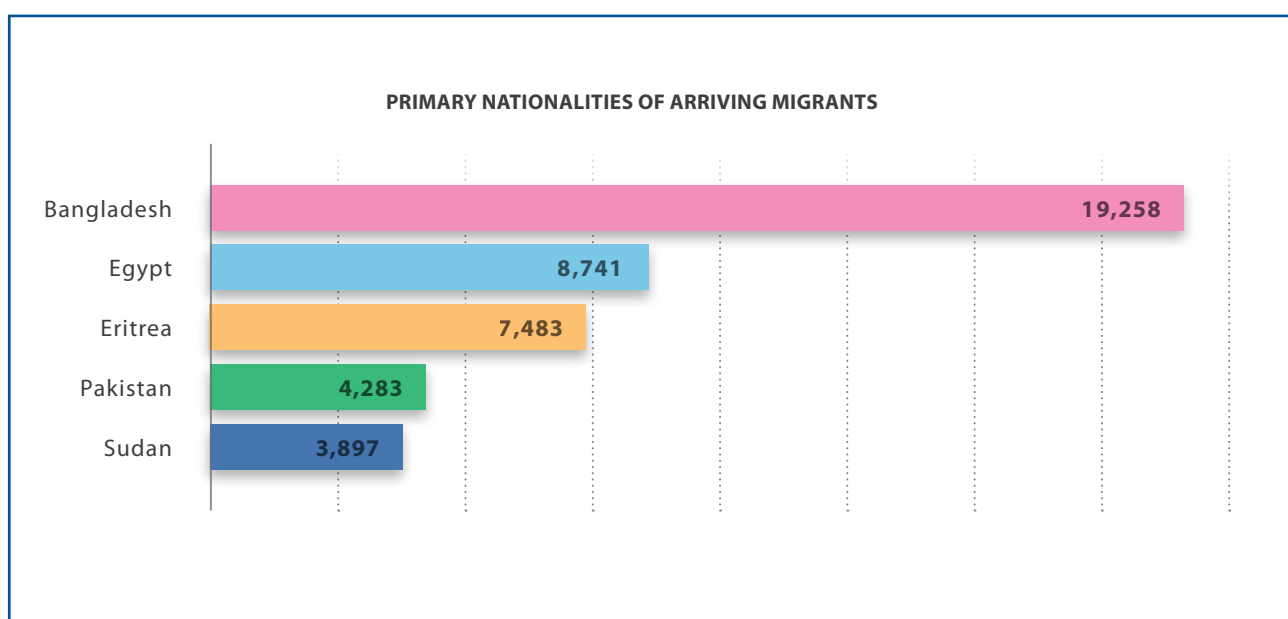


develop on the fringes of migration flows. A notable example involved Tunisian fishing vessels which, in addition to transporting migrants, were plundering their boats and leaving them adrift. Thanks to regional agreements allowing ITCG fisheries inspectors to board vessels of signatory countries in international waters, evidence was collected and several captains were detained for conduct comparable to piracy under Article 101 of UNCLOS – the first such cases recorded in the modern Mediterranean.

Supporting all these activities is an advanced surveillance system integrating AIS, coastal radars, aircraft assets, satellite platforms and European data-exchange networks.

Yet beyond technology, a decisive value lies in the Coast Guard's daily presence in the civilian maritime domain: no other actor possesses the same depth of knowledge of commercial traffic, fisheries, leisure boating and navigation safety patterns. This proximity enables coast guards to detect weak signals and interpret complex phenomena before they develop into operational issues.

The management of irregular migration flows, the safeguarding of human life at sea and the security of civilian uses of the sea demonstrate how the role of coast guard agencies is becoming increasingly central in major maritime regions worldwide. The Italian Coast Guard is a concrete example: an organisation able to combine operational responsibility, domain awareness and international cooperation – contributing every day to the stability of the Mediterranean and beyond.





1

OVERVIEW

In 2025, the IFC recorded 35 ENVSEC¹ incidents in its AOI, a substantial decrease compared to 2024 (56 incidents). Despite this decline, Maritime Pollution (MARPOL)² remained the predominant category of incidents, driven largely by oil leakages, waste mismanagement,

and accidental discharges from Tankers, Cargo Vessels, and Fishing Vessels operating across busy shipping lanes. The IFC expects the number of ENVSEC incidents in 2026 to remain similar to 2025 due to persistent underlying drivers, such as extensive petrochemical handling and reliance on aging merchant vessels.

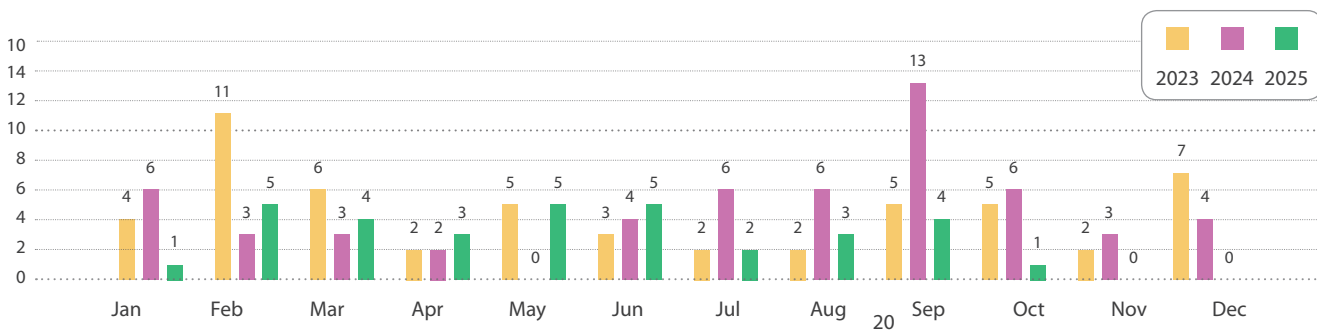
2

KEY FACTS

In 2025, MARPOL remained the predominant category of ENVSEC incidents, with a total of 33 cases, representing more than 90% of all

reports received. This was followed by Maritime Pollution – Maritime Illegal Exploitation (MIE)³ with 1 incident, and Others⁴ with 1 incident.

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



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

² Refers to liquid pollution (oil spills, and the discharge or leakage of oil or sewage); air pollution; and solid pollution (illegal discharges of waste, garbage, plastics, etc.). This category also includes onboard record violations (such as oil blending) and noise pollution.

³ Exploitation of oil and gas, flora, biological resources, and mineral resources (such as nodules).

⁴ Any maritime environmental security incident that does not explicitly fall within the established ENVSEC classifications, including but not limited to harmful or fatal incidents involving marine life.





OBSERVATION/ASSESSMENT

Unlike previous years, no pronounced seasonal spikes were observed in 2025. Incident occurrences remained relatively stable throughout the year, reflecting an overall decline across most regions. Notably, the Republic of Korea (ROK), Indonesia, and Thailand together accounted for the majority of MARPOL related incidents, consistent with their high-density maritime traffic and ongoing waste-management challenges.

In contrast to the upward trend observed between 2023 and 2024, ENVSEC incidents in 2025 declined significantly, with the number of reported cases falling by approximately 38%. Despite this reduction, MARPOL remained the most prominent category, accounting for over half of the incidents. Most cases were associated with oil leakages, waste mismanagement, and accidental discharges from Tankers, Cargo Vessels, and Fishing Vessels operating in high density shipping corridors. Most MARPOL incidents were reported in the ROK (14 incidents), followed by Indonesia (7 incidents), and Thailand (3 incidents).

The decline in MARPOL incidents suggests improvements in regional enforcement and monitoring, particularly in Southeast Asia. For example, Singapore increased its port state control inspections and tightened waste reception requirements in 2023, resulting in higher compliance among merchant vessels.⁵

Similarly, Thailand's Marine Department, in collaboration with the Thai-MECC and various government and industry partners, conducted the 13th Thailand Oil and Chemical Spill Response Exercise in July 2024 to strengthen national preparedness and enhance response capabilities for MARPOL incidents.⁶

Although illicit Ship-to-Ship (STS) transfers continue to pose challenges globally, particularly among vessels seeking to evade sanctions, their impact within the IFC's AOI in 2025 appeared less pronounced than in previous years. Nevertheless, the use of aged or poorly maintained vessels in such operations, combined with AIS-off behavior, continues to heighten the risk of accidents leading to spills.

⁵ Reference from source – *Reception Facilities for Residues Disposal Arising from Exhaust Gas Cleaning Systems (Scrubbers)*. Accessed 17 November, 2025. [https://www.mpa.gov.sg/media-centre/details/reception-facilities-for-residues-disposal-arising-from-exhaust-gas-cleaning-systems-\(scrubbers\);](https://www.mpa.gov.sg/media-centre/details/reception-facilities-for-residues-disposal-arising-from-exhaust-gas-cleaning-systems-(scrubbers);) "Procedures for Port State Control, 2023 (A 33/Res.1185)." Accessed 17 November, 2025. <https://www.wco.org/localresources/en/OurWork/IIS/Documents/A%2033-Res>.

⁶ Reference from source – PTT Exploration and Production Public Company Limited (PTTEP), *PTTEP joins Marine Department, government and private agencies in the 13th Thailand Oil and Chemical Spill Response Exercise*. Press release, July 30, 2024, accessed 17 November, 2025, <https://www.pttep.com/en/newsroom/press-releases/1002/pttep-joins-marine-department-government-and-private-agencies-in-the-13th-thailand-oil-and-chemical-spill-response-exercise>.

Regional authorities have thus stepped-up enforcement/preventive efforts. For example, Indonesian authorities intercepted an AIS-off vessel near Batam operating in poor mechanical condition after mariners reported its irregular movements, enabling enforcement agencies to intervene before further risks could develop.⁷ Mariners are therefore encouraged to report suspicious rendezvous patterns or irregular vessel movements to enhance situational awareness and enable timely responses by relevant agencies.

Meanwhile, incidents in the MIE and “Others” sub-categories remained low throughout 2025. This is likely linked to sustained enforcement actions by regional authorities, including ongoing monitoring initiatives and strengthened regulations on seabed resource extraction and coastal sand mining. Of note, the incident categorised as “Others”, was likely caused by erroneous human judgement, which led to the ship running aground, causing major damage to the coral reef.

⁷ Reference from source – *Fuel Smuggling Crackdown: KM Meneer Caught with 20 Tons of Illegal Diesel*. Published 1 July, 2025. Accessed 17 November, 2025. <https://batamnewsasia.com/2025/07/01/fuel-smuggling-crackdown-km-meneer-caught-with-20-tons-of-illegal-diesel/>



4

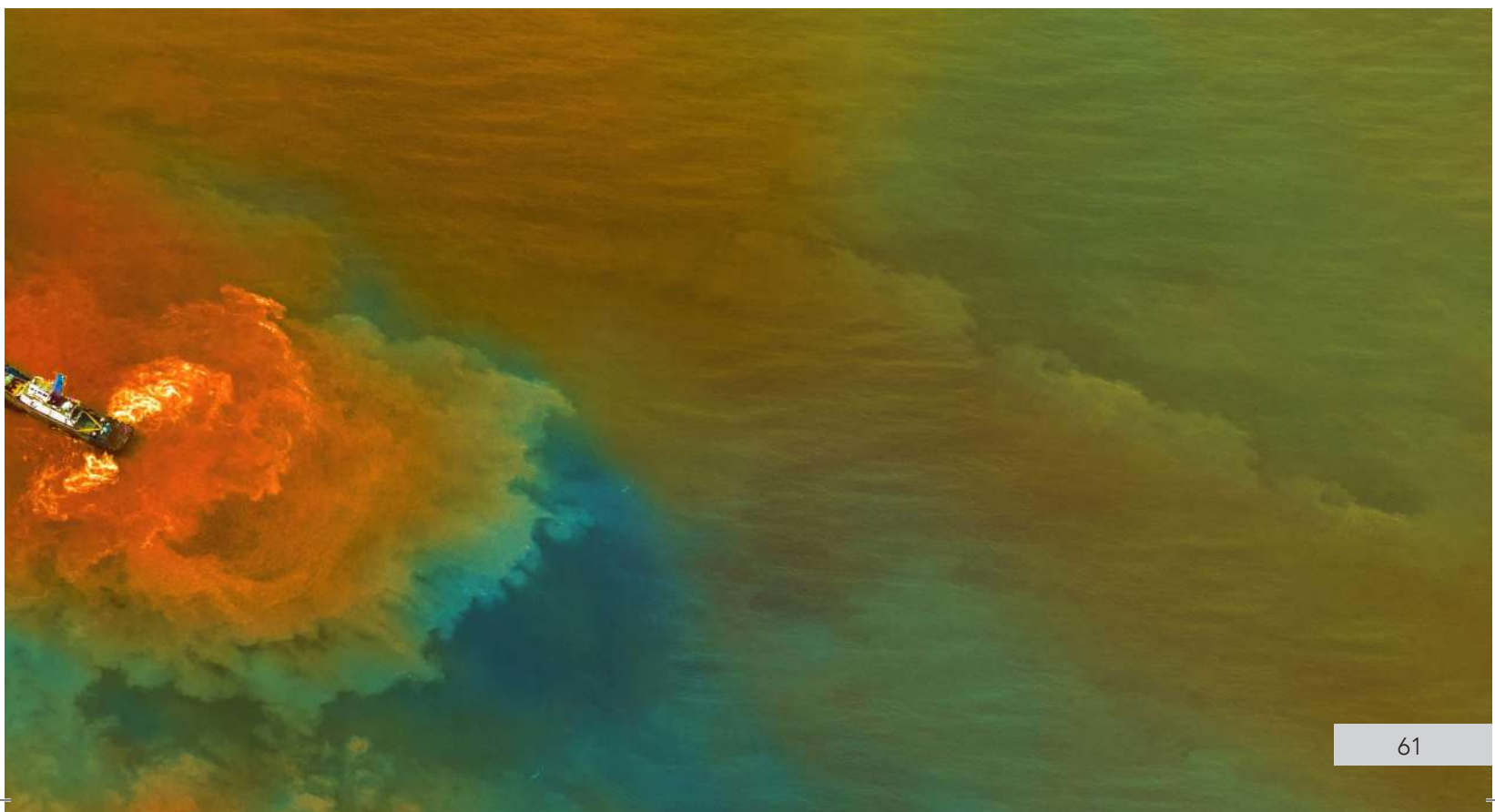
FORECAST / WAY AHEAD

IFC assesses that ENVSEC incidents in 2026 are likely to remain comparable to 2025. While improved enforcement efforts and strengthened port waste management regulations across Southeast Asia have contributed to the reduction in MARPOL incidents, the underlying drivers of environmental risk, such as dense maritime traffic, extensive petrochemical handling, and the continued reliance on aging merchant fleets, are expected to persist in the coming year. As such, accidental spills, improper waste disposal, and leakages associated with shipboard operations will remain key areas of concern.

Illicit STS activities are also expected to continue in 2026, particularly in regions affected by ongoing geopolitical tensions and global sanctions regimes. Although their impact within the IFC's AOI appeared less pronounced in 2025,

the use of inadequately maintained vessels and AIS-off behavior in such operations will continue to pose navigational and environmental risks. These activities may exacerbate vulnerabilities in busy sea lanes and further complicate monitoring efforts by coastal states.

To strengthen collective resilience, the IFC encourages regional partners, mariners, and coastal authorities to maintain vigilant reporting, align with MARPOL compliance requirements, and continue enhancing waste management oversight. Advancements in surveillance technologies, expanded data-sharing mechanisms, and coordinated enforcement operations will remain critical to safeguarding the marine environment and supporting timely responses to emerging risks across the region.



ALTERNATIVE FUELS

Article contributed by International Tanker Owners Pollution Federation (ITOPF)

The number of alternatively fuelled vessels are increasing on the global shipping order books as the industry pushes towards the decarbonisation net-zero targets set by the International Maritime Organisation (IMO). These fuels, such as liquefied natural gas (LNG), methanol, ammonia or biofuels can produce substantially lower, or in some cases zero, greenhouse gas emissions as well as lower sulphur oxides (SOx) and nitrogen oxides (NOx) particulate matter, in comparison to traditional fuel oils. While the adoption of these alternatively fuelled vessels grows in the global fleet, so too do the challenges around responding to pollution events when these fuels spill.

The marine spill response industry, when dealing with alternative fuels, is expected to see quite a large shift from protracted shoreline clean-up operations spanning large areas, which are typical for oil spills, to short-term localised events with potential high risks for human health whereby the main approach may be to mainly monitor and evaluate the risks to receptors.

The only similar alternative fuels to traditional fuel oil are biofuels (e.g. FAME and HVO), as both substances behave similarly when spilled. These liquid fuels are likely to persist and float, forming slicks on the water surface. Biofuels can be recovered using conventional techniques, such as booms, skimmers, scoops or nets in a similar fashion to traditional oil spills.

However, other more volatile alternative fuels such as LNG, methanol and ammonia have short-term

residence on the water following a spill, which means established oil pollution clean-up measures are inappropriate, such as the use of boom and skimmers. These substances are unlikely to be recoverable, and therefore natural attenuation is likely to be the only appropriate active clean-up option. The focus following a release of these fuels is likely to comprise:

- Monitoring and evaluation, which could include the use of expert atmospheric plume models, multi-gas monitors and sensors mounted possibly on UAVs to evaluate presence of flammable or toxic vapour/air mixtures and to allow for demarcation of exclusion or safety zones.
- Preventative measures and controlled release, involving stopping the leak (without posing risk to life) and mitigating against fire, preventing further releases and reducing the risks to sensitivities. Although clean-up and preventive measures will be significantly different from oil spills, measures may still be possible to mitigate against risks associated with an alternative fuel spill.

Significant steps are required by multiple stakeholders to establish and practise alternative fuels specific contingency plans to be ready in the event of a spill of these volatile substances. It is likely that a response to a significant incident involving these fuels, in most instances, would not be solely undertaken by government agencies but would require the assistance of technical experts, private organisations and the wider response industry.



As a result of this, preparedness and efficient communication between these parties is essential in promoting an effective response, with a particular emphasis on health and safety aspects such as monitoring and PPE.

Regular training for all responders is paramount to reduce the risks posed by these fuels. In order to work together as a coherent unit, all responders need to understand the contingency plan in place and the roles and responsibilities of themselves and others in implementing the plan effectively. Clear communication channels during these training workshops and exercises will facilitate rapid information exchange in the future.

ITOPF has adapted as technologies have developed, shifting its services to technical advice on effective spill response and mitigation of environmental impacts to ship-sourced pollutants. ITOPF expanded its service to non-tankers in 1991 and has now established itself as a leader in providing technical advice to spills of cargo other than oil, such as HNS. ITOPF's role on-site or remotely is not only to support its members and associates but also importantly to provide advice to various stakeholders such as governmental authorities, populations impacted by the pollution or insurers seeking objective technical expertise.

With the continuing adoption of alternative fuels within the global fleet, ITOPF is also adapting to this change, ensuring it is ready to provide timely and accurate advice to its members and associates. ITOPF set up an internal 'new developments' group in

2020 to research how these substances (including nuclear propulsion) behave when spilled, how they interact with humans and the environment, what possible clean-up methods can be used and the potential damage and liability implications that may result. Aims of the group also included increasing awareness of these topics to government agencies and other stakeholders as well as analysing the gaps that are present in HNS contingency planning and response.

ITOPF has dedicated extensive resources to the development of HNS resources and supports its stakeholders in their contingency planning journey, many of which are publicly accessible on ITOPF's website. ITOPF is also part of multiple external working groups, namely the International Group of P&I Clubs Alternative Fuels Working Group.





OVERVIEW

In 2025, the IFC recorded 11 CYBSEC incidents¹ in its AOI. Excluding AIS-Spoofing incidents², the 2025 figures are similar to 2024 (9 incidents), but about a 50% drop compared to 2023 (21 incidents). In 2025, CYBSEC incidents included the breakage of Underwater Telecommunications Cables, Malware Attacks on shipping infrastructure and the likely-

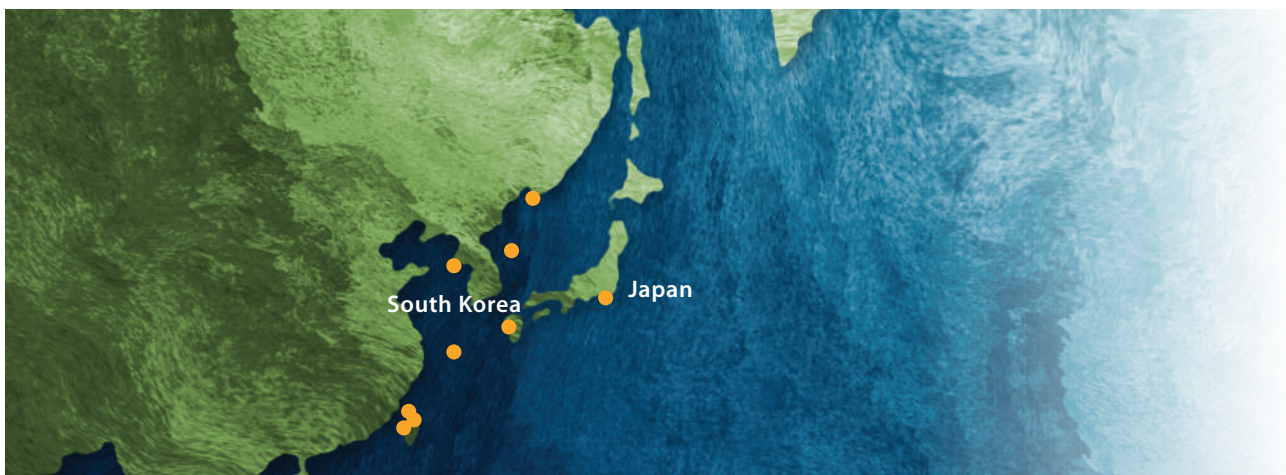
deliberate degradation of critical navigation tools, including GPS and AIS network systems. Most of these incidents were concentrated in Northeast Asia, between Taiwan and Russia. In 2026, IFC expects a similar number of CYBSEC incidents to be reported within the AOI, as ships, infrastructure, and commercial systems become increasingly digitised and connected.



KEY FACTS

In 2025, incidents were evenly split between AIS Spoofing (3 incidents), Underwater Telecommunications Breakages (3 incidents), Cyber-Attacks (3 incidents), and GPS Degradations (2 incidents). These numbers are a similar breakdown to 2024. Very few of the targeted attacks or degradations have been attributed to any specific organisation, and all submarine cable breakages have been publicly classified as accidents.

9 of the 11 incidents in 2025 occurred in Northeast Asia (see below map). This is a significant change to 2024, where only 2 CYBSEC incidents were reported in the same area. It is possible that this change is due to increasing tensions in the region, and the increased interest of issue-motivated Advanced Persistent Threat (APT) groups in the Northeast Asia maritime domain.



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 In 2024, the IFC conducted a focused AIS spoofing trial, resulting in 54 incidents detected in 2 months. AIS spoofing data has been omitted from this analysis in order to remove the discrepancy caused by the trial. See Para 3a for more details.

³ <https://www.darkreading.com/cyber-risk/asia-apt-actors-focus-expands-globally>



While CYBSEC incidents accounted for only a small percentage of the total MARSEC incidents in 2025 in IFC's AOI, the disruptive and far-reaching impact of such incidents underscores

the critical need for robust defenses across all internet-connected systems and devices. Regional authorities are actively addressing this challenge, implementing measures to enhance cybersecurity resilience in the maritime sector.



OBSERVATION/ASSESSMENT

a AIS Spoofing

3 incidents of AIS Spoofing were reported by the IFC in 2025. However, this figure likely represents only a small portion of actual AIS deception activity - including Spoofing and Dark Shipping – occurring in the AOI, possibly as part of the global network of ships suspected to be transporting sanctioned oil and goods. However, verifying AIS Spoofing for criminal means remains challenging, and the IFC only reports on activity that confirmed by relevant authorities to be acting in either a criminal manner or against UN sanctions.

In 2025, the IFC conducted a trial into organic analysis and reporting of Dark Shipping and AIS Spoofing in the region, and associated criminal or sanctions-avoidance activities that were enabled by AIS deception. Going into 2026, the IFC will continue to work with partners and open-source information to report on documented cases of AIS deception, in line with other IFC Clusters' reporting processes.

b Underwater Telecommunications Cable Damage

There were 3 incidents related to Underwater Telecommunications Cable Damage in 2025, similar to 2024. 2 of the 3 incidents occurred in the vicinity of Taiwan, and were allegedly damaged by Cargo Vessels, although investigations have not determined any evidence of deliberate sabotage.⁴ The third incident occurred within the Indonesian archipelago and was likely a case of accidental damage from dragging of fishing nets or anchors.

Underwater Telecommunications Cables remain a critical vulnerability for many countries within the IFC's AOI, due to the coastal or archipelagic nature of many states in the region. While there are many national-level infrastructure projects to increase resilience in Asia's underwater telecommunications networks, high concentrations of fishing and other maritime

⁴ <https://globaltaiwan.org/2025/06/taiwans-digital-vulnerabilities/>



activity combined with relatively shallow water and regular high-impact weather events puts cables at regular risk of accidental damage.⁵ Once broken, repairs to cables are slow and expensive; fortunately, there is capacity for repairs to be conducted in the region. While no regional state maintains a sovereign repair capability, 3 foreign-owned repair vessels are headquartered in Southeast Asia, and the ASEAN Cables Pte Ltd, a multinational consortium made up of several ASEAN telecommunications authorities, manages a small fleet that services the Asia Pacific.⁶

C Hacking / Malware Attack

There were 3 direct Hacking or Malware Attacks reported in 2025, 2 against Japanese maritime-industry corporations (shipbuilding and global shipping) and 1 against a Taiwanese container carrier shipping company. Both attacks against Japanese companies involved the use of ransomware resulting in disruption to operations and were self-declared as conducted by Qilin (likely-Russian-based APT) and Threat Actor 888 (limited information). Of note, Japan has increasingly been a target of ransomware attacks in 2025 with big companies such as Asahi being targeted, and the maritime sector has not been immune.⁷

The attack on a Taiwanese company was not attributed to any group, and consisted of a DDOS attack on the company's public-facing website. The company reported minimal disruption to operations, with the website returning to full operation within a few days.

d GPS Degradation

There were 2 incidents of GPS degradation in 2025, where multiple vessels reported outages, confusion, or spoofed returns on their GPS receivers. 1 incident occurred in the Yellow Sea near the DPRK/ROK border and the other occurred in the Sea of Japan, south of the Russian port of Nakhodka. Both incidents resulted in navigation system failures and congestion near ports, but there were no reports of any serious incidents.

⁵ <https://www.csis.org/analysis/strategic-future-subsea-cables-singapore-case-study>

⁶ <https://rsis.edu.sg/rsis-publication/rsis/strengthening-undersea-cable-resilience-in-the-indo-pacific/>

⁷ <http://straitstimes.com/asia/east-asia/japanese-companies-brace-themselves-for-more-attacks-as-cybercrimes-climb>



4

FORECAST / WAY AHEAD

In 2026, the IFC expects a similar number of CYBSEC incidents to be reported within the AOI, as ships, infrastructure and commercial systems become increasingly digitised and connected, and risk of cyberattacks targeting ships, maritime infrastructure, and shipping companies. We also expect the maritime community to be more willing to report CYBSEC incidents for shared awareness. 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.

All partners are encouraged to report and share CYBSEC incidents and lessons learnt in order to

collectively strengthen the industry's knowledge and ability to respond effectively.

Of note, the IFC will be changing how we classify CYBSEC incidents in 2026. Since the inception of the CYBSEC cluster, the IFC has reported on the type of CYBSEC incident and has classified the incident via hacking methods (e.g. Ransomware, SQL, DDOS). However, from January 2026, the IFC will classify CYBSEC incidents by the target type (e.g. platform, underwater, infrastructure, commercial). These classifications will better enable the IFC to analyse the trends within the maritime CYBSEC domain and better inform partners on current CYBSEC threats.





CRITICAL UNDERWATER INFRASTRUCTURE

Article contributed by Virtual Regional Maritime Traffic Centre

INTRODUCTION

The Virtual Regional Maritime Traffic Centre (V-RMTC) and its embedded Critical Undersea Surveillance Centre (CIUSC) operates in the framework of the Italian Navy Maritime Operations Centre providing a coherent, shared Maritime Domain Awareness in close cooperation with the 43-member states of the V-RMTC community with a specific focus in monitoring and protecting the National critical undersea infrastructure.

THE FRAMEWORK

On World Hydrography Day (21 June, 2025), in London, the Nippon Foundation GEBCO Seabed 2030 Project announced that 27.3% of the world's ocean floor has now been mapped to modern standards; we have just a vague idea of more than 70% of the ocean floor. Nowadays, about 99% of global internet traffic passes through an undersea network, carrying financial transactions worth over \$10 trillion a day (ISPI – Cavi sottomarini: Le nuove Autostrade dei dati 2024). At the same time in Mediterranean Sea, there is an average of over 9,000 ships transiting daily and this number refers only to those units reporting their position by AIS.

The expansion of the activities in the underwater environment has introduced new security concerns, as increased accessibility brings more potential threats. These security issues demand a proactive

approach, emphasising secure-by-design systems to address both existing and emerging risks in the underwater domain. Defense tools span from prevention to deterrence.

Prevention means reducing the number and impact of destabilising incidents by making it more difficult to hostile forces to threaten infrastructure safety. Reducing response and repair time will strengthen resilience and will act as a deterrent. Fast real-time detection of threats is a fundamental instrument to prevent and combat incidents and to identify the hostile forces responsible for sabotage and damages. Another instrument is making more expensive deliberate or unintentional hostile action against critical infrastructures, using better detection systems, efficient instruments and severe penalties.

ABOUT THE PROTECTION OF THE NATIONAL CRITICAL UNDERSEA INFRASTRUCTURE

The commitment of the Italian Navy in protecting the National Critical Infrastructure starts before the establishment of the CIUSC. In 2021, a bilateral agreement with National Stakeholders was signed for the monitoring and protection of their infrastructure. Immediately after the North Stream event of the 26 September 2022, the Italian Navy realised that a more structured approach was needed and a new





maritime operation named SEABED SECURITY was launched, specifically dedicated to the protection of the national critical undersea infrastructure. A few days after that, the Critical Undersea Surveillance Centre (CUISC) was established in the framework of the Virtual Regional Maritime Traffic Centre. The CUISC plays a key role in the monitoring and protection of the CUI, sharing information directly with the major national stakeholders, institutions and allies. Either the CUISC or the owner of the infrastructure can raise the alarm.

Integrating the information provided by AIS, satellites, radar, units at sea, MPRA and submarine the CUISC is able to detect vessels suspicious behaviours in

proximity of the CUI and raise the alarm to the owner (in order to increase the awareness) and to the forces at sea in order to timely intercept and inspect the vessel. Furthermore, the alarm can be raised by the owner of the CUI that has experienced a failure.

In this case, the CUISC will engage the MOC that will send an air or surface asset to investigate while the CUISC, exploiting the stored database information, will reverse engineer the event to detect the responsible entity. Time and information are key elements of the CUISC that positions itself at the center of a link that connects the 43 member states of the V-RMTC community, EU and NATO allies, national stakeholder and institutions.



The Critical Undersea Surveillance Centre plays a key role in the monitoring and protection of the Critical Underwater Infrastructure, sharing information directly with the major national stakeholders, institutions and allies.

GENERAL CATEGORIES	EXPLANATORY NOTES
THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS)	This refers to the act of Sea Theft, Sea Robbery and Piracy conducted within the maritime domain.
MARITIME TERRORISM (MT)	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.
MARITIME INCIDENTS (MI)	This refers to general incidents in the maritime domain such as collisions, groundings, vessels sinking etc.
ILLEGAL, UNREPORTED, AND UNREGULATED FISHING (IUUF)	This refers to fishing incidents that flout the rules of legal conservation and management measures put into place by the respective authorities.
CONTRABAND SMUGGLING (CS)	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.
IRREGULAR HUMAN MIGRATION (IHM)	This refers to all channels of wilful and un-wilful irregular migration through illegal means.
ENVIRONMENTAL SECURITY (ENVSEC)	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.
CYBER SECURITY (CYBSEC)	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.



THEFT, ROBBERY, AND PIRACY AT SEA (TRAPS) CLASSIFICATION

TRAPS Classification	Explanatory Notes
Hijacked	Any illegal act of violence whereby perpetrators HAVE boarded AND taken control/detained a vessel. and/or its crew against their will.
Boarding	Refers to incident 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 vessel during boarding. Note: Additional Information (e.g. use / discharge of weapons during the boarding will be highlighted in the IFC comment box.
Attempted Boarding	Any suspicious act including but not limited to vessel(s); (1) having a very close CPA, (close approach 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. Note: Additional Information (e.g. use / discharge of weapons during the boarding) will be highlighted in the IFC comment box.
Suspicious Approach	Any act of vessel(s) approaching close proximity enough to warrant suspicion. No boarding paraphernalia or weapons are sighted onboard.



MARITIME TERRORISM (MT) CLASSIFICATION

MT Classification	Explanatory Notes
Bombing	An attack caused by a violent shattering or blowing apart of something, as is caused by an Improvised Explosive Devices (IEDs) or bomb by/for a terrorist/terrorist group if supported by specific info/intel or claimed by extremist group.
Hijacking-Kidnapping	Any illegal act of violence whereby perpetrators have boarded and taken control/detained a vessel and/or its crew against their will, by/for a terrorist/terrorist group to further their agenda such as terrorist attack (not inclusive of general funding of the organisation) if supported by specific info/intel or claimed by extremist group.
Shooting	An attack caused by the shooting of a gun or other weapons by a terrorist/terrorist group if supported by specific info/intel or claimed by extremist group.
Counter Maritime Terrorism	Any seizure of items (weapons, precursors for explosive materials, etc) or people with a clear linkage to a terrorist/terrorist group if supported by specific info/intel.



MARITIME INCIDENTS (MI) CLASSIFICATION

MI Classification	Explanatory Notes
Adrift	Vessel suffering from an issue (other than those listed below) that means it cannot transit as intended, including loss of steerage. Vessel floating in uncontrolled directions without either being moored or steered.
Aviation Incident	Aviation-related activities in the maritime domain, such as aircraft crash.
Cargo Mishap	Uncontrolled movement of cargo onboard, or off of, a vessel.
Collision-Grounding	Any situation where a vessel strikes an object, be it stationary, moving, seafloor, rocks, etc.
Fire-Explosion	Fire and/or explosion in the maritime domain.
Equipment Failure	Shipboard systems failing to perform their intended function (such as engine, steering, switchboards etc.).
Missing	Vessel is lost.
Sunk-Capsized	Vessel overturned/submerged (or partially submerged) into the water, such that the vessel is no longer able to function.
Vessel Detained	Incidents arising from vessel engaged in unauthorised activities in the maritime domain.
Violent Confrontation	Incident whereby violence (such as use of force) is used in an encounter between two or more parties.
Others	Incidents that do not explicitly fall into other MI classifications such as, but not limited to, vessel flooding (during which the vessel can continue to function).



ILLEGAL, UNREPORTED, AND UNREGULATED FISHING (IUUF) CLASSIFICATION

IUUF Classification	Explanatory Notes
Local	Conducted IUU Fishing by national vessels, or foreign vessels which have a licence to fish, in waters under the jurisdiction of a state, in contravention of its laws and regulations.
Poaching	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.
International	Conducted IUU Fishing by vessels (declared as an IUU vessel by Regional Fisheries Management Organizations (RFMOs) such as IOTC, WCPFC, etc. and other official organisations such as INTERPOL) in contravention of regional regulations or international laws and regulations.





CONTRABAND SMUGGLING (CS) CLASSIFICATION

CS Classification	Explanatory Notes
Drugs	When the smuggled goods are substances with a physiological effect on the body. E.g. Methamphetamine, Cocaine, Cannabis
Fuel	When the smuggled goods are fuel products. E.g. Petroleum, Crude Oil, Gas
Natural Resources	When the smuggled goods are resources that are harvested from nature E.g. Gold, Sandalwood, Wood, Sand, Metals
Domestic Products	When the smuggled goods are either common household products or manufactured items. E.g. Rice, Flour, Salt, Gas Cylinders, Plastic, Cars, Alcohol
Wildlife	When the smuggled goods are live animals or animal parts listed under CITES; E.g. Elephant Tusk, Pangolin Scales, Tortoises, Sloths
Weapons	When the goods smuggled are designed for inflicting bodily harm or any form of damage. E.g. Guns, Knives, Explosives
Tobacco	When the smuggled goods are a product of the tobacco plant. E.g. Cigarettes, Cigars, Chewing Tobacco
Chemical Substances	Vessel overturned/submerged (or partially submerged) into the water, such that the vessel is no longer able to function.
Precursors	When the smuggled goods are ingredients or precursor chemicals frequently used in the manufacture of Narcotic Drugs or Psychotropic Substances listed as under control by the UN International Narcotics Control Board.
Others	When the smuggled goods are anything outside of the above categories. E.g. Cash



IRREGULAR HUMAN MIGRATION (IHM) CLASSIFICATION

IHM Classification	Explanatory Notes
Irregular Human Migration	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)
Human Trafficking	When persons are coerced and moved/migrated against their will (forced or deceived into doing so)
Human Exploitation	When persons are used, or currently working in the maritime sector, as a resource with no regard for their well-being (within the maritime domain) e.g. Slavery. Migration may not be an element in this classification
Illegal Documentation	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 being exploited but just working illegally.



ENVIRONMENTAL SECURITY (ENVSEC) CLASSIFICATION

ENVSEC Classification	Explanatory Notes
Maritime Pollution (MARPOL)	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
Maritime Illegal Exploitation (MIE)	Exploitation of Oil and Gas, Flora and Biological and Mineral resources (nodules, etc.)
Contagion	Transmission of viruses through maritime means.
Others	Any Maritime Environment Security incidents not explicitly fall into ENVSEC classifications such as, but not limited to, harmful or fatal incident of marine life, etc.



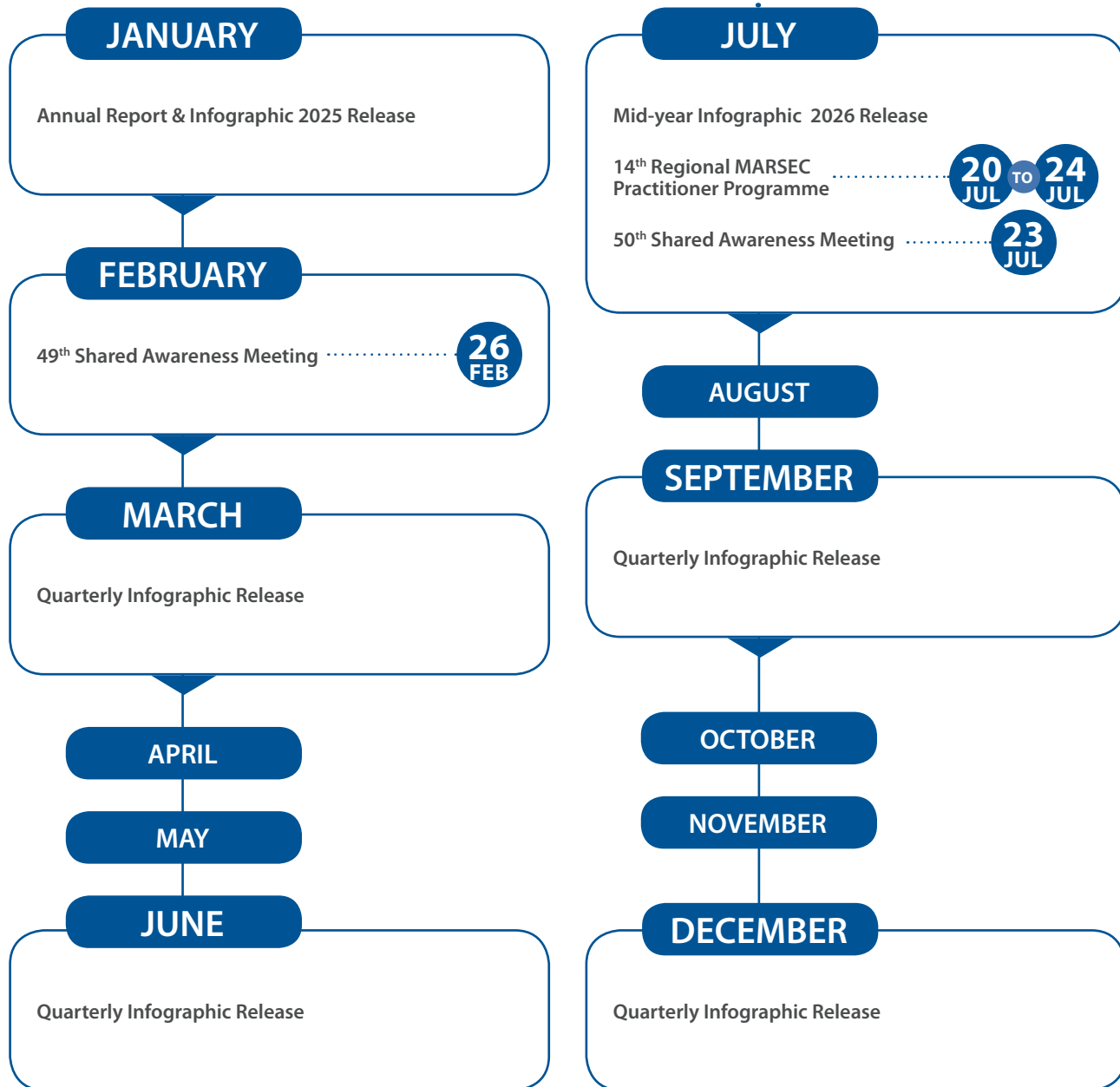
CYBER SECURITY (CYBSEC) CLASSIFICATION

CYBSEC Classification	Explanatory Notes
Malware	Malware is a term used to describe malicious software, including spyware, ransomware, viruses, and worms. Malware breaches a network through a vulnerability, typically when a user clicks a dangerous link or email attachment that then installs risky software.
Attempted Phishing (including Spear Phishing)	Phishing is the practice of sending fraudulent communications that appear to come from a reputable source, usually through email. The goal is to steal sensitive data like login information or to install malware on the victim's machine.
Man-in-the-middle Attack	Man-in-the-middle (MitM) attacks, also known as eavesdropping attacks, occur when attackers insert themselves into a two-party transaction. Once the attackers interrupt the traffic, they can filter and steal data.
Denial of Service Attack	A denial of service attack floods systems, servers, or networks with traffic to exhaust resources and bandwidth. As
SQL Injection	A Structured Query Language (SQL) injection occurs when an attacker inserts malicious code into a server that uses SQL and forces the server to reveal information it normally would not. An attacker could carry out a SQL injection simply by submitting malicious code into a vulnerable website search box.
Zero-day Exploit	A zero-day exploit hits after a network vulnerability is announced but before a patch or solution is implemented. Attackers target the disclosed vulnerability during this window of time.





FORECAST OF IFC ACTIVITIES 2026



2026



INFORMATION FUSION CENTRE





INFORMATION FUSION CENTRE



[http:// www.ifc.org.sg](http://www.ifc.org.sg)

103 TANAH MERAH COAST ROAD #02-01, SINGAPORE 498750

 +65 6594 5734  +65 9626 8965 • +65 6594 5728

 IFC_DO@DEFENCE.GOV.SG

 [BIT.LY/INFORMATION_FUSION_CENTRE](https://bit.ly/information_fusion_centre)