Review Article:
The Evolution of the Shipping Industry's Approach to Maritime Security

Shipping Industry
www.maritimeglobalsecurity.org

Reviewed by
Peter Cook
Managing Editor
International Journal of Maritime Crime and Security

The 21st century has heralded a paradigm shift in the shipping industry's security posture. The emphasis of responsibility for commercial ships carrying the 12bn tons plus of cargo worldwide, fundamental to the global economy, has shifted from national navies with their fleets of warships to private owners of the ships of trade. Concurrently, threat profiles in the last twenty-five years have exceeded all expectations in their diversity, complexity, scale and pervasiveness.

Since the year 2000, the shipping industry has increased its carrying capacity three times over, from just over 8 million deadweight tonnage (dwt)[1] to 2.4 billion dwt, enabling it to carry more than double the volume of cargo, from 5.8bn tons to 12.7 bn tons, with a three time increase in ton miles[2] from 22.7bn to 66.7bn nautical miles[3].

Meanwhile, almost all western navies have shrunk by around one third[4]. The shrinking of naval fleets has forced the shipping industry to realise the erstwhile guardians of the oceans have all but disappeared. Political expediency has re-prioritised naval roles from their original purpose of protecting ocean going trade to satisfying short-term political objectives, saving money and reducing political risk. Gone are the days when the international community and its navies had the capacity and capability to dominate the oceans and take the lead in maritime security, that is now the task of ship owners.

Characteristically resilient and resourceful, the shipping industry has valiantly managed each of these new challenges with aplomb and pragmatism. The industry has ensured that world trade keeps moving and the global economy perpetually grows. The international shipping associations along with the International Maritime Organisation (IMO)[5] have provided guidance to shipowners on how to counter each of these significant threats, assess the risks and mitigate them to manageable levels by providing relevant and timely direction for shipowners, Masters and the crews of ships in a graduated and effective process.

This article examines the way in which the commercial the shipping industry has, without invitation, grown into the role of being largely responsible for its own security in a progressively unstable world and increasingly insecure seas and how it continues to develop strategies to mitigate the risks into the future. The Annex provides a comprehensive table of the thirty-three different documents published for the shipping industry by the international shipping associations and IMO up until 28 February 2026.

International Ship and Port Facilities Security Code

The introduction of the International Maritime Organisation's (IMO) International Ship and Port Facility Security (ISPS) Code drafted at the IMO in 2002 (post the 9/11 attacks on the USA) and implemented in 2004 was the first step towards shifting responsibilities. The focus, understandably,

[1] *Deadweight tonnage (dwt) is a measurement of the weight of cargo that can be carried based on metric tons.*
[2] *Ton miles is a measure used by economists as defined as "the tonnage of cargo shipped, multiplied by the average distance over which it is transported." Maritime Economics 3rd Edition, Stopford 2009*
[3] *These figures have been taken from the United Nations Convention on Trade and Development Review of Maritime Transport 2001 and 2025 https://unctad.org/publications-search?f%5B0%5D=product%3A393*
[4] *IISS Military Balance 2013*
[5] *The International Maritime Organization (IMO) is a specialized agency of the United Nations responsible for regulating shipping, ensuring maritime safety, and preventing marine pollution.*

was to provide "measures and procedures to prevent acts of terrorism which threaten the security of passengers and crews and the safety of ships"[6].

The format of the ISPS Code was not dissimilar to the IMO's International Safety Management (ISM) Code, which had been adopted in 1989 for the "Safe Operation of Ships and for Pollution Prevention". Both the ISM and the ISPS Codes were incorporated into the International Convention for the Safety of Life at Sea (SOLAS) 1974.

As the new requirements of the ISPS Code were adopted across the world, the new norm of self-protection slowly became accepted. The ISPS Code requires Shipowners to appoint Shipping Company Security Officers (CSO)[7] to oversee the management of security for similar kinds of ships within a firm's fleet. The Shipowner is also required to appoint a Ship Security Officer (SSO) who is responsible for the security for each individual vessel at sea and in port. Shipping companies are required to formulate and draft their ship security plans in accordance with the ISPS Code and possibly with the assistance of a Recognised Security Organisation (RSO)[8], in preparation for them to be authorised by the flag State of the ship and audited (often conducted by Classification Societies). Additionally, Port Facilities[9] are also required to appoint a Port Facility Security Officer (PFSO) who formulates and drafts a Port Facility Security Plan to be authorised by the national authority for the port. The PFSO is then responsible for the implementation and upholding of the plan. The ISPS Code comprised two parts: A and B. Part A is mandatory for all ships engaged on international voyages, passenger ships, cargo ships of 500 gross[10] tonnage and upwards, mobile offshore drilling units and port facilities serving ships engaged on international voyages. Part B of the Code provides guidance about further security measures and was not mandatory, although some nations have adopted both Part A and B as requirements for their national standards.

The adoption and implementation of the ISPS Code was the first step, albeit the most practical methodology for improving security across the maritime industry swiftly, in the transfer of responsibilities for security, from public to private.

Historically, navies were established from the fifteenth to the seventeenth centuries, with the primary purpose of protecting trade. During the period of the two world wars, warships dominated the sea lanes. Piracy was regarded as a minor, often isolated problem that could be dealt with locally. During the cold war naval forces were configured to maintain the maritime passages across the north Atlantic between North America and Europe and the Mediterranean. To fulfil these functions, navies had to be quite large with a mixed fleet of warships. The collapse of the Warsaw Pact and the disintegration of their naval forces in the 1990s neutralised the justification for unnecessarily expensive large peacetime navies. Consequently, western naval forces were reduced in size by about one-third and defence budgets became tighter, significantly altering each navy's deployment strategy. Naval presence across the world's oceans was significantly reduced and deployments were more focused.

Somali Piracy

Despite the growing success of Somali pirates from 2005, western politicians were focused on the seemingly unwinnable conflicts in Iraq and Afghanistan. Accordingly, the primary focus of the navies was supporting these two campaigns for the sake of other demands. This point was emphasised by the Royal Navy's First Sea Lord, Sir Mark Stanhope, who when asked by the author in 2010, when the navy would start protecting ships against Somali pirates, dismissed the question and said "this is a merchant navy problem"[11].

Disorientated by the dismissive nature of first world governments' response to the growing impact of piracy, the international shipping associations, which advocate on behalf of their ship-owning members

[6] *Foreword of ISPS Code 2003 Edition piii*

[7] *Company Security Officer (CSO), Ship Security Officer (SSO) and Port Facility Security Officer (PFSO) all require the individuals who will hold the appointment to complete and pass an IMO audited course.*

[8] *Recognised Security Organisations (RSOs) can be government organisations or private companies accepted by the contracting government.*

[9] *Ports may have several different port facilities (or terminals) within their boundary of each Port Facility is required to complete a PFSP.*

[10] *Gross Tonnage (GT) is an alternative method for measuring a ships capacity based on total hull space below the ship's upper deck, measuring "the moulded volume of all enclosed spaces of the ship".*

[11] *Future Maritime Operations Conference, Royal United Services Institute (RUSI) in July 2010*

and industry sector groups at the UN's International Maritime Organisation (IMO)[12], based in London, were forced to radically change course and quickly draft a set of vessel self-protection measures. Piracy in the Gulf of Aden and off the coast of Somalia was escalating fast; whilst the eight attacks in 2007 was concerning, 2008 saw more than a 500 percent increase with 43 ships attacked and 33 were successfully hijacked. In January 2009, led by Oil Companies International Marine Forum (OCIMF)[13], the industry published a slim booklet for seafarers entitled Piracy – East Africa/Somalia Situation. By the middle of 2009 more than 60 ships had been hijacked with their crew's held hostage in atrocious conditions of depravity and brutality.

Prompted by the seemingly relentless and increasingly prevalent piracy attacks, the largest shipping associations (BIMCO[14], ICS[15], INTERCARGO[16] and INTERTANKO[17], SIGTTO[18], OCIMF, CLIA[19]), along with marine insurers (IGP&I[20], IUMI[21] and JWC/JHC[22]), the ITF[23] and the IMB[24] drafted a 20-page document outlining vessel protection measures and submitted it to the IMO for endorsement and publication. The IMO debated the document at the Maritime Safety Committee (MSC) and published Circular MSC. 1/Circ. 1335[25]) on 29 September 2009. The guidance was known as Best Management Practices, colloquially referred to as "BMP".

The collaborative unified approach of shipping associations, marine insurers, maritime trade unions and the International Maritime Bureau demonstrate a strong collegiate purpose for providing dialogue between the stakeholders in the shipping industry. The collective nature of these parties sent a strong message of aligned purpose which has stood the test of time and incorporates not only counter piracy but many other maritime security publications. The number of organisations, including naval alliances, which have joined the core supporters by backing and supporting the purpose of publications and the actions of those following the guidelines is a testament to the initiative taken by the shipping associations.

The tempo of piracy attacks meant that an updated and improved second version of the original BMP, referred to as BMP 2 was published before the IMO had time to formally issue BMP1. Whilst governments did form and deploy naval task groups in late 2009, the pirates were exploiting their

---

[12] The International Maritime Organization (IMO) is a United Nations specialized agency responsible for regulating international shipping, ensuring maritime safety, security, and environmental protection.

[13] OCIMF https://www.ocimf.org/ Oil Companies International Marine Forum (OCIMF) is a voluntary association of oil companies with an interest in the shipment and terminalling of crude oil, oil products, petrochemicals and gas.

[14] BIMCO - Baltic International Maritime Council https://www.bimco.org/ BIMCO is the world's largest direct-membership organisation for shipowners, charterers, shipbrokers and agents.

[15] ICS - International Chamber of Shipping https://www.ics-shipping.org/ The leading global trade association representing around 80% of the world's merchant tonnage through national shipowners' associations.

[16] INTERCARGO https://www.intercargo.org/ representing the interests of quality dry bulk cargo shipowners.

[17] INTERTANKO https://www.intertanko.com/ The International Association of Independent Tanker Owners is a trade association.

[18] SIGTTO https://www.sigtto.org/ The Society of International Gas Tanker and Terminal Operators.

[19] CLIA https://www.cruising.org.au/ CLIA is composed of more than 60 of the world's major cruise lines and serves as a non-governmental consultative organisation to the International Maritime Organization (IMO).

[20] IGP&I https://www.igpandi.org/ The International Group is a not-for-profit association of 12 P&I Clubs providing marine liability cover for 90% of the world's ocean-going tonnage. Through the unique Group structure, the member Clubs, whilst individually competitive, share between them their large loss exposures, and also share their respective knowledge and expertise on matters relating to shipowners' liabilities and the insurance and reinsurance of such liabilities.

[21] IUMI https://iumi.com/ The International Union of Marine Insurance is a global, professional body that represents the interests of national and international marine insurers and reinsurers.

[22] JWC/JHC https://lmalloyds.com/ The Joint War Committee is comprised of underwriting representatives from both the Lloyd's and IUA company markets, acting on behalf of those engaged in writing marine hull war business within the London market.

[23] ITF International Transport Workers Federation, the Trade Union body representing seafarers. https://www.itfseafarers.org/en

[24] International Maritime Bureau https://icc-ccs.org/imb/ Part of the International Chamber of Commerce (ICC) a non-profit making organisation, established in 1981 to act as a focal point in the fight against all types of maritime crime and malpractice.

[25] The Maritime safety Committee of the IMO had published other Circulars related to attacks by pirates and armed robbers, as far back as MSC/Circ.597, issued in August 1992, but the incidents were not on the scale of the Somali piracy and the International Shipping Associations were not prompted to publish their own documents until 2009.

numerical advantage and momentum. The attacks and hijackings continued without any tangible decrease in number, intensity and ferocity.

Figure 1 BMPs 3-5 published in booklet format.

By June 2010, when BMP 3 was published in several languages in a pocket-sized booklet (designed to fit into a seafarer's overall pocket) the guidelines had grown to 44-pages including diagrams and photographs to illustrate written descriptions, and support for the publication across the industry and naval formations had significantly increased. However, the revolutionary element of the document, which was introduced without significant protest or comment was the declaration and adoption of the "High Risk Area" (HRA). The HRA covered over 2 million square nautical miles of the northwest Indian Ocean. On 10th November 2011, the UK's Hydrographic Office published a revised Anti-Piracy Planning Chart – Red Sea, Gulf of Aden and Arabian Sea, with the HRA clearly marked (see chart below). The HRA, had the same coordinates as the UKMTO Voluntary Reporting Area, established by UKMTO in 2009, which had been in use ever since. The unforeseen difference was that it was the shipping associations who declared the establishment of the HRA and therefore, it was the shipping industry, not a supranational organisation (like the IMO) or the coastal States touched by the HRA that were custodians and consequently decided when it was no longer in effect.

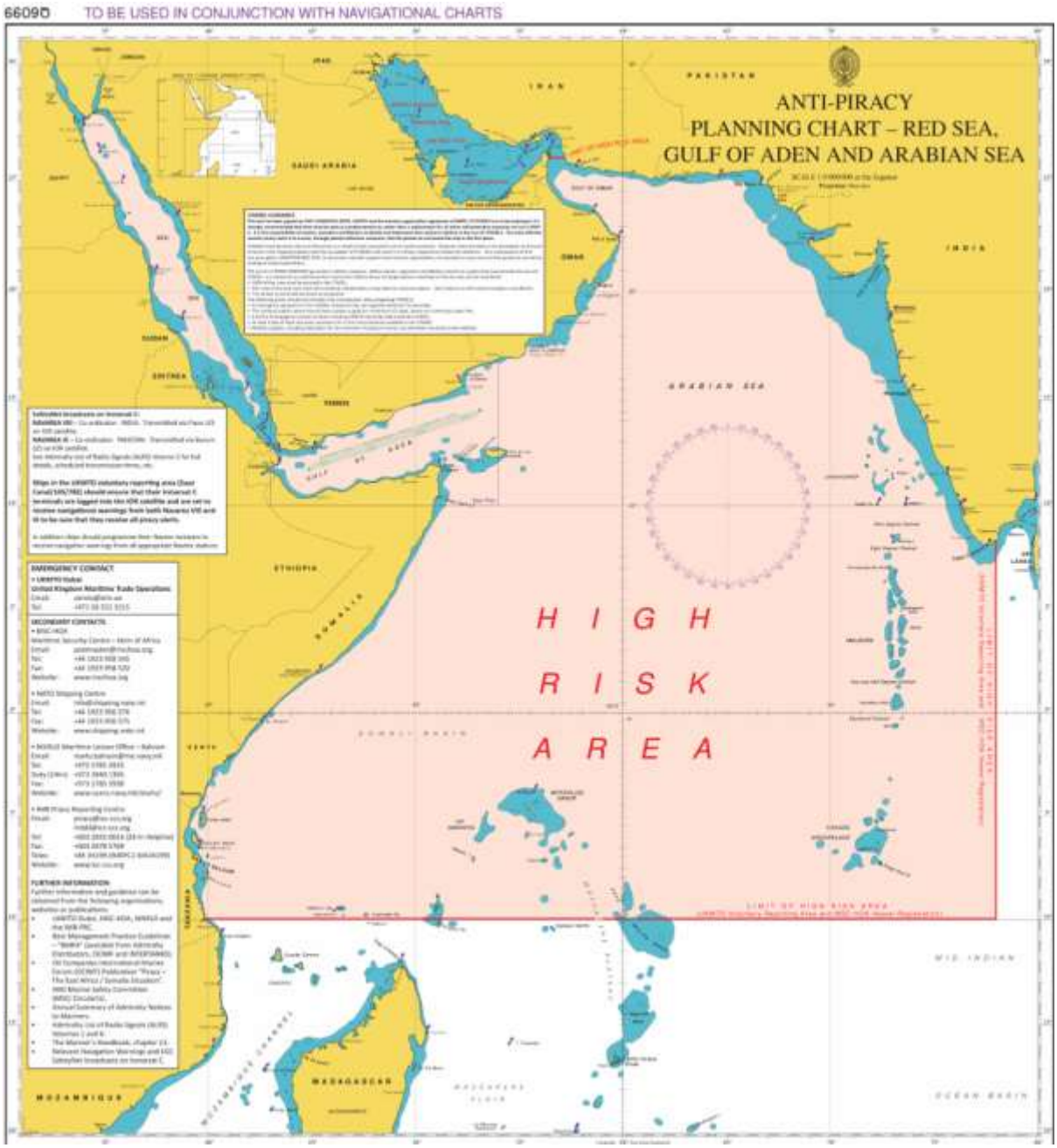

Figure 2Section of UKHO Maritime Security Chart Q6099 published 10 Nov 11.

BMP 3 also introduced the concept of Citadels for ships. Citadels had historically been used in castles, they were effectively safe rooms hidden away in the core of the defensive structure where the defenders could retreat and hold out if the attackers breached the defences and got onboard the vessel.

Onboard ships, the citadel is a "designated pre-planned area purpose built into the ship where, in the event of imminent boarding by pirates, all crew will seek protection."[26] The concept was the space should be self-contained with independent air supply and air-conditioning, supplies of water, food and some form of sanitary arrangement for several days. It should also have communications and ideally access to engine controls etc. The key element is that the integrity of the concept is lost if any member of the ship's crew is left outside the Citadel. If all the crew are in the Citadel and the naval forces have an appropriately trained team sufficiently close to the ship, they may be prepared to conduct an assault to kill or capture the pirates and liberate the crew. An assault would not conducted if any of the crew are outside the Citadel.

[26] *BMP 3, p33*

Despite the introduction of the three versions of BMP for the self-protection measures of ships and the formation of naval task groups to patrol the vast HRA, the pirates were audaciously persistent; attacks and hijackings continued at an alarming rate.

In August 2011, shortly after the IMO had vigorously debated the use of private armed guards on ships, BMP 4 was published. By this time, more than 250 ships in total, had been attacked, around half of those had been hijacked with the crew's held hostage, sometimes for months and hundreds of millions of USD had been paid in ransoms and recovering vessels after periods of capture. BMP 4 was broken down into thirteen sections with diagrams, photographs, tables and explanatory text designed to provide the seafarer with easily accessible information on as many activities as possible related to the Somali pirate threat. The advice on the selection, setting up and use of Citadels was more comprehensive. The information on the use of private armed guards was concise, placing the emphasis for the decision of their use on the ship owner and the flag State of the vessel.

The efficient application of all the measures in the BMPs, the unprecedented cooperation and coordination of the international naval forces and the appropriate use of private armed guards proved to be the effective combination of measures to deter and suppress Somali pirates. In May 2012, the *MV Smyrni* was the last ship to be captured and hijacked by pirates for some time. Despite the success level of the pirates decreasing significantly, the shipping industry did not lower its guard. Many ships maintained a high level of preparedness and private guards continued to be deployed on ships effectively until the Covid pandemic in 2020.

Even though in 2013 there were two unsuccessful pirate attacks, the combination of BMP measures, naval coalition forces and armed guards supressed piracy in the HRA. In December 2015, after calls from some of the Coastal States of the HRA, the extent of the area was reduced. In 2017 there were two successful but isolated attacks on ships. BMP measures continued to be taken, the naval forces maintained a presence, albeit reduced and armed guards were still being embarked on ships transiting the region. Additionally in 2017, there was an increasing threat from Houthis, based in the southwest of the Arabian Peninsula threatening ships navigating the narrow channel, called the Bab Al Mandeb (BAM) between the Gulf of Aden and the mouth of the Red Sea. The increased levels of threatening activities prompted the implementation of the Maritime Security Transit Corridor (MSTC) acting as an extension of the Internationally Recognised Transit Corridor (IRTC) through the disputed area. The purpose of the new MSTC was so the navies could provide protection for merchant ships transiting the BAM either entering or leaving the Red Sea. This increased activity initiated the publication of a new UK Hydrographic Office Maritime Security Chart Q6099 (with MSTC marked).

In June of 2018, BMP 5 was published, including a separate Voyage Reference Card. The increased diversity of threats, including piracy, the use of anti-ship missiles, sea mines and Water-Borne Improvised Explosive Devices (WBIED) required a larger booklet incorporating much more information, with more-detailed explanations requiring a smaller font. BMP5 was building on the excellent work and common understandings established by all the preceding BMPs, making the transition for seafarers to a greater number of threats more manageable. BMP 5 also acknowledges the "High Risk Area (HRA) is an industry defined area within the [Voluntary Reporting Area] (VRA)", established by UKMTO in 2009.

Global Counter Piracy Guidance for Companies, Masters and Seafarers

At the same time, the threat of piracy and armed robbery at sea was ongoing in other areas of the world as well. The two other piracy "hotspots" were the Gulf of Guinea off the coast of West Africa and the waters off and around southeast Asia, principally around the Straits of Malacca and in the South China Sea. However, the geographical locations, nature of the crimes committed, and regional geopolitical situations meant that different counter piracy tactics had to be adopted in each region.

Consequently, at the same time as BMP 5 was published, the shipping associations also published the Global Counter Piracy Guidance for Companies, Masters' and Seafarers. The role of this separate booklet was arguably more political than pragmatic. In 2018 the perception by the shipping industry was that by swift, robust action, taken in and with the IMO, they were largely instrumental in halting and suppressing Somali piracy with limited involvement of the coastal States. The shipping industry had created and developed several strategies, methodologies and tactics that had worked. The shipping industry was frustrated that the coastal States in the Gulf of Guinea and off the coast of southeast Asia were not prepared to adopt these procedures and practices to reduce the threat to their innocent seafarers who were the principal victims of the crimes. Each region had its own idiosyncrasies

which diplomatically were very important to different nations, but as far as the shipping industry was concerned, these regional differences just exposed seafarers to unnecessary risk. The Global Counter Piracy Guidance for Companies, Masters and Seafarers was an attempt by the shipping associations and some of the naval forces to provide a common language and tactics for countering piracy globally, whilst acknowledging the significant differences between each piracy area.

Figure 3Global Counter Piracy Guidance for Companies, Masters and Seafarers

Piracy in the Gulf of Guinea (GoG)

Whilst Somali piracy was almost exclusively conducted outside the territorial waters of the regional coastal States, maritime crimes in the GoG were often committed within the territorial waters of the twenty coastal States. If the crime is conducted within a coastal State's territorial waters, it is conducted within the coastal State's legal jurisdiction and is therefore defined as robbery at sea rather than piracy[27]. However, many of the coastal States within the GoG lacked the naval or maritime law enforcement resources to enforce the law[28]. There were other complicating factors including regional armed activist groups, illegal, unregulated and unreported (IUU) fishing and endemic corruption. All of which challenged the development and enforcement of counter piracy and counter maritime crime operations.

Another unusual aspect of maritime crime in the GoG was that maritime crime is also subject to market forces; when oil prices were high the criminals would steal cargo (refined petroleum product[29]) from the ships, to sell ashore on the black market. However, when oil prices dropped, the more profitable crime was capturing crew, and holding them hostage for ransom. The shift added a complexity to the problem.

Having found an effective solution to Somali piracy, ship owners were keen to apply the same model of tactics off the coast of West Africa, but the coastal States refused to allow the use of international naval vessels to conduct the same kind of operations or allow the use of private armed guards by commercial ships. As the GoG took over as the principle hot spot for maritime crime, there was a marked increase in incidents and the number of seafarers being held hostage, injured during

[27] *Article 101 of UNCLOS defines piracy as an act conducted for private ends, by the crew or passengers of a private ship, on the high seas.*
[28] *Additionally, many coastal States in GoG have not formulated or adopted counter piracy legislation, so without a law to break, no crime has been committed.*
[29] Despite having a wealth of crude oil, Nigeria does not an oil refinery, so all the crude extracted is loaded onto ships to be transported to refineries, then a proportion of the refined products are returned to Nigeria for consumption.

incidents, or tragically killed. Despite great diplomatic efforts by former colonial powers and shipping industry representatives, there was no solution on the horizon. Nigeria was at the epicentre of the maritime crime. A significant proportion of the ships being attacked were oil tankers, either exporting crude oil for refining or importing petroleum product to Nigerian ports for use across the country.

After considerable discussion and debate, it was the international shipping association, OCIMF, that in early 2015, took the initiative and established the Maritime Trade Information Sharing Centre Gulf of Guinea (MTISC GOG) a voluntary based centre established in Ghana, along the lines of the UKMTO in Dubai. The MTISGOG was designed to provide an accurate and detailed maritime domain picture, to help the coastal States to reduce the risk of armed robbery at sea and piracy in the region. It was hoped this was the first step towards reducing maritime crime in the region. OCIMF also published a MTISC GOG booklet, not dissimilar in concept and function to the BMPs. It was hoped that this pamphlet along with the publication of the UK Hydrographic Office's Maritime Security Chart (Q6114) of West Africa including Gulf of Guinea (published April 2014) would provide a foundation for progress in fighting maritime crime in the GoG.

Regrettably, the establishment of the centre was surrounded in controversy, linked to security aspects related to the handling of information about ships and host country support for the reporting centre. The author visited MTISGOG, shortly after establishment. Sadly, the initiative never realised its potential and it was closed after a relatively short period of time.

Figure 4: UKHO Gulf of Guinea Maritime Security Chart along with the MTISGOG booklet and BMP West Africa.

On 20 June 2016, the Maritime Domain Awareness for Trade Gulf Guinea (MDAT GOG) was established by the British Royal Navy and the French Navy, located in Brest, France. With attacks in the GoG not reducing, levels of violence increasing and significant confusion about what forms of private security protection were admissible, the calls for the shipping industry providing a BMP West Africa became louder. Despite several regional objections to the publication of BMP West Africa, in March of 2020 the dark green booklet was eventually published.

BMP West Africa adopted the familiar format of the BMPs for the other side of the continent but carefully described the differences of the threat profile in the GoG. There was an emphasis on not loitering on drift or at anchor close to the shore making ships particularly vulnerabe. The physical self-protection measures were similar to the other BMPs, but there was a cautionary note about the use of the Citadel and additional information for Floating (Production) Storage and Offloading (F(P)SOs) platforms used in the region. The guide also briefly covered the use of Private Maritime Security

Companies and the Security Escort Vessels they used to provide protection and security for commercial ships. The procedures for contacting MDAT GOG were provided in detail. The document was politically sensitive as disruption of the fragile ongoing negotiations between coastal states was an important factor.

Piracy and maritime crime in Asian Waters

The waters around southeast Asia have had a reputation for piracy and other maritime crimes for thousands of years. A combination of significant volumes of trade moving from port to port, a plethora of boats and ships plying trade, moving people and fishing, along with the geographic proximity of small islands and archipelagic waters seem to have been the ideal seascape for maritime criminals to flourish. The politics of the waters around the southeast Asian nations are very different to both the waters in which Somali pirates operated and in the coastal States of the GoG

The Regional Cooperation Agreement on Combating Piracy against ships in Asia (ReCAAP) formed by the ASEAN plus 6 other nations in November 2004. ReCAAP is a multinational agreement that has continued to evolve and now brings together 21 Contracting Parties[30]. in Asia to promote and enhance cooperation against piracy and armed robbery against ships. The ReCAAP Information Sharing Centre (ISC) enhances regional cooperation through three pillars: information sharing, capacity building and cooperative arrangements. ReCAAP ISC works closely with Contracting Parties, shipping industry and international partners to mitigate maritime security incidents. Whilst ReCAAP is not a shipping association, it isn't a State and it works hard to distribute information about the regional maritime security situation to support seafarers and coastal States.

As illegal activities in the waters around Asia increased, ReCAAP published the Tugboats and Barges (TaB) Guide Against Piracy and Sea Robbery in January 2013, after a protracted period between 2008-2011 when tug boats and barges were targets of robbery and hijacking. In 2014 the ReCAAP ISC published a report on "Incidents of Siphoning of Fuel/Oil at sea by pirates, following a number of serious incidents over the preceding four years. As the attacks became more widespread, the level of violence increased, and all ships seemed to be likely targets for the criminals.

In March 2018, ReCAAP ISC published an all-encompassing guide in a booklet format titled, Regional Guide to Counter Piracy and Armed Robbery Against Ships in Asia, providing the general details about mitigating risks and specific details on reporting incidents whilst in the region. The publication of two maritime security charts in May 2013 (Maritime Security Chart - Karachi to Hong Kong Q6112, –and the Adaman Islands to Torres Strait including Indonesia Q6113) complemented the documents. An updated version of the regional guide was published in March of 2022 bringing seafarers up to date with the evolving situation for the region.

[30] Australia, Bangladesh, Brunei, Cambodia, China, Denmark, Germany, India, Japan, South Korea, Laos, Myanmar, Netherlands, Norway, Philippines, Singapore, Sri Lanka, Thailand, United Kingdom, United State and, Vietnam.

Figure 5: Maritime Security Charts and ReCAAP ISC publications.

During the period 2016-2019 there were 29 incidents (18 successful attacks and 11 failed attempts) on vessels transiting the Sulu and Celebes Seas and the Waters off Eastern Sabah. These attacks had a more sinister motivation and outcomes, hence the publication of a stand-alone document on the most up to date information. The Abu Sayyaf Group (ASG) Islamic terrorist group had been extremely active in the area, in 2004 they were responsible for planting an improvised explosive device on Superferry 14, killing 116 people. Since that attack, most of their attacks and kidnappings had been conducted ashore. However, between 2016-2019 ASG utilised piracy style tactics to abduct 75 crew, 65 of which were released or rescued and 10 were either killed or died in captivity. Thankfully regional forces have managed to deter further attacks on vessels by ASG. In 2017 a Trilateral Cooperative Agreement was established between Indonesia, Malaysia and the Philippines (INDOMALPHI) which helped the cooperation and coordination of maritime patrols to address threats of armed robbery, kidnapping and terrorism in and around the Sulu Sea. The success of this agreement led to its renewal in 2023.

The nature of piracy and maritime crime in the waters off Asia means that the criminals often use small boats to disguise their activities amongst the large number of small fishing and other vessels that populate the waters across the region to avoid detection until an attack is underway. To provide the crew of ships with information about the diverse range of boats, ReCAAP ISC published a Guide on Identification of Fishing Boats in Asia Waters in October 2022. The guide covers 16 coastal Asian nations with a broad outline of their fishing activities and includes photographs of more than 120 distinctively different fishing vessels to aid with recognition and description, and help apprehension by authorities. The second version of the guide was published in March 2024 with "updated information on the modus operandi for different kinds of fishing activities and criminal behaviour."

Mass Maritime Migration

Global migration facilitated using boats and ships (particularly for stowaways) has been part of the maritime tapestry for as long as vessels have moved between different ports. Indeed, many countries, including USA and Australia have significantly grown their populations and thereby their economies by encouraging and importing immigrants from other parts of the world across oceans to create a new life in a new country. Indeed, the UN believes**:** "International migration and economic development are woven together." However, the disruptive nature of conflicts, inequality, climate change and wealth disparity have prompted people to migrate in growing numbers especially during the 21st century. The contained waters of the Mediterranean Sea and the involvement of organised criminal groups that have both smuggled and trafficked people across the Mediterranean exacerbated the problem, which along with media coverage has made this an emotive issue.

In early 2015, coastal State naval and coastguard forces were soon overwhelmed by the sheer number of craft and migrants crossing the Mediterranean, significantly limiting the authorities ability to manage the flow of people and boats.

Uunseaworthy boats and rafts crossing busy shipping lanes, resulted in commercial ships being compelled (SOLAS[31] Regulation 33 and UNCLOS[32] Art 98 Duty to render assistance) to help these individuals at sea, which criminals have exploited. Again, this shifted the onus of responsibility onto the commercial shipping industry. The sheer volume of desperate people attempting to cross the Mediterranean caused a range of problems for ships transiting these busy routes. Whilst the duty and moral response is to help the migrants, Article 98 also qualifies this by "in so far as he [master] can do so without serious danger to the ship, the crew or the passengers:", so the Master must consider the security consequences of embarking, possibly hundreds of people, including women, children the old and possibly infirm onto a ship designed to carry less than twenty crew. The challenges of providing shelter from the weather, sanitary arrangements, food, water and medical care are likely to be beyond the capability or resources of the crew for any longer than a few hours. Another problem was finding a port, within a reasonable distance, that would allow the ship to disembark the migrants, as many countries were denying disembarkation, which is counter to UNCLOS[33].

Figure 6: Mass Maritime Migration documents for shipping companies, Masters and crews.

The shipping associations along with UN agencies produced two publications that helped shipping companies, Masters and crews to navigate this challenging situation as well as they could. The International Chamber of Shipping (ICS) published the Large Scale Rescue Operations at Sea (Edition 1 in 2014, Edition 2 in 2015) as a form of guidance for shipping companies, Masters and crews. In 2015,

[31] SOLAS International Convention for Safety of Life at Sea, a key maritime treaty that establishes minimum safety standards for the construction and operation of merchant ships.
[32] UNCLOS United Nations Convention of the Law of the Sea.
[33] UNCLOS Art 98

ICS along with the IMO and UNHCR published a more technical guide focused on the legalities, principles and practices applied when dealing with refugees and migrants.

Additional Security Related Shipping Industry Guides:

In addition to the centralised Round Table publications, different Shipping Associations have published specific papers that are specifically relevant to their membership, but also have wider general utility.

Figure 7: Bridge Vulnerability and Vessel Hardening Papers

Specific Ship Protection Measures:

After Somali pirates had conducted several attacks on vessels using shoulder launched rocket propelled grenades (RPG-7), aimed at the Bridge of the ship, OCIMF conducted a computer-based study to look at the likely effects on tankers of different sizes and methods for improving protection. The publication "Ship Security – Bridge Vulnerability Study" was published in October 2014. The study demonstrates that by using the methods and measures proposed in the publication can be "considerably reduced"[34] In 2018 OCIMF published an additional paper titled "Guidelines to Harden Vessels" which was complementary to the Bridge Vulnerability Paper but provides a useful diagrammatic description of layers of defence for vessels and enhanced information on the methodology for preventing third parties boarding ships. The publication uses the layered defence concept to provide a practical implementation process. The Annexes go into further useful detail and descriptions. Annex C provides some excellent diagrams and useful check lists. This publication was updated in 2022. "Although the focus in on vessels when underway, measures are examined for vessels at anchor and alongside."[35]. These publications were for personnel onboard vessels, owners, operators, and managers along with naval architects and shipyards.

[34] Ship Security – Bridge Vulnerability Study Oct 14 Section 5 – Conclusions.
[35] Guidelines to Harden Vessels (Second Edition 2022) p1

Figure 8: Specific maritime threat publications published by shipping associations.

Jamming and Spoofing of Global Navigation Satellite Systems (GNSS):

Hydrographic navigation paper charts of the seas and oceans of the world were introduced at the end of the eighteenth century. Gradually, as more areas were surveyed and charts printed, navigation became more accurate, shipwrecks on coastal shores were significantly reduced and the movement of trade became safer and more sophisticated. The sheer number of paper charts being published soon made it impossible for every ship to have every chart on board. Additionally, the navigator was responsible for keeping the charts up to date with the latest amendments. The advent of electronic charts "in the 1990s provided ships with additional information, including real time information which could be displayed on screens on Electronic Chart Display and Information Systems (ECDIS)"[36]on the bridge of the ship. The IMO took the initiative and adopted performance standards in the 90s for the utilisation of the new technology. In 2000 the IMO revised SOLAS to reflect the advantages of ECDIS for navigation and on 1 January 2011 they made ECDIS mandatory (replacing the need for paper charts for all newly built passenger ships over 500 gross tons and cargo ships of over 3,000 gross tons).

Consequently, commercial ships have moved from using paper charts to ECDIS. The digitalisation of charts has allowed them to be linked to other digital inputs, including navigational aids. This gives the officer of the watch a more holistic understanding of his environment from the hydrographic features below the surface, navigation lights, other vessels, weather, tides and currents. This empowers the officer of the watch to make informed decisions, improving safety and vessel efficiency.

Concurrently, ships have become more reliant on using an auto-pilot system that steers the ship automatically, often taking wind, tide and current into consideration, taking the vessel from one pre-planned waypoint to another waypoint without a seafarer physically at the wheel of the ship. The ship's autopilot will invariably incorporate data from the Global Navigation Satellite Systems (GNSS) to keep the on course.

The position of the ship relative to its actual location is dependent on the accuracy of the GNSS, or as we commonly refer to it global positioning system (GPS). The signal from the constellation of satellites can however be manipulated to provide a corrupted position for the purposes of crime or state sponsored activities.

According to the INTERTANKO publication Jamming and Spoofing of Global Navigation Satellite Systems (GNSS) 2nd Edition, GNSS Jamming, is "occurring frequently in many regions of the world."[37] It goes on to say, "Spoofing is more insidious, as false signals from a ground station or flying

[36] https://www.imo.org/en/ourwork/safety/pages/electroniccharts.aspx
[37] *Jamming and Spoofing of Global navigation Satellite Systems (GNSS)*

drone simply confuse a satellite receiver."[38] In simple terms it means; "jamming causes the receiver to die, and spoofing causes the receiver to lie."[39]

In 2019 INTERTANKO published their first edition of the Jamming and Spoofing of Global Navigation Satellite Systems (GNSS) and the second edition was published on 25 September 2025. This comprehensive publication provides an excellent overview of the situation as perceived by the authors, when written, and provides well thought out advice for seafarers on how to mitigate these attacks, malicious or not.

Thankfully, the previous method of astro navigation, which relied on using a sextant to take sightings of the sun, stars and planets, along with independent mechanical chronometers cannot be interfered with electronically but this skill does require familiarity and practice.

Loitering Munitions – The Threat to Merchant Ships:

In 1859 the Austrians used a form of drone to conduct an ariel attack on Venice by launching over 200 balloons, loaded with explosives , to land across the city on a time fuse during the Second Italian War of Independence. The torpedo, an underwater, self-propelled, explosive device a form of drone, was first used in the late nineteenth century and extensively by navies in the early to mid-twentieth century to destroy ships whilst underway. However, it has really been during this century that drone technology has developed at an exponential rate, partly because of its low cost and general reticence to expose humans to the risk of delivering munitions. The first armed drone strikes were conducted in Iraq and Afghanistan from 2001.d In 2006; drones became available on the commercial market. Drones are now causing a paradigm shift in the conduct of conflict. The Editor-in-Chief, Prof Chris Bellamy's article; "Inhospitable Sea II. The Black Sea. the role of the Russian and Ukrainian" (Vol 3 Issue1) covered in detail the use of unmanned aerial, surface and sub-surface weapon delivery systems, which allowed the Ukrainians to successfully destroy the Russian Black Sea fleet by using drones, because there is no Ukranian navy.

In August 2023 OCIMF published their paper on Loitering Munitions – The Threat to Merchant Ships. The paper is short and pithy, but introduces drone technologies, their *modus operandi* and mitigating countermeasures that can be employed. More recently we have seen Ukrainian surface drones deployed against Russian flagged vessels, which is quickly raising the risk levels for merchant ships operating in the Black Sea and other contested sea areas.

The Guidelines on Cyber Security Onboard Ships:

In April 2014, the Security Association for the Maritime Industry (SAMI) held one of the first conferences on cyber security for commercial ships. The concept of this previously unimagined threat to shipping was new, frightening and, for many, bewildering. Despite the novel nature of this new threat, the "Round Table"[40] of shipping associations and the Cruise Liner International Association (CLIA) were already collaborating and drafting the "Guidelines on Cyber Security Onboard Ships" and the lead drafter of the publication provided a fascinating and equally worrying presentation, at the conference, on the potential dangers of this newly perceived threat. The first version of the Guidelines was published in January 2016, catching some members of the industry, and undoubtedly some flag States by surprise. The "Round Table" and CLIA's initiative was groundbreaking. The aim of the guidelines was twofold; firstly, to provide a comprehensive explanation to the members of the shipping industry about the new threat and howit could be effectively countered. The other aim was to self-impose on the shipping industry, a common understanding of the problem, promote a common vocabulary and range of mitigation measures, ahead of any one flag State imposing their own requirements arbitrarily[41]. Consequently, when the IMO published MSC. 1/Cir. 1526 Interim Guidelines on Maritime Cyber Risk Management[42] on 1 June 2016, the shipping associations were able

[38] *Ibid*
[39] *Ibid*
[40] *"The Round Table" of shipping associations incudes; BIMCO, ICS, INTERCARGO and INTERTANKO*
[41] *Most flag States lacked the technological and industry expertise to create this level of document, so they were welcomed by flag States and shipping companies alike.*
[42] *Maritime Cyber Risk Management rather than Cyber Security was used by the IMO because in their view: "Threats are presented by malicious actions (e.g. hacking or introduction of malware) or the unintended consequences of benign actions (e.g. software maintenance or user permissions). In general, these actions expose vulnerabilities (e.g. outdated software or*

to propose to the IMO that their Guidelines on Cyber Security Onboard Ships be referred to as Best Practice for Implementation of Maritime Cyber Risk management, which they were.

Figure 9: Versions 1-5 The Guidelines on Cyber Security Onboard Ships published between 2016-2024.

When the IMO's, Maritime Safety Committee (MSC) met in June 2017 (shortly after the publication of V2 of The Guidelines for Cyber Security Onboard Ships) the MSC considered and adopted Resolution 428(98) on Maritime Cyber Risk Management in Safety Management Systems to be incorporated into the mandatory ship safety systems, as part of the ISM Code (referred to above) by 1 January 2021. This was the first global mandatory system for the implementation of cyber risk management and the industry guidelines were "baked-in" to the process.

The dynamic evolution of cyber security and the diversity of attacks mounted has prompted updated versions of the Guidelines to be published as follows: V3 in December 2018, V4 in January 2021, and V5 in November 2024. These publications have progressively become more sophisticated and comprehensive whilst maintaining currency to mitigate the evolving threats. The guidelines have also accrued more and more supporters from across the industry, which is a great endorsement to the purpose of the initiative and ongoing development of the guidelines.

The leadership demonstrated by the shipping associations in the compilation of the first set of Guidelines for Cyber Security Onboard Ships and the perpetual momentum of revised versions, along with the IMO's initiative to make the implementation of cyber risk management across the international fleet mandatory has clearly provided an effective structure for the pragmatic implementation of effective mitigation measures for commercial fleets.

ineffective firewalls) or exploit a vulnerability in operational or information technology. Effective cyber risk management should consider both kinds of threat.

Figure 10: The new BMP Maritime Security Document and complementary 6-monthly MISTO Reports.

BMP Maritime Security and Maritime Industry Security Threat Overview (MISTO)

In recognition of the growing number of threats, along with their increasing diversity and dispersion across world, the shipping industry has again taken the initiative by combining the extensive range of different publications into one wide-ranging base document recognising the requirement for "a comprehensive threat-based methodology". BMP Maritime Security is designed as the foundation document with a broader scope than the previous regionally based BMPs, including terrorism, cyber threats, Unmanned Airborne Vehicles (UAVs) and conventional missiles. The document is designed to support a structured approach to threat and risk assessment and engenders commonality of methodology and understanding.

A fundamental principal of the BMP Maritime Security is to emphasise the importance of shipowners, masters and crews understanding the threat triangle, which is based on three factors which determine the likelihood of an attack: "Intent", "Capability" and "Opportunity". This concept (first introduced in BMP5) helps the reader to understand the factors that deter and facilitate the potential attackers.

The new BMP Maritime Security covers a range of threats including Waterborne Improvised Explosive Devices (WBIED), loitering munitions and GNSS spoofing. The protection measures are based on a layered vessel-hardening strategy, utilising physical barriers, citadels and sensors. There are comprehensive sections on incident response and post-incident procedures. The section on reporting and geographical information centres provides excellent guides for each maritime security hotspot around the globe. There is a section on seafarer welfare response and a section covering the Maritime Lexicon and relevant abbreviations, supporting the use of a common vocabulary globally.

Using the BMP Maritime Security document as the base document, the Round Table of Shipping Associations, along with CLIA and IMCA[43] publish the Maritime Industry Security Threat Overview (MISTO) every six-months or so, providing the most up to date information available. The MISTO is a compilation of open-source information, that is publicly available. MISTOs focus on physical threats including piracy, armed robbery, terrorism, and war/armed conflict. If threat actors pose a cyber security threat this will also be included.

The MISTO provides an explanation on how threat and risk are interlinked and how the reader can effectively make a risk assessment for a specific ship, on a specific voyage incorporating specific

[43] *International Maritime Contractors Association (IMCA) https://www.imca-int.com/ Over more than 50 years, IMCA has built a global reputation in the development of safe and efficient standards and guidelines for offshore operations.*

circumstances (threat, weather, local time and light conditions and recent attacks). The concise brief on the specific threat areas starting with "Background and trends" which builds the scenario, then provides threat descriptions based on the threat triangle concept describing each area using the heading capability, intent and opportunity. At the end of each brief there are online links for more information.

Conclusion

This article has followed the evolution of the shipping industry's security related documents in chronological order throughout the first quarter of the twenty-first century. Apart from the ISPS Code, most of the comprehensive publications described above and listed in the Annex below, have emanated from the international shipping associations, the non-governmental organisations (NGOs) that are not for profit and represent their respective membership, within the maritime industry. Each of these organisations are NGOs with Consultancy Status at the IMO, meaning they have a voice in the debates, providing the invaluable industry perspective, but cannot vote.

The publications listed have covered a diverse range of threats from potential terrorist attacks on ships and in ports, piracy attacks and mass maritime migration, GNSS spoofing and loitering munitions and vessel hardening at the various hotspots around the globe. The shipping associations have also been world leading in their innovative approach to cyber-security for ships on a global basis, which has proved to be very successful.

Despite a dynamic threat profile and shrinking naval forces, the shipping industry has demonstrated outstanding resilience and the ability to adapt to a growing number of dangerous situations (including the global pandemic). The industry has simultaneously managed a continuous increase of demand, growing the fleet capacity by a factor of three, carrying almost one hundred and twenty percent more cargo for three times the number of ton miles which is outstanding in so many ways.

With a seaman like eye to the future they have defined a relatively simple and effective method of improving their security stance for the future with the introduction of BMP Maritime Security and the accompanying MISTO updates. As John Stawpert, Principal Director Marine of ICS commented "The beauty of this approach lies in its universality; the fundamental threat assessment process has universal applicability, and its embedding in shipping companies' security culture has unquestionably enhanced industry-wide security."[44]

Thus far, the twenty-first century has tested the determination, commitment and diligence of the shipping industry to maintain, not only the backbone but the entire skeletal structure of the global economy, quietly, effectively and efficiently by moving more than eighty per cent of all trade by volume. It has also had to unexpectedly take on and successfully maintain secure passage for ships, cargoes and their brave crews in a geopolitically deteriorating period. The global shipping industry has been exemplary in the way they have managed these new challenges without flinching and largely without recognition by the billions of people they serve. The men and women of the maritime industry, especially the seafarers who spend months at sea, sometimes in threatening situations are the overlooked critical element of the global economy.

As you reflect on the article, I offer this thought; most national economies are dependent on shipping, and I have described how responsibility for the protection of the ships has progressively shifted away from navies and pushed it over to the ship owners and managers. The shipping industry has ably proven how it can protect itself very effectively from a range of threats like piracy, hapless migrants and cyber-attacks. However, there are limits, it is completely irresponsible to expect ship owners to put their ships, cargoes and seafarers in harm's way against sophisticated threats which they cannot and should not be expected to confront. If the navies are unable to, or are prevented from, using their technological cutting-edge ships with their sophisticated array of sensors and weapon systems to maintain the integrity of the shipping lanes for the safe passage of trade, then as Chris Trelawny[45] wrote, "[there is] an almost existential crisis around the question of what navies are for"[46]

In the twenty-five years that the shipping industry has been assuming greater responsibility for its own security, navies have been pulled away from playing their part. It almost feels as though

[44] *Maritime Executive article 30 Sep 2025, Maritime Security in an Era of Unprecedented Challenges.*
[45] *Special Advisor to the Secretary General of the IMO on Maritime Security (and coincidentally an officer in Britain's Royal Naval Reserve).*
[46] *RUSI Journal158, no1 (2013):51*

navies have become more of a political toy rather than a functional tool. In his seminal book *Seapower,* Geoffrey Till points outs "They [navies] also have to work alongside rather than regard themselves as distant from and somehow superior to many other maritime stakeholders with their grubby little concerns. Mariners indeed need to be "all of one company" as Drake recommended."[47]

There inevitably will come a time in the not-too-distant future when navies, paid for by citizen's taxes, are unable to fulfil their original primary function of protecting shipping and fail to ensure the continuance of global trade. An interruption to the global supply chain will severely impact citizens, initially by increases in the cost of their fuel, food and other goods, leading to scarcity, quite possibly large-scale rationing and their consequential drop in living standards. It is entirely possible, these citizens will believe they have been failed by the navy they have been paying for, to fulfil this fundamental obligation.

But the essential responsibility for ensuring the maritime security of nations is not the function of the navies, it is the core responsibility of their political masters. It is therefore incumbent on nation's political leadership to provide their navies with the commitment, ships and wherewithal to do their job they were designedfor.

[47] *Seapower: A Guide for the Twenty-First Century, Fourth Edition 2013, Geoffrey Till*

Annex to BMP Maritime Security & Maritime Industry Security Threat Mitigation Overview

Shipping Industry Security Publications 2002 - 2025

Document	Publication Date	Comments
International Ship and Port Facility Security (ISPS) Code	2002	After the 9/11 terrorist attacks on the USA in September 2001, using hijacked aircraft as weapons, the international community was very concerned that terrorists may use ships, to conduct future attacks, possibly against ports. The IMO quickly convened the Maritime Safety Committee to develop the ISPS Code in November 2001. The Code was adopted in Resolution in December 2002 and incorporated into SOLAS. The Code was adopted in 2004.
Piracy – The East Africa/Somalia Situation	January 2009	A slim 34-page booklet, designed to fit into seafarer's overalls pockets, produced by BIMCO, ICS, IG P&I Clubs, INTERCARGO, INTERTANKO, SIGTTO and naval supporting organisations UKMTO[48] and EU NAVFOR Somalia[49]
BMP 1	29 September 2009	20-page document produced by the Round Table (BIMCO, ICS, INTERCARGO, INTERTANKO) released as MSC.1/Cir. 1335
BMP 2	21 August 2009	17-page document endorsed by 12 shipping associations, P&I Clubs and marine insurers and 3 naval groups. BMP 2 was published and distributed before BMP1 could be adopted by the IMO.
BMP 3	June 2010	77-page booklet, designed to fit into seafarer's overalls pockets, with 14 signatories including shipping associations, maritime trade union bodies, marine insurers and 7 naval organisations. BMP 3 introduces and declares the boundary of the High Risk Area (HRA), different to the UKMTO Voluntary Reporting Area (VRA) and briefly talks about the Citadel concept.
BMP 4	August 2011	91-page booklet, 18 signatories, 7 supporting naval organisations and INTERPOL. Reinforcement of HRA, development of Citadels and introduction of the use of Private Armed Guards.
ReCAAP and IFC Tug Boats and Barges (TaB) Guide Against Piracy and Sea Robbery	January 2013	The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) published their first, 36-paged publication to counter the increasing number of incidents involving tug boats and barges between 2008-2012.

[48] *United Kingdom Maritime Trade Operations (UKMTO) Trusted. Connected. Ready. For more than 25 years, the United Kingdom Maritime Trade Operations (UKMTO) Centre has been a trusted authority in the maritime security sector, helping protect crucial trade routes by providing mariners, shipping companies, and regional authorities with essential, verified and corroborated security information. UKMTO's approach is and will always be, to support any mariner and maritime trade customer in the provision of information and reassurance in the Middle East and Indian Ocean Region, through the Single Information Framework (SIF) agreement, UKMTO collaborates with global maritime stakeholders to provide timely and validated security alerts. UKMTO operates a Voluntary Reporting Scheme (VRS) within the Voluntary Reporting Area (VRA) outlined in UKHO Maritime Security Chart Q6099.* https://www.ukmto.org/

[49] *The European Union's military operation to contribute to the maritime security in the Western Indian Ocean and in the Red Sea.* https://eunavfor.eu/

Large Scale Rescue Operations at Sea	Edition 1 2014, Edition 2 2015	The International Chamber of Shipping (ICS) published a 12-page guide for shipping companies, Masters' and crews of ships that encounter mass maritime migration situations and how to manage them.
Ship Security – Bridge Vulnerability Study	October 2014	A short 11 paged paper based on computer software to simulate the effects of attack by AK-47 automatic weapons and RPG-7 (rocket propelled grenades) against the bridge of a variety of tankers.
Rescue at Sea	January 2015	In early 2015 the International Maritime Organisation (IMO), United Nations High Commission for Refugees published a guide to the principles and practices as applied to refugees and migrants, to complement the ICS publication for merchant vessels likely to encounter maritime migrants.
Maritime Trade Information Sharing Centre Gulf of Guinea (MTISC GoG)	March 2015	60-page booklet, published by OCIMF, for seafarers that introduces some of the complexities of trading in the GoG. Provides the basis of assessing risk and mitigating measures against a range of criminal acts prevalent in the region. Many of the measures are similar to the BMPs, but there is no reference to the use of private armed security.
(ReCAAP) Guide for Tankers Operating in Asia against Piracy and Armed Robbery involving Oil Cargo Theft	November 2015	ReCAAP, IFC and the S Rajaratnam School of International Studies published a 39-page Guide, specifically for tankers operating in Asia involving oil theft after a period of increased attacks against vessels in the region..
The Guidelines on Cyber Security Onboard Ships V1	January 2016	The aim of the Guidelines on Cyber Security Onboard Ships was to offer guidance to shipowners and operators on how to assess their operations and put in place the necessary procedures and actions to maintain the security of cyber systems onboard their ships.
The Guidelines on Cyber Security Onboard Ships V2	June 2017	The IMO had developed guidelines1 that provide high-level recommendations on maritime cyber risk management to safeguard shipping from current and emerging cyber threats and vulnerabilities. The Guidelines on Cyber Security Onboard Ships are aligned with the IMO guidelines and provide practical recommendations on maritime cyber risk management covering both cyber security and cyber safety.
(ReCAAP) Regional Guide to Counter Piracy and Armed Robbery Against Ships in Asia	March 2018	ReCAAP published a 60-page guide to counter piracy and armed robbery in Asia. The purpose of this pocket sized booklet was to differentiate Asian piracy from Somali and Gulf of Guinea piracy and armed robbery at sea, thereby stipulating the different way that the crimes are fought and managed in the region.
BMP 5	June 2018	Includes a Voyage Reference Card *aide memoire,* smaller font in the booklet allowing for more details. Introduces Maritime Safety Transit Corridor through Bab al Mandeb. Defines different areas referenced in detail Provides broad information on Anti-ship missiles, sea mines and water-borne improvised explosive devices (WBIED) and the maritime global security website as a useful source. More emphasis on reporting of incidents at all stages. Introduces other piracy hotspots, additional guidance for fishing vessels and yachts, more extensive definitions, and glossary of terms.

BMP Global Counter Piracy Guidance for Companies, Masters and Seafarers	June 2018	The Global Counter Piracy Guidance for Companies, Masters and Seafarers was an attempt by the shipping associations and some of the naval forces to provide a common language and format for countering piracy globally, whilst acknowledging the differences between each piracy area.
OCIMF Guidelines to Harden Vessels (First Edition)	July 2018	OCIMF's follow on document to their Ship Security Bridge Vulnerability Study (October 2014), providing much greater detail on the hardening of ship's organic defences against piracy attacks. The paper was aimed at ship owners, operators, managers, Master, crew, naval architects, and shipyards.
The Guidelines on Cyber Security Onboard Ships V3	December 2018	The third edition of the industry Guidelines on Cyber Security Onboard Ships addresses the requirement to incorporate cyber risks in the ship's safety management system (SMS). It also reflects a deeper experience with risk assessments of operational technology (OT) - such as navigational systems and engine controls - and provides more guidance for dealing with the cyber risks to the ship arising from parties in the supply chain.
ReCAAP Guidance on Abduction of Crew in Sulu-Celebes Seas and Waters off Eastern Sabah	July 2019	Between 2016-2019 there were 29 incidents (18 successful attacks and 11 failed attempts) of attacks on vessels transiting the Sulu and Celebes Seas and the Waters off Eastern Sabah. The Abu Sayyaf Islamic terrorist group were active in the area. ReCAAP published a 48-page document providing specific information and guidance to ships transiting these dangerous waters. The aim with this publication was to provide as much detailed information about the threat as possible.
Jamming and Spoofing of Global Navigation Satellite Systems (1st Edition)	2019	This document was aimed at owners, operators and Masters. It provided guidance on the various types of Global Navigation Satellite System (GNSS), an introduction to threats associated with these systems and guidance on how to mitigate against these threats. It is not intended to cover all of the technical aspects of these issues but it will aim to identify practical and pragmatic ways to mitigate disruptions.
BMP West Africa	March 2020	The maritime security situation off the coast of West Africa was complex and dynamic. BMP West Africa (WA) was produced to help seafarers avoid becoming victims of maritime security incidents in the regional waters. The layout and much of the content of the BMP WA was similar to the BMPs issued for countering Somali piracy, but included additional information on Ship to Ship Operations, Floating (Production) Storage and Offloading vessels, operating with security escort vessels.
The Guidelines on Cyber Security Onboard Ships V4	January 2021	The purpose of these guidelines was to improve the safety and security of seafarers, the environment, the cargo, and the ships. The guidelines aim to assist in the development of a proper cyber risk management strategy in accordance with relevant regulations and best practises on board a ship with a focus on work processes, equipment, training, incident response and recovery management.
ReCAAP) Regional Guide 2 to Counter Piracy and Armed Robbery Against Ships in Asia	March 2022	ReCAAP published an updated 60-page booklet providing more up to date information on maritime crime across the ReCAAP ISC region. This Regional Guide (Version 2) includes updated information such as the modus operandi for the different types of perpetrators and contact details of the relevant agencies. It is designed to assist the Owner/ Operator/Master and crew operating in Asia to adopt the appropriate measures to avoid, deter or delay attacks and unauthorised boardings. This Guide complements information provided by the IMO, particularly the reporting

		of incidents to the nearest coastal State and flag State as stipulated in the MSC.1 Circular 1333/Rev.1 and Circular 1334 (refer to Annex B of this Guide). This Guide should be read with the latest information and assessment of the situation in the reports issued by the ReCAAP ISC (https://www.recaap.org), Information Fusion Centre (IFC) https://www.ifc. org.sg) and the International Maritime Bureau (IMB) (https://www.icc-ccs.org/icc/imb) whose contact details can be found in Annex D
Guide Book on Identification of Fishing Boats in Asian Water	October 2022	The different types of fishing boats operating in Asian waters are compiled in this Guide book, to assist the ship master and crew, to become more familiar with the characteristics and image of the boats that are operating in different regions in Asia. This Guide book will also facilitate the crew's vigilance when sighting boats/vessels that appear out of the norm and to adopt the necessary precautionary measures.
OCIMF Guidelines to Harden Vessels (Second Edition)	October 2022	An updated and more detailed version of the 2018 edition.
Loitering Munitions – The Threat to Merchant Ships	August 2023	Introduces loitering munitions and the threat they pose to commercial ships, provides operational characteristics and trends related to the employment of these systems, and their technical features. Considerations, including guidance for best practice.
Guide Book on Identification of Fishing Boats in Asian Water Version 2	March 2024	'Guide Book on Identification of Fishing Boats in Asian Waters - Version 2' includes additional fishing boats/vessels operating in Asian waters provided by the ReCAAP Focal Points/Contact Point.
The Guidelines on Cyber Security Onboard Ships V5	November 2024	These guidelines explain why and how cyber risks should be managed in a shipping context. The supporting documentation required to conduct a risk assessment is listed and the risk assessment process is outlined with an explanation of the part played by each component of cyber risk. This publication highlights the importance of evaluating the likelihood and threat in addition to the impact and vulnerabilities when conducting a cyber risk assessment. Finally, this publication offers advice on how to respond to and recover from cyber incidents.
BMP Maritime Security	March 2025	Best Management Practices (BMP) Maritime Security (MS) consolidates previously published regional BMP documents into a single comprehensive publication. It focuses on a threat and risk management process addressing globally applicable threats and mitigations, as well as providing references to external sources for up to date regional information.
Maritime Industry Security Threat Overview (MISTO)	31 March 25	The MISTO has been compiled to provide general and situational information regarding the maritime domain. MISTOs are based on an amalgamation of publicly available information and information obtained by the authors through their networks of stakeholders in shipping, governments, and academia. The information contained herein is based on data available as of the date of this assessment and is subject to change without notice. The MISTO does not constitute a guarantee of the accuracy, completeness, or timeliness of the information provided. This Edition of MISTO includes

		sections on: Gulf of Guinea – predominantly Niger Delta based pirates; Red Sea, Gulf of Aden, Northwest Indian Ocean – Houthi insurgents; Northwest Indian Ocean and adjacent waters – Somali pirates; Straits of Malacca and Singapore (SOMS) – pirates and armed robbers; Black Sea and Sea of Azov – Russia and Ukraine.
Jamming and Spoofing of Global Navigation Satellite Systems (2nd Edition)	25 September 2025	This document is aimed at shipowners, operators and Masters. It provides guidance on multiple GNSS systems, explains the risk associated with their suboptimal operation and recommends ways to manage this risk. It is not intended to cover all technical aspects related to satellite navigational systems, but it will aim to identify practical and pragmatic ways to mitigate possible disruptions hindering safe navigation
Maritime Industry Security Threat Overview (MISTO)	26 November 2025	This MISTO provides update sections on: Gulf of Guinea – predominantly Niger Delta based pirates; Red Sea, Gulf of Aden, Northwest Indian Ocean – Houthi insurgents; Northwest Indian Ocean and adjacent waters – Somali pirates; Straits of Malacca and Singapore (SOMS) – pirates and armed robbers; Black Sea and Sea of Azov – Russia and Ukraine.