



**FACTS AND FIGURES**

**THE 2025 EUROPEAN**

**MARITIME SAFETY REPORT**

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# Introduction

The second edition of the *European Maritime Safety Report (Emsafe)*, fully revised and updated, focuses on current issues impacting shipping and safety in the European Union (EU). Overall, Emsafe aims to contribute to a greater understanding of the safety-related challenges and opportunities facing the maritime sector by bringing together a set of key technical data, from EMSA's own databases and externally, relating to the safety of ships and their operation.

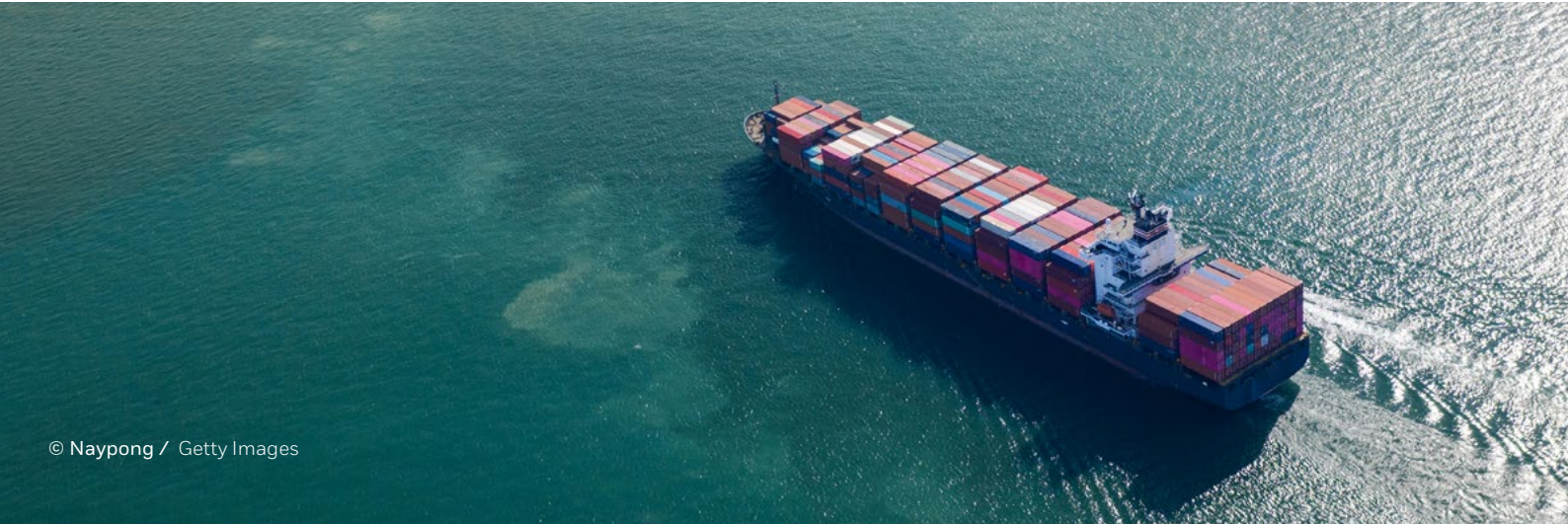
Emsafe uses data and information from 2019 to 2023, a period in which global events had a substantial impact on the maritime sector. The COVID-19 pandemic, the impact of the withdrawal of the United Kingdom from the EU and the cascading effects of international conflicts, including the invasion of Ukraine and the situation in the Middle East, all significantly influenced maritime traffic flows.

Within this context, this second edition of Emsafe analyses the maritime sector's attempts to maintain safety levels while simultaneously adapting to an evolving regulatory landscape and addressing additional challenges such as the ageing of the fleet, digitalisation, decarbonisation and the need to retain and attract a qualified workforce.

In addition, since the publication of the first report in 2022, high-profile maritime accidents, including the fires on board the *MV Fremantle Highway* and the *Felicity Ace*, have highlighted new safety risks that the industry should work to mitigate.



# The EU maritime sector



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Maritime transport is essential for the global economy, carrying over 80 % of world trade by volume. EU ports handled more than 3 375 million tonnes of goods in 2023, 39 % of which corresponded to national and intra-EU transport.

**There were more than 880 000 ship calls to EU ports in 2023**, representing an increase of almost 20 % compared with pre-pandemic levels. More than 50 % corresponded to domestic traffic, with ro-pax and passenger ships the most common ship types calling at EU ports. Approximately three quarters of all ships calling at EU ports are flagged to a Member State, with fewer than 25 % registered to a non-EU country.

Throughout 2023, **395 million passengers embarked and disembarked at EU ports**, 5.5 % fewer than in 2019 (after a 45 % drop in 2020 due to the travel restrictions imposed by the COVID-19 pandemic).

Between 2019 and 2023, **EU shipyards accounted for 7.6 % of global newbuild activity**, by number of ships built. Compared to 2016–2020, **the global share of ships built in the EU over an equivalent five-year period decreased by 1.2 %**. Despite this decline, the EU continues to lead in constructing passenger ships, fishing vessels and offshore supply vessels. The Netherlands, Poland and Spain are the Member States that produce the largest number of vessels in these categories. Meanwhile, Finland, Italy and Germany focus on building larger vessels, such as cruise ships.

**Figure 1:** Number of newly built ships by ship type in the EU and worldwide and share of EU builds by ship type (2019–2023) (\*).

	In the EU	In the world	%
Tankers	17	2 429	0.7%
Bulk carriers	10	2 262	0.4%
General cargo ships	69	1 076	6.4%
Container ships	1	994	0.1%
Ro-Ro cargo ships	14	271	5.2%
Passenger ships	262	814	32.2%
Other cargo ships	0	68	0%
Fishing vessels	277	1 610	17.2%
Other work vessels	358	3 819	9.4%
<b>Total</b>	<b>1 008</b>	<b>13 343</b>	<b>7.6%</b>

(\*): Merchant ships with IMO numbers, self-propelled, 100 GT and above.

Source: EMSA

In contrast, **the European marine equipment industry is a world leader**, with a market share of 35 % for a wide range of products.

Data from the [MED Portal](#), the reference database for products certified in the EU under the Marine Equipment Directive (Directive 2014/90/EU), shows that 45 % of the marine equipment installed on EU Member State-flagged ships is manufactured by companies based in the EU.

# Flag state



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EU Member States, in their capacity as flag states, play a fundamental role in ensuring maritime safety and the protection of the marine environment. They must ensure that ships registered to them (flying their flags) comply with all relevant international, EU and national regulations, including regulations on the construction, operation, management and recycling of ships.

## The EU Member State-flagged fleet

In contrast to the world fleet, which expanded by 6 % between 2019 and 2023 to meet increasing demand, the EU Member State-flagged fleet decreased by 2 %.

**Figure 2:** Number of ships registered to EU Member State flags.

Ship Type	2023	2019-2023
Other work vessels	4 096	4 098
Passenger ships	2 496	2 412
Tankers	2 110	2 288
General cargo ships	1 579	1 642
Bulk carriers	1 105	1 314
Container ships	1 095	1 096
Ro-Ro cargo ships	418	394
Other cargo ships	110	89
<b>Total</b>	<b>13 009</b>	<b>13 333</b>

Source: EMSA

In 2023, the EU Member State-flagged fleet represented around 13 % of the world fleet by number of ships and approximately 16 % of global gross tonnage (GT).

Whereas the global tonnage increased by 13.8 % from 2019 to 2023, the EU Member State tonnage fell by 1 % in the same period. The proportion of EU Member State tonnage in relation to the global equivalent dropped from 18.7 % in 2016 to 17.8 % in 2020 and 15.8 % in 2023.

## Passenger ship safety in the EU

The number of passenger ships registered to EU Member States increased by almost 2 % from 2019 to 2023, with ro-pax and passenger high-speed craft (HSC) flagged to EU Member States representing more than **30 % of the world fleet of those ship types and more than 50 % in terms of GT**. In addition, the number of HSC flagged to EU Member States increased by 17 % in the same period.

Despite the increase in the number of passenger ships in the EU, there has been no decline in their average age. **As of 2023, the average age of passenger ships flagged to EU Member States was 29 years, up from 28 years in 2019.**

**Figure 3:** Average age (by ship type) of ships flagged to EU Member States compared with the world fleet.

	EU MS flagged fleet	World fleet
Passenger ships	29	28
Other work vessels	26	24
General cargo ships	22	26
Ro-Ro cargo ships	18	20
Other cargo ships	17	30
Tankers	14	18
Container ships	13	14
Bulk carriers	12	13

Source: EMSA

This trend can be linked directly to **existing ships shifting from non-EU flags to EU Member State flags.**

**Figure 4:** Number of flag changes by ship type in relation to EU Member State flags (2019–2023).

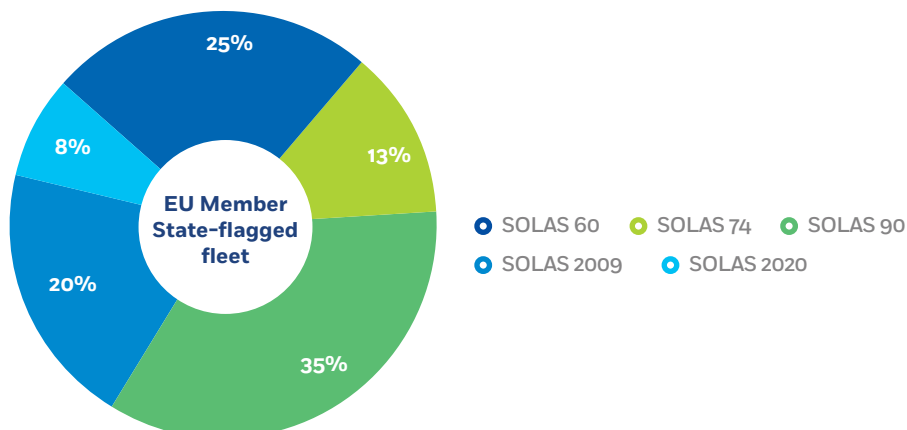
	EU MS to EU MS	non-EU MS to EU MS	EU MS to non-EU MS	Balance
Tankers	388	685	1108	-423
Bulk carriers	125	404	769	-365
General cargo ships	475	577	687	-110
Container ships	380	683	729	-46
Ro-Ro cargo ships	51	57	71	-14
Passenger ships	254	97	118	-21
Other cargo ships	43	38	9	29
Other work vessels	642	505	612	-107
<b>Total</b>	<b>2 358</b>	<b>3 046</b>	<b>4 103</b>	<b>-1 057</b>

Source: EMSA

From 2019 to 2023, 35 % more ships transferred out from an EU Member State flag than moved in from flags outside the EU. Most ships leaving EU Member State flags were bulk carriers, oil and chemical tankers and general cargo ships.

The average age of passenger ships transferring to EU Member State flags was 18 years (21 years in the case of ro-pax). **Over a third of these ships were more than 25 years old at the time they changed to EU Member State flags.**

The ageing trend of passenger ships flagged to EU Member States is an area of concern. In general, safety standards are not applied retroactively, meaning that ships comply with the standards applicable at the time of their construction. **38 % of all passenger ships in operation** in the EU Member State-flagged fleet were built at a time when the applicable damage stability standards were those of the International Conference of Safety of Life at Sea (SOLAS) 1960 and 1974.

**Figure 5:** EU Member State-flagged passenger ships, under different SOLAS damage stability requirements based on date of build (2023).

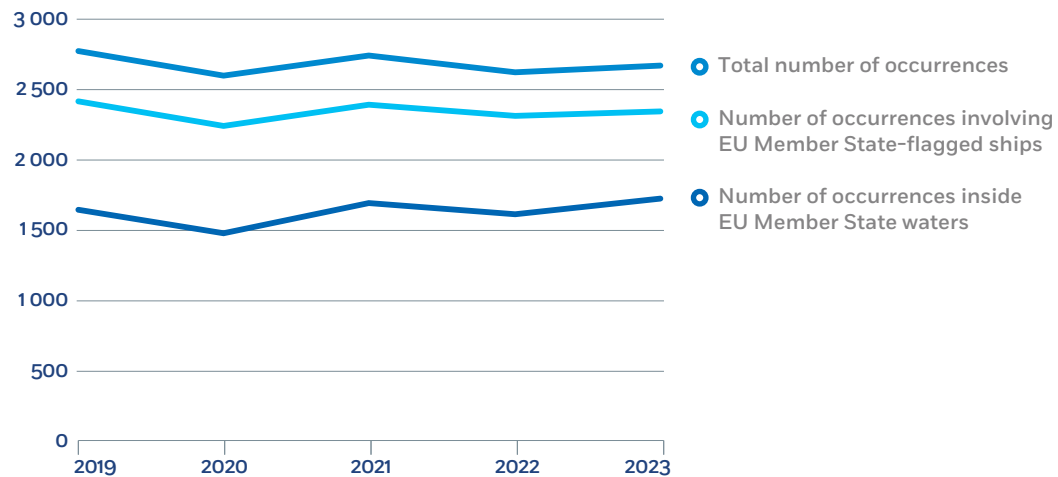
Source: EMSA



## Accidents

The number of recorded accidents is a reliable indicator of the safety performance of a fleet. Between 2019 and 2023, an average of **2 344 accidents involving at least one EU Member State-flagged ship under the scope of applicable EU legislation took place every year**. The number of accidents reported to the European Marine Casualty Information Platform (EMCIP) (managed by EMSA) during that period decreased by 16 % compared to the period covered in the first edition of Emsafe.

**Figure 6:** Total accidents reported to EMCIP (2019–2023).

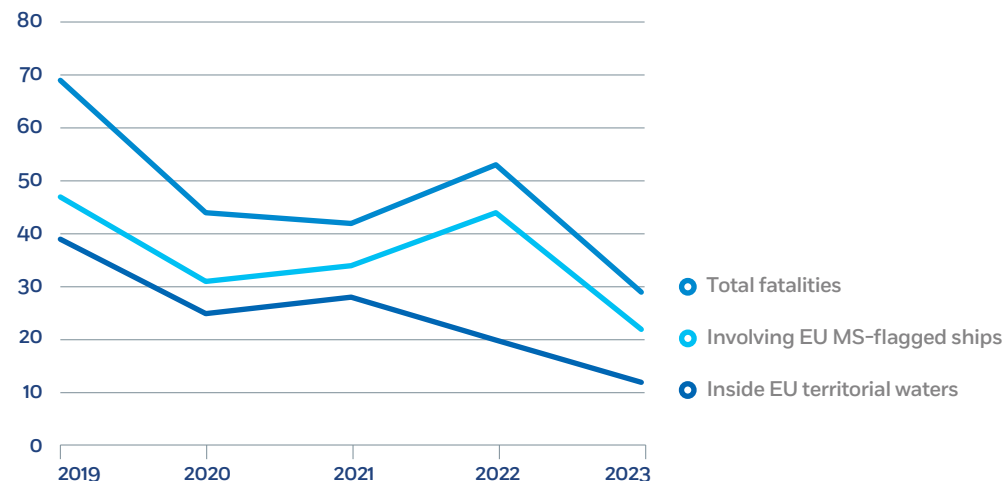


Source: EMCIP (EMSA)

Serious accidents (ships damaged to the point that they are unfit to proceed, serious injuries, non-severe damage to the environment) represented 27.8 % of all recorded accidents during the period, while very serious accidents (fatalities, total loss, severe damage to the environment) made up 2.2 % of the total.

**In 2023, 22 people died and 741 were injured in accidents involving EU Member State-flagged ships.** The highest number of fatalities occurred in accidents involving cargo ships, which represent around 49 % of the fleet, followed by fishing vessels and service ships.

**Figure 7:** Total fatalities reported to EMCIP (2019–2023).

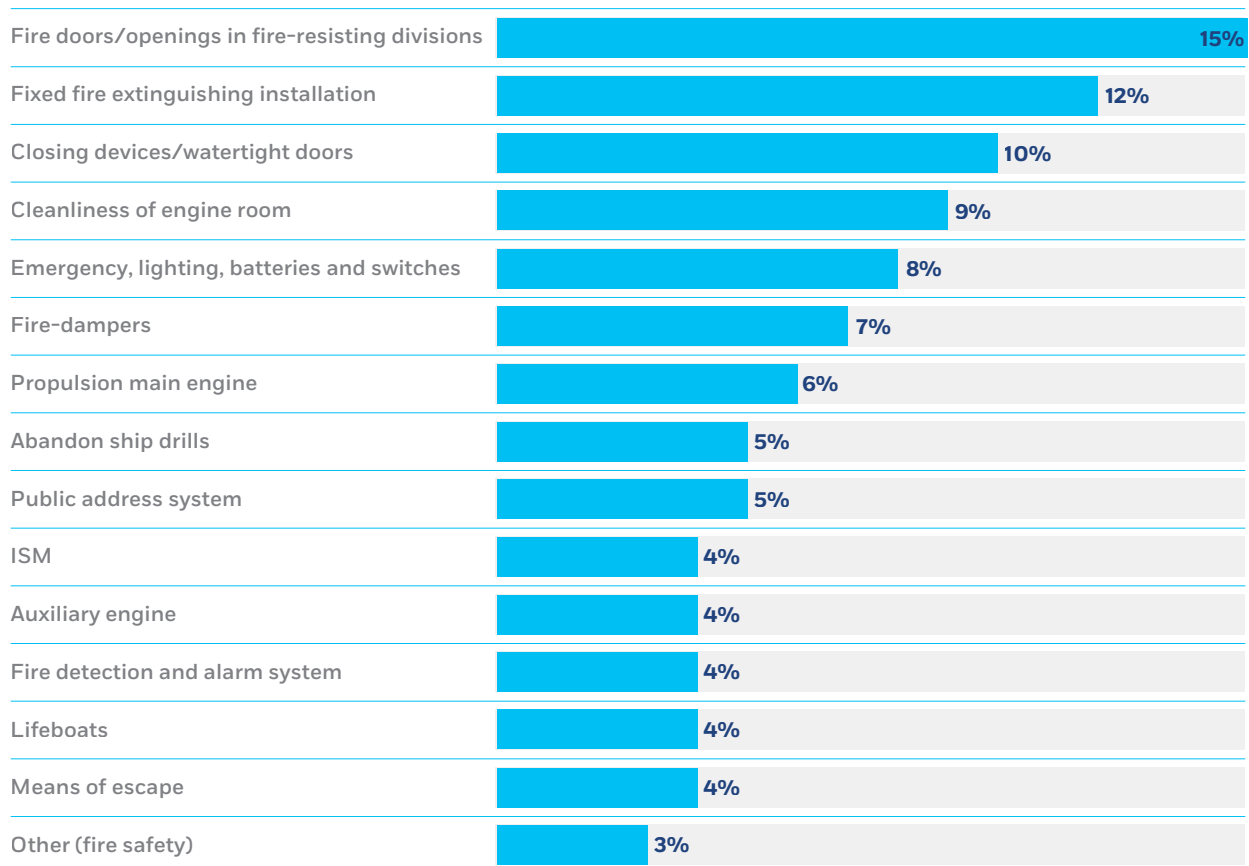


Source: EMCIP (EMSA)

## Flag state: safety indicators

The number of deficiencies found during flag-state surveys or inspections could also serve as a potential safety performance indicator. However, there is currently no centralised database of flag-state inspections; the nearest equivalent at the EU level is the database of the special regime for inspections of ro-pax and HSC, included in the THETIS-EU database maintained by EMSA. The results of these inspections show that **38 % of all deficiencies found relate to fire safety.**

**Figure 8:** Top-15 deficiencies identified in inspections of ro-pax and HSC (2019–2023).

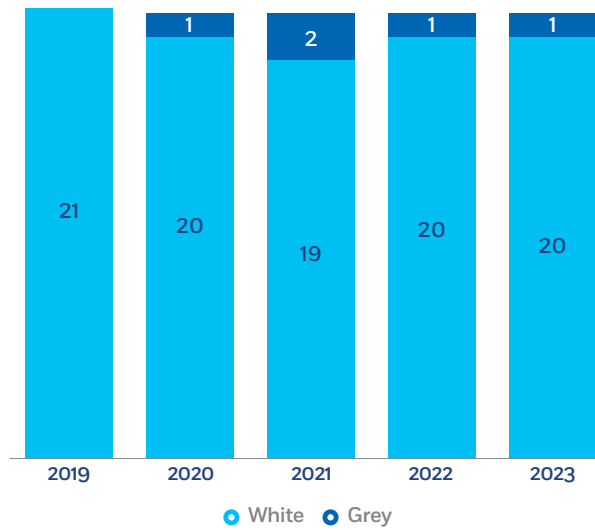


Source: Thetis (EMSA, 2023b)

At the international level, the findings of the International Maritime Organization's (IMO) Member State Audit Scheme provide useful aggregated data. **42 % of these findings are related to flag-state obligations**, with the largest share (33 %) relating to implementation, followed by enforcement (17 %). This ranking has remained consistent over the years, despite the larger number of audits taking place between 2016 and 2022 at the international level.

The outcomes of port state control (PSC) inspections are also an indicator of the safety performance of ships flagged to EU Member States and operating internationally. In 2023, **all EU Member State flags in the Paris Memorandum of Understanding (MoU) regime were whitelisted but one**, which was on the grey list.

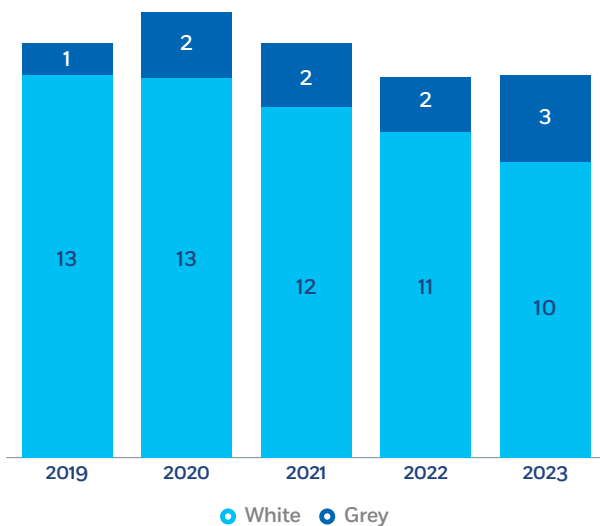
**Figure 9:** EU Member State flag performance according to the Paris MoU system of white, grey and black lists.



Source: Paris MoU

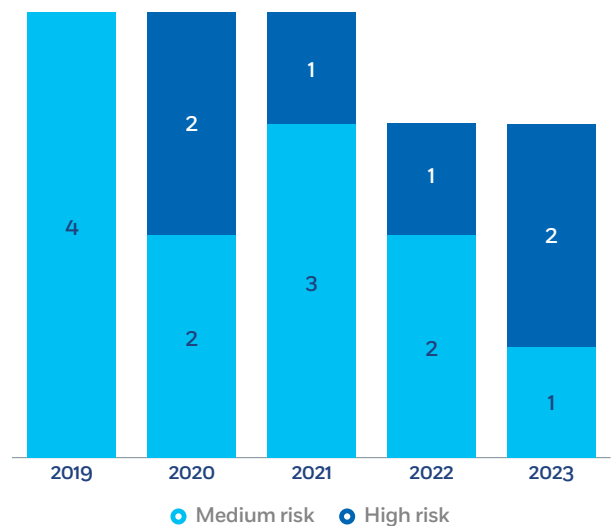
Beyond the Paris MoU, this second edition of Emsafe analyses the safety performance of ships flagged to EU Member States in the PSC regimes of the Tokyo MoU and the United States Coast Guard (USCG). Three were on the Tokyo MoU grey list, **while two EU Member State flags were considered high risk by the USCG in 2023**. These performance indicators relate to ships flying the flag of an EU Member State but trading in various regions around the world, outside the EU.

**Figure 10:** EU Member State flag performance according to the classification of the Tokyo MoU.



Source: Tokyo MoU

**Figure 11:** EU Member State flag performance according to the classification of the USCG.



Source: USCG

## Recognised organisations

Flag states continue to delegate tasks to recognised organisations, for both conducting statutory surveys and issuing certificates. **In 2024, two thirds of all EU Member States delegated the issuance of passenger ship safety certificates, either fully or partially, to a recognised organisation: a 10 % increase on 2020.** A similar trend was found in the delegation of International Safety Management Code certification.

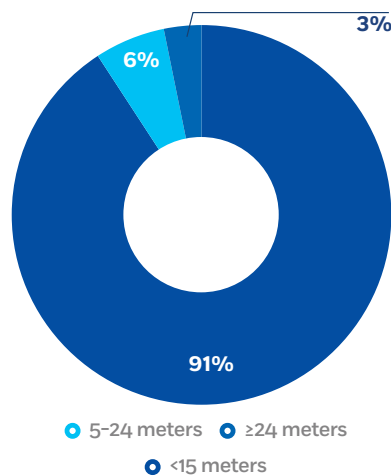
Globally, there are 110 recognised organisations recognised by at least one flag (a 15 % increase compared to 2020), but only 11 are recognised by the European Commission. The EU withdrew its recognition of the Russian Maritime Register of Shipping in October 2022.

## Fishing vessels

Currently, nearly 70 000 fishing vessels are flagged to EU Member States – a 6 % decrease since 2020. The EU Member State-flagged fleet is also ageing, with **70 % of vessels now more than 25 years old** and only 2 % of the entire fleet having been built between 2019 and 2023.

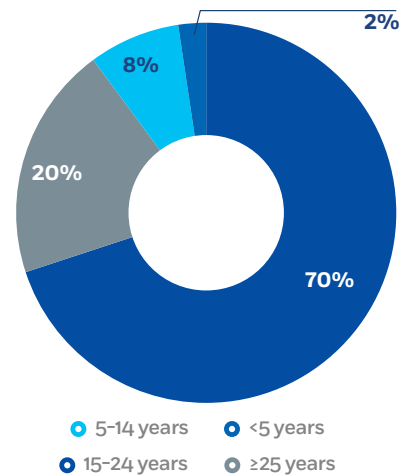
In addition, only 3 % of all fishing vessels registered to an EU Member State measure 24 metres in length or more, with 6 % being between 15 and 24 metres in length. The remainder (91 %) measure below 15 metres in length.

**Figure 12:** Distribution of the EU Member State-flagged fishing fleet by length.



Source: DG MARE

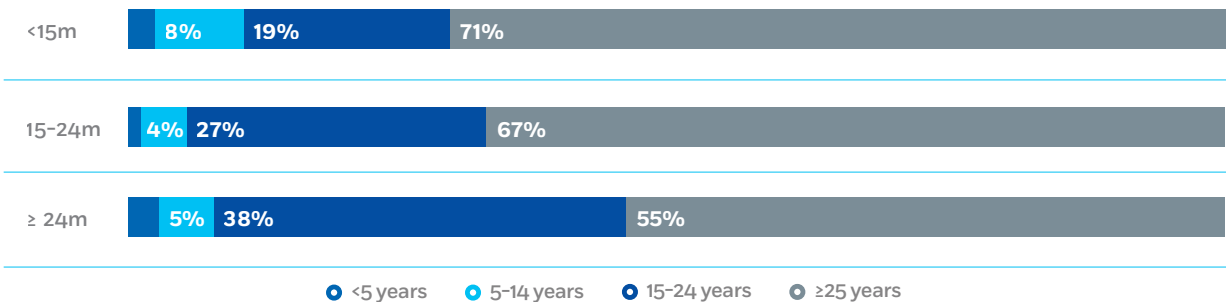
**Figure 13:** Distribution of the EU Member State-flagged fishing fleet by age.



Source: DG MARE

Fishing vessels measuring less than 24 metres and more than 25 years old now represent most of the overall fleet (68 %). This age trend is now common across all fishing vessel length ranges, even within the part of the fleet above 24 metres, more than 50 % of which are older vessels.

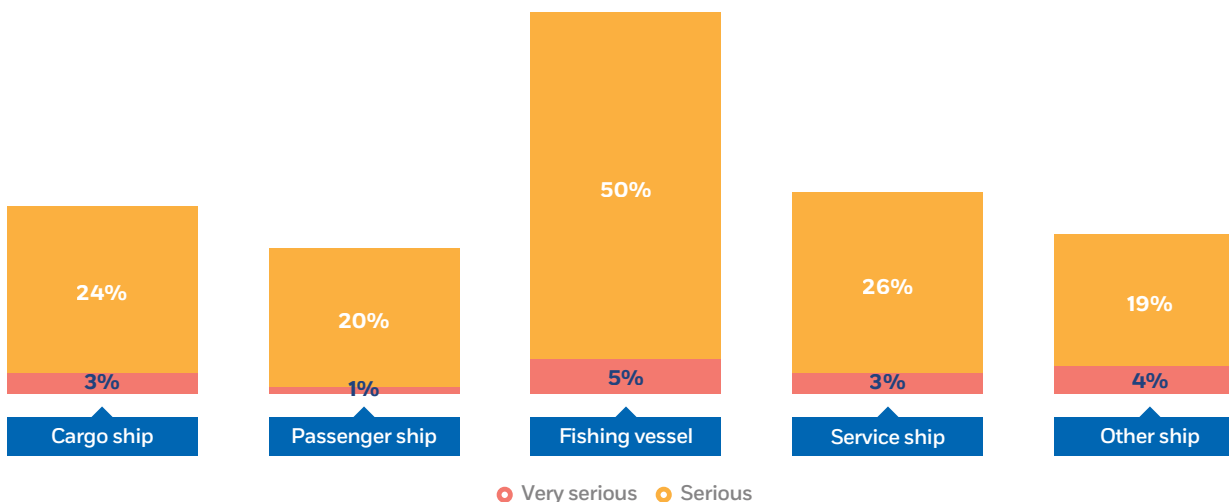
**Figure 14:** Age distribution of the EU Member State-flagged fishing fleet by length.



Source: DG MARE

Fishing vessels are particularly vulnerable to accidents, making them a priority for enhanced safety measures. These vessels account for 17 % of the total number of accidents recorded each year under the scope of applicable EU legislation, and 60 % of the total number of vessels lost. In 2023, 55 % of these accidents resulted in very serious or serious consequences.

**Figure 15:** Share of very serious and serious occurrences per ship type.



Source: EMCIP (EMSA)

The current safety standards for fishing vessels are less stringent than those for commercial shipping. The Cape Town Agreement, the international convention aimed at implementing safety standards for fishing vessels, has not yet come into effect. So far, only nine EU Member States, along with Iceland and Norway, have ratified the agreement.

At the EU level, the Commission is in the process of evaluating the implementation of Directive 97/70/EC on setting up a harmonised safety regime for fishing vessels of 24 metres in length and over. At the same time, additional measures have been taken that are expected to give new insight into the vulnerabilities of these vessels. The scope of the Accident Investigation Directive (Directive 2009/18/EC) was extended to include the reporting of accidents involving fishing vessels below 15 metres in length that involve fatalities and the loss of vessels. In addition, the revision of the PSC Directive (Directive 2009/16/EC) adds a new voluntary regime for fishing vessels to its scope.

# Port state

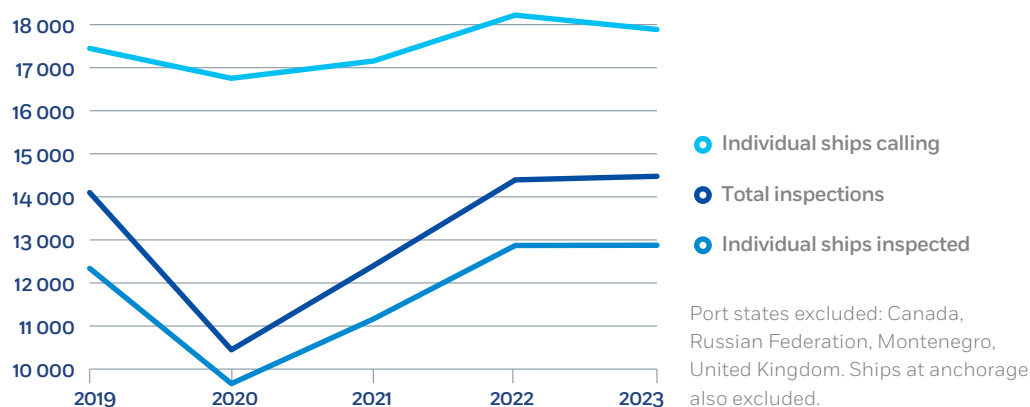


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With the rise in maritime traffic and the safety risks posed by substandard ships, PSC is crucial for ensuring compliance with safety regulations in EU waters. EU Member States, as port states, inspect foreign-flagged ships visiting their ports to verify they meet safety, environmental and labour standards. This serves as a second line of defence against substandard shipping, complementing the responsibilities of flag states.

**The number of PSC inspections carried out every year in the EU under the Paris MoU remains above 14 000** following the recovery from the COVID-19 period. Most Member States restarted their inspection efforts, in some cases going beyond their pre-pandemic figures.

**Figure 16:** Number of individual ships inspected, and total PSC inspections carried out, by EU Member States (2019–2023).



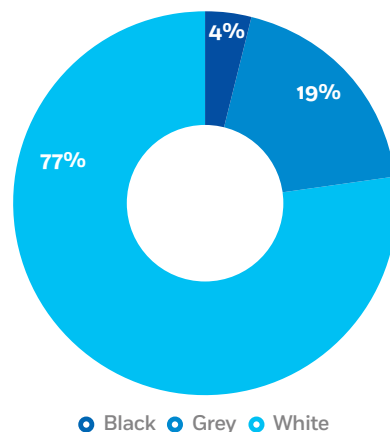
Source: Thetis (EMSA)

The number of individual ships inspected in 2023 by PSC officers in the EU increased by 4 % in comparison with 2019. **Approximately one out of every two deficiencies found was safety related**, with deficiencies relating to fire safety being the most frequently reported, regardless of ship type.

In 2023, 77 % of all non-EU-flagged ships calling at EU ports were on the Paris MoU white list and 4 % were registered to flags with significant safety issues, listed on the Paris MoU black list.

However, in 2023, the Panamanian flag moved from the white to the grey list (denoting some safety issues) under the Paris MoU classification. Ships registered to Panama constituted the second-largest number of port calls in the EU – over 115 000 between 2019 and 2023. This means that **the share of ships on the grey list increased from 5 % in 2020 to 19 % in 2023**.

**Figure 17:** Distribution of non-EU-flagged vessels calling at EU ports: Paris MoU ‘White, grey and black list’ (2023).



Source: EMSA

The top-three non-EU-flags for ships visiting EU ports were those of Liberia, Panama, and Antigua and Barbuda, but in 2023 the Panama flag moved from the Paris MoU white list to the grey list, based on its safety performance.

## Hazmat

The misdeclaration of hazardous and polluting goods (hazmat) poses significant risks to crew, cargo and reception ports. In 2023, **14 % of ships carrying hazmat and arriving at EU ports from non-EU ports and terminals were flagged to grey- and black listed non-EU countries**.

More positively, the percentage of undeclared hazmat has decreased by nearly 50 % since 2019 for arrivals from non-EU ports. In 2023, the percentage of missing hazmat declarations in the European vessel traffic monitoring system, SafeSeaNet, was about 4 % for ships departing from EU ports, and similarly around 4 % for ships arriving from non-EU ports.

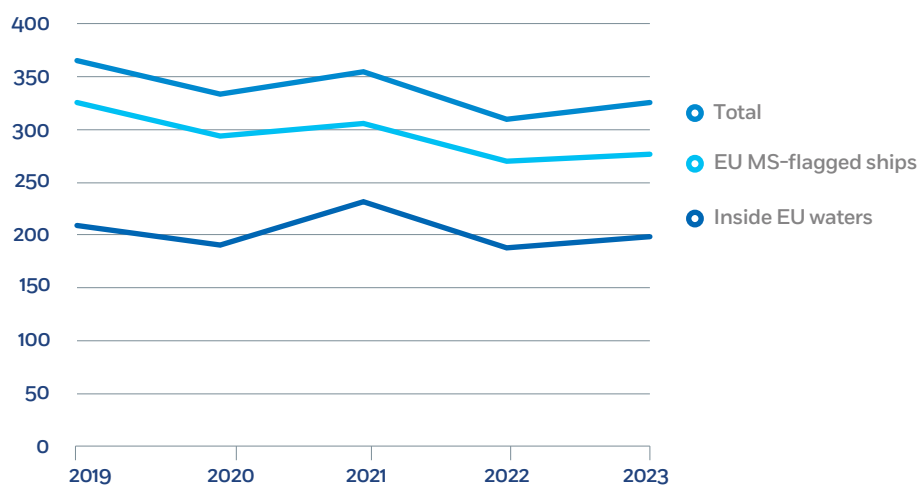
# Coastal state



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EU Member States, in their capacity as coastal states, oversee and regulate maritime activities within their waters, particularly to prevent accidents and environmental damage and to support the maritime communication network. Between 2019 and 2023, an average of 1 631 accidents occurred annually within EU territorial waters, resulting in 1 018 search and rescue (SAR) operations reported during that period.

**Figure 18:** Total number of ships requiring SAR intervention, within EU waters – accidents involving at least one EU Member State-flagged ship (2019–2023).



Source: EMCIP (EMSA)



Globally, and within the EU, SAR responsibilities are managed at the national level and facilitated through cooperation agreements across different EU regions. Between 2019 and 2023, 13 % of SAR interventions in EU waters involved vessels flagged to non-EU countries.

From 2019 to 2023, fishing vessels accounted for 58 % of all SAR operations, meaning that, when this share is correlated with the number of fishing vessels involved in accidents, at least **36 % of all fishing vessels in distress required SAR intervention during this period.**

An emerging issue in SAR is the challenge of operations in remote areas, especially for passenger ships due to the large number of people they carry. The increasing number of cruise ships visiting polar regions (the Arctic and the Antarctic) heightens the risk of SAR operations. Preparing for these challenges is crucial for the maritime community.

# Seafarers and safety



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Qualified seafarers are essential for ensuring the safety of ship operations and are vital for the future of the maritime sector in the EU. However, **the available maritime labour pool appears to be getting smaller.**

By the end of 2023, 172 308 masters and officers held valid certificates of competency (CoCs) issued by an EU Member State. This was a 20 % reduction from 2019, but a 7 % reduction when the effect of the United Kingdom's withdrawal from the EU is taken into account. At the same time, another 125 519 masters and officers held original CoCs issued by non-EU countries – an increase of 4 % since 2019 – with endorsements issued by EU Member States attesting to their recognition.

Overall, by the end of 2023, 297 827 masters and officers held the requisite certificates and endorsements to serve on board EU Member State-flagged vessels, **a 12 % decrease compared to 2019.**

In the same year, the average age of seafarers eligible to work on EU Member State-flagged ships was 44 for those certified in EU Member States and 41 for those certified in non-EU countries. In addition, the share of women in the seafaring profession continues to be very low, at 2.78 % of all available seafarers certified in the EU in 2023, and just 0.8 % of those certified in non-EU countries.

## Seafarers: working conditions and training

The working conditions of seafarers remain challenging. Deficiencies in their conditions of employment, including **work and rest hours, wages and manning levels under the Maritime Labour Convention (MLC), Title 2**, are found in **one out of every 13 Paris MoU PSC inspections, on average.** Between 2019 and 2023, **one out of every four** PSC inspections found deficiencies under the MLC category of healthcare, safety protection and accident

prevention of seafarers (Title 4) in Paris MoU reports. More than 60 % of the MLC-related deficiencies discovered in the reference period were found on board bulk carriers or general cargo ships, and around 13 % on board tankers.

The training of seafarers is an important part of the safety process. The Commission, assisted by EMSA (which carries out inspections), assesses the educational systems implemented in non-EU countries on behalf of EU Member States and in line with the International Conventional on Standards of Training Certification and Watchkeeping for Seafarers.

To this end, **51 non-EU countries have had the CoCs they issue recognised by EU Member States**, allowing their seafarers to work on board EU Member State-flagged ships.

# Safety and sustainability



To meet the emission targets set by the European Green Deal, the maritime sector must adopt alternative fuels and power technologies while ensuring ship safety. These new energy sources can carry significant risks, necessitating robust safety measures and inherently safer designs.

From 2019 to 2023, the number of **liquefied natural gas (LNG)**-ready ships (excluding LNG carriers) more than tripled worldwide, with 34 % operating in Europe. LNG is fully covered by the International Code of Safety for Ship Using Gases or Other Low-flashpoint Fuels, which sets safety standards at the international level for low-flashpoint and gaseous fuels.

**Hydrogen**, while falling under the above code, lacks specific provisions addressing its high flammability and explosion risk. Draft non-mandatory IMO guidelines for hydrogen-fuelled ships are expected by 2026. In the interim, EMSA has released [a study on the potential of hydrogen as a fuel in shipping](#), followed by a [dedicated study series on its safety aspects](#).

**Methanol** use is expanding and is already addressed by IMO interim guidelines (MSC.1/Circ.1621), which will be enhanced in the years to come as more experience is gained with its use as a fuel in shipping. To further assist policymakers and the industry, EMSA has published a study on [the potential of synthetic fuels in shipping](#), including e-methane and e-methanol, and [bunkering guidance that includes bio-sourced methanol](#).

**Ammonia** is at an early stage of adoption, with no commercial uses at present and serious toxicity concerns. In 2024, the IMO approved non-mandatory interim guidelines for ammonia (MSC.1/Circ.1687), promoting its safe use as a fuel. In parallel, and to support policymakers and the industry, EMSA released a study analysing [the potential of ammonia as a fuel in shipping](#), and a [study series investigating and analysing its safety](#).

**Biofuels** such as DME, FAME, FT-diesel and HVO pose no major safety concerns above those of traditional fossil fuels. To address a gap in the standardisation of procedures for the marine bunkering of biofuel, [EMSA has published a guidance document](#) that includes checklists for different bunkering phases and configurations.

**Liquefied petroleum gas** use is guided by the IMO's 2023 interim guidelines (MSC.1/Circ.1666).

**Fuel cells** also raise safety issues due to potential leakages, with non-mandatory guidelines in place (MSC.1/Circ.1647) that are to be revised and consolidated in the future.

**Batteries** are increasingly being used in short-range voyages, but international safety standards are still lacking. In 2023, EMSA issued [the first non-mandatory guidance for national administrations and industry](#) aiming at the uniform implementation of the essential safety requirements for battery energy storage systems on board ships. The guidance focuses on lithium-ion batteries, which represent the battery technology most frequently used in maritime applications.

Additionally, **connecting ships to onshore power** introduces interface risks, requiring careful management. EMSA has therefore published its [guidance on shore-side electricity](#) to assist national administrations in the planning and development of shore-side electricity options.

## Safety and autonomy

As the shipping industry continues to move towards increased automation, risk assessment is crucial for the overall safety assessment and verification of new maritime autonomous surface ship (MASS) designs and should be looked at holistically, taking into account hazards associated with physical layout, operation, control of risk mitigation measures and maintenance.

On the regulatory side, progress has been made in the development of the non-mandatory IMO MASS Code. At the same time, to support consistent safety evaluations, EMSA has developed a tailor-made risk-based methodology (included in the draft IMO MASS Code) and an associated pilot software tool (the Risk Based Assessment Tool) to assist maritime administrations and the industry in identifying and prioritising safety-critical elements in early MASS designs.

In terms of the safe operation of automated vessels, discussions are ongoing on the implications that this will have for seafarers and their training. To support these discussions, EMSA has produced [a report on the identification of competences for MASS operations in remote-control centres](#). Going forward, the human element will be pivotal in the development and operation of these vessels and their associated remote-control centres.

# Conclusions

The European Union has built a strong and comprehensive maritime safety system over the last several decades. While significant progress has been achieved, numerous challenges remain, making it clear that maintaining – and further reinforcing – this system is not optional. Rather, it is essential to avoid a regression to the era of substandard shipping, which was marked by serious accidents, environmental harm and the loss of human life. Crucially, maritime transport continues to play a critical role in the global and EU economies, with increasing trade volumes and passenger traffic underlining the need for safer, more efficient vessels.

The EU's harmonised legislative framework ensures consistent implementation and enforcement across Member States, complementing international conventions. This integrated approach remains vital in guaranteeing high safety standards, even as global dynamics – such as the shift in shipbuilding to Asia – introduce new dependencies and vulnerabilities for the EU's maritime industry.

Despite a 16 % reduction in accidents recorded since 2019, several hazards remain to be addressed. Potential fire incidents on ro-pax and HSC continue to raise concerns, particularly as many passenger vessels are ageing. The misdeclaration of hazardous cargo has decreased by 50 %, reflecting progress in enforcement and awareness, although compliance gaps persist in relation to a small number of vessels.

Challenges relating to the workforce pose a significant threat to the sustainability of maritime safety. Since 2019, there has been a 12 % decline in the number of available masters and officers in the EU. There are also concerns about an ageing workforce and the industry's ability to attract new generations of seafarers. Despite the stable average age of seafarers, suggesting that new entrants are replacing those leaving the career, the attractiveness of the sector remains low, and is particularly affected by the working conditions on board ships. Labour inspections regularly reveal deficiencies in crew welfare, particularly on bulk carriers and cargo ships. These issues highlight the urgent need for ongoing investment in training and in improving working conditions.

The introduction of alternative fuels offers opportunities for emission reduction, but also introduces new safety risks. The FuelEU Maritime Regulation (Regulation (EU) 2023/1805), which entered into force in 2025, sets ambitious greenhouse gas reduction targets, requiring safe ship design, rigorous risk assessments and continuous training of seafarers. EMSA has already taken steps in this regard by publishing guidance on battery safety and contributing to the development of IMO standards.

Passenger ship safety, particularly in domestic operations, remains a top priority for the EU. However, progress is hampered by the slow development of updated safety standards and their inconsistent implementation by the Member States. New potential risks, such as electric-vehicle fires on board ro-ro ships, deserve attention.

This second edition of Emsafe covers the first two years of Russia's war of aggression against Ukraine. During that time, the 'shadow fleet' has become ever more present in European waters as a means of transporting sanctioned Russian oil. These vessels do not generally call at EU ports and are not under EU Member State flags. Therefore, they exist outside of the usual EU inspection regimes, and are opaque in terms of their safety performance. In addition, the composition of this fleet is quite dynamic, with frequent flag changes. The risk they pose to the EU's coasts is difficult to assess, but the uncertainty alone constitutes a risk. The next edition of Emsafe may consider the impact of this development from a maritime safety perspective if more reliable data becomes available.

In summary, the EU maritime safety landscape is entering a period of rapid transformation. Technological innovation, environmental ambition and evolving operational realities demand a forward-looking, integrated approach. However, given the profile of the fleet, old ships will coexist for a long period of time with newer designs. EMSA will remain a key partner in navigating these challenges, ensuring that Europe's seas stay safe, resilient and sustainable for decades to come.

# ABOUT THE EUROPEAN MARITIME SAFETY AGENCY

About the European Maritime Safety Agency  
EMSA's mission is to serve EU maritime interests for a safe, secure, green and competitive maritime sector, and act as a reliable and respected point of reference in the maritime sector in Europe and worldwide. Based in Lisbon, we work on maritime safety, security, sustainability, digitalisation, and capacity building, among other tasks, in full support of the EU Member States and the European Commission.

## Get in touch for more information

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