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Maritime Transport Fitness Check of the legislation on flag State responsibilities, accident investigation, port State control, the vessel traffic monitoring and information system and, the reporting formalities for ships arriving in and/or departing from ports of Member States

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Glossary

Term or acronym	*Meaning or definition*
AIB	Accident Investigation Body
AIS	Automatic Information System
CISE	Common Information-Sharing Environment
COLREG	Convention on International Regulations for Preventing Collisions at Sea
EMCIP	European Marine Casualty Information Database
EMSA	European Maritime Safety Agency
III Code	IMO Implementation of International Instruments Code
IMO	International Maritime Organisation
HAZMAT	Hazardous materials and dangerous goods
HLSG	High Level Steering Group on the Governance of the Digital Maritime System and Service
LL	International Convention on Load Lines
LRIT	Long Range Identification and Tracking system
MARPOL	International Convention for the Prevention of Pollution from Ships
NIR	New Inspection Regime (port State control)
NSW	National Single Window
PCS	Port community systems
PMoU	Paris Memorandum of Understanding on port State control
QMS	Quality Management System
RFD	Reporting Formalities Directive
RO	Recognised organisation
SOLAS	International Convention for the Safety of Life at Sea
SSN	Union Maritime Information and Exchange System (SafeSeaNet)
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers

UNCLOS	United Nations Convention on the Law of the Sea
VIMSAS	Voluntary IMO audit scheme
VTMIS	Vessel Traffic Monitoring and Information Exchange System

1. INTRODUCTION

Purpose and scope

In 2015, the Commission decided to undertake a mid-term review of the 2009 EU Maritime Transport Strategy[1] and in support of this exercise to undertake a fitness check in which it would reflect on the overall achievements or limitations of some selected key European measures in maritime transport.

The rationale behind this exercise is the need to evaluate the key measures in place and check whether any change, simplification and/or modernisation is necessary and relevant in view of the evolving circumstances. Since 2009, several developments have affected the maritime sector. The 2008 financial crisis resulted in overcapacity, which has intensified the already strong competition in the shipping market. Declining margins for operators have resulted in some of them being less willing to carry out regular maintenance on ships. The crisis has also impacted on public administrations with responsibilities in the field of maritime safety, putting strain on their resources as flag, port and coastal States. This has created new challenges for policy makers and market operators including the need to avoid that competition and fewer resources impact negatively on safety and quality shipping and the need to boost efficiency through digitalisation and administrative simplification.

The fitness check thus provides a comprehensive evaluation of key elements of maritime transport legislation supporting maritime safety, pollution prevention and the efficiency of maritime traffic and transport. A main aim is the achievement of a European Maritime Transport Space without Barriers that is safe, secure and sustainable and that supports the competitiveness of short sea shipping (compared to other modes of transport).

The fitness check aims to look more closely at the interaction between the concerned key legislative acts and their implementation to check whether and how the objectives of competitiveness and quality shipping can be better supported and mutually reinforced, while also considering the international rules and conventions on which they are based and that they enforce.

The fitness check assesses whether overall the key elements of the existing regulatory framework serve well the objectives of the policy area – if they are fit for purpose – or whether there are possible adjustments which can increase the cumulative impact of these measures and/or minimise regulatory burdens.

The scope of the exercise covers the EU policies in:

- Flag State – the operational parts of the flag State related activities[2] including in particular accident investigation
- Port State – the port State control inspections
- Coastal State – the reporting formalities and the Union Maritime Information and Exchange System

This EU policy has developed a comprehensive and consistent framework to facilitate the enforcement of standards set at the International Maritime Organisation. For the most

[1] COM (2009) 0008

[2] except the one related to the enforcement of the parts of the Maritime Labour Convention implemented through EU law

part, maritime safety and environmental protection are not policy areas where the EU has set its own standards. However, through EU legislation, the EU has imposed strict conditions for ships operating in EU waters, irrespective of the flag, in order to achieve safety and pollution prevention.

The role of the European Maritime Safety Agency (EMSA) is not evaluated here. In accordance with its legal mandate, there was a separate and broader independent evaluation exercise undertaken in parallel, by the Board of the Agency, in 2016-2017[3]. This evaluation confirmed the overall effectiveness, the efficiency, the relevance and the value added of the Agency's activities. It resulted in very few recommendations and concluded that the mandate was adequate to pursue and enhance existing tasks and services.

However, given the focus on enforcement, the impact of the legislation being reviewed would be difficult to assess in isolation from the supportive role that EMSA is playing through its technical assistance to Member States and the Commission. The contribution of EMSA to the overall achievement of the Commission objectives will therefore be taken into account and discussed in the analysis.

The fitness check analyses the effectiveness, the efficiency, the relevance, the coherence and the EU added value of the policy area, with a closer look at the key individual legislation. For the latter, the fitness check is accompanied by individual evaluations[4] of the concerned legislative acts.

The fitness check covers all EU Member States and the period from 2009 when the various instruments started to enter into force with the proviso that obligations and reporting requirements are implemented over the years until 2016. The fitness check therefore concentrates on the most recent period to assess the interaction between the provisions as they are now being applied.

Regarding the scope, the fitness check covers the three key pillars of maritime safety and pollution prevention: the responsibilities of Member States as flag States, port States and coastal States. All other relevant legislation at EU level is related in one way or another to one of these reponsibilities. This is the case for the legislation related to Recognised Organisations/classification societies: while very much related to the flag State responsibilities[5], that legislation is also an essential part of EU law and procedure. It could in this context have been integrated into this fitness check. However, simultaneous developments at IMO level with the adoption of the related Recognised Organisation Code made it inappropriate and not timely to include it in the present assessment. Nonetheless explanations are made in relation to this legislation, where relevant.

In addition, other exercises have been carried out by the Commission in parallel which must be seen within this context. One of them is the comprehensive fitness check of passenger ship safety legislation that was concluded in 2016 and adopted in 2017 and led

[3] Evaluation on the implementation of the Regulation (EC) No 1406/2002 establishing EMSA - Final Report, May 2017, Ramboll - http://www.emsa.europa.eu/news-a-press-centre/external-news

[4] SWDs….that have been supported by three support studies carried out by external contractors. It is recommended to read all texts for the full scope of the Evaluations.

[5] It is a possibility for a flag State to use a classification society (then becoming a recognised organisation) but it is not an obligation. In any case, a State can never delegate away its responsibilities and obligations. They remain with the flag State.

to the revision of the three concerned Directives[6]. Another is the evaluation of EU legislation on seafarers' training and certification requirements which has been finalised in December 2017[7]. With these other two exercises, the complete chain of responsibilities linked to the successive maritime safety packages has been covered.

Regarding social issues (living and working conditions) in maritime transport, the enforcement of the Maritime Labour Convention via port State control is covered under the coherence chapter but not the enforcement via flag State control of the parts of the Convention implemented through EU law. To be fully complete, one should finally refer to the more specific legislation related to pollution prevention and environmental protection or related to cabotage rules for intra-EU shipping which are less central but also relevant for the fulfilment of the above-mentioned objectives.

2. BACKGROUND TO THE INTERVENTION

Description of the intervention and its objectives

At the global level maritime transport, maritime safety and marine environmental protection are promoted through an international legal framework that consists primarily of the United Nations Convention on the Law of the Sea, 1982, and a number of conventions stemming thereunder adopted under the auspices of the IMO which define the responsibilities of States as flag State (or State of registry), port State and coastal State: the International Convention for the Prevention of Pollution from Ships (MARPOL); the International Convention for the Safety of Life at Sea (SOLAS); the International Convention on Standards of Training, Certification and Watch-keeping for Seafarers (STCW); the Convention on International Regulations for Preventing Collisions at Sea (COLREG); the International Convention on Load Lines (LL); the Convention on Facilitation of International Maritime Traffic (FAL).

The origin of EU maritime transport and maritime safety policy dates back to the early 1990s. The Communication entitled 'A Common policy of Safe Seas'[8] contained a package of accident-driven response measures aiming at convergent Community implementation of existing international rules. The focus was essentially on Member States as coastal States regarding vessel traffic monitoring[9], especially for dangerous goods and hazardous material (HAZMAT), and as port States regarding port State control[10]. The responsibilities of Member States as flag States regarding technical safety standards were covered to a lesser extent, in relation to their use of classification societies (recognised organisations)[11].

The policy has developed in this way because shipping is essentially international in its character as a transport mode and fundamental for trade between nations, and thus needs to be regulated at the international level, using international rules, regulations and standards. There is therefore a specialised United Nations body for maritime transport –

[6] https://ec.europa.eu/transport/modes/maritime/news/2017-10-23-maritime-transport-final-adoption-passenger-ship-safety-package_en

[7] …

[8] COM (93) 66

[9] Directive 93/75/EC concerning minimum requirements for vessels bound for or leaving Community ports and carrying dangerous or polluting goods (Hazmat Directive)

[10] Directive 95/21/EC on Port State Control

[11] Directive 94/57/EC on common rules and standards for classification societies and technical safety standards for ships (Class Directive)

the International Maritime Organisation[12] – charged with such rulemaking. Shipping can only operate effectively if the regulations and standards are themselves agreed, adopted and implemented on an international basis. IMO is the forum at which this process takes place.

While the rulemaking is international, the enforcement is however left to the individual States. Work is progressing, especially through the IMO 'III-Code'[13] becoming mandatory for all contracting parties, towards more world-wide harmonised implementation and application of such international rules. However it is widely acknowledged that lack of enforcement is the weak point of international maritime regulation. IMO States have very different levels of capacity to give full effect to the rules. This creates distortion of competition. It may cost less for a shipowner to be registered under a certain flag State that does not fully enforce all the rules – while ships still compete for the same cargo and sail anywhere in the world.

Weak enforcement of international rules in turn undermines flag State responsibility as the first line of defence to ensure maritime safety. As long as that situation remains there is a need for port State control as a second line of defence. This is also why the early EU maritime safety policy put more emphasis on this aspect, as a way to control enforcement by all flag States and to ensure that ships sailing in European seas are compliant, irrespective of flag[14]. This approach has been successful and similar arrangements now exist in other parts of the world applying same or similar port State control rules and procedures.

There may also be situations where international rules are complemented by national or regional rules. There may indeed be specific geographical or other circumstances or indeed values, that a State or group of States (like the European Union) wish to protect. Such cases are normally taken to the IMO in order to inform the shipping world of such requirements or procedures and indeed to discuss whether such higher levels of protection can be agreed at the global level. This is part of the continuous improvement approach to maritime safety – learning from experience and sharing best practice. Examples of where EU Member States or the EU has made such input to the broader international community in the IMO include stability rules[15] for passenger ships (following the *Estonia* disaster). This also illustrates the need for 'special' protection given that the EU is among the areas in the world with the most passenger ships and most traffic in often constrained waterways such as the Baltic and Mediterranean.

[12]IMO currently has 173 Member States and three Associate Members.

[13] IMO III-code - The implementation of flag State (and coastal and port State) obligations under IMO instruments are guided by the IMO instruments and now mandatory IMO Implementation of International Instruments Code (IMO Res. A 1070 (28) - III Code) and cover areas such as implementation, delegation authority, enforcement, flag State surveyor, flag State investigations and review and improvement

[14] This also explains why PSC detention data is the only available public source for measuring performance, also for flag States.

[15] The so called 'Stockholm agreement' introduced stricter stability rules for any ro-ro ships (ferries) passenger traffic on the Baltic Sea. It was a regional stricter measure allowed under the relevant IMO Convention. This was later extended to all EU member States under Directive 2003/25/EC and influenced discussions at the IMO for the recent revision of the relevant stability rules in relevant IMO Conventions. The enforcement is on flag States, through flag State inspections to ensure from the start, before operation of the vessel, that the latter fulfils all requirements and the relevant certificate is issued testifying the vessel is fit for service. The control remains with port States control to ensure that the vessel continues to comply. That is the complementarity of the system.

In the aftermath of the sinking of the *Erika* and *Prestige* oil tankers, at the turn of the millennium, the EU reinforced this set of measures with additional packages of rules[16] to improve maritime safety and pollution prevention. The EU-wide vessel traffic monitoring system was revised in 2002 to put in place a vessel traffic monitoring and information system to monitor traffic along EU coasts and to be able to intervene as early as possible, saving life and mitigating any consequences of incidents, e.g. oil pollution.

With the third maritime safety package adopted in 2009, the EU expanded its legislative framework to cover all chains of responsibility in the maritime sector to combat sub-standard shipping and give Europe enhanced protection. This included new legislation on flag State responsibilities, however more in the form of a framework reflecting certain international obligations incumbent on Member States as flag States.

The focus has thereafter shifted from enacting new legislation to proper implementation and enforcement as well as regular evaluation to learn from experience, improve where possible and therefore ensure that the legislation remains fit for purpose and producing the required effect.

Despite these additional regionally applied measures, EU action in the field of maritime safety and protection of the environment still mirrors the international legal framework developed by the parties to the IMO. We have incorporated IMO rules into the EU legal system ensuring their harmonised application but in a way that also respects Treaty obligations on EU Member States e.g. the four freedoms and fair competition.

It is essential to note that the *Erika* and *Prestige* packages, together with the Communication[17] and related action plan on a European Maritime Transport Space without Barriers, support maritime transport policy as a whole. By mirroring the international legal framework applied worldwide, there is less risk of out-flagging of EU shipping in search of more favourable conditions. At the same time, the stringent conditions imposed in EU waters irrespective of the flag prevent quality shipping suffering unfair competition from those operators and flag States willing to allow lower standards on safety to save money. Finally the legislation aims to ensure a level-playing field within the EU between EU flagged ships through uniform and effective application of the rules and enforcement (which is not possible at international level where there are no such legal means).

The competitiveness of intra-EU maritime transport (Short Sea Shipping) compared to other modes is another long-standing key objective of maritime transport policy. The concept of a European Maritime Transport Space without Barriers, which extends the Internal Market to intra-EU maritime transport implies that the latter is facilitated, made more efficient, attractive and competitive, while maintaining safety levels. One of the key measures in this regard was the adoption in 2010 of EU legislation to simplify and streamline reporting for vessels entering an EU port. The Reporting Formalities Directive requires Member States to set up a single entry point for a set of 14 ship reporting formalities, bringing together e.g. customs aspects, border control reporting and information submitted for the vessel traffic monitoring and exchange mechanism.

The European Maritime Safety Agency (EMSA) plays a key role with regard to maritime transport policy, working with and assisting the Commission and the Member States in

[16] Known as the first, second and third maritime safety packages dating respectively from 2002, 2005 and 2009.
[17] COM(2009) 10

fulfilling these objectives operationally. The Agency was established in 2002 and has had its mandate extended over the years. Based in Lisbon, EMSA today provides technical, operational and scientific assistance to the European Commission and the Member States in the fields of maritime safety, maritime security, prevention of, and response to, pollution caused by ships as well as response to pollution caused by oil and gas installations.

Its assistance is particularly relevant in support of the regular process of updating and developing new legislation, monitoring its implementation and evaluating the effectiveness of the measures in place. EMSA carries out regular 'on the ground' visits to maritime administrations and inspects classification societies as well as third countries' systems for training and certification of seafarers. Furthermore EMSA, upon request, assists Member States affected by pollution caused by ships and oil and gas installations with specialised ships and equipment and deploys satellite images to detect pollution. This has become a key area for EMSA maritime monitoring and information activities (see annex 4), supporting effective maritime monitoring and situational awareness at sea.

Taken together, the policy area covered by the fitness check forms the core framework for ensuring maritime traffic and transport safety and efficiency:

- Flag State – the primary responsibility under international rules for ensuring vessels are fit for purpose (Directive 2009/21/EC)[18],
- Port State control – the second "line of defence" carrying out verification spot checks (Directive 2009/16/EC)[19],
- Coastal State obligations under international law supported by EMSA systems for ensuring vessel traffic monitoring and appropriate exchange of information between the responsible authorities (Directive 2002/59/EC)[20],
- Reporting obligations for the ship master (or any other person duly authorised by the operator of the ship) where we are aiming to reduce administrative burdens by requiring Member States to set up a National Single Window reporting entry point (Directive 2010/65/EC)[21],
- And, should an accident occur, accident investigation – as part of flag State or coastal State responsibilities, resulting in safety recommendations in the interest of further improving the regime and the effectiveness of applicable rules (Directive 2009/18/EC)[22].

[18] Directive 2009/21/EC of the European Parliament and of the Council of 23 April 2009 on compliance with flag State requirements - OJ L 131/132, 28.5.2009

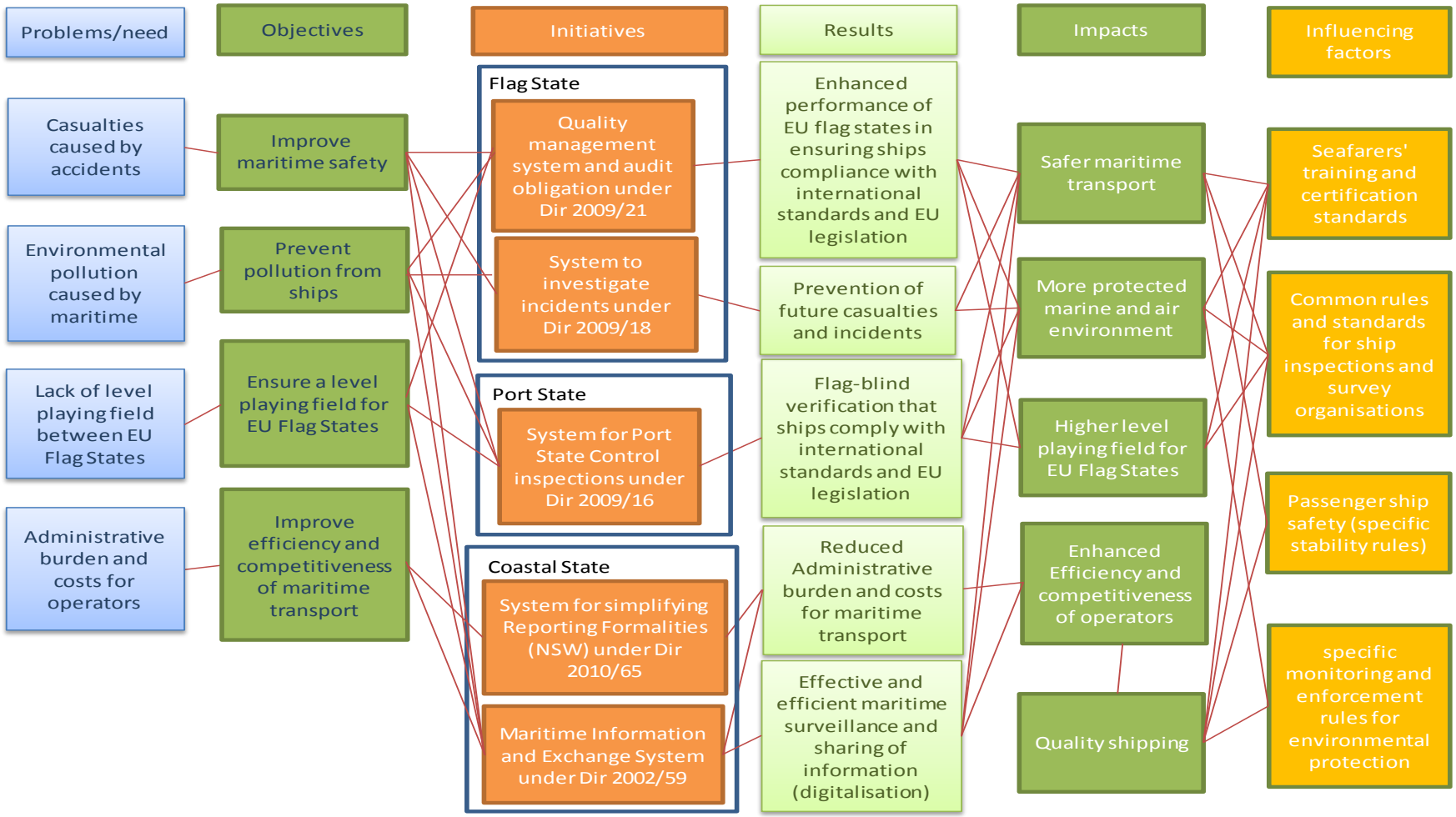
[19] Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on port State control - OJ L 131/57, 28.5.2009

[20] Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system - OJ L 208/10, 5.8.2002

[21] Directive 2010/65/EU of the European Parliament and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States - OJ L 283/1, 29.10.2010

[22] Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector - OJ L 131/114, 28.5.2009

Figure 1 - Intervention logic



The first key objectives, maritime safety and pollution prevention in EU waters, are tackled through a reinforced and comprehensive layer of EU legislation covering inter alia flag State, port State and coastal State responsibilities as key elements.

Firstly, as flag States, Member States have to ensure that all applicable rules at international and EU level are adhered to before granting a ship the right to fly its flag, enter into its register of ships and start operating. This is known as the first "line of defence"[23]. However, any ship flying a third country flag can enter EU waters with potentially dramatic consequences in case of sub-standard shipping. To address this risk, Member States are obliged to carry out port State control inspections of foreign ships calling at their ports which aim to detect non compliance with the requirements (stemming from international conventions) and which may therefore pose a safety or environmental risk. This is sometimes referred to as the second "line of defence". Finally as coastal States, Member States must fulfil their obligations under international law for the monitoring of maritime transport (goods and passengers, e.g. dangerous goods, border checks, customs formalities) and maritime traffic (the vessels) for the avoidance of collision, groundings, etc. and the protection of people and cargo (third line of defence).

These roles which are defined at international level have become fully enforceable through EU legislation. There is no system of sanctions through international law, only a 'soft' informal peer review process which allows a certain level of compliance but does not have enforcement powers preventing non-compliant parties. Under EU law, the Commission has the responsibility to check the implementation of the relevant rules and act as necessary, including through the infringement procedure.

To assist the Commission with this mission, EMSA has from the start been given a core task to carry out visits to maritime administrations. A full cycle of visits is held for each piece of legislation in all the Member States. Each individual visit is documented and the report shared with both the Member State concerned and the Commission[24], resulting in findings which can be followed up by the Member State and by the Commission as appropriate. At the end of a cycle, a horizontal analysis is carried out by the agency to identify common issues as well as best practices and the outcome is disseminated to all Member States enabling better understanding, more harmonised implementation, and where ultimately necessary, improvement of the rules.

Beyond ensuring a high level of safety and pollution prevention, the incorporation into EU law of international obligations aims to achieve a **second key objective, a level-playing field between EU flags**, which would then be subject to both international obligations and also review by the Commission, as guardian of the Treaty and in charge of verifying proper implementation of EU law.

Regarding flag States' responsibilities, the Commission's original proposal in 2006 for a Flag State Directive was very comprehensive. It aimed to provide for an effective and uniform application of the then applicable related international obligations amongst flag States. However the co legislators decided to wait for the IMO related rules (what today is the III-Code) in order to make sure EU legislation remained aligned with international rules and to avoid possible disadvantages for EU flags. The outcome was therefore a framework Directive which provides for only a limited number of obligations incumbent

[23] It is inherent in the whole system that the ship-owner has the responsibility for operating and maintaining his vessel(s) at all times and in accordance with requirements.
[24] http://www.emsa.europa.eu/visits-to-member-states

on Member States as flag States. The EU legislation, which was finally agreed in 2009 therefore included a requirement for Member States to develop, implement, certify and maintain a quality management system for the operational parts of the flag related activities as well as an obligation to undergo an IMO audit and publish the outcome.

Regarding port State control, the EU inspection system was also revised in 2009 putting in place the so called "New Inspection Regime" (NIR) so that there is a better targeting of vessels which present a risk for safety. This change also allowed for more efficient use of resources. These inspections can lead to the identification of deficiencies, and in the case of serious problems, to sanctions and possible detention. Vessels which are subject to frequent detentions can be banned from European ports and the system also provides for the listing of persistently substandard shipping companies[25]. On the other hand vessels showing a good quality record need not be inspected as often, promoting and facilitating good quality shipping.

To support coastal State obligations, the Union Maritime Information and Exchange System ('SafeSeaNet') within the Vessel Traffic Monitoring and Information System Directive, was established in 2002, hosted in EMSA. EU legislation prescribed the use of automatic identification systems (AIS) – an automatic tracking system used on ships and by competent authorities (Vessel Traffic Services[26]) for ship identification and avoidance of collision. The Directive also prescribed the use of the long range identification and tracking of ships (LRIT) for any ship calling at an EU port, in line with international obligations and required the Commission to cooperate with Member States to establish data centres for handling the information, hosted in EMSA. These requirements placed on ships enable effective communication of in particular ship positions and allows for tracking and tracing, wherever the ship may be sailing. For the LRIT it includes the possibility to send distress signals if a vessel is under imminent attack (part of maritime security).

The Vessel Traffic Monitoring and Information System Directive lays down a reporting obligation on the master, operator or agent for reporting certain information regarding dangerous goods into the system. Together with the above-mentioned ship positioning systems, this has enabled much stronger maritime surveillance support for Member States. Importantly, the use of the system was not limited only to the Vessel Traffic Monitoring and Information System Directive objectives but any relevant EU legislation[27], inter alia, also for port State control, port reception facilities, reporting formalities. The objective was to avoid duplication, build on the existing investments and enrich the available information with additional information stemming from other EU legal acts and sources into (what today are) fully integrated maritime services supporting both safety and efficiency of maritime transport and maritime traffic.

As a complement to these three pillars, an additional initiative was taken in 2009 as part of the third maritime safety package to fulfil the objectives of maritime safety and pollution prevention and reduce the risk of future marine casualties. The Directive incorporated into EU law the principles underlying the IMO casualty code: Member States affected by an accident at sea should investigate the causes and propose ways of preventing recurrences in the future. Under EU law, Member States are obliged to establish an independent investigative body to carry out safety investigations. Such

[25] The current list of low and very low performing companies can be consulted at the following EMSA website http://www.emsa.europa.eu/psc-main/publication-of-information.html
[26] Similar to air traffic control for aviation
[27] A revision of the Directive was included in the third maritime safety package for that purpose

investigations should be conducted in an unbiased manner and the root causes of accidents more easily identified along with the lessons learned. The goal is to improve the system - such investigations do not seek to determine or assign any civil or criminal liability.

A third key objective of maritime transport legislation is to ensure the efficiency of maritime transport and therefore its competitiveness (compared to other modes of transport). Trade facilitation and reduced administrative burden on maritime operators are supported by EU legislation. The Reporting Formalities Directives provides for a single entry point for harmonised, simplified and digitalised reporting formalities from ship to shore. The Vessel Traffic Monitoring and Information System Directive has established the Union Maritime Information and Exchange System (SafeSeaNet), enabling exchange and sharing of information between administrations. The Reporting Formalities Directive is more concerned with the *collection* of information and how to make it more streamlined and less burdensome for operators whereas the Vessel Traffic Monitoring Information System Directive is more focused on the *use* and re-use of reported information and how to make the sharing and exchange more effective.

In 2010, maritime operators sailing in EU waters from one port to another were still subject to burdensome administrative procedures bringing costs and competitive disadvantage compared to other modes of transport. The aim of the proposed revision of the Reporting Formalities Directive in 2009 was therefore to simplify, digitalise and harmonise the administrative procedures to achieve the internal market in maritime transport (European Maritime Transport Space without Barriers).

The scope of the revised Reporting Formalities Directive is thus to facilitate and simplify the submission of information by maritime operators by rationalising the formalities and mandating the use of electronic reporting and the establishment of single entry points at national level. Member States were required to establish, by June 2015, a National Single Window offering a single entry point for ship reporting under the various legal obligations under EU and international law. The Directive states that information should then be channelled to other systems at EU level, like the Union Maritime Information and Exchange System (SafeSeaNet), or at national level (e.g. border control and customs), where it is shared for relevant purposes.

While focussing on safety, the competitiveness aspect of ensuring *uniform* safety level is of equal importance. The correct application of the measures becomes key, not least in times of depressed markets where the temptation to cut corners and save money eg by not doing the necessary maintenance, is real. It should not be an advantage to operate non-compliant ships but it should be an advantage to operate quality ships and innovative operations.

To conclude, the fitness check assesses those provisions and policies aimed at facilitating safe, secure, sustainable and competitive maritime transport (cargo and passengers) and maritime traffic (vessels) in EU waters.

Baseline and points of comparison

The benchmark for the fitness check is the situation before the five key pieces of EU legislation covered here were implemented, together with the stated objectives of these different pieces of legislation. The counterfactual draws a picture on the likely situation without the Directives coming into force and thus enables a more accurate evaluation of the cumulated impact of the policy area under review.

Of course, in 2009, the effective baseline date, a lot of EU legislation was already in place in relation to maritime safety and maritime transport efficiency which was developed since the 1990s: but there were gaps and flaws in the maritime acquis..

Flag State responsibilities were not regulated at all at EU level, which was a big gap on maritime safety. EU Member States could be audited by IMO regarding their flag State responsibilities under the voluntary audit scheme[28] but there was no means at EU level to ensure that all underwent the audit or monitored that process.

There was also no specific comprehensive EU legal act on accident investigation and at national level, only about half of Member States had an accident investigation capacity. In many cases investigations were not carried out by investigative bodies with sufficient independence. Investigations were also conducted primarily for judicial, criminal, prosecution or administrative purposes.

Port State control was regulated but by legislation dating back to 1995, under which EU Member States were obliged to carry out inspections on 25% of port State control eligible vessels visiting their ports with no clear rules on the targeting of vessels for inspection, nor provisions to ban vessels subject to repeated detentions. Because Member States could not be sure how many port State control eligible ships would visit their ports during a given year, they tended to concentrate their inspection efforts in the later months of the year in order to maximise the results of their inspection effort. This resulted in unfocussed and uneven port State control coverage throughout the year and throughout the EU.

Over the period under review, the number of port State control inspections carried out has decreased from 23,728 in 2010 to 17,403 in 2016 but the inspections were more focussed targetting higher risk ships(see Table 1).

[28] 19 Member States had volunteered to undergo the IMO VIMSAS before the Flag State Directive came into force

Table 1 - Deficiencies and detentions per inspection in the Paris MoU, 2010 and 2016

Inspections in				Change 2010-2016	
Sea basin	Type	2010	2016	Absolute	%
Baltic Sea	Inspections	3349	2083	-1266	-38%
	Deficiencies per inspection	1.5	1.5	0.0	0 %
	Detention rate in %	1.1%	1.7%		0.6 pp
North Sea	Inspections	8787	6646	-2141	-24%
	Deficiencies per inspection	2.6	2.2	-0.4	-15%
	Detention rate in %	2.8%	3.1%		0.3 pp
Mediterranean Sea	Inspections	6334	4950	-1384	-22%
	Deficiencies per inspection	3.6	2.6	-1.0	-28%
	Detention rate in %	5.5%	4.5%		-1.0 pp
Black Sea	Inspections	1743	853	-890	-52%
	Deficiencies per inspection	3.4	4.1	0.7	21%
	Detention rate in %	4.1%	8.6%		4.5 pp
None-EU	Inspections	3215	2871	344	-11%
	Deficiencies per inspection	2.5	2.8	0.3	12%
	Detention rate in %	2.8%	5.3%		2.5 pp
Total Paris MoU	**Inspections**	**23428**	**17403**	**-6025**	**-26%**
	Deficiencies per inspection	**2.7**	**2.4**	**-0.3**	**-11%**
	Detention rate in %	**3.4%**	**4.0%**		**0.6 pp**

Source: EMSA/THETIS

Regarding the coastal State pillar, the SafeSeaNet system was developed over the years based on a directive from 2002 and was up and running in 2009. It was supporting coastal vessel traffic monitoring obligations, including the monitoring of dangerous goods and hazardous material. The potential for the later developments leading to the Union maritime monitoring and exchange system was already there.

So overall, there was some EU legislation in place in 2009 to ensure maritime safety and pollution prevention. However the third maritime safety package brought further improvements and made sure that the whole chain of responsibility was covered by the EU acquis (as mentioned before, other important legal acts were adopted as part of this package regarding classification societies, insurance, etc.).

The situation is contrasting for the administrative procedures and obligations for shipping operators. In 2009, there was a previous version of the legislation on reporting formalities in place[29] in which there was no reference to single reporting entry point, to digital reporting formats or to harmonised and coordinated reporting within Member States. The impact assessment[30] performed in 2009 found that over half of the ports still used fax machines for their information exchanges. Electronic data reporting was only applied in a small number of Member States.. Different information systems were in place with very low level of harmonisation. Stakeholders reported that the average time for document

[15] Directive 2002/6/EC so called 'FAL Directive'

[30] Commission Staff Working Document: *Report on impact assessment of different options to simplify/reduce/eliminate administrative procedures for Short Sea Shipping and implementing a European Maritime Transport Space without Barriers*, COM(2009) 11 final / SEC(2009) 46, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52009SC0046

preparation was around 6-6.5 hours per port call representing a substantial administrative burden.

Without the legislative changes brought forward in 2009 and 2010, the EU framework for maritime transport and safety would remain diverse and with the risk of uneven implementation in the EU internal market. With regard to accident investigation specifically, it is likely that there would have been significantly less investigation of accidents and marine casualties. These investigations would have been carried out with less independence and their results would not have been reported and shared between Member States. This would have resulted in an incomplete view on maritime safety in European waters and for the EU Member States flagged fleet.

With regard to the reporting formalities, a plethora of port-level reporting systems with little harmonisation even within each Member State would have remained in place after the deadline (1 June 2015) for having National Single Windows up and running . It is assumed to be highly unlikely that harmonisation and simplification would have ensued to the same extent without EU intervention in this area. There would have been little incentive for digitalisation of ship reporting in EU Member States. Digitalisation would have still likely taken place but the uptake can be assumed to have been slow and uneven among Member States under the old legislation. Some early adopters would not have needed incentives but others would have had less capacity to prioritise digitalisation processes. The ports would still have had an interest in establishing more efficient processes at local level for facilitation of reporting from ships to shore. However it is unlikely that such simplification and rationalisation would have taken place on a large scale or evenly across the EU.

Regarding possible points of comparison, it remains difficult to benchmark the EU policy area being reviewed here against maritime safety performance in other jurisdictions/geographical regions.

Firstly, there is a lack of reliable comparable data and evidence for a proper benchmarking: there exists no other 'IMO' data than the data that has been used under this fitness check. Port State Control data from the various regional organisations carrying out inspections is indeed the data used to indicate performance of flag States, under the Flag State Directive. However, it is not always available and it is not always comparable.

The Paris MoU, a Port State Control organisation that includes the EU coastal States, Norway and Iceland as well as Canada and Russia publishes a 'white-grey-black' list[31] of flags depending on their Port State Control performance. This list is primarily used for targeting of vessels for inspection but it can provide some indication of how flags are performing, and as such the list is used in the Flag State Directive.

[31] The White, Grey and Black (WGB) list is a targeting mechanism developed and used by the Paris MoU. The list is based on the inspection performance of vessels according to their flag. The WGB list presents a spectrum from quality "white" flags to flags with a poor performance "black flags" which are considered high or very high risk ships. The WGB list is drawn up annually on the basis of the total number of inspections and detentions over a 3-year rolling period for flags with at least 30 inspections in the period. Article 8(2) of Directive 2009/21/EC provides that Member States which appear on the black list or which appear, for two consecutive years, on the grey list of the Paris MoU have to provide the Commission with a report on their flag State performance. The report shall identify and analyse the main reasons for the lack of compliance that led to the detentions and the deficiencies resulting in black or grey status.

Of the 42 flags listed in the highest performing white list in July 2017, 21 are EEA Member States. Of the 19 States that appear on the grey list, only three are EEA Member States. No EEA Member States are on the black list. In accordance with the Flag State Directive, the Member States that appear on the grey list for two years or more have been asked by the Commission to explain their performance and to take appropriate action to remedy it. This type of follow-up, enforceable through the EU Directive, is only done by the EU and is not done by the IMO or under the Paris MoU.

By way of comparison over time, on the 2010-2012 lists, of the 45 flags on the white list 22 were EEA, of the 19 States on the grey list only two were EEA states and no EEA State was on the black list. This suggests that as regards the performance of EU flagged fleets the situation is rather stable.

The Tokyo MoU, a Port State Control organisation that covers the Pacific Rim countries, also publishes such a list of flags. Of the 32 countries that appear on its white list, 13 are EEA Member States and only 2 EEA States appear on its grey list of 20 flag states.

In similar vein the US Coast Guard operates a scheme called 'Qualship21' to identify high-quality ships, and provide incentives to encourage quality operations. This is based on the flag State applying for recognition and is dependent on that flag having a sufficient number of calls to US ports – the data is therefore not as comprehensive as that of the Paris MoU. What can be said is that of the 27 flag States listed by the US Coast Guard, 8 are EU flag States.

It needs however to be recalled that not all EU flagged vessels sail everywhere in the world. Depending on type and size they may be engaged primarily in domestic or EU traffic and therefore not feature on any other MoU lists.

Other evidence may be made available through the IMO audits but these are just starting to be compulsory so they will yield results over the coming years only.

Secondly, there are methodological issues which arise in attempting to rate EU performance against other flags or regions. There are other factors external to maritime safety legislation such as a different implementation regime, or a more favourable tax regime which would influence the performance of other jurisdictions. Moreover there is an important limitation in such benchmarking which is linked to the spill over effects of the EU enforcement system to other parts of the world. For example strict enforcement at EU level through Port State Control has an impact on performance of other actors (sub-standard shipping has been banned from EU waters and so operators will rarely risk bringing substandard tonnage to an EU port).

3. IMPLEMENTATION / STATE OF PLAY

Description of the current situation

The situation today is one with very few fatalities and very few serious incidents. Fortunately Europe has not experienced any accident like the *Erika* or *Prestige* accidents since the turn of the century. Maritime transport in Europe is one of the safest forms of transport of either goods or persons. Taking the example of 2016, some 3145 marine casualties and incidents were reported to the European Maritime Casualty Information Platform (EMCIP) database by the maritime accident investigation bodies in the

EU/EEA. In total there were 106 reported fatalities, 957 persons injured, 26 ships lost and 123 investigations launched.

But while these figures may appear low if related to the number of ships, millions of passengers and tonnes of cargo transported, maritime safety can never be taken for granted. A single maritime accident can have a disproportionate effect as the *Erika* and *Prestige* accidents have shown with respect to cargo transport and the *Costa Concordia* and *Norman Atlantic* incidents have illustrated with respect to passengers and crew.

Another general feature today is the level-playing field that has been achieved between Member States through EU-led uniform implementation and enforcement of international conventions and rules related to flag, port and coastal State responsibilities and obligations. For example all EU Member States with an operational flag register had completed the IMO audit by 2016. EU legislation encouraged greater transparency on audit outcomes. The 13 Member States who had not done so set up Accident Investigation Bodies. Several other Member States changed the governance structure of their Body to ensure its independence and adequate follow-up and learning from accidents and investigations.

Regarding port State control, the revised Directive has resulted in the implementation of the New Inspection Regime. This entailed the development of a ship specific targeting system for inspections with each ship assigned a ship risk profile and a 'fair share' scheme for the number of inspections to be carried out by each Member State. This new inspection regime relies heavily on an information support system (THETIS) hosted in EMSA. THETIS not only stores and disseminates data but also includes a capability to calculate the criteria necessary to guide inspections targeting in Member States from such data. It is to be noted that this particular change supported competitiveness objectives and reduction of administrative burden. It has shifted the focus from any individual operator to those that try to evade rules and regulations.

For traffic monitoring and exchange of information between coastal authorities, the situation today is the outcome of fifteen years of implementation of the related Directive, dedicated inter alia to the development of the necessary IT tools at central and decentralised level for the Union Maritime Information and Exchange system – SafeSeaNet. With this system, each Member State is connected to the central system via their national system and therefore able to request and share information across a secure and fully operational platform. The availability of the central SafeSeaNet system was 99.65% in 2016 against a yearly indicator of 99%. There is a high degree of compatibility and harmonisation across the EU (administration to administration).

The governance of the system is managed through the High Level Steering Group for Governance of the Digital Maritime System and Services (previously HLSG on SafeSeaNet[32]). This governance body is composed by high level representatives of the Member States and chaired by the Commission. It integrates and streamlines the work carried out for the reporting formalities and the SafeSeaNet System for better complementarity and consistency.

A specific provision in the Vessel Traffic Monitoring and Exchange System Directive requires the Member States and the Commission to cooperate regarding the functioning of the system. This includes how to effectively deal with ships in need of assistance

[32] COM decision 2009/584/EC establishing the SSN HLSG (now repealed and replaced by COM decision (EU) 2016/566)

seeking a place of refuge. In the wake of the *MSC Flaminia* incident[33], work has been carried out by Member States with the support of the Commission and EMSA and in consultation with concerned industry. This resulted in the EU Places of Refuge Operational Guidelines[34]. The guidelines were successfully tested in subsequent exercises demonstrating efficient cooperation and coordination and the EU work was praised[35].

Another development is the gradual emergence of a more complete information and exchange system based on operational needs from not only authorities involved in maritime safety, security or pollution prevention, but from any authorities with an interest in the maritime domain. The Vessel Traffic Monitoring and Exchange System Directive was revised in 2014[36] further clarifying that the central SafeSeaNet shall be used for the data exchanged in accordance with relevant Union legislation.

As shown in Figure 2 below, this codified the linking together of data from SafeSeaNet, automatic identification system (AIS), Long Range Tracking and Identification (LRIT), and satellite imaging (CleanSeaNet, COPERNICUS) with the information in the messages sent from ships, into the Integrated Maritime Services (IMS). The same (commonly referred to as the maritime surveillance picture) can be used not only for maritime safety, security and pollution prevention but also for transport facilitation purposes as well as for enforcement and control purposes also in the fields of customs, sea border control, health and general law enforcement. The integrated maritime services are used by other EU Agencies, especially in the context of European Coast Guard cooperation e.g. providing operational services in the areas of anti-piracy, fisheries monitoring and Sea border control on behalf of EU-NAVFOR operation ATALANTA (fighting piracy), EFCA (European Fisheries Control Agency) and EBCGA (European Border and Coast Guard Agency / Frontex), respectively. It is also supporting the objectives of MAOC-N (Maritime Analysis and Operations Centre - Narcotics) and OLAF – the European Anti-Fraud Office in the fight against illicit drug trafficking by sea.

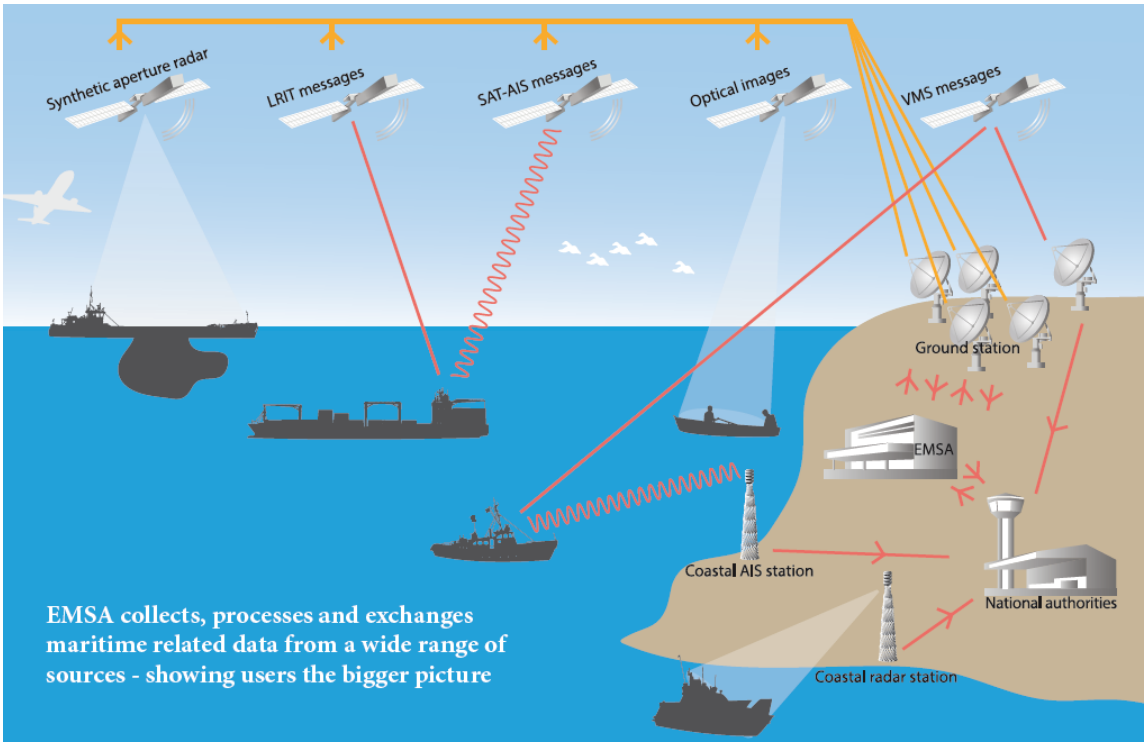
[33] MSC Flaminia - a container ship which caught fire on 14 July 2012, occurring on international waters, involving finding a place of refuge

[34] https://ec.europa.eu/transport/sites/transport/files/modes/maritime/digital-services/doc/por-operational-guidelines.pdf

[35] The Commission on behalf of all involved was awarded the Industry Innovation award at the international Conference on Wreck & Salvage in December 2016

[36] Commission Directive 2014/100/EU of 28 October 2014 amending Directive 2002/59/EC of the European Parliament and of the Council establishing a Community vessel traffic monitoring and information system, Annex III

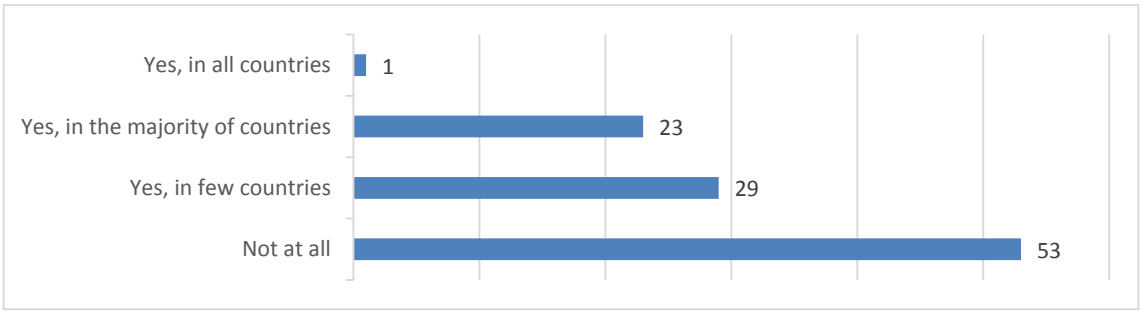
Figure 2 - EMSA integration of data for efficient, safe, secure and clean maritime environment



Source: EMSA

Regarding administrative procedures today, EU legislation on reporting formalities has brought some progress in terms of digitalisation and simplification at national level. However Commission monitoring clearly shows a lack of progress with regard to the objective of harmonisation at EU level and the implementation of the National Single Windows. Over the period of implementation, it appeared that Member States were developing a considerable variety of single window concepts, systems and environments. This was confirmed also by the targeted consultation results (see Figure 3) where according to the large majority of the shipping companies, the harmonisation of formalities at national level has not been achieved.

Figure 3 - Are reporting formalities harmonised at national level?



Source: PwC elaboration on Targeted Consultation results (2017)

Among the problems reported is e.g. the lack of binding technical specifications on the National Single Windows, legal difficulties regarding exchanging confidential/sensitive information and guaranteeing data quality.

Substantial work was subsequently done within a Member State expert group on maritime administrative simplification and electronic information services (the eMS group). This expert group contributed with agreements on definitions, business rules and

a standard data set as compiled in the *Data mapping report*[37] from February 2015 and the *National Single Window guidelines*[38], published in April 2015 before the implementation deadline for the National Single Windows. This resulted in some improvement at national level on a voluntary basis but was not sufficient overall as both the data mapping report and the National Single Windows Guidelines were non-mandatory. As a result, most coastal Member States were still late in establishing their National Single Window by the required deadline. The situation today is that only five Member States have managed the full switch to electronic reporting and have fully or partially established a single entry point for reporting. The required interlinking between the National Single Window and the national SafeSeaNet is also suboptimal in half of the coastal Member States hampering the re-use of data between Member States.

Monitoring arrangements

EMSA is responsible for carrying out visits 'on the ground' to maritime administrations on behalf of, and to assist the Commission with checking the implementation of the Directives. Such rounds of visits have been undertaken for the Vessel Traffic Monitoring and Exchange System, the Port State Control and the Accident Investigation Directives. EMSA visits each Member State and reports to the Member State concerned and the Commission on findings. These findings feed into the Commission assessment and may result in the launch of infringement procedures or EU-Pilots. Since 2004, EMSA has carried out 129 visits in total related to the legislation covered by the fitness check: 58 visits for the Port State Control Directive, 28 visits for the Accident Investigation Directive and 43 visits for the Vessel Traffic Monitoring and Exchange System Directive, including the 2009 amendment especially regarding the Places of Refuge provisions.

As the Flag State Directive has few provisions, monitoring is done, as previously stated, by following up on cases where Member States have appeared on the grey list of the Paris MoU on Port State Control, including requests for corrective action. Between 2011 and 2015, a total number of 12 Member States were grey listed which resulted in a report to the Commission identifying the causes for the status. This prompted Member States to identify actions to improve their flag performance. There has also been the occasional presence of EMSA as observer invited by the flag State, during IMO audits. Finally the Commission has acted in some cases and has opened infringement procedures[39] against Member State apparent failures to fulfil the requirements in the Directive.

Verification of the implementation of the Accident Investigation Directive has been carried out through a cycle of EMSA visits started in April 2012 and completed in mid-2017. As a follow up to each visit, the Commission has engaged with the Member States concerned to address issues that have been identified. Particular attention was given to questions around independence and resources and the EMCIP database. As a result some 5 infringement cases[40] were opened against Member States during that period.

[37] Non-mandatory *eMS Data Mapping Report*, 25 February 2017, https://ec.europa.eu/transport/sites/transport/files/data_mapping_report_2010_65_eu_0.pdf
[38] Non-mandatory *National Single Window Guidelines*, 17 April 2015, https://ec.europa.eu/transport/sites/transport/files/modes/maritime/doc/2015-06-11-nswguidelines-final.pdf
[39] Commission v. Portugal (ongoing; not yet published), http://europa.eu/rapid/press-release_IP-17-1052_en.htm
[40] Italy (infringement closed at letter of formal notice phase; no specific press release available), Cyprus (infringement ongoing at letter of formal notice phase, no specific press release available), Belgium (http://europa.eu/rapid/press-release_MEMO-17-1045_en.htm), Ireland (http://europa.eu/rapid/press-

Regarding the Port State Control Directive, EMSA carried out visits from 2012 to 2015. The Commission followed up on findings with the Member States concerned: some cases were resolved through training provided by EMSA. Over the period, 2 infringement cases[41] were opened. EMSA also carried out an analysis of the cost-efficiency of the measures in place[42].

Since the adoption of the Vessel Traffic Monitoring and Exchange System Directive, its implementation has been monitored mainly through the governance body set up for that purpose, the HLSG, as well as through EMSA visits. A cycle was carried out from 2009 to 2012 and coastal Member States were subsequently revisited regarding the provisions related to places of refuge until 2016. The Commission has again engaged with the visited Member State to address issues that had been identified. From these visits, EMSA has drawn the common lessons learnt and possible best practice in horizontal analysis that was shared with the Member States[43]. In April 2011, the Commission also published an implementation report[44] assessing the implementation and the impact of the measures taken according to the Directive.

As far as the Reporting Formalities Directive is concerned, verification of the implementation was carried out through the Member States expert group on maritime administrative simplification and electronic information services (the eMS group) and via the High Level Steering Group. Monitoring was also facilitated through the technical assistance provided by EMSA to those Member States who had requested support for the setting up of their National Single Window. There were no visits by EMSA but the Agency facilitated a peer review process with seven Member States.

4. METHOD

Short description of methodology

The analysis for the fitness check is based on the evidence gathered in the individual evaluations covering legislation on flag State responsibilities, accident investigation, port State control, the vessel traffic monitoring and information system and, the reporting formalities for ships arriving in and/or departing from ports of Member States. The methodology takes into account both the subjective opinions and experiences of consulted stakeholders and objective factors such as the benchmark analysis and on-site field studies.

This includes:

- Evidence from assessing the implementation and application of legislation (infringement procedures)

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release_MEMO-17-1045_en.htm), Portugal (infringement ongoing at letter of formal notice phase, no specific press release available).

[41] Cyprus (http://europa.eu/rapid/press-release_MEMO-16-319_en.htm) & Portugal (infringement ongoing at letter of formal notice phase, no specific press release available).Italy, Cyprus, Belgium, Ireland, Portugal (not yet published).

[42] EMSA Horizontal Analysis of Visits to Member States June 2015, shared with the Member States

[43] There has been an interim Horizontal Analysis report in 2011, discussed in the HLSG and in the EMSA Administrative Board. There has been a final Horizontal Analysis report whose relevant parts were discussed in the HLSG and its sub-expert groups. In particular the findings related to the Places of Refuge provisions have been included in the discussions of the related HSLG sub-group as input to the development of the related EU Operational Guidelines.

[44] COM(2011) 232 final

- Evidence gathered by EMSA through its cycles of visits to the Member States relating to the implementation of Vessel Traffic Monitoring and Information System, Accident Investigation and Port State Control Directives as well as Horizontal Analysis work carried out by EMSA and discussed with Member States
- Information gathered by EMSA through its technical assistance and peer review process related to the National Single Window
- Data contained through EMSA systems and databases such as deficiencies recorded on THETIS (the database for reporting the results of port State control inspections), information from EMCIP (the European Marine Casualty Information Platform), data from Maritime Support Services and the systems hosted in EMSA, etc.
- Results of the various consultations processes: open public consultation, targeted consultations, interviews and surveys

The individual evaluations have been supported by studies undertaken by external contractors who submitted their final reports over the summer 2017. The contractors applied standard triangulation approach to address the evaluation questions, through different angles: desk study, interviews, and targeted surveys.

The evaluations for the Flag State, Accident Investigation and Port State Control Directives were conducted simultaneously which ensured optimising data collection efforts and minimising stakeholder fatigue. Despite these efforts the consultation process suffered from a relatively low response rate as regards most groups of stakeholders.

Most of the desk study for these three Directives was based on data received from EMSA out of databases on shipping and accidents (MarInfo, THETIS, EMCIP and UNCTADstat). For port State control the data set comprised time series for the number of inspections, deficiencies, and detentions – by port State, by age of ship, by ship risk profile, by priority and by type of deficiency. To put this data (regarding inspections, deficiencies and detentions) in an even wider international perspective, some elements were compared with those of other Memoranda of Understanding such as the Mediterranean, Indian Ocean and Tokyo MoUs. This was also done with an eye on the pursuance of global port State control harmonisation, as well as on the question whether the Paris MoU inspections have pushed 'substandard' shipping elsewhere.

For the evaluation of the Vessel Traffic Monitoring and Exchange System Directive, the available documentation was extensive. A significant volume of quantitative information exists as a result of the EMSA visits to Member States and ensuing horizontal analysis. Minutes of meetings of the High Level Steering Group for Governance of the Digital maritime System and Services and the recent Impact Assessment support study[45] (2014) also supported the qualitative analysis, based on direct user experience. An essential resource was the dedicated SafeSeaNet survey carried out in 2017 with members of the High Level Steering Group which targeted the key national experts managing or using the SSN systems, primarily collecting qualitative information about ongoing developments and applications.

The evaluation for the Reporting Formalities Directive was supported by a comprehensive range of data collection tools and activities by the Commission, the external study team and EMSA, notably: a desk review of online information about 40

[45] https://ec.europa.eu/transport/sites/transport/files/modes/maritime/studies/doc/safeseanet/2014-02-support-study-for-ia-on-vtmis.pdf

EU ports, an in-depth analysis of reporting formalities in these 40 ports as "port benchmarks"; fact-finding field study visits to three "Port Cases" including on-site interviews; and EMSA peer reviews of seven selected Member States. This was complemented by open and targeted consultations via surveys, consultation events (workshops, meetings) and interviews, the data collected by EMSA from the eMS group and finally literature review on relevant material relating to the Directive.

An Open Public Consultation covering the fitness check as a whole and the individual evaluations lasted from October 2016 until January 2017 and collected 53 responses in total which overall supported the evaluation findings. The questionnaire included general overall questions as well as more specific questions related to the five directives covered by the individual evaluations. This provided some evidence on the stakeholders' perception of the cumulative impact of the policy area being reviewed by the fitness check and the need for simplification and/or reduction of administrative burden.

Regarding the fitness check as a whole, major shipping events were valuable platforms to consult, discuss and collected ideas with the main stakeholders. Such events included the Malta Maritime Summit in October 2016, the March 2017 European Shipping Week organised by the European ship-owners (ECSA), the informal ministerial meeting under the Maltese Presidency in March 2017 which resulted in the Valetta Declaration and the related Council conclusions[46]. A high-level seminar was held in Florence with key stakeholders in May 2017 in the presence of Commissioner Bulc. Several exchanges of views with the Member States were held in the informal Maritime Directors' meetings setting, in the High Level Steering Group meetings as well as other relevant fora.

Limitations and robustness of findings

It should be emphasised that drawing firm conclusions about what causal impact has been derived from the diverse set of legislation covered by the fitness check is complicated. The reason is that maritime safety and efficiency are influenced not only by the five EU Directives but also by a comprehensive framework of international (i.e., IMO) and national legislation, and also by a number of external factors such as cyclical economic factors influencing the market (e.g. demand for raw materials) and operational conditions as well as business and operating decisions of shipowners.

This difficulty has been underlined in a study commissioned by the European Parliament Research Service in 2015 for an ex-post impact assessment on the implementation and effects of the third maritime safety package[47] which stated that "For several of the anticipated long-term effects (such as reduced number of accidents, reduced casualties at sea and reduced environmental damage from accidents at sea) (…) it is complex to assess to what extent these effects are a result of the Directives. As stated in the ex-ante Impact Assessments carried out for the Directives, risk reduction is affected by a large number of factors, of which the entire normative framework and compliance of all players involved are but some."

It is widely acknowledged that maritime statistics and data are scarce, incomplete and not always comparable. All possible effort has been made to address this difficulty and to

[46] Council conclusions on "Priorities for the EU's maritime transport policy until 2020: Competitiveness, Decarbonisation, Digitalisation to ensure global connectivity, an efficient internal market and a world-class maritime cluster", 8 June 2017

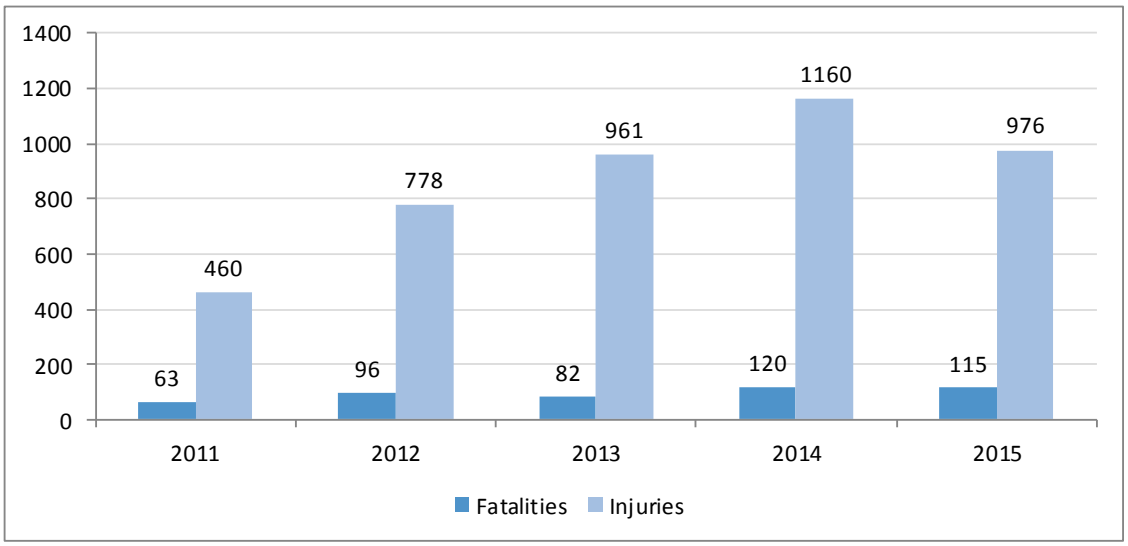
[47] http://www.europarl.europa.eu/committees/en/studies.html

find and use what is available from EMSA and from other sources. Nevertheless, it is a fact that there are gaps and these are not easily overcome.

For example, the IMO Casualty Investigation Code requires a marine safety investigation to be conducted into every "very serious marine casualty" as defined in the IMO code. Prior to the introduction of the EMCIP database, accident statistics were reported and collated in a haphazard and partial fashion if at all. Many Member States did not carry out investigations at all and those that did, did so for reasons other than those set out in the IMO Casualty Code. The establishment of a common EU database to which national administrations are obliged to report has resulted in an increasingly comprehensive reporting on marine incidents and contributes to more insightful analyses. In 2011, a total of approximately 2000 marine casualties or incidents (as defined in the Accident Investigation Directive) were reported in EU waters or involving EU flagged vessels worldwide. This has increased over time and has stabilised at around 3200 per annum. However, comparisons with various other information sources suggest that under-reporting of marine casualties and incidents continue, with a total of 4000 per year being a best estimate. This being said it is estimated that the most serious incidents are reported and it is only the less serious that are not reported.

As shown in Figure 4, of these 3200 reported marine casualties or incidents there are around 100 fatalities while there are approximately 1000 injuries yearly in EU waters or involving EU flagged vessels worldwide.

Figure 4 - Reported fatalities and injuries in the European Marine Casualty Information Platform EMCIP (2011-2015)[48]



Source: EMSA Marine Causalities and Incidents Summary Overview 2011-2015

A second example relates to collecting key information per Member State as flag State, where it has been rather difficult under the Flag State Directive individual evaluation to gather the data from the national administrations.

The lack of quantifiable cost and savings data has hampered analysis of the costs of the measures evaluated. The discussion on efficiency is therefore based mostly on qualitative inputs and an assessment of the overall impression of administrative burden as reported by the stakeholders.

[48] Based on the reporting of marine incident investigations by Member States Accident Investigation Bodies to EMCIP

The analysis of the effectiveness and the efficiency of the measures has also been hampered by the lack of a quantitative baseline against which results could have been assessed and benchmarked. There has been no previous impact assessment providing for an adequate baseline.

There also seems to be "stakeholder fatigue" with several evaluation studies taking place in the recent time which has negatively influenced the willingness to participate in the stakeholder consultation. Limited interest to participate in the evaluation studies amongst several stakeholder groups (notably shipowners and non-EU flags) led to a somewhat unbalanced stakeholder representation. Partial responsiveness by Member States to submit information on staffing and flag State inspections made the establishment of country profiles for the purpose of evaluating the Flag State Directive a challenging task. Regional differences regarding the implementation of the Flag State and the Accident Investigation Directives, implying that the performance of EU Member States flags and Accident Investigation Bodies varies strongly[49], leading to different perspectives on the directives, were addressed by deliberate efforts to query both high and low performers in terms of flag performance and non-conformities.

A strong collaboration between the consultants for the various studies and repeated efforts ensured that sufficient involvement was guaranteed nevertheless.

Thanks to these mitigating measures, sufficient inputs overall could be gathered to answer the evaluation questions, complemented by sufficient secondary material (i.e. databases, literature) to provide additional inputs, quantify several effects and result in sufficiently robust conclusions.

The open public consultation had a relatively low response rate: 53 responses in total, amongst which 15 individuals and only 2 of them stating that they represented passengers' interests. However this low number of replies has to be seen in perspective: 16 replies come from representative stakeholders' groups (national and European shipping industry associations, European port association and other type of organisations such as industry associations, private companies and NGOs) which therefore does help provide a decent overall picture.

5. ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS

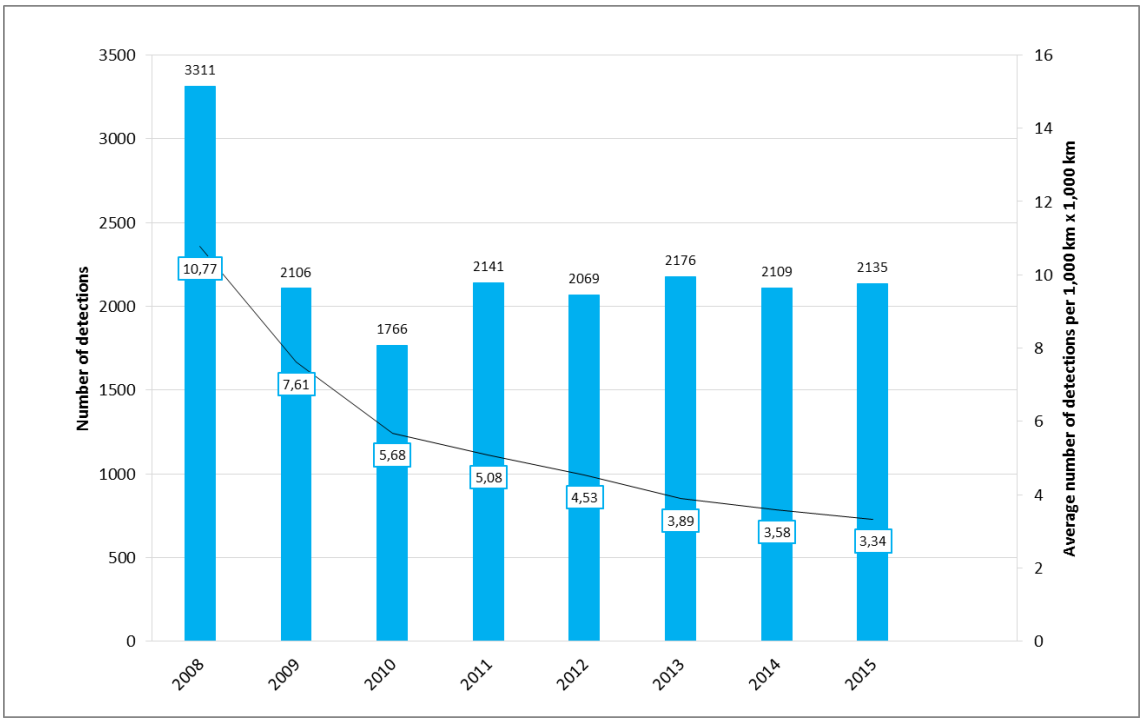
Effectiveness of the maritime legislation reviewed

- ***To what extent have the objectives been achieved?***

The absence of major accidents of a similar scale as those involving the *Erika* and the *Prestige* oil tankers respectively, in 1999 and 2002, gives an indication that there has been considerable progress in eliminating sub-standard/non-compliant vessels from EU waters. In relation to oil spills, Figure 5 below illustrates the decreasing and stabilising trend in EU waters between 2008 and 2015 (average number of detections per 1000 square km).

[49] Depending on the size of the fleet/accidents under that fleet

Figure 5 - Detection of possible spills – Trend over a decade



Source: EMSA

The public consultation on the Implementation of the 2009 EU's Maritime Transport Strategy[50] (for the mid-term review) showed a high level of satisfaction with the EU safety legislation and safety levels achieved in EU waters amongst stakeholders. However the latter continue to be concerned about effective enforcement. The results of the targeted consultations and the open public consultation for the fitness check have also confirmed that a wide range of stakeholders consider the existing legislative set up as effective to ensure a high and uniform level of maritime safety and pollution prevention.

The existence of EU rules covering the responsibilities of Member States as flag, port and coastal State have provided an effective way to prevent accidents through the various complementary lines of defence. It has also proven effective to promote quality shipping by incentivising continuous upgrades of equipment, systems and operational processes. This is illustrated by the continued very low number of incidents and fatalities in EU waters (115 fatalities in 2015; as a comparison the situation in other modes of transport is 26,134 fatalities for road transport, 150 for air transport and 27 for rail transport[51]).

However this evidence should be treated with caution given that there are several other pieces of EU legislation which also contribute to achieve the objectives of maritime safety and pollution prevention. It is thus difficult to attribute effects to one directive over another. One key factor of maritime incidents is the human element. For the latter, there is EU legislation on seafarers' training and enforcement of living and working conditions. The seafarers' training and certification requirements are covered by an evaluation of the two concerned Directives that has been finalised in December 2017. This evaluation has

[50] SWD(2016) 326

[51] Statistics Pocketbook 2017 & EMSA publication *Summary Overview of marine casualties and incidents 2011-2015* – It is to be noted here that there are no comparative data on safety performance available for the EU. Safety performance indicators are normally not calculated on the basis of tonnes or passengers, but on the basis of vehicle movements. However the vessel-km data is not available for maritime transport. The comparison is therefore made with absolute safety numbers, which has methodological limitations given that the population exposed is different.

concluded that the maritime training systems in Europe have been enhanced and the level of seafarers' training has improved.

Furthermore the contribution of EU legislation generally needs to be appreciated in light of the broader maritime safety framework that is developed by Member States, the EU and IMO. Additionally, there are other factors and circumstances which influence the achievement (or lack) of these objectives. This makes it difficult to isolate the effects of the directives, such as the evolution of the state/age[52] of the fleet and/or the consequences of economic cycles on the transport rates.

Regarding the more specific objectives of the legislation being reviewed, the individual evaluations have pointed to a high degree of effectiveness. It comes out of the analysis that the Directives do support that Member States effectively and consistently discharge their obligations as flag, port and coastal States, comply with all relevant international rules and facilitate adequate safety investigations. The instruments put in place by EU legislation have proven highly effective to achieve the overall goals of maritime safety and pollution prevention. This is the case with the obligation to carry out the IMO audit (at the time a voluntary process only), the obligation to establish independent Accident Investigation Bodies, the harmonised procedures and the targeting system for port state control inspections, and the establishment, development, use and operation of the vessel traffic monitoring and information system.

There are several examples to illustrate how the individual Directives have produced the expected results regarding safety.

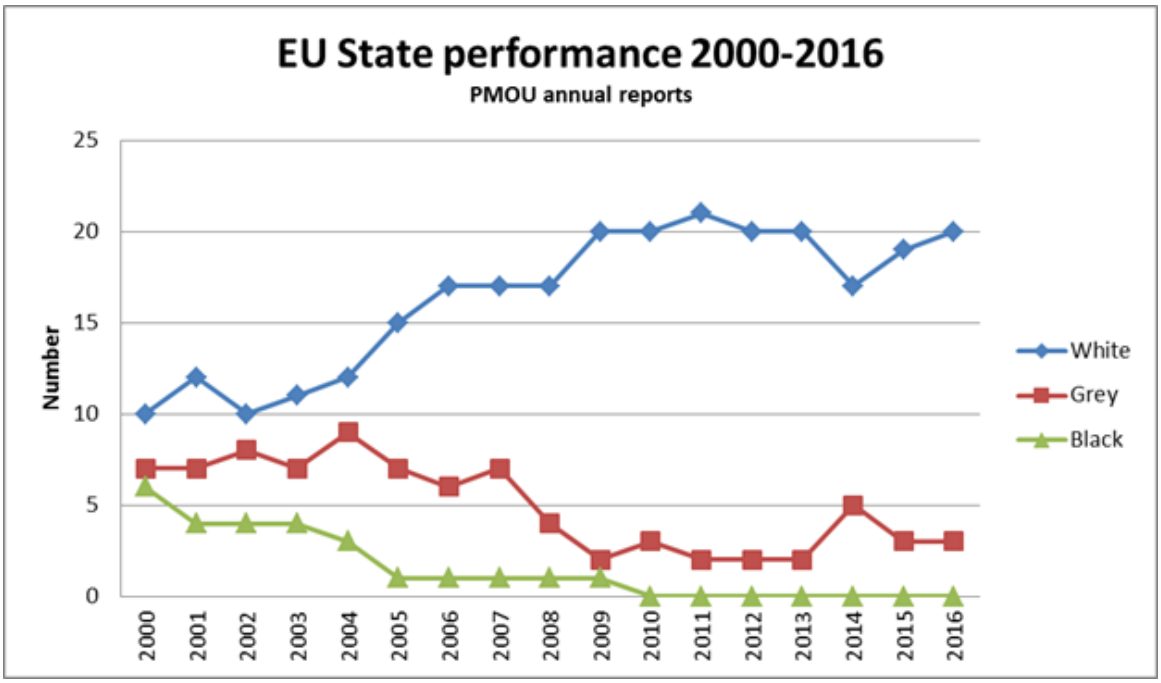
For flag State obligations, the related Directive incentivised Portugal to request the IMO audit as it is an obligation under the directive. Member States have to a large extent standardised their follow-up procedures for when a ship under their flag is detained by a port State following a port State control inspection. The procedures are moreover said to be consistently applied. These procedures are fundamental for a flag State in fulfilling their obligations as a flag for their fleet and as such have been made enforceable under the Directive. On the other hand, flag performance of Member States in the Paris MoU port State control regime[53] (see also Figure 6 below) has slightly deteriorated over the period. This could reflect a lack of effectiveness of the Directive. However, this finding can also be related to an improved effectiveness of port State control in detecting deficiencies or to methodological problems in the use of port State control detention data for calculating flag State performance in relation to the size of the fleet[54].

[52] In December 2016 the EU/EEA flagged fleet had an average age of 19 years. The world fleet average age was 22 years. *(source: Lloyds List Intelligence)*

[53] See footnote 23 above

[54] The mathematical formula developed and used in the Paris MoU has the unwanted effect that the thresholds used may unduly negatively impact on flags with a small fleet.

Figure 6 – Flag performance in the Paris MoU port State control regime



Source: EMSA

The effectiveness of the port State control Directive is indeed well illustrated by the number of deficiencies of all types which has fallen since the implementation of the new inspection regime (targeted system) in 2011 (see Table 2).

Table 2 - Deficiencies by type of deficiency in the Paris MoU, 2011 and 2016

Type of deficiency	2011	2016	Change 2011-2016 absolute	Change 2011-2016 %
Pollution prevention	**2333**	**2088**	**-245**	**-11%**
Pollution prevention	2333	2088	-245	-11%
Safety	**39679**	**32968**	**-6711**	**-17%**
Alarms	450	332	-118	-26%
Cargo operations including equipment	310	220	-90	-29%
Certificate & documentation	7484	6874	-610	-8%
Dangerous goods	121	65	-56	-46%
Emergency systems	1861	2169	308	17%
Fire safety	6316	5391	-925	-15%
ISM	1544	1866	322	21%
Lifesaving appliances	4626	3642	-984	-21%
Other	563	207	-356	-63%
Propulsion and auxiliary machinery	2908	2027	-881	-30%
Radio communications	1686	977	-709	-42%
Safety of navigation	6472	5282	-1190	-18%
Structural conditions	2764	1839	-925	-33%
Water/Weathertight conditions	2574	2077	-497	-19%
Security	**510**	**376**	**-134**	**-26%**
ISPS	510	376	-134	-26%
Working and living conditions	**7439**	**6754**	**-685**	**-9%**
Labour conditions		5785		
Living and working conditions	7439	969[55]	-6470	-87%
TOTAL	**49961**	**42186**	**-7775**	**-16%**

Source: EMSA/THETIS.

As shown in Table 3, the deficiencies identified per inspection and detention rate of high risk ships have increased while the detention rate for low risk ships remained the same and their deficiencies found per inspection decreased in 2016 compared to 2011. The evaluation finds that the targeting of high-risk ships using the EMSA THETIS tool – via the specific risk profile for each ship and the priority-setting system – is effective. It leads to the inspection of ships that pose a higher risk of non-compliance with the applicable EU/international standards.

[55] The split between "Living and working Conditions" and "Labour conditions" reflects to a large extent the split between deficiencies recorded against ships under the ILO Merchant Shipping (Minimum Standards) Convention (ILO 147) prior to 2013 and those recorded against ships under the Maritime Labour Convention 2006 (MLC 2006) after 2013.The significant (87%) decrease in the number of "Living and working conditions" deficiencies is due to the facts that all EU Member States carrying out port State control have ratified the MLC 2006 and so record deficiencies under this Convention rather than ILO 147. The overall total of deficiencies in the category "Working and living conditions" decreased from 7439 to 6754 a decrease of approximately 15%.

Table 3 - Deficiencies and detentions per inspection in the Paris MoU, by ship risk profile

	Ship risk profile	2011	2016	Change 2011-2016 Absolute	%
Deficiencies per inspection	HRS	5.9	6.1	0.2	4.0%
	SRS	2.4	2.3	-0.1	-3.6%
	LRS	1.4	1.0	-0.4	-26.2%
Detention rate in %	HRS	8.9%	14.5%		5.6 pp
	SRS	3.5%	3.6%		0.1 pp
	LRS	1.8%	1.8%		0.0 pp

Source: EMSA/THETIS.

As an exception to this, two types of ships were mentioned: fishing vessels and smaller ships. Fishing vessels are covered by international conventions (e.g. MARPOL, COLREG etc.) and all port States have a right – but not an obligation – to inspect such ships, but not under port State control. Many smaller ships trade only domestically and may not ordinarily be subject to port State control but rather flag State control and inspections. However, these 'gaps' are considered to be of limited scope, and are probably limited to a relatively small number of Member States. It should nonetheless be noted that the issues were reported to be on the rise in the concerned Member States.

The evaluation for accident investigation reached the conclusion that the Directive clearly fostered the creation of Accident Investigation Bodies as well as strengthened their independence. It also increased accident investigation quality and usefulness for maritime safety (prior to the adoption of the directive, some Member States only provided for criminal or administrative investigations of maritime accidents).

Regarding the effectiveness of coastal State related legislation, desk research and EMSA's horizontal analysis on the implementation of the Vessel Traffic Monitoring and Information System Directive shows quantitatively that there is significant use of the system for the reporting part. This serves the objective of safety and pollution control, especially with regard to emergency procedures. Using the system is mandatory and in January 2017, EMSA monitoring, as reported to the HLSG, showed that only 1% of the required pre-arrival information was missing[56].

However there is still sub-optimal use of the system as an exchange mechanism. There are relatively[57] low numbers of data requests being made to it, issues regarding data completeness and correctness, and lack of experience with the latest versions. The horizontal analysis shows positive trends in terms of quality control, thanks to the effectiveness of the monitoring procedures and governance provisions.

In the open public consultation, stakeholders were largely of the view that the Union Maritime Information Exchange system (SafeSeaNet) facilitates monitoring of maritime traffic (vessels). The majority of shipping companies responding (four out of five) and national competent authorities (nine out of ten) were of the view that the system facilitates monitoring of maritime traffic to a great extent or to some extent. In contrast,

[56] According to EMSA monitoring there were 60.664 ship calls in Europe in January 2017. Of those, 57.690 had sent the required pre-arrival information. When deducting the 2.322 exempt from reporting, it leaves 652 non-reporting (+- 1%).

[57] The use of the system for exchanging information on dangerous goods is not constant, and in most cases only triggered when there is a situation with the vessel developing at sea. This explains the hitherto relatively low number of requests.

all three port-related authorities were of the view that this was only to a limited extent. This can be explained by the fact that ports' authorities may not be the relevant authority to receive the information or use it, depending on the organisational set up within Member States. It may also be that these ports' authorities have not requested access to the system at national level.

When it comes to the objective of simplifying reporting obligations, for transport and trade facilitation, a wide range of stakeholders and notably shipping operators find the current situation unsatisfactory. The situation today in terms of administrative procedures remains burdensome. This impacts the competitiveness of the maritime transport sector which cannot take advantage of a European Maritime Transport Space without Barriers equivalent to the internal market for other modes of transport.

Some achievements can be identified at national level regarding electronic reporting from business to administration and, to some extent, the establishment of one reporting point – the National Single Window. However the objective of full national harmonisation was not achieved in the large majority of Member States. The National Single Windows are also in fact not the only reporting entry point since several reporting obligations were kept outside of the Directive scope. Ships are therefore forced to report data via several channels, in several formats and often they must report the same data again to several authorities, even within the same port. The objectives of simplification and digitalisation are therefore only partially met at national level.

At EU level, the intended process of harmonisation has made little or no progress at all: the evaluation study concludes that "*there are no two National Single Windows alike in the EU*". The lack of harmonisation is repeatedly referred to by stakeholders and in particular masters/operators who face the large administrative burden of having to adapt their reporting anew for almost every port they call. Reporting formats, procedures and interfaces vary, not only between Member States but often also within the same Member State[58].

Given the incomplete implementation of the National Single Windows, it was also not always possible to achieve the interlinking between the National Single Window and the national SafeSeaNet system. This hampered data exchange from administration to administration for transport and traffic facilitation. The situation today is that the interlinking is missing or suboptimal in half of the coastal Member States.

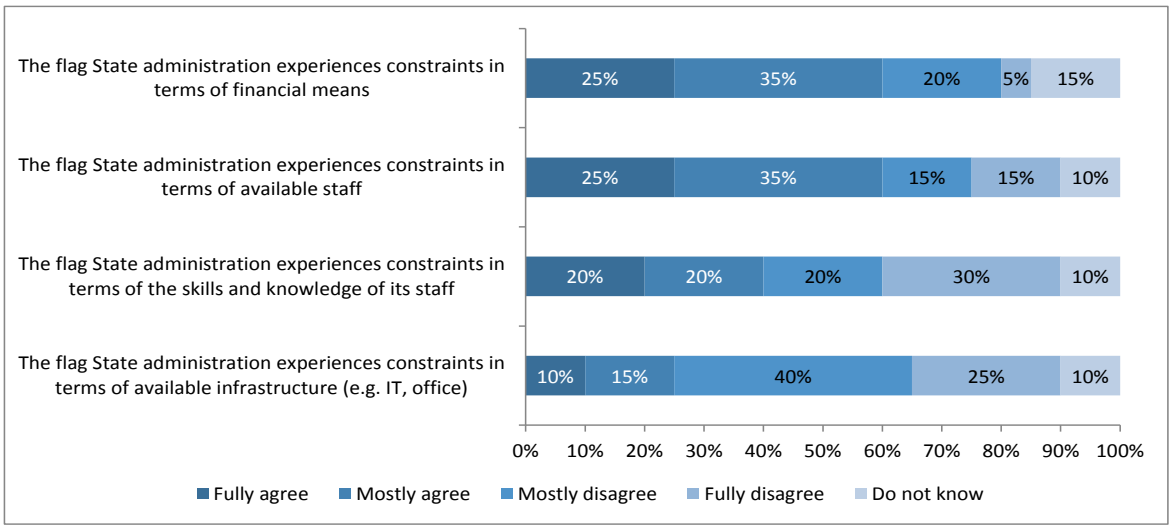
- ***What factors influenced the (or lack of) achievements observed?***

Resource issue

For the first line of defence, flag State controls, on the whole stakeholders indicated (see Figure 6) that flag State administrations experience resource constraints in terms of staff. This concerns in particular technical and experienced staff/surveyor and financial means.

[58] '*The Reporting Formalities Directive that aimed to simplify and rationalise reporting formalities for ships in European ports as of June 2016, has unfortunately not helped in easing the situation. Crews and companies face a worse situation today than before. Rather than having a single European window, diverging national solutions were developed and even at Member States' level there is very often no single solution in place. Such led to an increase of the administrative workload and the risk of seafarer fatigue, to the detriment of job satisfaction and smoothness of operations*.' (ECSA and ETF press release for the Digital Transport Days in Tallinn in November 2017).

Figure 6 - Resources constrains for administrations (survey outcome on follow-up procedures, n=19)



Source: Ecorys, survey (2017)

Also, flag State officers can be used for multiple tasks (Recognised Organisations (RO) monitoring, port State control and other maritime safety fields). In some countries, port State control inspectors are also responsible for carrying out the flag State surveys. Over the past decades, flag State work has been largely delegated to ROs, as indicated by the evidence collected in the study supporting the flag State evaluation. Great variance is observed. Depending on organisational structure and size of the fleet, the number of surveyors per ship ranges from one flag State inspector/surveyor per 111 ships to one per every 2 ships.

So most EU Member States[59] use ROs acting on a maritime administration's behalf for a large number of functions. The number of ROs active per Member State differs from 1 to 11. That must however be seen in relation to the size of the fleet and therefore the needs. Table 4 showing an overview of the use of ROs for work in relation to the different conventions, illustrates the high involvement of ROs in flag State functions. Only for MARPOL Annex III and MLC, the involvement of ROs is relatively smaller (below 50%). The number of delegated functions relates moreover to the number of ROs in a Member State.

[59] Two models for flag State administrations were identified. The dominant model in the EU entails few flag State inspectors and a large role for ROs. The other model - as applied by only a few Member States – suggests a higher number of flag State inspectors and a smaller role for ROs.

Table 4 – Use of ROs in relation to IMO conventions

	Yes		No		Partial		Limited		Unknown	
	Survey	Certificate	Survey	Certificate	Survey	Certificate	Survey	Certificate	Survey	Certificate
Passenger ship safety	65%	60%	14%	31%	11%	0%	0%	0%	10%	10%
Cargo ship safety constr.	90%	86%	0%	8%	5%	0%	2%	2%	4%	4%
Cargo ship safety equip.	81%	74%	4%	15%	6%	6%	5%	2%	4%	4%
Radio	82%	81%	6%	10%	8%	5%	1%	1%	4%	4%
ISM Code	64%	53%	8%	19%	6%	7%	8%	4%	12%	18%
ISM Code - DOC	65%	58%	13%	25%	1%	1%	8%	4%	9%	12%
ISM Code - SMC	65%	58%	8%	25%	6%	1%	8%	4%	9%	12%
Load line	88%	88%	0%	8%	7%	0%	0%	0%	5%	5%
MARPOL Annex I	86%	84%	0%	8%	11%	5%	0%	0%	4%	4%
MARPOL Annex II	89%	84%	1%	8%	3%	0%	0%	0%	8%	8%
MARPOL Annex III	43%	37%	30%	32%	3%	0%	0%	0%	23%	27%
MARPOL Annex IV	91%	87%	1%	8%	3%	0%	0%	0%	5%	5%
MARPOL Annex V	61%	54%	13%	17%	3%	0%	0%	0%	18%	21%
MARPOL Annex VI	93%	88%	0%	8%	3%	0%	0%	0%	5%	5%
Tonnage measurement	71%	68%	18%	27%	5%	0%	0%	0%	4%	6%
MLC	46%	40%	16%	22%	11%	7%	0%	0%	25%	31%

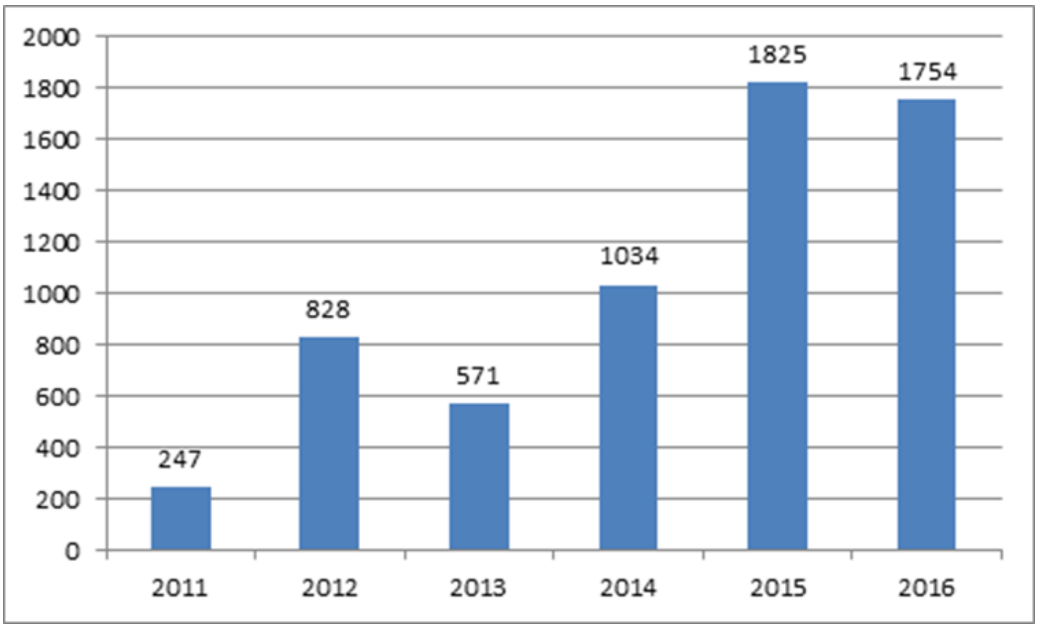
*Source: Ecorys, based on EMSA country information *'Partial' refers to a shared responsibility with the maritime administration – 'limited' indicates that the RO is authorised but only during predefined periods of time and upon approval of the maritime administration.*

This in turn underlines the importance of proper monitoring of ROs acting on behalf of the EU Member States in question. This is all the more important as it is not possible under international law to delegate away any responsibility as a flag State.

Regarding accident investigation, it was reported that resource availability and connected staffing issues limits the investigation of accidents that are not classified as very serious. Of the 5 infringement cases that the Commission has opened, all were related to the issues of independence, resources and impartiality of the Accident Investigation Bodies. Consequently gaps in coverage can occur.

In contrast, the situation for port State control appears more favourable. Overall, the evaluation has indicated that inspectors carrying out inspections in EU ports are sufficiently trained and well qualified. Since the first introduction of a specific EU regime for port State control in 1995, serious efforts by all parties involved have led to the situation today whereby inspections are carried out in a harmonised way throughout the EU. EMSA training and distance learning is appreciated by all stakeholders.

Figure 7 - Number of PSC inspectors completed EMSA e-learning modules per year



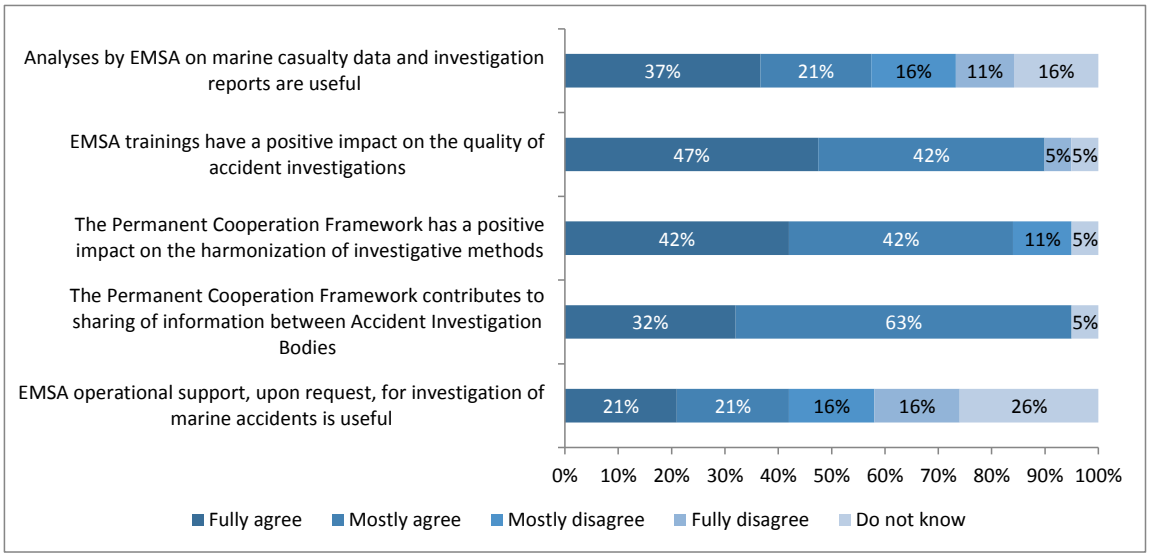
Source: EMSA.

However it should be noted that lack of resources with the required expertise based on recruitment difficulties is also a growing problem here. This appears to be linked to the trend of fewer and fewer EU seafarers with sea-going experience (the total number of EU seafarers today is around 220,000 originating mostly from the UK, Poland, France, Croatia and Italy).

Finally regarding coastal State related legislation, financial resources and technical expertise have been a main factor influencing the achievements (or the lack of) observed. This is linked to the level of investments required to set up the SafeSeaNet system and the National Single Window.

EMSA support

Figure 8 - Survey outcomes on EMSA contributions (n=19)



Source: Ecorys, Survey (2017)

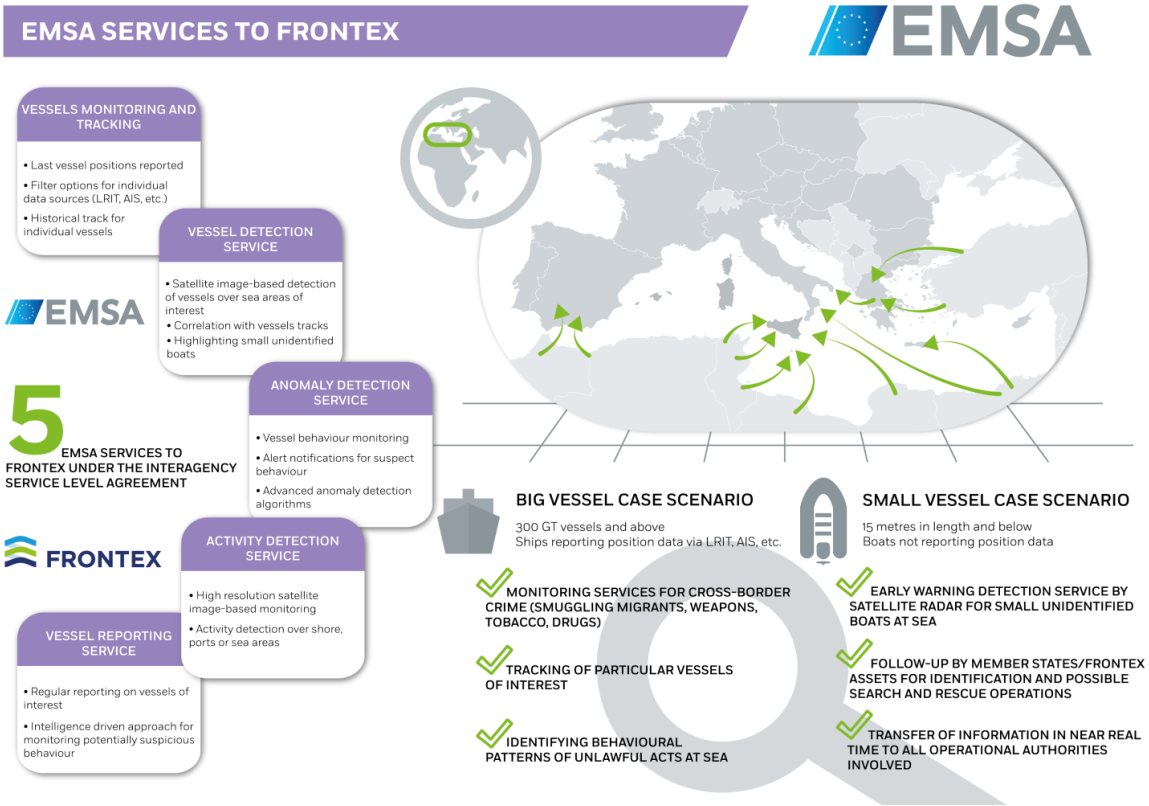
As shown in Figure 8, stakeholders responded positively on the effects that EMSA has on maritime safety and the quality support to maritime administrations. Particularly

positive responses were received on the training offered on accident investigation. EMSA support of the Permanent Cooperation Framework, which is the framework for exchange of best practice between Accident Investigation Bodies, is also welcome. The same goes for EMSA providing capacity building support to flag State. However, some Member States wanted EMSA to work out better guidance on how to monitor ROs.

Regarding port State control, the support provided by EMSA for training of officers and through the THETIS database is integral to the effectiveness of the revised Directive. The added value of operational support on marine incidents and data analysis were acknowledged to a lesser extent. However Member State authorities appreciate that EMCIP offers a harmonised system for accident investigations. This facilitates cooperation between them in terms of definitions and elements to address. It is also used by Accident Investigation Bodies for accidents they investigate outside the scope of the Directive. Finally it offers a useful dissemination tool for their work as well as a connection with the corresponding IMO notification system[60].

As far as the Vessel Traffic Monitoring and Information System Directive is concerned, the SafeSeaNet system hosted in EMSA is at its core. The integration (through interoperability solutions) of all relevant data into the Integrated Maritime Services responds to an increasing number of requests from authorities. These services play a central role in the coast guard cooperation between EMSA, EFCA and EBCGA (Frontex). An example is illustrated in figure 9.

Figure 9



Source: EMSA

The same type of services – maritime surveillance using the "maritime picture" – are used for example in search and rescue, pollution prevention and coordination over the

[60] GISIS – Global Integrated Shipping Information System

identification of places of refuge following an accident involving vessels. It has also been used for the purposes of transport and trade facilitation in the so called "Blue Belt"[61] project. The same system allows for better planning (e.g. in respect of port State control inspections or environmental inspections for port reception facilities) and efficient execution, as the required information is either available or can be called up within the Integrated Maritime Services.

All developments of the Integrated Maritime System and Services are carried out with Member States through a bottom up approach where EMSA, as host of the systems, is meeting user needs. All technical developments and improvements are discussed and agreed in the Governance body (the High Level Steering Group for governance of the digital maritime system and services). They are rolled out following a harmonised approach and time table. EMSA acts as a central node and provides technical support (24/7) to all Member States contact points to ensure the functioning of the system and services at all times. This contributes to a harmonised and uniform development and use of the system making it one EU-wide system providing maritime digital services.

In the run up to the deadline of June 2015 for the establishment of the National Single Windows, seven Member States turned to EMSA requesting technical assistance. Such technical assistance was provided to these Member States and helped to set up elements of an operational and harmonised solution for a single entry point for reporting formalities. It followed an EMSA project sponsored by the Commission to develop a prototype single window which was also making the connection between the SafeSeaNet system and the National Single Window.

Insufficient legal provisions and poor implementation

The development of vastly different systems and models in Europe for reporting formalities is primarily linked to the lack of timely, detailed and binding technical specification for the development of National Single Windows and the lack of definition of standardised forms. The existing common but non-mandatory EU guidelines have not been a sufficient tool in this regard.

The Reporting Formalities Directive was also from the outset flawed in the sense that the original Commission proposal aimed to establish a single entry point for ship reporting. Yet the scope of the adopted Directive did not cover all reporting obligations and reporting formalities for ships. For example the National Single Windows are not the mandatory entry point for all national reporting obligations for ships. They also do not channel all customs formalities for ships, e.g. those relating to the arrival and departure of a vessel[62]..

Work was therefore initiated in a joint customs-transport project to facilitate the establishment of a common digital cargo declaration (the eManifest). The competent HLSG sub-group discussed the so called 'Part C' data (national reporting obligations not mandatory to request via the National Single Windows). However the creation of a truly single reporting entry point has not been achieved since some reporting procedures are kept separate and in parallel.

[61] COM(2013) 510 final

[62] However some customs formalities for goods entering the EU (such as the entry summary declaration, the arrival notification and the customs goods manifest) are enabled for submission via the National Single Windows in some Member States, even though only the entry summary declaration was explicitly referred to in the Directive

Finally the vague requirements and specifications in the Reporting Formalities Directive are also a partial explanation for the slow and incomplete implementation of the provisions of the legislation. The Directive does not give guidance to support Member States in their implementation and it does not provide sufficiently clear criteria for the Commission to follow up on implementation with formal procedures.

Efficiency of the maritime legislation reviewed

- ***To what extent are the costs of individual instruments proportionate to the overall benefits achieved?***

While it is difficult to estimate the costs of the individual instruments provided for by each of the five directives, it is close to impossible to give a quantitative estimation of the benefits of maritime safety. The latter includes for example assessing the value of life-saving and the related methodological difficulties. To get an indication of the cost-benefit character of the policy area under review, one can however aggregate the costs of the EU intervention (beyond the five directives covered by the fitness check) and compare it with the costs associated to major accidents like the *Erika* and the *Prestige* accidents.

EU intervention in this policy area can be considered as mainly related to better enforcement of rules and uniform application. While rules would have to be implemented anyhow at national level under IMO obligations, costs can therefore mainly be attributed to the role of EMSA (€30 million per year[63]). One could add national administration costs related to the additional obligations for accident investigation under EU legislation (though these are likely to be rather limited) as well as potentially more significant national administration costs related to the implementation of the vessel traffic monitoring and information system. For the latter, there were initial (collective) development costs of €203 million, shared between the EU and Member States, plus ongoing reporting and administrative costs of €51 million per annum (not counting the upgrades required to implement new SSN versions and related to the establishment of the national single windows).

This could then be compared to the potential benefits, including clean-up costs and loss of business savings to affected parties from major incidents such as the *Erika* and *Prestige*. These are estimated to range from tens to hundreds of millions of Euros per case (€350 million in the case of the *Erika*[64] and considerably more in the case of *Prestige*).

Regarding the costs of the individual instruments and whether they can be considered proportionate to the overall benefit achieved, the individual evaluations have provided some indication which is summarised here.

The Flag State Directive contains very few provisions and its requirements mirror existing (inter)national rules, where resources should already be foreseen or made available[65]. It can therefore be assumed that the costs associated to this Directive are very low and consequently proportionate to the benefits observed.

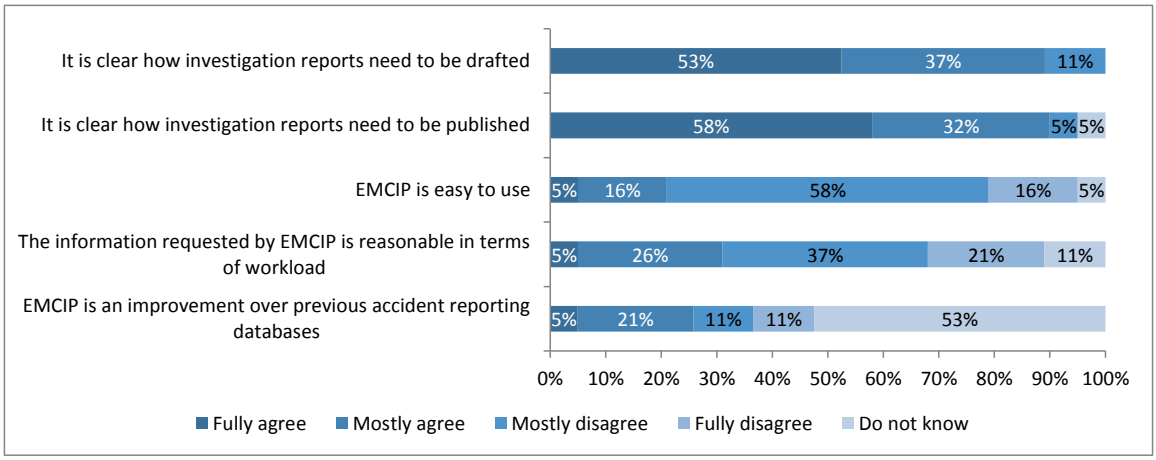
[63] The annual budget of EMSA over the period was ca €50 million per year out of which €20 million were operational funds allocated to the network of anti-pollution vessels not covered by the fitness check – to be further noted that EMSA action covers all the EU acquis hence the figure of €30 million is overestimated

[64] *Factors Affecting the Cost of Oil Spills* (2002), by Dr Ian White
http://www.itopf.com/fileadmin/data/Documents/Papers/costs02.PDF

[65] *c.f.* III-Code Part-2 Flag States point 16

As far as the Accident Investigation Directive is concerned, it has increased the reporting requirements both in quantitative (reporting on serious accidents) and qualitative terms (reporting has been put on a more demanding basis due to the European Maritime Casualty Information Platform, the EMCIP database). There is widespread perception among Member State authorities (Accident Investigation Bodies) that EMCIP has been difficult to use and they disagree whether the requested information is reasonable in terms of workload (see the survey results in Figure 10). The Accident Investigation Bodies responding to the survey and interviews largely indicated that reporting through EMCIP entails a significant workload and is inefficient. The difficulties of using the database combined with the reporting requirements that are regarded as strict, mean that the usage of EMCIP is considered by many to be disproportionate to the added value.

Figure 10 - stakeholders views on the use of EMCIP (n=19)

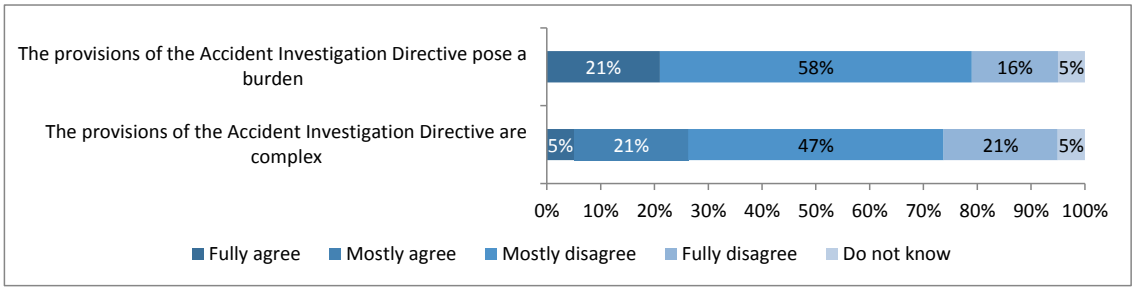


Source: Ecorys, Survey (2017)

Here it should be pointed out that many of the issues should be addressed by the next version of EMCIP which will be available in 2018. As with all big IT developments, there is anyhow continuous technical improvement potential on the basis of the users' experience. Moreover, having centrally hosted systems like THETIS and EMCIP, and to some extent the Integrated Maritime Services, reduces costs for the national level. Indeed all developments and improvements take place at central level, under the EMSA budget, and benefit the national level at much lower costs.

Apart from this reporting burden, the directive is not perceived as administratively burdensome and/or complex. An explanation for this finding could be that the Accident Investigation Bodies are highly professionalised and that the respondents are well informed on the provisions and benefits of the directive. This is illustrated by the stakeholder's perceptions as reported in Figure 11.

Figure 11 – Stakeholders' perception of the efficiency of the AID (n=19)



Source: Ecorys, Survey (2017)

Regarding port State control, the individual evaluation overall estimates (as illustrated in Table 3) that the average costs across the Member States have remained almost unchanged both prior to and after the introduction of the new inspection regime – i.e. the higher cost per inspection is offset by fewer inspections[66].

Table 3 - Port State control inspection costs, average for Member States

	2007	2010	2011	2016
Inspections (number)[67]	**22996**	**23428**	**18814**	**17403**
- Initial inspections (share)			28%	36%
- More detailed inspections (share)			57%	51%
- Expanded inspections (share)			15%	13%
Cost per inspection (Euro)	**189**	**189**	**257**	**248**
Man-hours per inspection (hours)[68]	6.5	6.5	7.8	7.5
- Initial inspection (hours)			5.3	5.3
- More detailed inspections (hours)			8.1	8.1
- Expanded inspections (hours)			11.1	11.1
Cost per man-hour - excl. allowances (Euro)[69]	26.5	26.5	26.5	26.5
Allowances (% of labour costs)[70]	10%	10%	25%	25%
Cost per man-hour - incl. allowances (Euro)	29.2	29.2	33.1	33.1
Total costs (mill Euro)	**4.4**	**4.4**	**4.8**	**4.3**

Source: EMSA

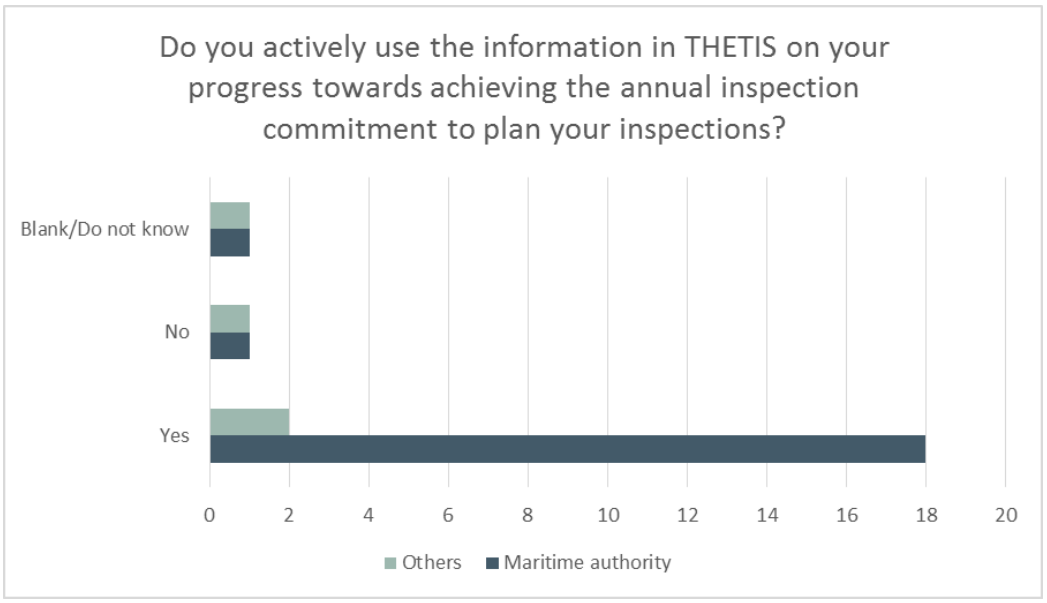
The current risk-based regime is generally perceived as an improvement by all categories of stakeholders and many (13 out of 25) maritime authorities indicate that the inspection regime is sufficiently flexible.

However, room for additional improvement in order to increase cost-efficiency has been identified. In particular for authorities that do not normally operate on a 24/7 basis – e.g. typically civilian authorities – it is considered administratively very heavy and expensive to have staff available on-call 24/7. Notifications are sometimes received with very short notice (a couple of hours). Moreover, risk profiles are recalculated every day and sometimes a ship can change priority (e.g. to Priority I) overnight when it is in the port.

The EMSA THETIS database is perceived as a useful and efficient tool to plan port State control activities, but also to monitor the work of inspectors. Moreover, as also shown in Figure 12, the vast majority of maritime authorities make use of THETIS to regularly monitor their progress towards achieving their annual inspection commitment (fair share). There is though still potential to improve the efficiency of some of the more advanced tools of THETIS by improving the user-friendliness of the system or by providing additional training.

[66] The estimate is based on inspection data from EMSA/THETIS. Furthermore, use was made of labour cost data provided by Eurostat, and it was assumed that allowances have increased with the NIR as requirements to geographical coverage have increased
[67] EMSA/THETIS
[68] EMSA (2016), "Port State Control Cost-Effectiveness - Pilot Study"
[69] Eurostat database, Labour Cost Survey 2012, "Other professional, scientific and technical activities"
[70] Based on stakeholder interviews

Figure 12 - Use of THETIS to monitor and plan inspections (n=24)



Source: COWI/Ecorys survey.

With regard to the Vessel Traffic Monitoring and Information System Directive, there is more insight thanks to the Impact Assessment support study carried out in 2014 which has analysed the costs associated with the implementation of the Directive. As mentioned above, there were collective development costs (compliance costs) of €203 million, shared between the EU and Member States, plus ongoing reporting and administrative costs of €51 million per annum. Developments costs follow decisions in the HLSG and on that basis the competent national administration finance IT improvements updates at national level where costs vary from one Member State to another. The ongoing annual costs are mainly incurred by users, i.e. shipping lines reporting the information. Costs per ship call were estimated to be approximately €50 per call (pre-National Single Window implementation).

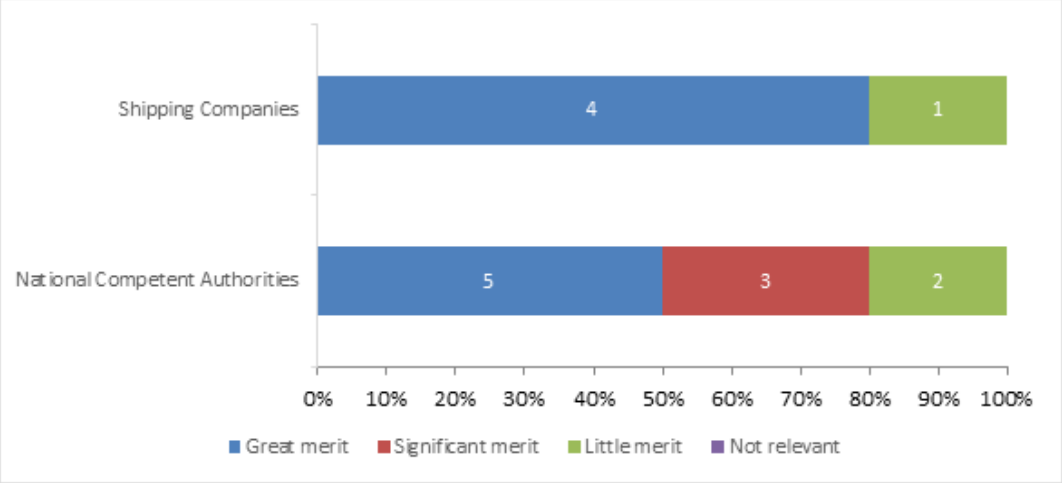
Annual costs incurred by the national administrations are often difficult to estimate precisely because operational systems may be multi-functional and staff may combine different roles. Costs quoted within the HLSG survey range from around €50,000 per annum, per administration, to around €650,000 per annum. These costs are considered reasonable and proportionate in relation to the benefits, i.e. better enforcement of safety rules and avoidance of maritime accidents. This has been confirmed by the majority of National Competent Authorities through the survey[71]. So while it is impossible to ascribe a financial benefit to the prevention of accidents as a direct result of the legislation, there are clear indications that stakeholders see no realistic alternative and continuing benefits associated to the implementation of the Directive and in particular the SafeSeaNet system.

All respondents in the HLSG survey agreed that there was an ongoing need for an information system in which Member States are able to communicate through a central exchange mechanism. To be informed on-time and with accurate data was seen as essential. It was also seen as efficient to organise this across a system in which Member States are connected. The results of the open public consultation (as shown in Figure 13)

[71] One National Competent Authority noted that the annual costs of running the national SSN are similar to the costs that would be incurred by any major port for maintaining a PCS. With regard to the central exchange mechanism, another Member State pointed out that it is more efficient to have a central exchange mechanism than to have to organise data exchanges on a direct basis between Member States.

reported support for the view that there would be great merit in continuing to build on the existing SafeSeaNet investments to maximise benefits/minimise costs, as well as to facilitate simplification and digitalisation.

Figure 13 - Is there merit in continuing to build on the existing investment in the system/platform and develop it to achieve the objectives of simplification and digitisation?



Source: PwC elaboration on OPC results (2017)

Finally regarding the Reporting Formalities Directive, the individual evaluation indicate that national authorities' costs for the National Single Windows have been estimated to €300,000 to €12,000,000 for the one-time implementation plus around €200,000 for annual maintenance and updates[72]. The large differences in reported costs are due to a number of interlinked factors: type of system implemented, point of departure situation, size and number of ports connected to the system, centralised or decentralised division of costs, etc. Connected authorities must also adapt to the common software and connect their systems to the National Single Windows with subsequent costs for updates and administration. The average costs for the connected authorities, e.g. port authorities have not been possible to estimate because of the highly diverse situation for these authorities across the EU. Connected authorities have also not shared any such data from the targeted consultations, mostly because of the difficulty of identifying and assessing the cost specifically linked to RFD implementation.

With only limited data on quantifiable costs available, the stakeholders' own assessment of the cost-benefit ratio becomes important as a qualitative assessment of the situation. The national authorities in charge of the National Single Windows have had high and quantifiable costs for implementation. Yet all stakeholders from this group replied in the targeted consultations that they found that the benefits will outweigh the costs[73]. The majority of the other stakeholders held the opposite view, either because of higher costs (shipping companies, agents) or lower benefits (other connected authorities). Especially shipping operators consider the situation today as largely inefficient due to the lack of harmonisation at EU level and the resulting non-harmonised way in which reporting takes place. It can therefore not be concluded that the reporting formalities directive in its current form has been efficient in terms of costs versus benefits.

[72] Evaluation support study on RFD and VTMIS by PwC and Panteia,, p.43
[73] Evaluation support study on RFD and VTMIS by PwC and Panteia, p.43

- ***To what extent has the intervention been cost effective for the various parties involved (national maritime administrations, shipping sector, port authorities, etc.)?***

National maritime administrations have a broadly positive appreciation of the cost-effectiveness of the legislation covered by the fitness check. This is reflected by the surveys and the interviews carried out through the evaluations related to the individual instruments. This is largely associated with the role of EMSA and the support provided to them through training, capacity-building, technical assistance and common databases and systems. EMSA also facilitates exchange of best practice and development of common approaches which increase the efficiency of national policies. This is done through ad-hoc workshops, permanent groups and the follow-up of visits rounds with horizontal analyses and dissemination of lessons learnt from implementation.

A number of remarks can be made regarding the proportionality of EU legislation compliance costs for those Member States that have small/no fleets or no coastline. The latter may therefore consider that they have reasons for differential transposition of IMO rules. As regards both the Port State Control and Accident Investigation Directives the EU legislation does provide indeed for specific rules for landlocked states without ports and/or fleets.

However, it should be recalled that all Member States are parties to the IMO and as such have the legal obligation to implement and enforce IMO standards. EU law provides a consistent framework and the means (through EMSA) to help the Member States, and particularly the ones with less resources, to discharge their obligations. Secondly, landlocked Member States can still have significant fleets, and this choice comes with obligations. Thirdly, all EU Member States have citizens as passengers on board ships and carry goods from the landlocked Member States on board vessels. Finally, there is also an element of solidarity, burden sharing and support within the EU provided through EU policy to ensure the protection of EU coasts. This came as a political decision and choice following the major disasters of the *Erika* and the *Prestige*.

The perception of the shipping sector is also generally positive with regards to the overall EU set-up covering flag State, port State and coastal responsibilities to ensure safety and environmental protection. Generally those engaged in international trade would like to see the same regulatory environment everywhere they sail and with uniformity in procedures. Anything else will generate difficulties as there would be a need to adapt, putting an extra burden on the crew and operations, normally at an extra cost.

The burdens often associated with EU legislation (or national legislation) relate to any 'higher' or 'extra' standards that would put EU shipping at a competitive disadvantage with the rest of the world. However the safety Directives under review largely mirror international obligations and only make them enforceable, as is the case for flag State and port State control. Regarding accident investigation, the EU regime has not changed obligations for the private sector.

In relation to coastal State responsibilities, the Vessel Traffic Monitoring and Information System Directive is perceived as highly efficient to ensure state-of-the-art traffic monitoring and effective intervention in case of emergencies. In particular, the shipping sector welcomed and actively contributed to the work carried out on places of

refuge for ships in need of assistance. This work promoted a common understanding[74] and approach among all involved parties, authorities and industry alike. In addition, the same system supports transport facilitation through digital information sharing allowing enforcement with lesser burden for industry, e.g. through focussed inspections, facilitating and leading to potential further reduced turn-around time for ships.

A case in point is port State control inspections, where the costs for shipowners are associated with the resources needed to assist inspectors when they conduct inspections on board. Shipowners report that it is sometimes difficult for the captain/crew to be part of port State control at the same time as undertaking loading/unloading or other activities. However, overall, shipowners perceive the administrative costs and the frequency and scope as proportional to the goal of eliminating substandard shipping. They have not reported any significant delays associated with undergoing inspections in EU ports. Importantly, as part of these foccused efforts, the new inspection regime with its targeting system has alleviated the burden for compliant ships and shipowners (fewer inspections based on a good track record). This has facilitated transport operations without lowering any standards.

In this respect, the fitness check does not give evidence of any significant volume of multiple or duplicate inspection burden on operators. Generally operators accept that inspections are required and some use them as a quality measurement and promotion tool of 'their' quality services. What is expected is that when inspections are conducted, they are focussed and efficient. The only issue in this regard was identified for inspections of ferry passenger ships (where an additional level of inspections on top of those required by IMO had been added by the EU following the *Estonia* accident). The recent fitness check of passenger ship safety legislation concluded that these inspections are still necessary but that where possible they should be folded into inspections already provided for by international conventions.

Regarding reporting obligations and coastal responsibilities, the picture is more mixed. Stakeholders generally agree that the current configuration of the national and centralised SafeSeaNet system has helped to promote efficiencies within the administrations. However more can be done for the facilitation part, especially trade facilitation and the better use and re-use of the information already reported into the system.

On the other hand the shipping sector is adamant about the lack of harmonisation of systems and procedures for reporting formalities and the consecutive burden placed on them. A majority of respondents to the open public consultation, especially among those from the shipping sector (86% of responding shipping companies) replied that the lack of harmonisation of the reporting formalities poses a burden.

Lack of harmonisation causes costs in form of staff hours for the shipping companies. It is estimated that, on average, the time spent on reporting for one single port call ranges between one and three hours. While this is a major improvement from the baseline with reporting times of around six hours, this still implies a significant cost, and notably for maritime operators in intra-EU traffic. It should also be noted that this average time estimate most likely hides differences in reporting burden depending on vessel type, vessel size, port and port reporting system. There is not sufficient quantitative data

[74] Resulting in agreed and applied EU Operational Guidelines for Places of Refuge, clearly setting out roles and responsibilities as well as procedures for dealing with a request for a place of refuge and for monitoring a situation and efficiently sharing the information using the EU-wide digital system and services.

broken down for these categories but there are indications on the differences in man hour requirements in the reported level of satisfaction among stakeholders. It is clear from consultations e.g. that shipping operators and shipping agents in ports with well-functioning National Single Windows report to have less administrative burden[75].

While exact costs have been difficult to quantify, it is however clear from the consultations that the costs for national maritime authorities and ports/other connected authorities have not yielded the benefits expected by the shipping sector stakeholders. Based on existing data, therefore it cannot be confirmed that the intervention has been cost-effective for the main parties involved (notably for shipping operators).

Relevance of the maritime legislation reviewed

- ***To what extent is EU intervention still relevant?***

The main relevance of EU intervention in the policy area under review is the effective and uniform enforcement of rules provided for by the EU rule of law and facilitated by the technical assistance of EMSA. The relevance of effective and uniform enforcement remains valid today to ensure a level playing field between Member States and to protect the economy and citizens. The relevance of having several lines of defence remains also valid and is in any case a required 'reflection' of international obligations.

Regarding the Member States' views, the Council has been vocal on the priorities for EU maritime transport policy and the relevance of the related EU legislation acquis. In the 2014 Athens Declaration[76], Ministers emphasised the need to fully implement the EU maritime acquis, including the third maritime safety package. They underlined that the implementation of environmental, safety and social requirements deriving from EU and international legal instruments was a vital precondition for the competitiveness of European quality shipping, and they invited the Commission and the Member States to work towards ensuring effective enforcement of the relevant regulations.

In that same Declaration, they highlighted that efficient EU-wide digital maritime services, building on existing applications, systems and platforms, are needed to underpin transport and trade facilitation objectives as well as safety, security and environmental protection.

In the recent Valletta Declaration[77], Ministers recalled the continuing objectives of the EU and its Member States to ensure a high and uniform level of maritime safety and security and maritime transport's significant contribution to the European economy. The Council then urged the Commission and the Member States to continue work on further digitalisation and simplification of administrative and operational procedures and the consequent reduction of administrative burden for the facilitation of maritime transport.

Respondents to the open public consultation and the individual targeted stakeholders' consultations largely indicated that EU intervention in the policy field covered by the fitness check is relevant towards achieving cleaner, safer and competitive shipping in the

[75] Staff Working Document on ex-post evaluation of the Reporting Formalities Directive, p.18; Evaluation support study on RFD and VTMIS by PwC and Panteia, p.40

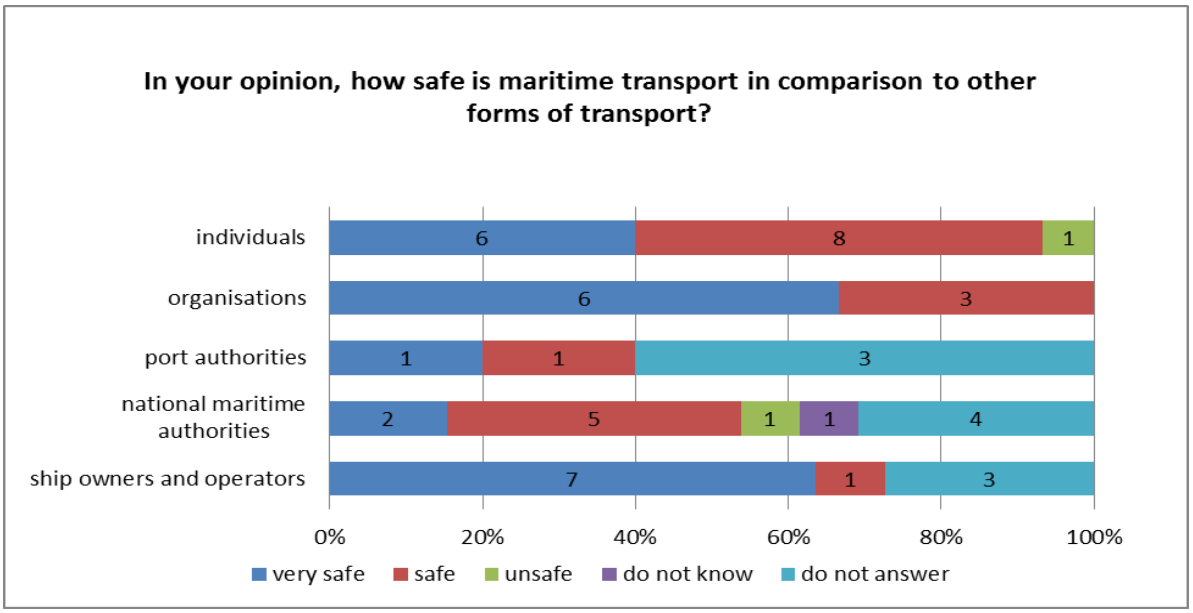
[76] Council Conclusions on "the Mid-Term Review of the EU's Maritime Transport Policy until 2018 and Outlook to 2020" – June 2014, endorsing the Athens Declaration of the May 2014 Informal Council

[77] Council conclusions on "Priorities for the EU's maritime transport policy until 2020: Competitiveness, Decarbonisation, Digitalisation to ensure global connectivity, an efficient internal market and a world-class maritime cluster" − June 2017, endorsing the Valetta Declaration of the March 2017 Informal Council

EU. Overall, the perception of the respondents on the safety and efficiency of maritime transport in comparison to other modes of transport is very positive.

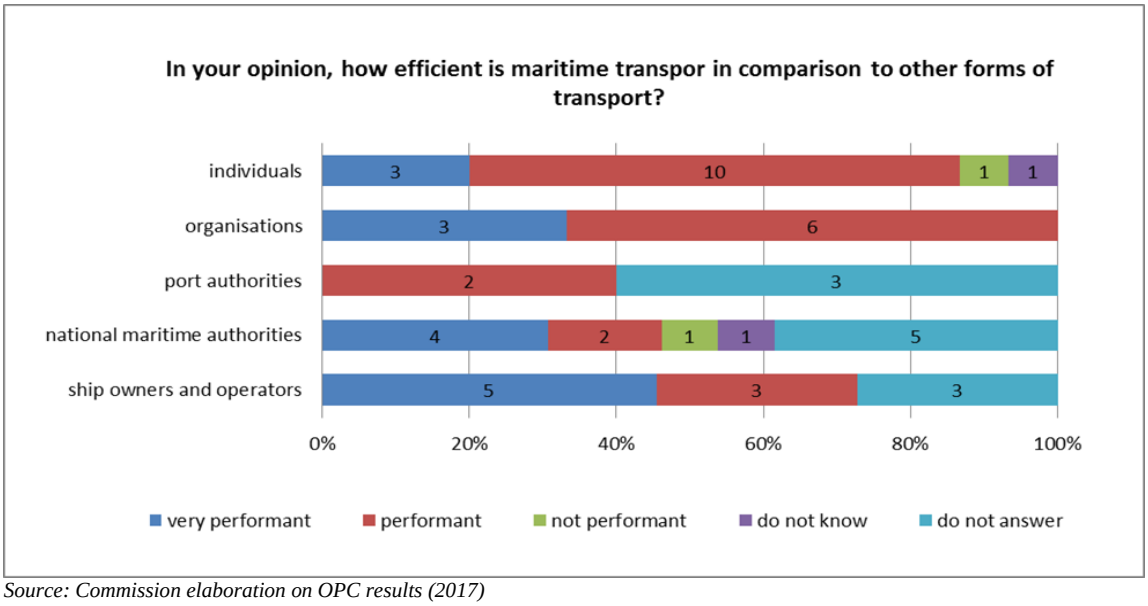
As shown in Figure 14-1, in general, respondents perceive maritime transport as a safe mode of transport because of its relative small number of accidents and its strong regulation. Regarding efficiency (Figure 14-2), respondents think that ships can carry more cargo in comparison to other modes of transport. One national maritime authority reported negative answers to both questions. The reasons explained for both answers are the same: the lack of strict supervision.

Figure 14 - 1



Source: Commission elaboration on OPC results (2017)

Figure 14 - 2



Source: Commission elaboration on OPC results (2017)

The Flag State Directive is seen as providing consistency in the regulatory framework across Member States and the effective application of international obligations in a uniform and harmonised way. Regarding this particular directive, some stakeholders questioned the relevance of it. Firstly, the IMO audit has become mandatory and, as a

result, the related provision of the directive has expired. Secondly, stakeholders remarked that with the introduction of the IMO III Code, which is broader and more detailed[78], the EU directive in its current form is therefore not fully aligned with changes in IMO legislation. At the same time, it was noted that in general terms the key relevance of the Flag State Directive is that it transposes international law. This provides for harmonised enforcement possibilities.

The Accident Investigation Directive is also seen as providing a consistent framework for conducting maritime accident investigations. The evaluation finds that it ensures that accident investigations are conducted in a uniform and harmonised way throughout the EU. There are no new legal or technological developments that affect the relevance of the Directive. The latter has proven appropriate, by promoting the principle of learning from experience for continuous improvement of maritime safety.

The evaluation finds that there is a need for port State control as a defence against substandard shipping. This is overwhelmingly supported by all the interviewed stakeholder groups. Although deficiencies and detentions have fallen with the introduction of the New Inspection Regime[79] (over the period 2011-2016, the number of deficiencies in the Paris MoU area has fallen by 16% and the number of detentions by 2%), substandard shipping continues to operate in the EU and elsewhere. It is only through continued vigilance that this can be addressed. This is borne out by the number of ships on the 'banning list' which is still notable[80]. Also from this perspective, the Port State Control Directive remains highly relevant in providing a harmonised and consistent framework for inspections.

The relevance of port State control should also be assessed in broader terms. Indeed since the entry into force of the New Inspection Regime in 2011, port State control has been relevant not only for maritime safety but also for other purposes such as environmental protection as well as the protection of working and living rights on board ships. It has been used to carry out enforcement in other primarily environmental areas such as the reduction in the sulphur content of certain liquid fuels[81]. EU legislation providing for an enforcement role for port State control in relation to ship-recycling[82] and the monitoring, reporting and verification of greenhouse gases emissions from shipping[83] has also been adopted.

With regard to the enforcement through port State control of the Maritime Labour Convention from 2006[84], the legislative framework providing for its enforcement entered into force at the end of 2013. This leaves little time to properly assess the impact of such enforcement by means of port State control. Evidence so far does not point to major indication of failure in the application of the related provisions.

Regarding EU intervention for coastal State responsibilities, the evaluation finds that the basic objective of establishing a common information system for vessel tracking and

[78] Although the Commission original proposal for a Flag State Directive was much more detailed, the co-legislator considered more appropriate to delete many of the initial provisions awaiting the entry into force of the III-Code, under finalisation in IMO at the time.
[79] Final evaluation report, Table 3-1, p.21 (source: EMSA/THETIS).
[80] See the list of ships that have been refused access: https://portal.emsa.europa.eu/web/thetis/refusal-of-access
[81] Regulated at EU level by Directive 2016/802/EU
[82] Regulated at EU level by Regulation 2013/1257/EU
[83] Regulated at EU level by Regulation 2015/757/EU
[84] Provided for by Directive 2013/38/EU which amended Directive 2009/16/EC on port State control

monitoring remains highly relevant and needed. Digitalisation of transport in general is seen as a way to reduce costs, improve utilisation of capacity, improve environmental efficiency and contribute to safety.

The actions of the Vessel Traffic Monitoring and Information System stakeholder groups, the regular HLSG meetings, the technical progression of the SafeSeaNet system, the development of value added services (Integrated Maritime Services), the 2009 and 2014 amendments to the Directive, all indicate continued relevance of the system, but ongoing pressure to adapt to changing needs.

The SafeSeaNet system has been evolving from a 'niche' system to a more comprehensive tool (the Union Maritime and Information Exchange system). The latter has the capability to support not only the objectives of the Directive itself of maritime safety and pollution prevention but other relevant EU legislation (among them the Reporting Formalities Directive). Basically all users with a legitimate interest in the maritime domain can be supported.

EU intervention regarding reporting formalities remains highly relevant today, even if the objectives of the related Directive have indeed not been fulfilled, in terms of EU-level harmonisation and, to a lesser extent, in terms of digitalisation. Harmonisation and simplification are still very relevant objectives according to a significant majority of stakeholders in the open and targeted consultations[85]. These objectives have been emphasised by maritime operators notably in the industry joint statement delivered at the European Shipping Week in March 2017[86].

The concept of a single entry point is still highly relevant as is shown by the national level benefits from those few National Single Windows currently fully implemented.

- ***How well do the (original) objectives (still) correspond to the needs within the EU?***

The original objectives of the policy area under review are still relevant today: enhancing the safety and efficiency of maritime traffic and transport, environmental protection and prevention of pollution, elimination of substandard shipping and reduction of the risks of incidents and related casualties. This is confirmed by the open and targeted stakeholder consultation. Protection of lives and EU coasts as well as the promotion of competitive maritime transport remain valid political objectives.

The objective of ensuring that Member States effectively and consistently discharge their obligations as flag States is still valid today. The flag State remain the first line of defence for ensuring that vessels are fit for sailing. Guaranteeing a level-playing field between flag States (whether first or second 'international' registers) still correspond to the needs of the internal market for maritime transport and the competitiveness of EU shipping globally.

The issue of substandard shipping is a global problem. Port State control is often considered as the only effective line of defence against ships presenting risks flying under low-performing flag States. Hence, port State control in the EU (Paris MoU) area will continue to be relevant as long as some shipowners and some flags are not doing a

[85] *Idem*, p. 52
[86] Joint industry statement, 1 March 2017, https://www.europeanshippingweek.com/joint-industry-statement-clia-europe-eba-ecasba-ecsa-empa-eta-etf-euda-interferry-wsc/

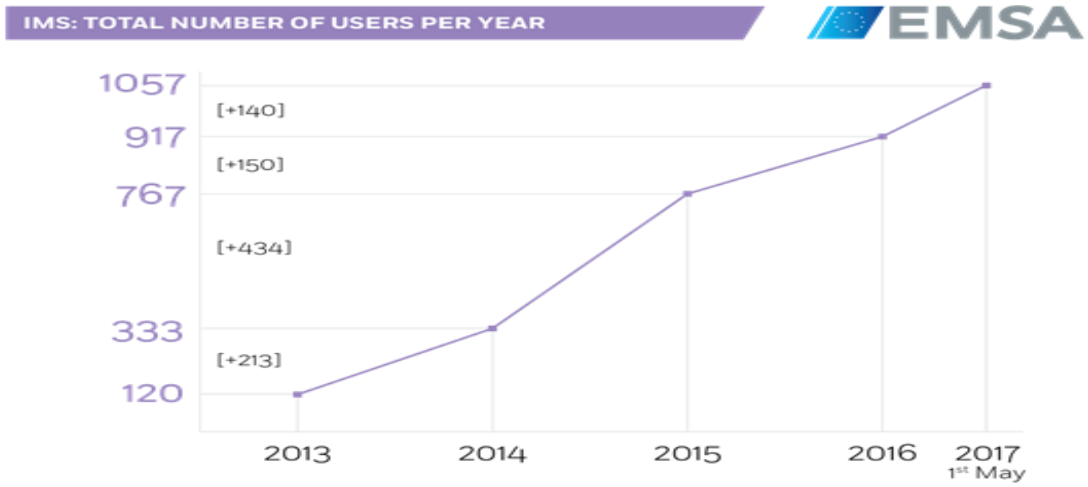
proper job. In other words, the need for port State control will remain for as long as there are significant differences in the standards and the quality of the controls across flag states and between different regions around the world.

In a context of global shipping competitiveness, port State control is perceived as an important tool for ensuring fair competition between shipping companies (i.e. ensuring a level playing field). High standard shipping – as evidenced by a good port State control record – is considered by the industry to be an important competitiveness parameter.

With its objectives of facilitating the expeditious holding of safety investigations and proper analysis of marine casualties and incidents to determine their causes, the Accident Investigation Directive meets EU citizens' demands for transparency and a high level of safety, protection and precaution.

Regarding coastal State responsibilities, the original objectives of the Vessel Traffic Monitoring and Information System Directive have been confirmed as relevant over the years. The Union Maritime Information Exchange System responds to operational needs even beyond the original objectives of maritime safety, pollution prevention and enhancing the response capacity of maritime authorities. It now serves a range of other purposes corresponding to priority EU needs (border control, fight against illegal activities and support to a wide range of coast guard functions). As Figure 15 below, regarding requests to the Integrated Maritime Services, shows, there is an increasing demand for access and use from a whole range of actors with a legitimate interest in what is happening at sea. This is both as regards vessels and the goods and passengers they carry and as regards efficiency of operations.

Figure 15 - EMSA Integrated Maritime Services total users[87] per year

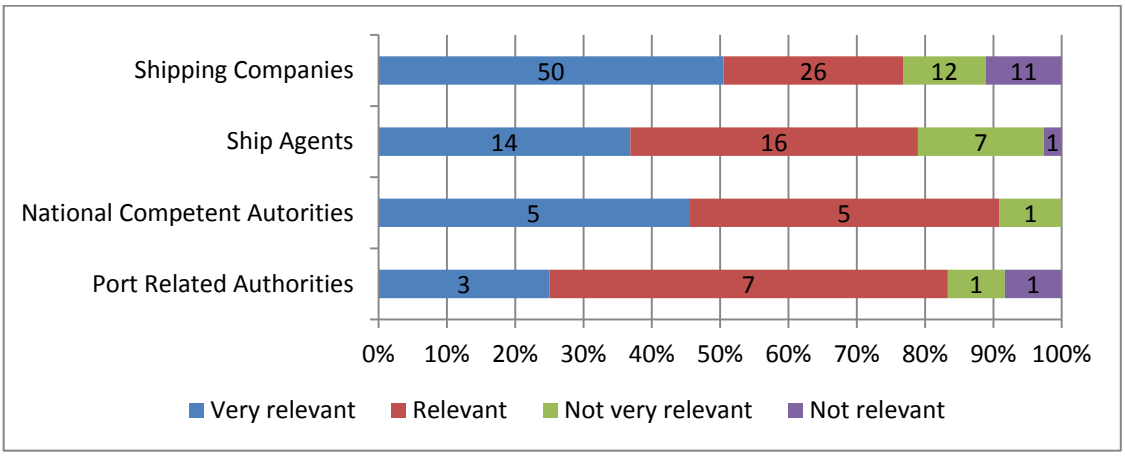


Source: EMSA

As for the legislation related to reporting formalities, its original objectives of simplification and harmonisation of administrative procedures, digitalisation and rationalisation certainly correspond to existing needs. They are considered by the shipping sector as a must for their competitiveness.

[87] Users can be any authority with a legitimate interest in, or in need of, situational awareness at sea including maritime administrations (safety, security, search and rescue, traffic monitoring, port State control, etc.), but also environment, sea border control, fisheries control, navies, etc. e.g. all Coast Guard Functions as well as customs (currently there are 26 users from DG OLAF and approximately 50+ users within the Member States whose organisation is linked with customs/taxation).

Figure 16 - The relevance of Reporting Formalities Directive objectives



Source: PwC elaboration on Targeted Consultation results (2017)

Coherence of the maritime legislation reviewed

- ***To what extent is the intervention coherent within and between each instrument?***

Overall the division of roles and responsibilities between flag, port and coastal State is one of complementarity of obligations. This mirrors the legal framework at international level. In this respect there is only little margin to discuss the coherence of the set up being reviewed under the fitness check.

There is indeed coherence between the Directives. Each has their individual rationale and objectives, with different approaches and mechanisms for the same purpose of ensuring maritime safety and environmental protection. The Flag State Directive basically applies a preventive approach whereas the Port State Control Directive applies a more corrective approach. This is particularly relevant when Flag state control as the first line of defence has not been effective. The Accident Investigation Directive brings in improvement through the dissemination of lessons learnt from maritime incidents. Finally, the Vessel Traffic Monitoring and Information System Directive also contributes: on the preventive side, through an effective monitoring of traffic, and, on the response side, with effective sharing of information and coordination between Member States, when accidents happen.

Apart from the specific situation of the Reporting Formalities Directive, no significant issues have been identified in relation to the other four directives individually. Furthermore as the directives complement each other, there is no evidence pointing to any negative cumulative impact. Rather the opposite: the directives allow Member States to fulfil their international obligations in a more effective and efficient way. One could argue that there is indeed positive cumulative impact.

One example is how the revised Port State Control Directive with the targeting system has supported Member States' ability to fulfil their responsibilities as flag States. The Flag State Directive requires that flag States have the responsibility to rectify the situation for ships flying their flag that have been detained through port State control. For Member States on the black list or the grey list for two consecutive years, flag States have the obligation to report to the Commission with an identification and an analysis of the main reasons that have led to the detentions and the deficiencies. One can say that, through allowing a better targeting of risky ships, the port State control New Iinspection

Rregime has facilitated the discharge by flag States of their obligations regarding certifying that a vessel is fit for sailing.

Another example of coherence between Directives is the complementarity between the EMSA systems which support the implementation of the Vessel Traffic Monitoring and Information System and the Port State Control Directives. Due to the interface between SafeSeaNet and THETIS, the use of real time information to give actual times of arrival and departure of ships facilitates the targeting of vessels for inspection. To be noted here that stakeholders have pointed out a number of technical issues and suggested a number of areas for further improvement. The Commission and EMSA have brought them to the attention of the competent authorities in the Member States.

Notwithstanding the positive cumulative impact of the legislative set up to address maritime safety, there is however a slight inclination towards a more corrective approach. This results from the vital necessity to protect EU coasts in the aftermath of the *Erika* and the *Prestige* disasters. The third maritime safety package has brought, inter alia, improvements to the effectiveness of port State control prescribing an even tighter regime. However it has fallen short of reinforcing the EU's "first line of defence". This can be explained by the decision of the co-legislator at the time to await the outcome of the on-going negotiations in IMO and the resulting adoption of only a framework Directive.

Finally a more detailed analysis has been carried out of the coherence between the Vessel Traffic Monitoring and Information System Directive and the Reporting Formalities Directive and their respective contribution to achieve the objectives of transport and trade facilitation.

There is complementarity between the objectives of both Directives and synergies between the systems established by the two Directives. The information required by the Vessel Traffic Monitoring and Information System Directive is one part of the reporting streamlined via the National Single Windows. By channelling the data via the National Single Window together with e.g. the information for border checks on persons and the cargo information required under the customs legislation, the maritime operators can save time and efforts by reporting all these formalities via the same entry point[88].

The Reporting Formalities Directive has mandated use of digital reporting and the establishment of single entry points to facilitate and simplify the submission of information by maritime operators. The information is channelled to the dedicated systems including SafeSeaNet, where it is being elaborated for specific purposes (e.g. maritime safety, border control, customs and phytosanitary checks, etc.).

In other words, the Reporting Formalities Directive on the one hand is more concerned with the *reporting* of information and how to make it less burdensome for operators. The Reporting Formalities Directive creates a common reporting entry point for the information required under the Vessel Traffic Monitoring and Information System Directive and other relevant EU legislation, e.g customs, border controls, etc. The Vessel Traffic Monitoring and Information System Directive on the other hand is about the possible *exchange, sharing, use and re-use* of relevant information required to be reported in the various pieces of EU legislation, supported by a cross-sector and cross-border information exchange platform.

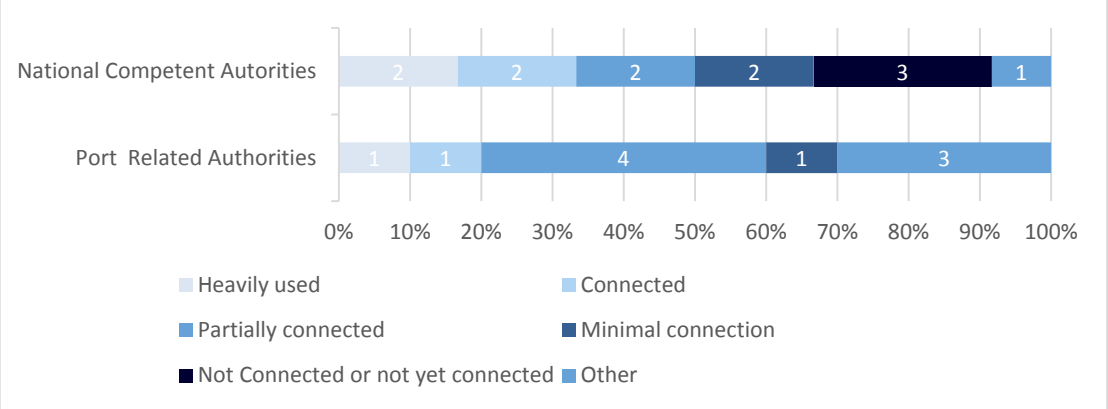
[88] Reporting Formalities Directive, Annex 1

The evolution of the SafeSeaNet system and the revision of Annex III of the Vessel Traffic Monitoring and Information System Directive in 2014 have increased the coherence with the other legislation being reviewed. A clear link to the Reporting Formalities Directive was made, together with links to *inter alia* legislation concerning maritime waste, maritime pollution, port State control and maritime security.

Clearly, the National Single Windows and the SafeSeaNet system need to be designed in a way so that they can work effectively together, contributing to the 'reporting only once' objectives of both Directives. The Vessel Traffic Monitoring and Information System Directive includes the requirement for Member States to develop and maintain the necessary technical interfaces to connect the national SafeSeaNet systems to the central SafeSeaNet system. The Reporting Formalities Directive requires the National Single Window to be compatible with the national SafeSeaNet systems.

From an analysis of the current situation it appears that all 21 EU coastal States have a functioning national SafeSeaNet system. However few today have a functioning interlinking of the National Single Window with their national SafeSeaNet. This was confirmed also by results of the survey among national competent authorities and port authorities (see Figure 17).

Figure 17 - Is the National Single Window connected to the national SafeSeaNet?



Source: Targeted consultations 2017, national competent and other authorities questionnaire replies; see also Evaluation study by Panteia and PwC, p. 58-59

Findings illustrate the diversity of situations and linking between the National Single Window (when existing at all) and the national SafeSeaNet, with a related impact on the exchange mechanism. Unavailability of the required information or low data quality influence the confidence in the information provided and therefore in the exchange system allowing the reuse and sharing of information.

While the legislative framework is therefore coherent overall, the insufficiently binding provisions of the Reporting Formalities Directive and the resulting lack of implementation and lack of achievement of harmonisation objectives have undermined the overall success of the legislative set-up. Including for the sake of the functioning of the Vessel Traffic Monitoring and Information System Directive, it is therefore urgent to review and improve the current ship reporting environment.

- ***To what extent is the intervention coherent with wider EU policy?***

The analysis of the individual evaluations of the Directives covering this fitness check did not reveal any incoherence with the other maritime Directives and Regulations

included in the third maritime safety package from 2009 or the overall maritime safety acquis.

With regard to other EU maritime legislation, stakeholders identified an overlap to some extent between the Flag State Directive and the Regulation on the transfer of ships between registers[89]. However, opinions on whether or not those two instruments should be integrated into one instrument differ substantially between stakeholders and the analysis is inconclusive. The potential overlap relates to the fact that both the Flag State Directive and the Regulation require more or less the same type of information. This overlap was already addressed by the Commission[90]. On the one hand the Flag State Directive has a safety objective only i.e. to avoid so-called 'flag hopping' to avoid stricter enforcement of applicable rules. On the other hand the Regulation on the transfer of ships between registers concerns the objective of vessels as goods on the internal market subject to the four freedoms, whilst respecting safety standards, i.e. national specific technical rules should not work as a barrier to free circulation. So far the Commission has not concluded whether there is any added value of merging the two pieces of legislation or if the connection/interoperability of registers and information systems can achieve the same effect.

Stakeholders also find that there is a need for better coordination between the Port State Control Directive and the Directive on roll-on / roll-off ferries and high speed passenger craft[91]. It should be noted here that this coordination has already been addressed in the revision of the related Directive as part of the Passenger Ship Safety package[92]. In this regard those roll-on / roll-off ferries and high speed passenger craft which can be brought within port State control (some 70% of the total) will in the future be treated under this regime. This will allow gaining from the well developed and harmonised port State control inspection system. It will bring in benefits in terms of administrative expenditure and efforts as well as reduce the burden on shipowners and operators – all without compromising on safety. Those vessels which cannot be brought within port State control will continue to be inspected to the same high level and full account will be taken of all inspections and surveys to which they are subject.

Regarding the social dimension, the Directives fully support the related objectives of EU maritime transport policy. Through a specific revision of the legislation for that purpose[93], both Flag State and Port State control support the enforcement of the provisions of the ILO Maritime Labour Convention from 2006 – the latter having been incorporated into EU law through the implementation of the agreement concluded by European social partners in the maritime transport sector[94]. For flag State responsibilities, certain enforcement and compliance provisions have been introduced to ensure that Member States establish clear objectives and standards of their inspection systems. Personnel should also have appropriate training competence to carry out verifications.

For port State control, all EU Member States have to inspect compliance with Maritime Labour Convention requirements on any ship calling into an EU port. Depending on the

[89] Regulation 2004/789/EC
[90] Report on the implementation of Regulation 2004/789/EC, COM(2015) 195
[91] Directive 99/35/EC
[92] by means of Directive 2110/2017/EU
[93] Directive 2013/54/EU
[94] Council Directive (EU) 2018/131 of 23 January 2018 implementing the Agreement concluded by the European Community Shipowners' Associations (ECSA) and the European Transport Workers' Federation (ETF) to amend Directive 2009/13/EC in accordance with the amendments of 2014 to the Maritime Labour Convention, 2006, as approved by the International Labour Conference on 11 June 2014

seriousness of the deficiencies concerning living and working conditions on board of a ship that would have been identified during an inspection, actions include: requiring the master to rectify; if significant, notifying the shipowners associations and the flag State; and possible detention of vessels in serious cases. Port State control also supports Member States inspection of the compliance of ship masters and shipowners with the training and qualifications requirements under EU law.

Finally the objective of the Reporting Formalities Directive to simplify procedures and reduce the administrative workload for ship-masters and crews supports the social dimension of maritime transport policy. The insufficient implementation and achievement of the objectives of the Directive have been identified by the trade-unions as one of the contributing key problems today for sailing in EU waters. This results in seafarer fatigue, with safety risks and to the detriment of job satisfaction and smoothness of operations.

Beyond maritime safety, the EU intervention covered by the fitness check is fully coherent with the strategic goals and recommendations for the EU's maritime transport policy until 2018[95] and the Communication and action plan with a view to establishing a European Maritime Transport Space without Barriers[96].

It is in line with the priorities of the Juncker Commission for digitalisation and internal market. The simplification, digitalisation and harmonisation objectives of the Reporting Formalities Directive remain strong priorities for EU overall policy, in line with the Commission priorities for 2015-2019 (notably: jobs, growth and investment; the digital single market; and the deeper and fairer internal market). The directive also aims at reducing administrative burden, thereby boosting competitiveness of the maritime transport sector. All these objectives have been recalled recently by the Council who underlined the need to create a European Maritime Transport Space without Barriers again in its June 2017 Conclusions[97].

Regarding the coherence of the Reporting Formalities Directive with customs policy, work was initiated in a joint customs-transport project to facilitate the establishment of a common digital cargo declaration (the eManifest). On the customs side, the harmonisation of the processes and data elements of the customs formalities at EU level as well as the detailed data requirements for electronic processing purposes was ensured through the new package of customs legislation, the Union Customs Code, applicable since May 2016 (with a transitional period). As the implementation of the Union Customs Code is not fully completed, the IT projects related to the automation and data harmonisation of the customs formalities at entry are currently under development by Member States and Commission, with a view to be operational as of 2020.

Furthermore due to the Vessel Traffic Monitoring and Information System Directive, the EU intervention covered by the fitness check contributes to the European agenda on migration and decarbonisation. The evolution of the SafeSeaNet system and the revision of Annex III of the Vessel Traffic Monitoring and Information System Directive in 2014 have increased the coherence with wider EU policy.

[95] Commission of the European communities, Strategic goals and recommendations for the EU's maritime transport policy until 2018, COM(2009) 8 final
[96] Regulation EC/789/2004
[97] See note 2

The priority of fighting climate change and ensuring sustainability is supported by the EU's Maritime Information and Exchange System for air and marine pollution detection and facilitation of ship waste disposal. Port State Control inspections support enforcement regarding the sulphur content of fuels[98], the monitoring, reporting and verification of GHG emissions from ships[99] as well as ship recycling obligations[100], with the accompanying developments of the EMSA THETIS tool.

For the latter the scope of port State control inspections is nonetheless a matter of concern for Member States. On the one hand, the inclusion of some environmental legislation is adding to the workload of inspectors and the complexity of the system. Several Member States therefore consider that port State control is moving too far from its original goals and risks overburdening the system. On the other hand, some Member States have expressed the wish that port State control is broadened in its scope to allow for the inspection of foreign fishing vessels for safety, environmental and working conditions related issues[101].

Related to the Union Maritime Information Exchange System in support of environmental objectives, the SafeSeaNet system with its vessel tracking and tracing, coupled with the EMSA CleanSeaNet satellite images service for the detection of oil spill and discharge, has enabled effective prevention of ship-source marine pollution and possible enforcement of penal sanctions. Statistics from EMSA in general terms show that the number of potential oil spills detected per 1000 km^2 has halved – from an average of 11 to an average of 5, since the CleanSeaNet service came into use some 10 years ago (see also figure 5).

The integration of information into the EMSA integrated maritime services (IMS) allow cross-sectoral and cross-border support to several additional users apart from those directly involved in maritime safety, security and pollution prevention e.g. transport logistics, environmental protection, fisheries control, sea border control, general law enforcement, customs and defence. The core maritime picture delivered by EMSA is provided to Frontex and supports, with additional specific intelligence, its operational task for sea border control[102]. The same approach is applied for fisheries control (EFCA) and for the fight against smuggling (MAOC-N and OLAF). This approach has built on existing systems and helped to avoid duplication and inefficient use of resources.

There is untapped potential here in inter-linking these developments based on the Vessel Traffic Monitoring and Information System Directive with other EU initiatives related to maritime surveillance, such as the voluntary Common Information Sharing Environment (CISE)[103]. This would allow streamlining maritime information exchange across the EU

[98] Directive 1999/32/EC
[99] Regulation 2015/757/EU
[100] Regulation 2013/1257/EU
[101] Directive 2017/159/EU implements the Work in Fishing Convention which establishes minimum living and working conditions for fishermen. However, there is no enforcement instrument at EU level to enforce those provisions. Furthermore, the low number of ratification of the Convention by the Member States makes its enforcement difficult given that the enforcement provisions of the Convention were not included in the Directive.
[102] As codified in the coast guard package adopted on 14/09/2016
http://www.consilium.europa.eu/en/press/press-releases/2016/09/14/european-border-coast-guard/#
[103] Commission Communication COM(2014)451 promoting Maritime CISE as a "voluntary collaborative process in the European Union seeking to further enhance and promote relevant information sharing between authorities involved in maritime surveillance. It is not replacing or duplicating but building on existing information exchange and sharing systems and platforms. Its ultimate aim is to increase the

by building on the existing systems and avoiding duplication at extra cost with no added value. Studies undertaken on behalf of EMSA[104] have clearly demonstrated the Union Maritime Information Exchange system potential to support the sharing of information conceptualised by CISE.

Regarding the coherence with other modes of transport, there is scope to interlink the developments of the Vessel Traffic Monitoring and Information System Directive with the traffic monitoring systems for inland waterways (River Information Services). In a long-term vision, it could be explored how the River Information Services can become interoperable or integrate them in existing information and exchange systems, especially as regards the Automatic Information System.

The coherence of the EU legislation under review with international law and notably IMO standards is overall not questioned as most of these standards are in fact incorporated into EU law through the concerned Directives.

There is however one case where a more detailed analysis would be warranted which is the Flag State Directive. Some Member States suggested that the Flag State Directive can be seen as a legal duplication of international efforts, causing them to argue in favour of its expiration in its entirety. These opinions however disregard the added value of an effective enforcement mechanism at the EU level.

EU transport policy aims at protecting the competitiveness of EU shipping and for that purpose regional EU legislation should be aligned with international rules. The Flag State Directive may not be adding value in this respect in light of recent developments regarding the IMO III-Code[105], which became mandatory in January 2016. Initially the mandating of the IMO audit and the implementation of a quality management system under the Directive were considered by Member States as sufficiently consistent with international obligations. The EU layer today is clearly not aligned to international law on the quality of the maritime administration and flag performance.

EU added-value of the maritime legislation reviewed

- ***What is the additional value resulting from the EU intervention(s), compared to what could have been achieved by Member States at national and/or regional levels?***

The overarching added value of the EU intervention being reviewed here is that it brings a level-playing field between the fleets of the EU Member States. This is achieved by providing for a uniform and effective implementation of IMO instruments and conventions, and consequently as well for the industry.

Accident investigation is a striking example where EU legislation has facilitated effective and uniform implementation of the related IMO guidelines. This has replaced a wide variety of responses or even no response in case of accident investigations amongst Member States. The Directive has also supplemented the international framework by establishing the Permanent Cooperation Framework and providing for a European

efficiency, quality, responsiveness and coordination of surveillance operations in the European maritime domain and to promote innovation, for the prosperity and security of the EU and its citizens."

[104] Study to assess the future evolution of SafeSeaNet to support CISE and other communities, September 2014, https://ec.europa.eu/transport/sites/transport/files/modes/maritime/studies/doc/safeseanet/2014-study-to-assess-the-future-evolution-of-ssn-to-support-cise-and-other-communities-executive-summary.pdf

[105] and RO-Code (Code for Recognised Organisations)

database for marine casualties. In addition, the Directive provides for a standardised approach for accident investigation and reporting. As a result of this standardisation, accident investigations are conducted in a harmonised way and reports are comparable. Over the years, investigation has become more streamlined in and between EU Member States, although some countries still have progress to make. Overall, stakeholders agree that the Directive contributed to the professionalisation and harmonisation of accident investigation practices. This is perceived as a considerable added value.

Historically, accident investigation was considered less of a priority compared to other flag State responsibilities, port State control or vessel traffic monitoring. This meant that at the time of the Directive's adoption only 13 EU Member States had any sort of maritime accident investigation capacity. Some Member States, particularly those with small fleets or coastlines, were clearly reluctant to provide for a permanent investigative capacity to investigate incidents which occur unpredictably and may occur infrequently. This led many to neglect their international responsibilities in this regard.

Port State control is a case in point where Member States would have intervened or continued to intervene even without EU intervention under the intergovernmental regime of the Paris MoU on port State control. The added value compared to the Paris MoU is the legally binding character of the regime – which also results in the commitment of the necessary resources – that can be effectively enforced vis-à-vis Member States[106]. The introduction of a system of refusal of access (banning) for ships considered to be sub-standard (having had multiple detentions in a short time-period) is mentioned as a specific example of achievement by the Directive[107]. Shipowners across the EU see the value of applying the same rules and procedures to inspections. Likewise, stakeholders recognise the EMSA THETIS module and the training and other assistance (including IT support) provided by the Agency to be of great added value. EMSA services supporting the implementation of the directive provide uniformity so that when sailing to any port in the EU, shipowners can expect to be met with the same rigour and treatment.

On the other hand, the Port State Control Directive, by adding an additional regulatory layer, is also perceived as removing the flexibility of the Paris MoU[108]. This is perceived notably regarding the decision making and the fair share or inspection commitment scheme (whereby if a Member State of the Paris MoU fails to carry out its agreed number of inspections in a given year it faces no sanction from the Paris MoU while such commitment is legally binding for EU Member States). Furthermore while the New Inspection Regime as a whole is perceived as being effective and efficient for targeting of high-risks ships, the fair share scheme has some limitations. Some countries have geographical challenges in fulfilling their inspection shares while others are doing more inspections than their fair share. However even if several Member States are indeed putting a lot of focus on these issues as important matter of concern which therefore need to be addressed, it does not question the overall very high added-value of the EU layer for port State control. The EU regime is generally and internationally perceived as the most highly developed in the world and one that should be emulated.

[106] See sub-section 2.3 on the effective contribution of the Directive to the objectives of improving safety, environmental protection and social conditions

[107] For a list of ships currently under detention and of those which have been issued with a refusal of access order http://www.emsa.europa.eu/psc-main/publication-of-information.html

[108] A significant number of Member States point out that the decision making process to change the Directive (full legislative process) is considerably more complex and slower than that used within the Paris MoU context to change either the Memorandum or the Guidelines

A strong factor contributing to the added-value of EU intervention compared to what could have been achieved by Member States at national and/or regional levels is the pooling of resources in a specialised EU body, EMSA, which delivers technical assistance and services to maritime administrations.

The considerable added value associated with EMSA has been confirmed by its external evaluation[109]. The Agency's systems and databases, its training and capacity-building activities and the administrative bridge it creates between the national maritime authorities and the Commission have been a key enabler of the success of the legislation under review.

The support of EMSA in hosting and fostering technical development of EU-level systems is particularly efficient: the Union maritime information and exchange system for safety, surveillance and transport facilitation (SafeSeaNet), the THETIS database for port State control and, to a lesser extent, the EMCIP database for accident investigation are all success stories. Another example is the EU Places of Refuge Operational Guidelines.

These tools are regularly reviewed and developed in order to alleviate any potential burden for Member States as users of the systems, thereby increasing the benefits even further. An example is the EMCIP database where heavy burdens have been identified in the individual evaluation for the Accident Investigation Directive. EMSA has already prepared a more user-friendly version illustrating the capacities for improvement with no need for legislative change.

The Union maritime information and exchange system for safety, surveillance and transport facilitation (SafeSeaNet) as established by the Vessel Traffic Monitoring and Information System Directive may be the most valid case to highlight the added value of EU intervention compared to national intervention alone. No such national action alone in this area could have brought the same results or EU-wide benefits as there would be no common denominator or facilitator/fora, such as EMSA, ensuring the harmonised technical development of what essentially is a huge IT project and platform.

An example where all EU Member States realised the benefit of EU intervention was the setting up in EMSA of the Data Centre to handle all Long Range Identification and Tracking (LRIT) information required to be transmitted from vessels under the IMO SOLAS convention. Instead of each Member State setting up such centres, possibly in a non-harmonised way, an EU LRIT Data Centre was created and is hosted in EMSA. This enabled a more efficient and effective implementation and at the same time harmonised operation[110].

There is a high degree of interdependence between Member States in being able to build up a comprehensive monitoring of maritime traffic, ships particulars, dangerous goods etc. All Member States need to know what is going on at sea and along their coast and when an accident occurs, coordinated action can take place as early as possible mitigating any consequences as far as possible. The absence of such an EU-wide system would unlikely have resulted in any uniformity, more likely in different technical

[109] Evaluation on the implementation of Regulation 2002/1406/EC establishing EMSA - Final Report, published on 30/08/2017, http://www.emsa.europa.eu/emsa-documents/latest.html

[110] In fact its integration into the Union Maritime Information and Exchange System enables a more comprehensive maritime monitoring and awareness service for all EU Member States and for all aspects involving a sea leg, enabling in turn better and more coordinated mitigation efforts should an incident or accident happen.

solutions and therefore less sharing and exchange of information, to the detriment of maritime safety, security and pollution prevention.

The added value of the Vessel Traffic Monitoring and Information System Directive has been to provide a legally binding regime requiring the Union Maritime Information and Exchange System to be set up and used. This enabled EU Member States to fulfil international requirements incumbent on all States as a coastal State, in a harmonised, effective and efficient way. The system and the services can furthermore be used to support a whole range of operational Coastguard functions and to enable transport facilitation – all in one system.

Finally regarding the added value of EU intervention for reporting formalities, the individual evaluation of the related Directive has shown that it has speed up the shift to digital reporting and relative harmonisation of standards within Member States. In most Member States, at least some shift from local to national standards has taken place and one Member State has a fully harmonised national system in place. Full or partial digitalisation is done in more than half of the analysed Member States.

However, while several benefits can be seen at national level, the added value at EU level is much more limited due to the lack of harmonisation between the Member States resulting in the existing plethora of individual national solutions. Therefore the establishment of the European Maritime Transport Space without Barriers has not been achieved and administrative burden has not been sufficiently reduced. This means that maritime transport continues to suffer a competitive disadvantage from the lack of internal market comparable to the other transport modes.

- ***To what extent do the issues addressed by the intervention continue to require action at EU level?***

Maritime safety and pollution prevention to protect EU citizens, EU coasts and marine environment remain relevant objectives of the EU intervention being reviewed. This is illustrated by the outcome of the rounds of visits 'on the ground' carried out by EMSA and the number of associated findings, as well as other information brought to the attention of the Commission. The views expressed by the stakeholders have also confirmed that effective enforcement due to EU intervention remains of great added value.

The work done within the context of the port State control Directive provides perhaps the best example. It is only through working together be it within the Paris MoU or at EU level that port State control can have the scale to be truly effective.

Any port State control inspection carried out at any port in the Paris MoU region has become very similar thanks to a number of instruments: the targeting of ships by means of an individual ship risk profile, the sharing of the inspection burden between States, the follow up through the sharing of inspection data and the development of a harmonised training system for individual inspectors. The EU directive makes the non-binding requirements of the Paris MoU a legally enforceable obligation on each EU Member State. This combined with the training and IT underpinning provided by EMSA to all Paris MoU States means that without EU action we could not continue to have the same level of performance.

An issue of growing concern is the scarcity of resources, both financial and human, on the Member States' side. This could potentially impact on their ability to maintain their

administrations' expertise, experience and knowledge both in relevant parts of the flag administration and for the independent Accident Investigation Bodies.

In the case of flag State work, the concern is linked to the very heavy reliance on Recognised Organisations. This entails the risk of removing from the administrations the necessary and required expertise for dealing with the commercial vessels in their fleet and for upholding international obligations incumbent on flag States (mandatory requirements under the IMO III-Code since 2016). In that respect, having a Flag State EU Directive remains of added value as it provides for an instrument at EU level to enforce the effective discharge by EU flag States of their international obligations. This finding also points to a need to address the scope limitations and the need for alignment of the EU Directive that have been highlighted under the coherence chapter.

In the case of accident investigation, the added value of the EU Directive is to bring effective, efficient and uniform application of international obligations amongst Member States. This comes with a certain cost in terms of human and financial resources allocated to the task. However, as long as there are maritime incidents, the need for accident investigation will remain. It is difficult to see how Member States would discharge their obligations in a more efficient way without the EU intervention. Rather the opposite, the sharing and pooling of resources that is made possible under the Directive may be exploited further.

For port State control, some respondents to the consultations referred to a lack of flexibility of an EU Directive compared to an international agreement (the Paris MoU). However the benefits provided in terms of enforcement and consistency with the assistance of EMSA training and the THETIS system outweigh to a great extent the limitations attributed to the New Inspection Regime and the fair-share scheme.

The centralised training and support from EMSA for all port State control officers/inspectors across the EU are highly appreciated and key also for a harmonised approach. Yet resources and recruiting the people with relevant expertise and experience is of increasing concern, in a similar fashion as for flag State and accident investigation.

Overall it appears that there may be a case for more sharing of expertise and pooling of competences via EMSA.

Finally the simplification of reporting formalities and the associated reduction of administrative burden continue to require EU intervention given the insufficient level of achievement so far. Harmonisation at EU level can obviously only be achieved through EU intervention.

Vessels will typically continue trading between Member States and internationally. EU intervention regarding coastal obligations will remain valid and the SafeSeaNet system will continue to provide added-value. As illustrated above, the latter has evolved over time towards other (non-safety related) maritime usages and other public-sector domains such as trade and sea border control. The added value hence has increased in parallel.

One issue that could still enhance the added value of the Integrated Maritime System is the access to data, in particular positioning data sent from ships (via the Automatic Information System). It is for example under discussion that such data could be opened up allowing reuse or use by the shipping industry themselves, possibly simplifying also their reporting requirements. There is also an ongoing discussion whether this positioning information should be made publicly available (some Member States already make such

positioning data publicly available). That could support more efficient (or abolish) some of the existing reporting[111] and facilitate logistical efficiency and interaction with ports. Actual time of arrival and departure would greatly help in the planning and efficient use of berths in a port. This would also produce positive effects in respect of reduced air pollution from ships – steaming at the appropriate speed in approaching the port and the (free) berth.

6. CONCLUSIONS

The outcome of the fitness check confirms that the EU legislation is relevant, effective, efficient and of added value, with the exception of the Reporting Formalities Directive. It plays a key role in enforcing IMO standards, thereby contributing to a high level of safety, security and sustainability of maritime transport as well as ensuring a level-playing field between Member States.

Overall, the distinctive roles of flag State as the first line of defence, port State as the second line of defence and coastal State for traffic monitoring and intervention, have their inherent relevance and complement each other. This contributes to achieving the objectives of safe, secure and sustainable maritime transport. The EU legislation mirrors international obligations incumbent on Member States which cannot be challenged. The added value of EU intervention compared to a situation where international obligations are simply transposed at national level is the enforcement and harmonised implementation of rules as well as the cooperation of all EU Member States in finding together sustainable solutions at international, EU or regional level. This provides for a high and uniform level of safety and a level-playing field between Member States. A key factor making the EU layer relevant, effective, efficient and of added value is the support of EMSA.

The exercise has faced a number of methodological limitations, mainly the difficulty in establishing a causal link between the available quantitative data on the implementation of the directives and the actual impact on maritime safety and pollution prevention.

Firstly, there are other pieces of legislation which also contribute to achieve these objectives. Hence, it is difficult to attribute effects to one directive over another. Other key texts are the legislation on Recognised Organisations[112] (classification societies who can be delegated to carry out work on behalf of a flag State) or the legislation related to training and qualifications of seafarers. They both contribute to the same objectives of ensuring quality shipping and avoiding accidents.

Secondly there are other factors and circumstances which influence the achievement (or lack) of these objectives which make it difficult to isolate the effects of the directives. For example, the fact that the number of deficiencies identified through port State control has increased should be interpreted that substandard ships are better targeted. However it may also have been influenced by a different factor which is that the fleet is ageing, that freight rates are 'depressed' and there is overcapacity in some segments, resulting in difficulties to earn money and therefore a temptation to cut down on maintenance.

[111] Reporting into Mandatory Reporting Schemes/Vessel Traffic Schemes along the EU Coastline and as reported to the IMO

[112] Directive 2009/15/EC and Regulation 391/2009

Another example is flag performance: the fact that it has deteriorated over the analysed period can be explained that through more effective port State control the risk of being on the grey list became higher (illustrating the coherence between the two Directives). However it can also mean that Member States have devoted less resource to flag surveys over the period or have not exerted enough control over the Recognised Organisations.

A final example is the number of incidents reported in the EMSA EMCIP database for the purpose of accident investigation which has increased over the years (from around 2000 in 2011 to around 3200 in 2016). Such an increase in reported incidents could at first glance signal a deterioration of maritime safety in EU waters. However, it actually reflects a continuous increase of database population effort by Member States. This evidence is therefore likely to remain irrelevant to measures progress or deterioration of the maritime safety situation until it has stabilised and full reporting is made by Member States into the database. In this regard, it appears that the data being reported to EMCIP today provides a more accurate reflection of what is happening in EU waters and to the EU flagged fleet.

These examples are important as they illustrate well the difficulties and limitations of the exercise. The five evaluation criteria have in fact mainly been used to assess the Directives against their more specific objectives and instruments.

Another key limitation was related to the stakeholder response: somewhat unbalanced representation with limited input from shipowners and non-EU flags; partial responsiveness by Member States regarding country profiles; and low response rate for the open public consultation. Mitigating measures (such as contacting stakeholders directly) and sufficient secondary material (i.e. databases, literature) allowed however providing additional inputs and resulting in sufficiently robust conclusions.

It is however fair to say that overall the EU maritime transport and safety policy has contributed in a number of ways to the overall improvement, both in terms of reduced number of serious incidents or accidents and in the capacity to monitor and take mitigation action earlier. This was both through better awareness and understanding contributing to a deterrent effect and via real operational application through EMSA.

Apart from the Reporting Formalities Directive, the fitness check concludes that the maritime legislation under review generally bring effectiveness and efficiency and is relevant and of added value.

The Flag State Directive has incentivised Member States to undertake the IMO audit, share the results and certify their quality management system. This has had a direct impact on the level-playing field between flag States (whether first or second 'international' registers). The Accident Investigation Directive has resulted in the setting up of independent Accident Investigation Bodies in all Member States to undertake adequate safety-related investigations when needed. The revised Port State Control Directive has allowed targeting better risky ships, entailing a better use of resources. The Vessel Traffic Monitoring and Information System Directive was the legal base for establishing SafeSeaNet, today the Union maritime information and exchange system. The latter was fully effective for safety-related purposes such as proper monitoring of hazardous material and dangerous goods and has developed so successfully that it is now supporting a range of maritime transport and other coast guard purposes, including that of efficient port State control.

On the one hand, the Reporting Formalities Directive has brought some expected results, enabling the reporting-once principle at national level and promoting digitalisation. Nonetheless, the objectives of harmonisation and simplification at EU level have not been achieved. According to some stakeholders, in particular ship-owners, the situation today can even be considered as worse given the heterogeneous development of the National Single Windows and the variety of situations and systems now in place.

With regard to the internal and external coherence of the overall set up, the fitness check has not found evidence suggesting the need to overturn the legislative framework. However, the analysis has highlighted a need to rebalance the overall legislative set up towards a more preventive approach, notably by reinforcing the EU layer for the first line of defence. The policy as developed since the early 1990s has had a focus on Member States as port and coastal States but much less as flag States, in anticipation of the IMO III-Code becoming mandatory. The latter has now become mandatory since 2016 and there is continued need for a uniform and convergent implementation of existing international rules in the Union. The fitness check is therefore pointing to a need to revert to the prime responsibility of Member States as flag States.

There is also room for improvement to achieve the complementarity between the Vessel Traffic Monitoring and Information System and the Reporting Formalities Directive for trade facilitation, starting with solving the outstanding implementation of the current National Single Windows. More complementarity could as well be explored between the Port State Control and the Vessel Traffic Monitoring and Information System Directives by making the interface between SafeSeaNet and THETIS stronger in operational terms.

There is finally scope for better external coherence in the case of the Union Maritime Information and Exchange System with other information-sharing related initiatives in the maritime domain like the voluntary Common Information Sharing Environment (CISE). This process is already being looked at through the European Coastguard cooperation and the task attributed to EMSA to support the streamlining of existing information-sharing efforts.

The recommendations at the level of the individual Directives are:

- **Regarding the Port State Control, Accident Investigation and Vessel Traffic Monitoring and Information System Directives, the situation today does not point to an urgent and immediate need for a revision of the legislation. There are nonetheless a number of possible improvements, notably regarding Port State Control.**

    - For port State control, the individual evaluation has underlined a certain lack of flexibility hampering effectiveness and efficiency. Another issue is the scope of the Directive. On the one hand, the inclusion of some environmental legislation is adding to the workload of inspectors and the complexity of the system and several Member States have expressed concern that Port State Control is moving too far from its original goals and risks overburdening the system. On the other hand, some other Member States have expressed the wish that Port State Control be broadened in its scope to allow for the inspection of foreign fishing vessels for safety, environmental and working conditions related issues.

- For accident investigation, the issue of resources, staffing and expertise for the Accident Investigation Bodies have been widely reported as problematic. This remains a challenging factor for EU legislation enforcing the related IMO rules. It should however not be addressed in isolation from the Flag State Directive.

- For the Vessel Traffic Monitoring and Information System Directive, the rules already require continuous development and improvement of the Union Maritime Information and Exchange System, through the established governance body. Any possible further revision would partly be dependent on the forthcoming proposal for the revision of the Reporting Formalities Directive.

- **For the Flag State Directive, there is scope for strengthening this first line of defence and therefore the preventive approach of the EU maritime safety acquis.**

  The IMO III-Code has become mandatory since 2016 and, as has been done with other IMO instruments, there is a need to revise the flag State directive aligning with the relevant parts of the IMO III-Code. This would ensure continued uniformity and enforcement, contributing to a higher level of maritime safety and maritime transport efficiency as well as guaranteeing a level playing field between Member States. Clear and strong monitoring is necessary even when a flag State has delegated their work to Recognised Organisations/classification societies. This would benefit from the inclusion of clear rules, procedure and guidance in the EU legislation. Linked to this is the measurement of performance of flags that is measured today through port State control only. It could be assessed if other criteria and parameters should be used including any such applicable to Recognised Organisations given that effectively in most Member States they carry out the actual work. Importantly, the requirement for Member States as flag States to undergo the now mandatory IMO Audit should be maintained. Consideration could also be given to whether the disclosure mechanisms as advanced by the IMO Audit Scheme suffice. Novel approaches to improve the collection and dissemination of knowledge, like the involvement of EMSA as an observer to Member State IMO audits, should be considered, in view of continuous improvement.

  Furthermore, the support of EMSA in terms of capacity-building and systems and database has to be factored in (as for port and coastal State obligations). The potential for further support using the EU-wide systems for risk assessment and therefore more pro-active safety, security and pollution prevention rather than only re-active, should be explored. This would help to focus the better use of resources and address shortages in expertise. It could ease the burden on quality operators and further improve competitiveness of the sector without losing focus and enforcement efforts. An additional and linked element would be EMSA training for flag State inspectors. This would enable maritime administrations to implement IMO conventions more effectively and at the same time ensure a higher level of harmonisation of flag State inspections across Europe.

- **For the Reporting Formalities Directive, there is a need for urgent action by reinforcing EU intervention to provide for EU-level harmonisation and digitalisation and to achieve the objective of simplification**. Indeed the

Commission is proposing a revision of the Directive as part of the Commission Work Programme for 2018. An impact assessment has looked at the various options to remedy the shortcomings of the current legislation. Options include, in line with stakeholders requests in the consultations, the possible establishment of a European Maritime Single Window environment with a view to simplify the reporting procedures and create a truly harmonised reporting environment across the EU. Such a reporting environment could be set up in several different ways, including by agreeing on harmonised formats for reporting to the existing National Single Windows or a more centralised solution. Any decision on this will be based on the outcomes of the impact assessment.

Beyond these specific recommendations, the following conclusions are drawn.

Firstly the EU layer of legislation appears fully relevant to ensure enforcement and uniformity. This contributes to a higher level of maritime safety and maritime transport efficiency as well as a stronger level playing field between Member States. The counter factual situation would be international obligations transposed into national legislation with no means for Member States to control each other or to cooperate with the support of EMSA. This would lead to less protection for EU citizens.

The EU is sometimes accused of developing regional legislation going beyond the IMO standards and undermining the credibility of the international regulation process. In fact, in the few cases when the EU developed its own stricter rules, such as the double-hull oil tanker standard and more recently the Monitoring, Reporting and Verification system for GHG emissions from ships, this has prompted progress at IMO level and the subsequent adoption of global initiatives. Where considered of added benefit by the EU Member States in their capacity as flag, port or coastal States, more centralised EU solutions in implementing and applying international requirements have nonetheless been developed. The best example of this relates to the EU-wide information sharing and exchange systems. The EU is today widely perceived as one of the regions in the world where rules are most strictly and properly monitored and enforced with effective systems and procedures in place.

Regarding such enforcement and implementation, there is considerable added value associated with EMSA. The Agency's systems and databases, its training and capacity-building activities and the administrative bridge it creates between the national maritime authorities and the Commission have been a key enabler of the success of the overall maritime transport policy, ensuring real operational application.

Secondly the capacity of Member States to fulfil their international obligations as a flag, port or coastal State in relation to the various Directives appears to be under strain. There is some concern expressed by stakeholders over the difficulty in recruiting staff with adequate training, experience and expertise. Moreover there are indications that several Member States are experiencing difficulties to maintain appropriate resources and are looking for efficiency gains and innovative approaches. Resources, staffing and expertise issues are for example widely reported as problematic for Accident Investigation Bodies. This issue should not be considered in isolation. In all Member States, investigations are now managed and/or conducted by investigative bodies of a permanent character, as required by the Directive. But not all individual investigators of such bodies are necessarily permanently employed there. The issue of resources has to be dealt with in conjunction with any work carried out on the Flag State Directive.

Thirdly the fitness check concludes that there is no major scope for simplification in the overall set up. The five directives are complementary and no overlap has been identified requiring legislative simplification. The overall set-up mirrors the various responsibilities defined at international level which would have to be followed in any case by the Member States at national level. The 'communitarisation' of the IMO international conventions is helping the Member States to discharge their responsibilities in the area of maritime safety. Regarding private operators, there appears to be no trade-off between enforcement of international rules and competitiveness of shipping. Out-flagging relates mainly to factors such as fiscal and /or employment conditions as well as the perception among operators that certain flag States provide their ship-owners with a higher level of service. EU legislation facilitates the competitiveness of quality shipping. EU operators compete on quality rather than on trying to cut costs through the avoidance of fulfilling the rules. The policy supports them by giving advantages to compliant operators and punishing competitors trying to gain a competitive advantage by not doing so.

On the other hand, the fitness check illustrates that there is margin to achieve further simplification and burden reduction in relation to the individual directives. The Port State Control system for example could be simplified and made operationally more flexible to optimise the inspection process and reduce costs for maritime authorities. An alignment of the Flag State Directive with current IMO obligations would also provide for a fully streamlined framework at EU level and reduce any potential regulatory burden for Member States. Regarding the burden for shipping operators, it comes out very clearly from all the consultations that their main concern is the lack of harmonisation for reporting formalities to ports. This generates administrative costs for them and hampers their competitiveness compared to other modes of transport. There is on the other hand no feedback regarding any burden associated to inspections under the port state control regime. Simplification of inspections processes was however provided under the passenger ship safety fitness check.

Fourthly the potential as well as the challenges of digitalisation are horizontal issues. In relation to the five Directives, digitalisation through EMSA systems has been a key enabler for the achievement of the objectives. THETIS and SafeSeaNet (individually and through their interlinking) are the most striking examples. These tools facilitate inspection planning, resource allocation, monitoring and enforcement reducing the burden on national administrations and private operators. Transport facilitation has been achieved to some extent with the developments of SafeSeaNet. However private operators remain particularly disadvantaged compared to other modes of transport in relation to reporting requirements which are not harmonised either between different policy areas within Member States or between Member States[113]. Here digitalisation will help to achieve simplification. It is however challenging given the level of investments needed to adapt systems.

The above conclusions lead to the following recommendations at the level of the policy area considered under the fitness check:

- **Maintain the EU layer of legislation and continue to build on EMSA capacity**. Incremental changes can be made with no need for legislative changes

[113] There is however EU-level harmonisation of *data requirements within respective sectors*, e.g. the harmonised customs data requirements following the implementation of the Union Customs Code legislative package, Regulation (EU) No 952/2013 of 9 October 2013 laying down the Union Customs Code (OJ L 269, 10. 10. 2013).

as demonstrated by the recent developments in relation to capacity-building and the extension of the THETIS functionalities. Existing options with regards to pooling of resources should be better exploited.

- **Explore with Member States the avenues for a better use of resources at national and EU level,** taking a holistic view regarding the various inspection and survey obligations, building on the role and support provided by EMSA and exploiting the efficiency gains offered by digitalisation and information sharing.

- **Take steps for the necessary simplification and harmonisation of the Reporting Formalities Directive as a matter of priority.** The RFD should be revised to simplify the administrative procedures that shipping operators need to follow when entering ports. The fitness check concludes very clearly that this is the major simplification step needed in the reviewed policy area and the number one priority for the years to come.

- **Promote digitalisation and pursue investments in EMSA digital systems, applications and databases** to support enforcement, facilitate implementation and reduce burden on maritime administrations and shipping operators. Regarding the simplification and harmonisation of reporting formalities, it results from the outcome of this fitness check that the new maritime single window environment needs to be designed in a way that it can work effectively together with the Union Maritime Information and Exchange System, building on existing systems and with the support of EMSA.

While maritime safety is crucial, the related regulatory framework should support the conditions under which the maritime industry can thrive and remain competitive on the global market. This includes the integration of new approaches and emerging technologies. An avenue worth exploring is the development of risk-based approaches with the support of EMSA systems, to promote the best use, possibly sharing or pooling, of technical resources in order to avoid shortages in expertise and ease the burden on quality operators.

Such a pro-active (rather than reactive) approach on safety, security and pollution prevention would support the competitiveness of the sector without losing focus on enforcement and quality shipping. Coupled with the simplification of reporting formalities, these measures have the potential to make a major contribution to achieving a safe, secure and sustainable European Maritime Transport Space without Barriers.

Annex 1: Procedural information

1. LEAD DG, DECIDE PLANNING/CWP REFERENCES

DG MOVE is the lead DG. The Decide planning entry is: 2016/MOVE/076.

The fitness check is linked to Decide planning entries for the:

- Evaluation of the Flag State Directive and Accident Investigation – 2016/MOVE/059;

- Evaluation of the Port State Control Directive – 2016/MOVE/58;

- Evaluation of the Reporting Formalities Directive and the Vessel Traffic Monitoring Information System Directive – 2016/MOVE/044.

2. ORGANISATION AND TIMING

The fitness check was launched in April 2016. The ISG met 3 times between April and June 2016 to discuss the roadmaps, the consultation strategy and the terms of reference for the studies related to the above-listed individual evaluations.

After the summer 2016, the external studies were carried out and the ISG met 3 times in relation to these individual evaluation studies.

Finally the ISG met three times in the autumn 2017 to review the individual SWD related to the individual evaluations and the overall Fitness check report.

The ISG is composed of DG MOVE (units D1, D2 and A3) and SG.

DG TAXUD participated in the ISG meetings related to the evaluation of the Reporting Formalities Directive and the fitness check.

The following DGs: MARE, ENV, GROW, EAC, JUST, CNECT, HOME, EMPL, ECHO, LS, were invited to participate and/or contribute to the process.

3. EXCEPTIONS TO THE BETTER REGULATION GUIDELINES

The Better Regulation Guidelines were followed.

4. CONSULTATION OF THE RSB (IF APPLICABLE)

The file was submitted to the RSB. The hearing was held in January 2018 and the RSB gave a positive opinion. The RSB also formulated the following main comments and recommendations:

- The restricted scope of the fitness check seems to limit its quality. Some problem drivers belong to other parts of maritime legislation.
- It is not clear throughout the report that its focus is the enforcement of IMO regulations.
- The positive conclusions of the fitness check are not fully supported by the evidence. It is not clear whether the EU framework is effective and efficient.

- The REFIT simplification dimension is not brought out well in the report.
- The cost burden on shipping operators is not sufficiently analysed.

These recommendations have been taken on board to the extent possible in the following way:

- Text has been inserted to explain the limitation regarding the scope of the fitness check and why certain parts of relevant EU legislation were not included. However, it was also explained that scope covers the three pillars of flag state, port and coastal state obligations, hence allowing drawing relevant results for an overall assessment of the policy area.

- Text was added to reinforce the explanations regarding the link between EU legislation and international standards.

- The conclusions have been rewritten to take into account the limitations regarding the evidence. However, it is considered that there are sufficient elements illustrating and analysis supporting that overall the EU framework is effective and efficient, with the notable exception of the Reporting Formalities Directive.

- Further analysis was made regarding the REFIT dimension, concluding that there is margin to achieve further simplification and burden reduction in relation to the individual directives, such as for the Port State Control system or the alignment of the Flag State Directive with current IMO obligations, and particularly for the Reporting Formalities Directive.

- Regarding the cost burden on shipping operators, the additions clarified that the burden is associated to the lack of harmonisation of the reporting formalities. Regarding the inspections, no significant cost burden has been identified for shipping operators. Rather the other way round, the policy in place supports EU operators by giving advantages to compliant operators and punishing competitors trying to gain a competitive advantage by not fulfilling the rules.

5. EVIDENCE, SOURCES AND QUALITY

The evidence supporting the fitness check analysis includes:

- Evidence from assessing the implementation and application of legislation (infringement procedures)
- Evidence gathered by EMSA through its cycles of visits to the Member States relating to the implementation of Vessel Traffic Monitoring and Information System, Accident Investigation and Port State Control Directives as well as Horizontal Analysis work carried out by EMSA and discussed with Member States
- Information gathered by EMSA through its technical assistance and peer review process related to the National Single Window
- Data contained through EMSA systems and databases such as deficiencies recorded on THETIS (the database for reporting the results of port State control inspections), information from EMCIP (the European Marine Casualty Information Platform), data from Maritime Support Services and the systems hosted in EMSA, etc.

- Results of the various consultations processes: open public consultation, targeted consultations, interviews and surveys

The individual evaluations have been supported by studies undertaken by external contractors who submitted their final reports in summer 2017. The contractors applied standard triangulation approach to address the evaluation questions, through different angles: desk study, interviews, and surveys.

Targeted surveys were carried out as well as stakeholder interviews where information-gathering efforts concentrated. Stakeholders were selected from the major stakeholder groups: maritime authorities, ship-owners, ship agents, third (non-EU) States whose ships call in EU ports, recognised organisations, seafarers and their organisations, the EU social partners and other actors involved in maritime transport who can be involved in the application of the Directives.

An Open Public Consultation (OPC) covering the fitness check as a whole and the individual evaluations lasted from October 2016 until January 2017 and collected 53 responses in total which overall supported the evaluation findings. The OPC ensured that non-organised interests (like passengers) were also consulted. The low response rate has to be seen in perspective with the fact that 16 replies come from representative stakeholders' groups.

One limitation has been that maritime statistics and data are scarce. All possible effort has been made to address this difficulty and to find and use what is available from EMSA and from other sources.

Stakeholder fatigue with several evaluation studies taking place in the recent time and limited interest to participate amongst several stakeholder groups (notably ship owners and non-EU flags) led to unbalanced stakeholder representation. A strong collaboration between the consultants for the various studies and repeated efforts implied that sufficient involvement was guaranteed nevertheless. Stakeholders were contacted directly and insights could be shared efficiently.

Overall and notwithstanding stakeholders' little involvement, sufficient inputs could be gathered to answer the evaluation questions, complemented by sufficient secondary material (i.e. databases, literature) to provide additional inputs and quantify several effects. Thanks to these mitigating measures, on the whole the conclusions can be found to be robust and comprehensive.

Annex 2: Stakeholder consultation

SYNOPSIS REPORT

1. Methodology

Stakeholders were consulted extensively via an open public consultation (OPC) and targeted consultations. In addition several events and conferences with stakeholders, including within the formal governance and expert groups already operational, were used to consult and collect ideas. Major shipping events have been valuable platforms to consult and discuss the fitness check and the evaluations. In these events, the Commission proved that it was listening to the industry and the social partners as well as the national maritime administrations. Such events included the Malta Maritime Summit in October 2016, the 2017 European Shipping Week organised by the European shipowners (ECSA) and the Florence workshop with Commissioner Bulc in May 2017. The informal ministerial meeting under the Maltese Presidency which resulted in the Valetta Declaration in May 2017 allowed exchanging views with the Member States on the priorities for the EU Maritime Transport Policy until 2020 and was also a good basis for the Commission to draw conclusions on the necessary follow-up initiatives of the Fitness check.

The specific targeted consultations which are reported through the synopsis reports annexed to the individual evaluation reports were carried out via surveys, consultation events (workshops, meetings) and interviews. Additionally a lot of data was collected over the years from the High-Level Steering Group on the Governance of the Digital Maritime System and Service and from the "eMS" subgroup more specifically related to the Reporting Formalities Directive.

To mitigate the risk of consultation fatigue, a joint targeted survey was carried out in relation to port State control, flag State and accident investigation. Six main stakeholder groups were identified and consulted[114]:

- Maritime authorities: Authorities of the 23 EU coastal Member States in their capacity of implementing and enforcing PSC legislation. In most countries, this is the national maritime administration or similar bodies.

- Ship owners: Ship owners engaged in various activities. This stakeholder group encompasses various players with strong interests in quality shipping and maritime safety.

- Ports, ship agents operating in ports and pilots: Ports, ship agents and pilots are involved in various aspects of port State control inspections and the potential detention of vessels.

[114] Workers representatives were consulted extensively in relation to the parallel evaluation of the STCW legislation. They were also consulted through the open public consultation. Finally, it should be noted that the enforcement via flag State control of the parts of the MLC implemented through EU law was not included in the present exercise.

- Third (non-EU) States whose ships call in EU ports: Non-EU flags with vessels calling EU ports need to provide relevant certificates according to international standards. Third States are equally consulted on the quality of European flags versus non-EU flags.

- Classification societies/Recognised organisations: developing and applying technical standards for the design, construction and survey of ships and which carry out surveys and inspections on board ships: Recognised organisations are questioned based on their involvement in inspections and experiences with flag State administrations and accident investigations.

- EU, regional and international bodies: European Maritime Safety Agency (EMSA), the Secretariat of the Paris Memorandum of Understanding, the International Maritime Organisation (IMO).

An invitation to participate in the targeted survey was sent to 308 stakeholders from all relevant stakeholder groups. The survey was open from 11 January until 16 February 2017. A total of 79 responses were collected.

For the Reporting Formalities and the Vessel Traffic Monitoring and Information System Directives, the targeted consultation was designed to collect field information and to obtain a picture of the state of play. Questionnaires were developed for four stakeholder groups, namely Shipping Companies[115], Ship Agents, NCAs and Other Authorities. Therefore it covers both the reporting entities and the authorities who collect and use the information. It ran for a period of six weeks from 23rd December 2016 until 7th February 2017.

A targeted consultation through the High-Level Steering Group on the Governance of the Digital Maritime System and Service was also carried out to address the more complex evaluation questions related to the Vessel Traffic Monitoring and Information System Directive. It was aimed at the key national experts in the Competent Authorities managing the national SafeSeaNet systems. It ran for a period of five weeks between 21st February 2017 and 29th March 2017.

2. Results of the Open Public Consultation

This synopsis report presents the results of the OPC regarding the more general questions that were included in the questionnaire covering the fitness check and the individual evaluations for legislation on flag State responsibilities, accident investigation, port State control, the vessel traffic monitoring and information system and, the reporting formalities for ships arriving in and/or departing from ports of Member States. For the more detailed questions pertaining to the various individual acts, the replies to the OPC are reported through the synopsis reports annexed to the individual evaluation reports.

The OPC collected 53 responses in total. For the purpose of this report, OPC respondents have been categorised in 5 categories:

- **Shipowners & operators (11 respondents)**: containing 5 respondents replying on behalf of private shipping companies and 6 respondents replying on behalf of shipping industry associations (National and European) ;

[115] Including Shipmasters

- **National Maritime Authorities (13 respondents)**: containing 11 national maritime authorities and 2 regional public authorities with a role in maritime transport affairs ;

- **Port Authorities (5 respondents)**: containing 4 port authorities and 1 European port association ;

- **Other - Individuals (15 respondents)**: containing citizens replying in their personal capacity such as seafarers and other interested citizens ;

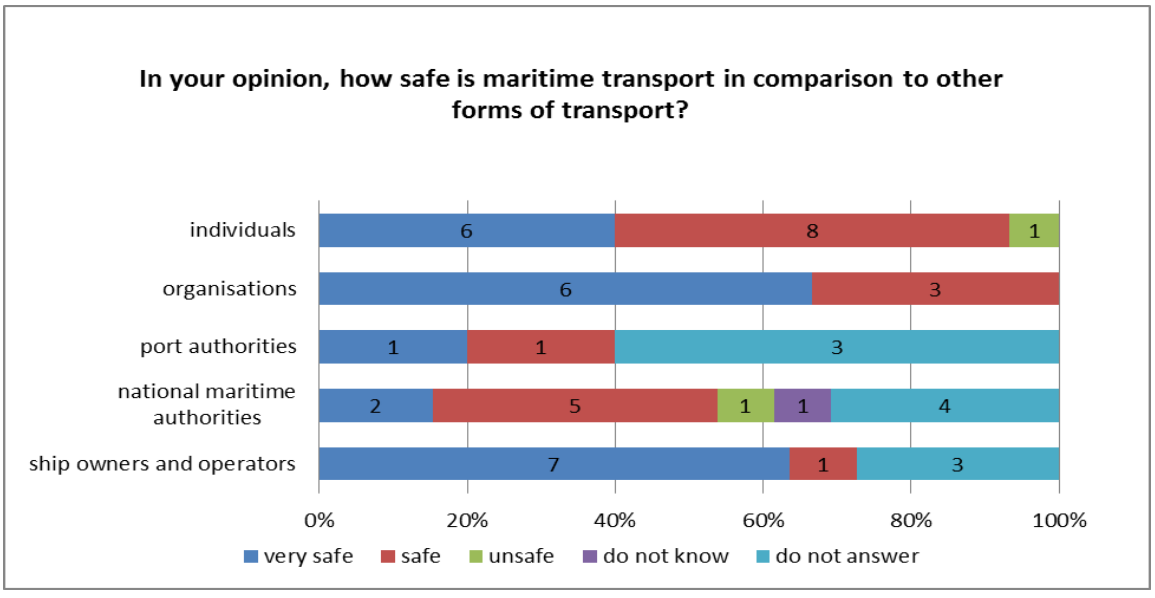
- **Other - Organisations (9 respondents)**: containing all respondents replying on behalf of entities that did not fit in the above categories, such as industry associations, private companies and NGOs.

No responses were received from national accident investigation bodies. The collected responses originate from 13 EU Member States and 2 non-EU countries (Norway and Montenegro). Most responses are from Belgium (23%, i.e. 12 responses), 5 of which are European and international associations. France and UK are next with 13% (7 responses) and 10% (5 responses) out of the total responses respectively.

2.1. Use of maritime transport for personal travel and freight transport

Among individuals, one third use maritime transport regularly for personal travel (daily or weekly), and one other third use it yearly. One third of the organisations use maritime transport monthly for personal travel while the remaining third use it yearly. Regarding the use of maritime transport for freight transport, one third of the individuals claim to use it on a regular basis (daily or weekly), and one organisation uses it regularly.

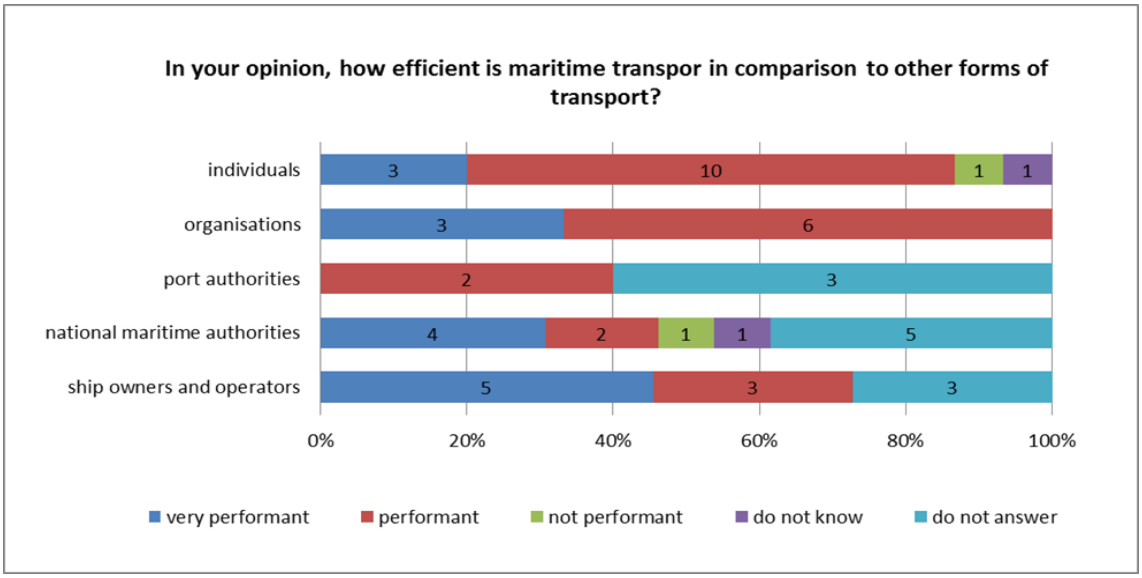
2.2 Perception of safety and efficiency of maritime transport



For the majority of respondents (6 individuals, 6 organisations, 1 port authority, 2 national maritime authorities and 7 ship owners and operators) maritime transport is very safe in comparison to other forms of transport. This reply was the main answer for two stakeholder groups (organisations and shipowners and operators). 'Safe' was the second most elected option (18 of 53), and the first answer for individuals (8) and national maritime authorities (5). Only 2 respondents (1 national maritime authority and 1

individual) consider maritime transport unsafe. The majority of port authorities (3) did not answer the question.

Many of the respondent mentioned the statistics related to maritime transport accidents to support their view, as the number of accidents is much lower than in other modes of transport. Also some mention that maritime transport is highly regulated, which can explain its safety. There was one respondent (representing academia) who mentioned the necessity of covering the fatalities of seafarers at national and international level. The one national maritime authority that considers maritime transport to be unsafe expressed the view that there is not enough supervision in relation to transport of cargo on board vessels.

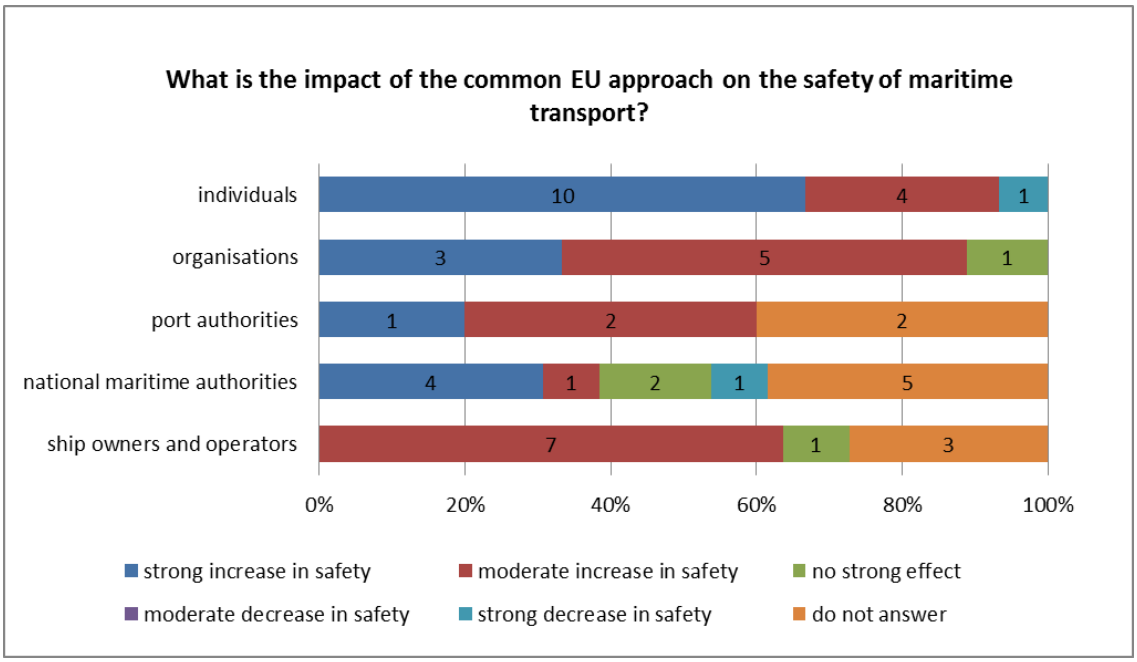


For the majority of respondents (10 individuals, 6 organisations, 2 port authorities, 2 national maritime authorities and 3 shipowners and operators) maritime transport performs well in comparison to other modes of transport. For three stakeholder groups (3 individuals, 3 organisations and 4 national maritime authorities), 'very performant' was the second most selected option. Only two respondents (1 invidual and 1 national maritime authority) consider maritime transport not performant. The majority of port authorities (3) and more than the half of national maritime authorities (5) did not answer the question.

The reasons of this positive perception relate to the capacity that ships can carry (several respondants pointed out that ships can carry more cargo than other modes of transport). Respondants also think that the position of short sea shipping could be further improved, and that could be the reason why the majority think that maritime transport is performant rather than very performant. The national maritime authority that considers maritime transport not efficient claims that there is not enough supervision.

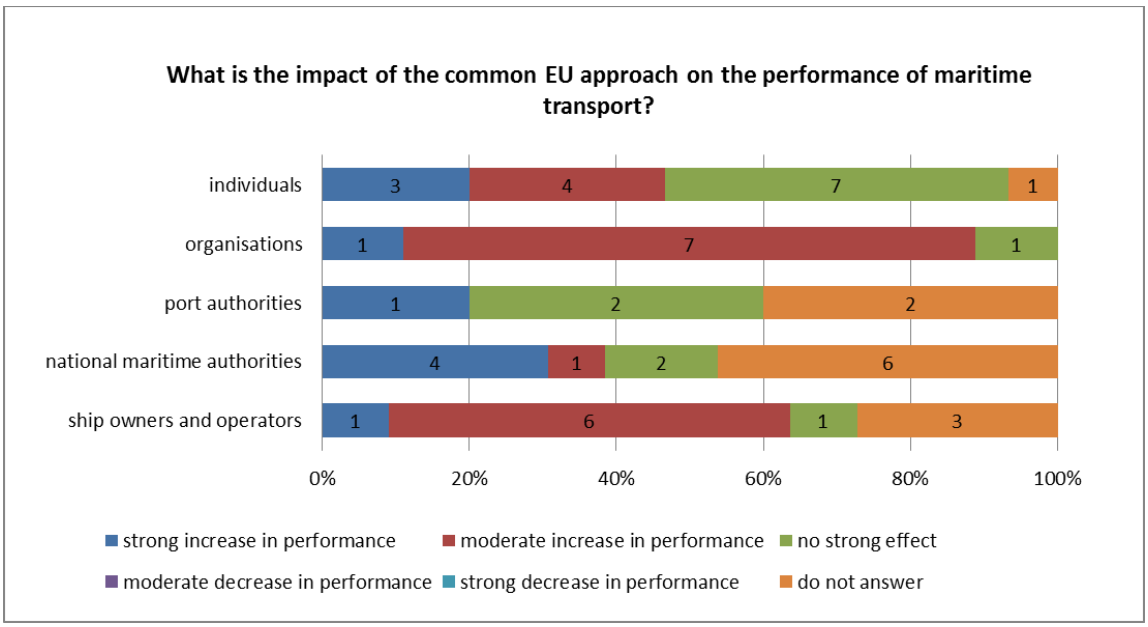
Overall, the perception of the respondents on the safety and efficiency of maritime transport in comparison to other modes of transport is very positive. In general, respondents perceive maritime transport to be a safe mode of transport because of its relative small number of accidents and its strong regulation. Regarding efficiency, respondents think that ships can carry more cargo in comparison to other modes of transport. The same national maritime authority reported negative answers in both questions. The reasons explained for both answers are the same; the lack of strict supervision.

2.3. Impact of the common EU approach on the safety and performance of maritime transport



The majority of respondents (4 individuals, 5 organisations, 2 port authorities, 1 national maritime authority and 7 shipowners and operators) consider that the common EU approach moderately increased the safety of maritime transport. Nearly the same number of participants (10 individuals, 3 organisations, 1 port authority and 4 national maritime authorities) selected the answer 'strong increase in safety'. For three stakeholder groups (1 organisation, 2 national maritime authorities and 1 shipowner/operator) the common EU approach did not have a strong effect on the safety of maritime transport. Only two respondents (1 individual and 1 national maritime authority) consider that the common EU approach strongly decreased the safety of maritime transport. The majority of national maritime authorities (5) did not answer the question.

The reason why the majority think that the common EU approach moderately increased maritime safety is that, although most of them recognise that it is useful for implementing international law in a harmonised way, they pointed out the limitations of the common EU approach, as maritime safety is the competence of IMO. Others mentioned that national legation is still not sufficiently in compliance with EU law. Negative opinions are not explained in the comments.



The majority of respondents (4 individuals, 7 organisations, 1 national maritime authority and 6 ship owners and operators) think that the common EU approach moderately improved the performance of maritime transport. The second most selected answer (7 individuals, 1 organisation, 2 port authorities, 2 national maritime authorities and 1 shipowner) is the EU approach has 'no strong effect'. This was the first choice for the stakeholder group of individuals. Only with one stakeholder group, national maritime authorities, 'strong increase in performance' was the second most selected answer. For the rest that answered, this was the third option. The majority of national maritime authorities (6) did not answer the question.

The perceptions for the impact of the common EU approach are not so positive mostly due to the fact that the performance of maritime transport is considered to be mainly market driven, and the shipping companies are the ones who take care of it. Some also mention that administrative burden increased because of the EU approach, while others welcome the "Fitness check of EU legislation for maritime transport safety and efficiency" exercise which should reduce the administrative burden, and indirectly improve performance.

Overall, the perception of the relevance of having an EU layer of legislation is positive, more for safety than for performance. The majority of respondents acknowledge the importance that the common EU approach has for harmonised implementation. Some examples were mentioned in support of this view, such as the effects of the Port State Control Directive. However, some mention its limitations as safety remains the competence of IMO. Regarding the impact on the performance of maritime transport, a large number of respondents (mostly individuals) consider that it has no strong effect, as they see performance as a market issue. Nevertheless, most acknowledge a moderate increase in performance due to the indirect effects of EU measures to improve operations.

2.4. Price as a determining factor when traveling by ship or using maritime transport

The majority of respondents consider price a significant factor when traveling by ship or using maritime transport, which illustrates the need for maritime transport to be efficient and competitive. Beyond this general remark, this question did not result relevant for the analysis.

Annex 3: implementation status of the VTMIS

Member State	**EMSA's visit date**	**CURRENT STATUS**
Belgium	04/06.Feb.2014	/
Bulgaria	19/21.Feb.2013	/
Croatia	31 May/3 June 2016	**Partly closed; follow-up under assessment**
Cyprus	28/30.Sept.2015	**closed 23.11.2016**
Denmark	3/5.Feb.2015	**closed 24.11.2015**
Estonia	15/17.May.2013	**closed 11.03.2014**
Finland	24/26.Mar.2015	**closed 25.11.2016**
France	19/21.Mar.2013	/
Germany	13/17.Feb.2012	**closed 23.01.2013**
Greece	15/17.Oct.2013	**closed 12.02.2015**
Iceland	29 May/1 Jun.2012	/
Ireland	18/22.June.2012	/
Italy	14/18.Dec.2015	**closed 01.03.2017**
Latvia	25/27.Nov.2014	/
Lithuania	07/08.Oct.2014	**closed 29.07.2015**
Malta	23/25.Sept.2014	**closed 14.09.2015**
Norway	05/09.Nov.2012	/
The Netherlands	03/06.Jun.2014	/
Poland	24/26 Sep.2013	/
Portugal	02/04.Oct.2012	**closed 15.05.2012**
Romania	08/11.Sept.2015	**closed 02.06.2016**
Slovenia	26/27.Nov.2014	/
Spain	08/10.Oct.2012	**closed 05.06.2014**
Sweden	01/03.Apr.2014	/
UK	27/29 Mar.2012	/

/ = the visit resulted in an assessment where there was no need for any specific follow-up.

Annex 4

EMSA Digital Maritime Services: current portfolio

Key information systems under EMSA[116] remit:

- **Integrated Maritime Services**: The IMS services to MSs support various activities performed by MS authorities executing functions in the maritime domain based on a vast array of notifications from ships, position information and satellite data. Users have access to the service through a web-based graphical user interface as well as standardized system-to-system interfaces.
- **SafeSeaNet: The Union Maritime Information and Exchange System,** established in order to enhance maritime safety, port and maritime security, marine environment protection, efficiency of maritime traffic and maritime transport. The system links maritime authorities from across Europe through a network for maritime data exchange, including: vessel information, port calls and voyage details, persons on board, dangerous and polluting goods, waste and cargo residues to be delivered and security information. This is based on notifications from ships from Mandatory Reporting Systems, notification of incidents from coastal stations and information from reporting formalities from NSWs.

The following central databases are hosted, maintained and developed by EMSA within the Union Maritime Information and Exchange System[117]: the Central Location Database (CLD), the Central Ship Database (CSD) and the Central Hazmat Database (CHD).

- **Central Location Database** (CLD): holds a reference list is of location codes which include UN/LOCODEs and SSN-specific codes. It also holds the list of port facility codes as registered in the IMO database GISIS. The CLD is used to facilitate the submission of information by the data provider as it allows searching location codes and port facility codes by their name or code.
- **Central ship database** (CSD): is premised on the fact that each ship has an active ship identity which is valid at a particular moment. Information from the CSD can be used by Member States as a reference for their national systems, for example for the national single window, or for cross-checking with data stored within national ship databases. Ships' identifiers (IMO, MMSI, name and call sign) are stored in the CSD, and it also includes other particulars (e.g. tonnage, length, beam) when these details are provided by relevant stakeholders. The current data sources are the notifications received from the SafeSeaNet, THETIS, and LRIT applications.
- **Central hazmat database** (CHD): includes a comprehensive list of all the dangerous and polluting goods that have to be notified in accordance with the VTMIS Directive 2002/59/EC.
- **Exemptions data base** which should cover ships which have regular calls that are exempted from reporting certain formalities (as is being managed at national or port level today). Included in the existing SSN exemptions data base.

[116] In addition to managing and hosting specific information systems, EMSA is in charge of the Maritime Support Services (MSS) Centre which is a 24/7 facility located at EMSA.

[117] As discussed and decided by the HLSG

- **Earth Observation Data Center**: Earth Observation data allows viewing Europe's oceans and coasts. Satellites can provide routine surveillance over wide areas or can target selected locations for monitoring specific operations. Radar images provide day and night coverage, regardless of weather conditions. Optical images, acquired only in daylight and cloud free conditions, provide high resolution color images of areas of interest. Data from satellites is downlinked to a network of ground stations, processed into images, analyzed, and then sent to the EMSA Earth Observation Data Centre. At EMSA, earth observation images are primarily used for the CleanSeaNet oil spill and vessel detection service and to support EMSA's Integrated Maritime Services once integrated with vessel traffic and other maritime information (see previous bullet point).
- **EU LRIT CDC**: The objective of the EU LRIT CDC is to identify and track EU flagged vessels worldwide and integrate them into the wider international Long Range Identification and Tracking (LRIT) system. The EU LRIT CDC disseminates LRIT information on EU-flagged ships around the world on behalf of all European flag States, and exchanges information with other data centers around the world. The EU LRIT CDC can provide Member State users, on request, with the LRIT information of any third country vessel bound to, or sailing within, EU waters.
- **EMCIP**: The European Marine Casualty Information Platform (EMCIP) stores, shares and assists analysis of casualty data and investigation reports submitted by the Member States. EMCIP stores data relating to the particulars and consequences of all notified marine casualties, incidents, and occupational accidents. Additionally, on completion of a safety investigation, the Member States' investigative bodies report data relating to the sequence of accidental events, the identification of contributing factors, including human factors and others relating to shipboard operations, shore management and regulatory influence, and any resulting safety recommendations.
- **STCW-IS**: The Seafarer Training Certification and Watch keeping Information System (STCW-IS) is an information system making available to the public information on the seafarers' certification systems in the MSs together with generic information on the EU maritime education and training institutions. The information is provided or validated by the participating countries, which are responsible for the content of the respective webpages. In addition, the STCW-IS gathers and compiles data on certificates and endorsements issued to seafarers by the EU maritime administrations with the objective of providing for policy making.
- **THETIS**: THETIS is the information system that supports the Port State Control inspection regime. The system serves both the EU Community and the wider region of the Paris Memorandum of Understanding on PSC (Paris MOU) which includes Canada, Iceland, Norway and the Russian Federation. To facilitate planning of inspections, THETIS is linked to SSN. THETIS indicates which ships have priority for inspection and allows the results of inspections to be recorded. Via THETIS these reports are made available to all port State control authorities in the Community and the Paris MOU.
  - **THETIS-EU**: has been established as the EU's reference database for inspections of ships' reporting, monitoring and verification, to support the MSs in meeting their obligations towards enforcement and inspection. The system provides a platform where inspectors enforcing compliance with the

respective directive or regulation throughout the EU can retrieve and record relevant inspection and targeting information on ships.

- **THETIS-MRV**: EMSA has developed a new module in THETIS, namely THETIS-MRV, enabling companies responsible for the operation of large ships using EU ports to report their CO2 emissions under the Regulation (EU) 2015/757 on Monitoring, Reporting and Verification of CO2 from marine transport. Through this web-based application all relevant parties foreseen by the Regulation can fulfil their monitoring and reporting obligations in a centralized and harmonized way since August 2017.