



# **Ex-post evaluation of Directive 2009/16/EC on port State control**

Final Report

**COWI**

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2009/16/EC on port State  
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## LIST OF ABBREVIATIONS AND ACRONYMS

ECSA	The European Community Shipowners' Associations
EMSA	European Maritime Safety Agency
EQ	Evaluation question
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
FONASBA	The Federation of National Associations of Ship Brokers and Agents
HSR	High risk ship
IACS	International Association of Classification Societies
ILLC	International Convention on Load Lines
IMO	International Maritime Organisation
ISM	International Safety Management
ISPS	International Ship and Port Facility Security
LRS	Low risk ship
MARPOL	International Convention for the Prevention of Pollution from Ships
MLC	Maritime Labour Convention
MoU	Memorandum of Understanding
NIR	New Inspection Regime
OPC	Open Public Consultation
PSC	Port State control
RO	Recognised organisations
SOLAS	International Convention for the Safety of Life at Sea
SRP	Ship Risk Profile
SRS	Standard risk ship
SSN	SafeSeaNet

STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
THETIS	Hybrid European Targeting and Information System
UNCLOS	United Nations Convention on the Law of the Sea
WGB	White-Grey-Black list

## EXECUTIVE SUMMARY

### Background

The ex-post evaluation of Directive 2009/16/EC on Port State Control (PSC) was initiated as a part of the Maritime Fitness Check under the Commission Work Programme 2016. Hence, the evaluation forms part of the Commission's REFIT programme and pays particular attention to potential areas for administrative burden reduction and simplification.

The evaluation was initiated in October 2016 and finalised in June 2017. Its purpose is to assess the relevance, effectiveness, efficiency, coherence and EU added value of the PSC regime as provided for in Directive 2009/16/EC as amended. It examines the application and impacts of the Directive from 1 January 2011, when it started to apply, until 30 June 2016 in the 23 EU Member States in which it is implemented. Furthermore, as shown in Table 0.1, the evaluation focuses on answering ten specific evaluation questions within the five evaluation criteria:

**Table 0.1 Evaluation criteria and evaluation questions**

Evaluation criterion	Evaluation question
Relevance	1 To what extent is the layer of defence provided by PSC (safety, working conditions, and environmental protection) still required and appropriate?
Effectiveness	2 To what extent is the targeting of what are described as higher risk vessels effective? Would other risk factors contribute to increase target effectiveness?
	3 To what extent are all eligible ships covered by inspections (PSC, flag state, environmental regimes)? Are there any gaps in coverage?
	4 To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions?
	5 How does the inspectors' training and qualification perform? How can the (present and future) availability of qualified inspectors be ensured and promoted?
Efficiency	6 How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?
	7 What are the administrative costs incurred by stakeholders? To what extent are these proportional to the benefits of improved safety?
Coherence	8 To what extent is there an efficient usage of the THETIS database? To what extent is the interaction between THETIS and other related databases optimal?
	9 To what extent is the Directive coherent having regard to the other legislation applicable in this area such as Directive 99/35, flag state surveys and environmental regimes? Are there any gaps or overlaps?
EU added value	10 What does the Directive add to the work being done by MS either individually or within the context of the Paris MoU?

## Evaluation objectives and methods

The responsibility for the continuous maintenance of a ship and its equipment and for complying with the requirements of rules and regulations applicable to the ship lies with the shipowner. Shipowners, who do not respect the rules and who sail under flags of flag States that do not enforce them properly, allow noncompliant ships to sail and trade around the world. This situation creates not only a competitive advantage for those ships but also a higher risk in terms of accidents, security or pollution. Such noncompliant ships are commonly referred to as 'substandard' ships. They are fought against by two lines of defence, whereas the first line of defence is the flag State itself, while PSC is often referred to as the second line of defence.

Hence, the primary responsibility for monitoring the compliance of ships with international standards for safety, pollution prevention and on-board living and working conditions lies with the flag State. The foundation for such international standards – i.e. the basis for laws and principles for all nations to follow concerning the sea – is established by the United Nations Convention on the Law of the Sea (UNCLOS). This is an umbrella convention that sets the scene for the International Maritime Organisation (IMO) conventions ILO conventions etc.

Although the majority of flag States carry out their responsibilities well, others do not. In 1978, a number of European countries agreed in The Hague to inspect whether the labour conditions on board ships were in accordance with ILO Convention no. 147. However, just as the memorandum was about to come into effect in March 1978, a massive oil spill occurred off the coast of Brittany (France) as a result of the grounding of the VLCC Amoco Cadiz. This incident caused a strong political and public outcry in Europe for far more stringent regulations with regard to the safety of shipping. After the Amoco Cadiz incident, it was decided by the members of The Hague Memorandum to also inspect ship safety and environment protection. To this end, on 1 July 1982 the Paris MoU was agreed upon, establishing a common understanding of the implementation of PSC based on international conventions, as a second line of defence against 'substandard' shipping. Nowadays, 27 countries are members to the Paris MoU, including the non-EEA countries Russia and Canada.

The success of the Paris MoU led, among other things, to the establishment of MoUs in other parts of the world: in the Caribbean, Indian Ocean, Asia-Pacific (the Tokyo MoU), West and Central Africa, Latin America (Viña del Mar Agreement), Black Sea, Riyadh and the Mediterranean. However, some of the poorer countries do not have resources to comply with MoU requirements and hence PSC is often of lower standards. The IMO provides support to these countries to develop their PSC capacity.

The original agreement between the Paris MoU members was to inspect 25% of individual ships arriving at Paris MoU members' ports. Global maritime developments, the introduction of new IMO instruments and the need for a better balanced method of targeting and inspection of ships led eventually the Paris MoU members to abandon the 25% quota. A task force led by the EC/EMSA developed a New Inspection Regime (NIR) based on a fair share scheme and a risk-based approach to targeting ships. The NIR was adopted by the Paris MoU in 2009.

EU law on PSC was initiated in the beginning of the 1990s with Directive 95/21/EC to enforce PSC measures among Member States through legislation – i.e. pursuing maritime safety within the context of harmonisation aspects and equal treatment at the EU level. The PSC Directive formed part of the two first pieces of maritime safety legislation following the first maritime safety Communication - 'A common policy on safe seas' (the other was Directive 95/57/EC regarding flag States and ROs). The Directive from 1995 has been amended to include the rules agreed in the Paris MoU,

in particular the New Inspection Regime (NIR). Its current consolidated (re-cast) version is Directive 2009/16/EC on Port State Control ('the PSC Directive'), which entered into force in June 2009 and applicable as of 1 January 2011. The EU PSC regime is based on the idea of targeted inspections, which ensures that ships calling at ports in the region are regularly inspected. If an inspected ship does not comply with the relevant standards it will be required to rectify the identified deficiencies before leaving port or within a fixed period of time. If the deficiencies are sufficiently serious, it may lead to the ship being detained.

The key elements of the EU PSC regime are in this context:

- Harmonised approach to inspections and detentions
- Annual inspection commitment
- Targeting of ships for inspection based on a ship risk profile
- Company performance
- Record keeping and information sharing (inspection database)

We have applied a standard triangulation approach where we address the evaluation questions from different angles: desk study, interviews, and surveys

Most of our desk study is based on very comprehensive and detailed data received from EMSA. This PSC data set comprises time series for the number of inspections, deficiencies, and detentions – by Paris MoU member, by age of ship, by ship risk profile, by priority, and by type of deficiency. To put the amount of and development in the Paris MoU PSC inspections, deficiencies and detentions in an even wider international perspective, we compare some of the Paris MoU data with those of the Mediterranean, Indian Ocean and Tokyo MoUs. This is also done with an eye on the pursuance of global PSC harmonisation, as well as on the question whether the Paris MoU PSC inspections have pushed 'substandard' shipping elsewhere.

Most information gathering efforts have been spend on interviews with targeted stakeholders. We have, in agreement with DG MOVE, selected stakeholders from the major stakeholder groups: maritime authorities, shipowners, ship agents, third (non-EU) States whose ships call in EU ports, recognised organisations, seafarers and their organisations, other actors involved in maritime transport, who can be involved in the application of the Directive, such as pilots, ports and port operators and other national and international bodies involved in PSC. We have carried out 34 stakeholder interviews, where the stakeholders were selected based on a number of criteria, taking into account among other things, their geographical location across sea basins and the number of PSC inspections (for maritime authorities), the types of trade and the rating of the flag on the White-Grey-Black list of the Paris MoU (for shipowners), the size, location and type of trade involved (for ports), the size of the flag and the position of the flag on the White-Grey-Black list of the Paris MoU (for third States). Additionally, we have benefited from a two-day workshop at EMSA premises with the relevant staff from EMSA and the Commission.

A targeted survey was launched together with a survey carried out in the evaluation of the flag State/Accident Investigation Directives to mitigate possible stakeholder fatigue and so to improve response rates. Despite these efforts the survey has suffered from a survey fatigue resulting in a relatively low response rate as regards most groups of stakeholders. Furthermore, an Open Public Consultation (OPC) on the fitness of EU legislation for maritime transport safety and efficiency was launched on 7 October 2016 and was closed on 20 January 2017. The findings from the OPC are presented in a separate report. It should be underlined that the (limited) responses to the OPC support our evaluation findings.

## Conclusions

Our overall conclusion based on the conclusions for relevance, effectiveness, efficiency, coherence and EU added value is that the PSC Directive adds value by combining a PSC control framework with a legal enforcement mechanism to ensure that it is implemented in Member States. The assistance of EMSA has supported the EU PSC regime in important ways, primarily through encouraging a harmonised European PSC approach.

Hence, overall the evaluation shows that the PSC Directive continues to play a key role in the defence against 'substandard' shipping operating in EU waters. In fact, the relevance of PSC remains as long as there are differences in the standards and the quality of the controls across the different regions and PSC regimes around the world. By the use of the THETIS system and the targeting of high risk ships through a risk-based approach – i.e. the NIR, the PSC regime is effective as it catches those ships with the highest risk of noncompliance with the agreed EU standards. In this way, PSC has contributed to the intended objectives to improve maritime safety, security, pollution prevention and working conditions. The evaluation finds that while several countries have trouble in recruiting qualified PSC inspectors, those inspectors that carry out PSC inspections in EU ports are adequately qualified, which means that PSC inspections are carried out in as a harmonised way as possible throughout the EU.

With the introduction of the NIR, the total number of inspections has fallen and there are more 'initial inspections'. However, some Member States continue to inspect more Priority I ships than they are supposed to according to their fair share commitment. This conduct affects other Member States negatively as it leads to more inspections than required. While some Member States claim that administrative costs have increased since the introduction of the NIR, others claim that they have decreased or remained unchanged. Data on the cost of inspections across Member States shows that the costs in 2016 are more or less the same as in 2011. However, increased operational flexibility may decrease costs for some Member States. From a shipowner perspective, however, costs related to PSC are viewed as proportional to the objective and that a good PSC record is important as it is seen as a competitive factor.

## Relevance

Hence, we find that there continues to be a need for PSC as a defence against 'substandard' shipping. Although deficiencies and detentions have fallen with the introduction of the NIR, 'substandard' shipping remains in the Paris MoU areas and in other MoU areas. Furthermore, it is a global problem and PSC is often considered as the only line of defence against ships from low-performing flag States. Data shows that the number of deficiencies and detentions has fallen since before the NIR. This could indicate that an abolition of the NIR provisions or PSC efforts in general may risk a return to a higher level of 'substandard' shipping in the Paris MoU area.

As already emphasised 'substandard' shipping is a global problem since shipping inherently is a global industry. Hence, PSC in the EU (Paris MoU) area will continue to be relevant as long as there are flags on the 'black list' of the Paris MoU – or simply because some flags are not doing a proper job. In other words, the need for PSC remains as long as there are differences in the standards and the quality of the controls across the different regions around the world, and as long as not all flag States carry out their obligations in full.

We therefore recommend that the Directive remains – but the Commission and EMSA could together with the Member States explore the need for more flexibility to increase effectiveness and efficiency and to align with Paris MoU processes to increase

the EU added value. Furthermore, Member States should continue to comply with the PSC Directive provisions as they will remain, but at the same time continue to inform about weaknesses that could be taken account of in a possible future revision of the PSC Directive.

#### Effectiveness

The evaluation shows that the PSC Directive has contributed to the objective of securing maritime safety, security, pollution prevention and good working conditions. The Directive has served as a supporting enforcement mechanism that has ensured compliance with agreed international and EU standards. The fact that effective measures are in place to ensure compliance with the PSC Directive by all EU Member States, the operation and maintenance of THETIS, and the harmonised training provided by EMSA are perceived by stakeholders as the three major factors behind the effectiveness of the Directive.

Furthermore, a good PSC record is a competitive factor for quality shipping. Thus, the Directive has also provided a motivating factor for the shipping industry to maintain high standards and thereby improve safety, security, pollution prevention and working conditions on board ships calling at EU ports.

While the targeting of high risk ships using the THETIS database – hereunder via the priority-setting system – is effective as it leads to the inspection of low-performing ships, there is room for improvement to the design of the ship risk profile. We have identified areas of improvement, some of which we understand already have been discussed – or are currently being discussed – in the Paris MoU Task Force 31. We therefore recommend to continue the process of looking at: weighting of generic and individual risk factors, formula for calculating flag State performance, provision regarding IMO audit, and green focus.

The evaluation shows that PSC inspectors in EU ports are well-trained and qualified, and that the Member States do not experience any major difficulties in complying with the training and qualification requirements of the Paris MoU/PSC Directive. However, the majority of Member States experience difficulties in recruiting qualified PSC inspectors. Such problems are less pronounced, or virtually non-existent – in countries in which PSC inspectors form part of the country's military (navy/coastguard). There is also an economic factor, i.e. that now and in the future significantly higher salaries are offered on-board or in the private sector compared to the salaries that can be offered for PSC inspectors.

Furthermore, the level of training provided at EU and national level is adequate. Only minor gaps in the training offered have been identified. Generally, inspections are carried out in a harmonised way throughout the EU, but differences in the culture of checking exist. Furthermore, occasions have been reported where PSC inspectors had to be relocated in order to comply with the qualification requirements regarding the number of PSC inspections that a PSC inspector must carry out during a certain period of time. Hence, many PSC inspectors carry not only out PSC inspections but have also other duties such as flag State surveys, ro-pax inspections, and fishing vessel inspections, as well as other responsibilities. Also, such requirements put a limit to how many PSC inspectors a Member State can keep occupied.

We therefore recommend that EMSA continues its provision of common training – in pursuance of high-quality and harmonised PSC inspections. Considerations could be made to encourage more flexible requirements, e.g. by having a more qualitative approach to determine 'qualifications' and training needs. Member States should provide EMSA with their wishes for needs-based training, try to learn from the

strengths of existing approaches to training/background/recruitment, and work actively towards a harmonised training approach.

#### Efficiency

Some maritime authorities have experienced an increase in administrative costs, others a decrease, and then again others no change, following the introduction of the NIR/PSC Directive. Hence, overall we find that the average costs across the Member States have remained almost unchanged. However, we find that such costs are not always proportional to the goal of eliminating 'substandard shipping'. We have thus identified a room for improvement in providing additional operational flexibility to the PSC regime, for example by being able to justify missed inspections.

Shipowners generally perceive the administrative costs, and the frequency and scope of PSC inspections as proportional to the goal of eliminating 'substandard' shipping and have not reported any significant delays associated with undergoing PSC inspections in EU ports. However, PSC inspections are demanding and occasionally interfere with the crews' scheduled rest periods.

However, there is a potential for further reducing the costs. When we compare the number of inspections carried out with the total commitment, the number of non-relevant inspections has increased significantly for some Member States since 2011. This practice distorts the overall calculation of the fair share for the other Member States. Another difficulty is that some Member States need to inspect a large share of Priority II ships in order to fulfil their fair share of inspections. However, Member States make use of postponement significantly more in 2016 compared to 2011.

We therefore recommend that the Commission/EMSA assess the need for increased operational flexibility: justification for a missed inspection should be made more flexible (e.g. in line with the justification for missed inspections as provided in Article 8(3) of the Directive). This could include the provision of a 'transitional period' (e.g. 24 hours) after which a change in priority takes an effect (and can be counted as a miss). These measures should increase flexibility to raise grounds to justify a missed inspection. In turn, Member States should respect the agreed inspection commitments and not exceed the number of inspections significantly (unless called for from a safety point of view).

The evaluation also shows that the THETIS database is viewed upon as an efficient tool by maritime authorities and a significant improvement compared to the former SIRENaC – to plan PSC activities, and to monitor the work of PSC inspectors. Moreover, the majority of maritime authorities make use of THETIS to regularly monitor their progress towards achieving their annual inspection commitment. More advanced features of THETIS, such as the Jasper Business Intelligence Tool are used relative rarely and problems when using the tool have been reported.

#### Coherence

We find that there is a need for better coordination between the Directive on ro-ro ferries and high speed passenger craft. However, since this coordination is already being addressed in the context of the revision of the ro-ro Directive, no specific recommendations to improve the coordination are made at this stage. For the flag State Directive, stakeholders believe that there is no need for more coherence and coordination. In fact, in some countries, PSC inspectors also carry out flag State surveys. In terms of coordination with other policy areas: Directive 2016/802 on reduction in the sulphur content of certain liquid fuels, Regulation 1257/2013 on ship recycling and Directive 2000/59/EC on port reception facilities for ship-generated



waste and cargo residues, maritime authorities are less convinced about the advantages.

#### EU Added value

Hence, the overall conclusion is that the Directive adds value – mainly by providing a legally binding regime that can be effectively enforced vis-à-vis Member States by the European Commission. In the Member States the Directive obligations result in the commitment of the necessary resources for PSC.

## RÉSUMÉ ANALYTIQUE

### Contexte

L'évaluation ex post de la directive 2009/16/CE relative au contrôle par l'État du port a été lancée dans le cadre du contrôle d'aptitude au transport maritime au titre du programme de travail 2016 de la Commission. Cette évaluation, qui fait partie du programme REFIT de la Commission, accorde une attention particulière aux domaines de simplification et de réduction potentielles des charges administratives.

L'évaluation a commencé en octobre 2016 et s'est terminée en juin 2017. Son objet est d'évaluer la pertinence, l'efficacité, l'efficacité, la cohérence et la valeur ajoutée de l'UE du régime de contrôle par l'État du port, conformément à la directive 2009/16/CE telle que modifiée. Elle examine l'application et les incidences de la directive depuis le début de son application le 1er janvier 2011 jusqu'au 30 juin 2016 dans les 23 États membres dans lesquels elle est mise en œuvre. De plus, comme le montre le Tableau 0.2, l'évaluation vise à répondre à dix questions spécifiques relevant des cinq critères d'évaluation:

**Tableau 0.2 Critères et questions d'évaluation**

Critères d'évaluation	Questions d'évaluation
Pertinence	1 Dans quelle mesure la protection apportée par le contrôle par l'État du port (sécurité, conditions de travail et protection environnementale) est-elle toujours nécessaire et appropriée ?
Efficacité	2 Dans quelle mesure le ciblage des navires décrits comme présentant un risque accru est-il efficace ? D'autres facteurs de risque contribueraient-ils à accroître l'efficacité du ciblage ?
	3 Les navires remplissant les conditions s'y rapportant font-ils tous l'objet d'inspections (régimes relatifs au contrôle par l'État du port, à l'État du pavillon, environnemental) ? Y a-t-il des lacunes en matière de couverture ?
	4 Dans quelle mesure la directive a-t-elle contribué aux objectifs fixés en matière d'amélioration de la sécurité, de la protection de l'environnement et des conditions sociales ?
	5 Quel est le niveau de qualification et de formation des inspecteurs ? Comment est-il possible de garantir et de favoriser la disponibilité (actuelle et future) d'inspecteurs qualifiés ?
Efficience	6 La publication des performances des entreprises conformément à l'article 27 et au règlement n° 802/2010 de la Commission (tel que modifié) a-t-elle donné des résultats ?
	7 Quels sont les coûts administratifs supportés par les parties prenantes ? Dans quelle mesure ces coûts sont-ils proportionnels aux bénéfices liés à l'amélioration de la sécurité ?
Cohérence	8 Dans quelle mesure la base de données THETIS est-elle utilisée de manière efficace ? Dans quelle mesure l'interaction entre THETIS et les autres bases de données connexes est-elle optimale ?
	9 Dans quelle mesure la directive est-elle cohérente avec les autres

	dispositions législatives applicables dans ce domaine, telles que la directive n° 99/35, les enquêtes sur l'État du pavillon et les régimes environnementaux ? Y a-t-il des lacunes ou des chevauchements ?
Valeur ajoutée de l'Union européenne	10 Quelle est la valeur ajoutée de la directive eu égard aux efforts accomplis par les États membres individuellement ou dans le cadre du mémorandum d'entente de Paris ?

### Objectifs et méthodes d'évaluation

Les responsabilités relatives à l'entretien continu des navires et de leur équipement et au respect des règles et règlements applicables incombent aux armateurs. Les armateurs qui ne respectent pas les règles et qui naviguent sous pavillon d'États qui ne les appliquent pas correctement permettent aux navires non conformes de naviguer et de participer aux échanges commerciaux mondiaux. Cette situation offre non seulement un avantage concurrentiel à ces navires, mais engendre également des risques accrus en matière d'accidents, de sécurité et de pollution. On appelle généralement ce transport non conforme un transport « inférieur aux normes ». Pour lutter contre ces manquements, les États utilisent deux lignes de défense : la première est l'État du pavillon lui-même et la deuxième est, de l'avis général, le contrôle par l'État du port.

Par conséquent, la principale responsabilité relative au suivi du respect des normes internationales en matière de sécurité, de prévention de la pollution et de conditions de vie et de travail à bord des navires incombe à l'État du pavillon. Ces normes internationales ont pour fondement – c'est-à-dire pour socle de lois et de principes maritimes que toutes les nations doivent respecter – la Convention des Nations unies sur le droit de la mer (CNUDM). Il s'agit d'une convention qui fixe le cadre pour les conventions de l'Organisation maritime internationale (OMI), de l'OIT, etc.

Si une majorité des États du pavillon assument leurs responsabilités de manière satisfaisante, tous ne sont pas dans ce cas. En 1978, à La Haye, plusieurs pays européens ont accepté de mener des inspections pour déterminer si les conditions de travail à bord des navires étaient conformes à la convention n° 147 de l'OIT. Cependant, au moment de l'entrée en vigueur du mémorandum en mars 1978, le VLCC Amoco Cadiz a échoué au large des côtes bretonnes (en France), ce qui a entraîné un déversement massif d'hydrocarbures. Cet incident a suscité une profonde indignation publique et politique en Europe et l'application de règlements beaucoup plus stricts en matière de sécurité du transport maritime a été réclamée. Après l'incident de l'Amoco Cadiz, les membres du mémorandum de La Haye ont décidé de mener également des inspections sur la sécurité des navires et la protection de l'environnement. À cette fin, le mémorandum d'entente de Paris qui a pris effet le 1er juillet 1982, a établi une conception commune de la mise en œuvre du contrôle par l'État du port, fondée sur les conventions internationales, afin de créer une deuxième ligne de défense contre le transport maritime « inférieur aux normes ». Actuellement, le mémorandum d'entente de Paris compte 27 pays membres, dont des pays n'appartenant pas à l'EEE (Russie et Canada).

La réussite du mémorandum d'entente de Paris a conduit, entre autres, à la création de mémorandums d'entente dans d'autres parties du monde : aux Caraïbes, dans l'océan Indien, dans la région Asie-Pacifique (le mémorandum d'entente de Tokyo), en Afrique de l'Ouest et centrale, en Amérique latine (l'accord de Viña del Mar), dans la mer Noire, dans la région du Golfe (le mémorandum de Riyad) et en mer

Méditerranée. Cependant, une partie des pays les plus pauvres n'ont pas les moyens de respecter les exigences des mémorandums d'entente et le contrôle par l'État du port est dès lors souvent inférieur aux normes. L'OMI soutient ces pays pour qu'ils puissent renforcer leur capacité de contrôle par l'État du port.

L'accord conclu initialement entre les membres du mémorandum d'entente de Paris visait à inspecter 25 % des navires accostant dans les ports de ces membres. Ce quota a été abandonné en raison de l'évolution du contexte maritime mondial, de l'introduction de nouveaux instruments de l'OMI et de la nécessité d'établir une méthode mieux équilibrée pour cibler et inspecter les navires. Un groupe de travail dirigé par la CE/l'AESM a élaboré un nouveau régime d'inspection (NRI) fondé sur un système de partage équitable et une approche basée sur les risques pour cibler les navires. Le NRI a été adopté par le mémorandum d'entente de Paris en 2009.

La législation européenne sur le contrôle par l'État du port a vu le jour au début des années 90 avec la directive 95/21/CE visant à appliquer les mesures s'y rapportant dans les États membres, c'est-à-dire en visant à garantir la sécurité maritime en tenant compte des questions d'harmonisation et de traitement équitable à l'échelle de l'Union européenne. La directive relative au contrôle par l'État du port faisait partie des deux premiers textes législatifs relatifs à la sécurité maritime qui ont fait suite à la publication de la première communication sur une politique commune de la sécurité maritime (l'autre texte étant la directive 95/57/CE sur les États du pavillon et les organismes agréés). La directive de 1995 a été modifiée pour y inclure les règles convenues dans le mémorandum d'entente de Paris, notamment le nouveau régime d'inspection. Sa version consolidée actuelle (refonte) est la directive 2009/16/CE relative au contrôle par l'État du port, entrée en vigueur en juin 2009 et applicable depuis le 1er janvier 2011. Le régime du contrôle par l'État du port de l'UE est fondé sur le concept d'inspections ciblées, qui garantit l'inspection régulière des navires faisant escale dans un port de la région. Si le navire inspecté ne respecte pas les normes pertinentes, il est tenu de corriger les irrégularités recensées avant de quitter le port ou dans un délai fixé. Si les irrégularités sont suffisamment graves, le navire peut être immobilisé. Les principaux éléments du régime de contrôle par l'État du port de l'UE sont établis comme suit :

- Approche harmonisée en matière d'inspection et d'immobilisation
- Obligation annuelle en matière d'inspection
- Ciblage des navires visés par les inspections en fonction de leur profil de risque
- Performances des entreprises
- Enregistrement des données et échange des informations (base de données sur les inspections)

Nous avons appliqué une approche normalisée par triangulation qui aborde les questions relatives à l'évaluation sous différents angles : étude documentaire, entretiens et enquêtes.

La plupart de nos études documentaires ont été réalisées sur la base de données très complètes et détaillées fournies par l'AESM. Cet ensemble de données sur le contrôle par l'État du port inclut des séries chronologiques sur le nombre d'inspections, les irrégularités et les immobilisations par membre du mémorandum d'entente de Paris, par âge des navires, par profil de risque des navires, par priorité et par type d'irrégularité. Pour mettre en perspective à une échelle internationale plus large le nombre d'inspections, d'irrégularités et d'immobilisations dans le cadre du mémorandum d'entente de Paris ainsi que leur évolution, nous comparons une partie des données du mémorandum d'entente de Paris à celles des mémorandums d'entente de Tokyo, de l'océan Indien et de la mer Méditerranée. Cela est également effectué en

tenant compte de l'objectif d'harmonisation internationale du contrôle par l'État du port ainsi qu'en déterminant si les inspections au titre du mémorandum d'entente de Paris ont incité les navires de transport « inférieur aux normes » à naviguer dans d'autres régions.

La plupart des efforts de collecte d'informations ont été consacrés aux entretiens avec les parties prenantes ciblées. Nous avons sélectionné, en accord avec la DG MOVE, des parties prenantes des principaux groupes : les autorités maritimes, les armateurs, les agents maritimes, les pays tiers n'appartenant pas à l'Union dont les navires font escale dans des ports européens, des organismes agréés, des gens de mer et leurs organisations, ainsi que d'autres acteurs du transport maritime qui peuvent être concernés par l'application de la directive, tels que les pilotes, les ports et les opérateurs portuaires, et d'autres organismes nationaux et internationaux participant au contrôle par l'État du port. Nous avons mené 34 entretiens de parties prenantes, dans le cadre desquels celles-ci ont été sélectionnées sur la base de plusieurs critères : leur situation géographique dans les bassins maritimes et le nombre d'inspections relatives au contrôle par l'État du port (pour les autorités portuaires), le type d'échanges commerciaux et le classement du pavillon sur la liste Blanche-Grise-Noire du mémorandum d'entente de Paris (pour les armateurs), la taille, l'emplacement et le type d'échanges commerciaux concernés (pour les ports), la taille et le classement du pavillon sur la liste Blanche-Grise-Noire du mémorandum d'entente de Paris (pour les pays tiers). En outre, nous avons profité d'un atelier de deux jours dans les locaux de l'AESM en présence du personnel concerné de l'AESM et de la Commission.

Une enquête ciblée a été lancée parallèlement à une enquête visant à évaluer les directives sur les investigations sur les accidents/l'État du pavillon afin d'atténuer la lassitude potentielle des parties prenantes et d'améliorer les taux de réponse. En dépit de ces efforts, les personnes interrogées ont fait preuve de lassitude, ce qui a conduit à des taux de réponse relativement faibles pour la plupart des groupes de parties prenantes. De plus, une consultation publique ouverte sur l'aptitude à l'emploi de la législation européenne concernant la sécurité et l'efficacité du transport maritime a été lancée le 7 octobre 2016 et clôturée le 20 janvier 2017. Les résultats de cette consultation sont présentés dans un rapport distinct. Il convient de souligner que les réponses (limitées) à la consultation corroborent les conclusions de l'évaluation.

## Conclusions

Selon notre conclusion générale basée sur les conclusions relatives à la pertinence, à l'efficacité, à l'efficacité, à la cohérence et à la valeur ajoutée de l'Union européenne, la directive relative au contrôle par l'État du port apporte une valeur ajoutée qui combine un cadre pour régir le contrôle par l'État du port et un mécanisme d'application de la loi dans l'optique de garantir sa mise en œuvre dans les États membres. L'AESM a soutenu le régime du contrôle par l'État du port de l'Union de manière importante, notamment en encourageant l'adoption d'une approche européenne harmonisée en la matière.

Par conséquent, dans l'ensemble, l'évaluation montre que la directive relative au contrôle par l'État du port continue de jouer un rôle essentiel de rempart contre l'exploitation de navires de transport « inférieur aux normes » dans les eaux de l'Union. En fait, le contrôle par l'État du port reste pertinent aussi longtemps qu'il existe des différences en matière de normes et de qualité de contrôles dans les différentes régions et de régimes de contrôle dans le monde entier. Grâce au système THETIS et au ciblage des navires à haut risque via une approche fondée sur les risques, à savoir le nouveau régime d'inspection, le régime du contrôle par l'État du port de l'UE s'avère efficace, car il intercepte les navires dont les risques de non-

conformité sont les plus élevés par rapport aux normes reconnues de l'Union européenne. De cette manière, le contrôle par l'État du port contribue à l'atteinte des objectifs fixés pour améliorer la sécurité maritime, la sûreté, la prévention de la pollution et les conditions de travail. D'après l'évaluation, si plusieurs pays rencontrent des difficultés pour recruter des inspecteurs du contrôle par l'État du port qualifiés, les inspecteurs qui procèdent à ces inspections dans les ports de l'Union possèdent les qualifications adéquates, ce qui signifie que les inspections sont effectuées de la façon la plus harmonisée possible dans l'ensemble de l'Union.

Depuis la mise en place du nouveau régime d'inspection, le nombre total d'inspections a diminué et il y a davantage d'« inspections initiales ». Cependant, certains États membres continuent d'inspecter plus de navires de priorité I qu'ils ne sont censés le faire au titre de leur engagement en matière de contribution équitable. Cette situation a des effets négatifs pour les autres États membres, car le nombre d'inspections est supérieur au nombre requis. Tandis que certains États membres affirment que leurs coûts administratifs ont augmenté depuis la mise en place du nouveau régime d'inspection, d'autres indiquent qu'ils ont diminué ou qu'ils sont restés stables. Les données relatives aux coûts des inspections dans les États membres montrent que les coûts en 2016 sont plus ou moins identiques à ceux de 2011. Cependant, l'amélioration de la flexibilité opérationnelle peut avoir diminué les coûts pour certains États membres. Du point de vue des armateurs, toutefois, les coûts liés au contrôle par l'État du port sont perçus comme proportionnels à l'objectif et il est important d'afficher des résultats positifs en matière de contrôle par l'État du port, ceux-ci étant considérés comme un facteur concurrentiel.

#### Pertinence

Par conséquent, nous estimons que le contrôle par l'État du port reste nécessaire pour lutter contre le transport maritime « inférieur aux normes ». Bien que les irrégularités et les immobilisations aient diminué depuis la mise en place du nouveau régime d'inspection, le transport maritime « inférieur aux normes » reste présent dans les régions visées par le mémorandum d'entente de Paris et celles visées par d'autres mémorandums. De plus, il s'agit d'un problème mondial et le contrôle par l'État du port est généralement considéré comme la seule ligne de défense contre les navires qui proviennent d'États du pavillon dont les résultats sont médiocres. D'après les données disponibles, le nombre d'irrégularités et d'immobilisations a diminué depuis la mise en place du nouveau régime d'inspection. Il serait dès lors possible que la suppression des dispositions relatives à ce régime ou des efforts entrepris dans le domaine des contrôles par l'État du port en général entraîne une nouvelle hausse du transport maritime « inférieur aux normes » dans les régions visées par le mémorandum d'entente de Paris.

Comme déjà souligné, le transport maritime « inférieur aux normes » est un problème mondial puisque le transport maritime est intrinsèquement une industrie internationale. Par conséquent, les contrôles par l'État du port dans l'Union européenne (région visée par le mémorandum de Paris) resteront pertinents tant qu'il y aura des pavillons sur la « liste noire » de ce mémorandum ou simplement tant que des États du pavillon ne feront pas correctement leur travail. En d'autres termes, les contrôles par l'État du port restent utiles tant qu'il existe des différences en matière de normes et de qualité des contrôles dans les différentes régions du monde et tant que les États du pavillon ne remplissent pas tous pleinement leurs obligations.

Nous recommandons dès lors le maintien de la directive, mais la Commission et l'AESM pourraient avec les États membres explorer la possibilité d'améliorer la flexibilité pour accroître l'efficacité et l'efficience et l'aligner avec les processus du mémorandum d'entente de Paris afin d'accroître la valeur ajoutée de l'Union

européenne. De plus, les États membres devraient continuer de respecter les dispositions de la directive relative au contrôle par l'État du port, car elles seront maintenues, mais devraient dans le même temps continuer de faire connaître les carences qui pourraient être prises en compte dans une future révision potentielle de cette directive.

#### Efficacité

L'évaluation montre que la directive relative au contrôle par l'État du port contribue à l'objectif visant à garantir la sécurité et la sûreté maritimes, la prévention de la pollution et des conditions de travail adéquates. La directive sert de mécanisme coercitif de soutien qui garantit le respect des normes européennes et internationales reconnues. Les parties prenantes estiment que l'efficacité de la directive est liée aux trois principaux facteurs suivants : l'existence de mesures efficaces pour garantir le respect de la directive relative au contrôle par l'État du port par tous les États membres de l'Union, l'exploitation et l'actualisation de la base de données THETIS et la prestation d'une formation harmonisée par l'AESM.

De plus, un bilan positif en matière de contrôle par l'État du port constitue un facteur concurrentiel pour un transport maritime de qualité. La directive a ainsi incité l'industrie du transport maritime à maintenir des normes élevées et, par conséquent, à améliorer la sécurité et la sûreté maritimes, la prévention de la pollution et les conditions de travail à bord des navires faisant escale dans un port de l'Union européenne.

Bien que le ciblage des navires présentant un risque élevé à l'aide de la base de données THETIS – au moyen d'un système d'établissement de priorités – soit efficace, car il permet d'inspecter les navires aux résultats médiocres, il reste possible d'améliorer le profil de risque des navires. Nous avons recensé des points à améliorer dont une partie auraient déjà été abordés – ou font l'objet de discussions – au sein du groupe de travail 31 du mémorandum d'entente de Paris. Nous recommandons par conséquent de continuer à examiner les points suivants : pondération des facteurs de risques individuels et génériques, formule de calcul des performances des États du pavillon, disposition sur l'audit de l'OMI et volet écologique.

L'évaluation montre que les inspecteurs chargés des contrôles par l'État du port sont dûment formés et qualifiés et que les États membres ne sont pas confrontés à des difficultés majeures relatives au respect des exigences de formation et de qualification de la directive relative au contrôle par l'État du port/du mémorandum d'entente de Paris. Cependant, la majorité des États membres rencontrent des difficultés pour recruter des inspecteurs qualifiés. Ces problèmes sont moins flagrants et même presque inexistantes dans les pays dans lesquels les inspecteurs chargés des contrôles par l'État du port font partie de l'armée nationale (membres de la marine/garde-côtière). Un facteur économique entre également en jeu, puisque les salaires à bord et dans le secteur privé sont et seront beaucoup plus élevés par rapport à ceux qui peuvent être offerts aux inspecteurs chargés des contrôles par l'État du port.

Par ailleurs, le niveau de formation à l'échelle nationale et européenne est satisfaisant. Seules quelques lacunes mineures relatives à la formation proposée ont été recensées. En général, les inspections sont effectuées de manière harmonisée dans l'ensemble de l'Union européenne, mais il existe des différences relatives à la culture de contrôle. De plus, il a été signalé que des inspecteurs ont dû déménager pour respecter les exigences en matière de qualification concernant le nombre d'inspections qu'un inspecteur doit effectuer sur une période donnée. Dès lors, de nombreux inspecteurs n'effectuent pas uniquement des inspections relatives au contrôle par l'État du port, mais ont également d'autres missions, telles que des enquêtes sur l'État du pavillon,

des inspections des navires de type ro-pax et des inspections de navires de pêche, auxquelles viennent s'ajouter d'autres responsabilités. De plus, ces exigences limitent le nombre d'inspecteurs qu'un État membre peut maintenir occupés.

Nous recommandons que l'AESM continue de dispenser des formations communes dans l'optique de réaliser des inspections harmonisées de grande qualité pour les contrôles de l'État du port. Des mesures pourraient être prises pour inciter à établir des exigences plus flexibles, par exemple en adoptant une approche plus qualitative afin de déterminer les besoins en matière de « qualifications » et de formation. Les États membres devraient faire part à l'AESM de leurs souhaits en matière de formations basées sur les besoins, tenter de s'inspirer des points forts des approches existantes en matière de formation/de connaissances antérieures/de recrutement, et s'efforcer d'adopter une approche de formation harmonisée.

#### Efficiences

À la suite de l'entrée en vigueur de la directive relative au contrôle par l'État du port/au nouveau régime d'inspection, certaines autorités maritimes ont connu une hausse de leurs coûts administratifs, d'autres une baisse, et d'autres, encore, un statu quo. Dans l'ensemble, nous avons constaté que les coûts moyens dans les États membres sont restés quasiment inchangés. Cependant, nous estimons que ces coûts ne sont pas toujours proportionnels à l'objectif visant à faire disparaître le « transport maritime inférieur aux normes ». Il serait selon nous possible d'améliorer la flexibilité opérationnelle du régime de contrôle par l'État du port, par exemple en ayant la possibilité de justifier les inspections non effectuées.

Les armateurs estiment généralement que les coûts administratifs, ainsi que la fréquence et la portée des inspections relatives au contrôle par l'État du port, sont proportionnels à l'objectif visant à faire disparaître le « transport maritime inférieur aux normes » et n'ont pas signalé de retard important relatif aux inspections en cours dans les ports de l'Union européenne. Cependant, ces inspections sont exigeantes et ne concordent pas toujours avec les périodes de repos prévues des équipages.

Il reste néanmoins une marge de réduction des coûts. Lorsque nous comparons le nombre d'inspections réalisées par rapport à l'ensemble des engagements, le nombre d'inspections non pertinentes a considérablement augmenté pour certains États membres depuis 2011. Cette pratique fausse le calcul global de la contribution équitable des autres États membres. En outre, certains États membres doivent inspecter un grand nombre de navires de priorité II pour atteindre un nombre d'inspections correspondant à leur contribution équitable. Cependant, les États membres ont beaucoup plus reporté les inspections en 2016 par rapport à 2011.

Nous recommandons que la Commission/l'AESM évalue la nécessité d'accroître la flexibilité opérationnelle : il convient de faciliter la justification des inspections non effectuées (par exemple conformément à la justification visée à l'article 8, paragraphe 3, de la directive). On pourrait notamment imaginer de prévoir une « période de transition » (par exemple 24 heures) à l'issue de laquelle l'ordre de priorité évoluerait (conduisant à comptabiliser l'inspection comme une inspection non effectuée). Ces mesures devraient accroître la flexibilité pour invoquer des motifs de justification des inspections non effectuées. En retour, les États membres devraient respecter les engagements convenus en matière d'inspection et ne pas dépasser de manière importante le nombre d'inspections (à moins que des raisons de sécurité soient invoquées).

L'évaluation montre également que la base de données THETIS est perçue comme un outil efficace par les autorités maritimes et comme une amélioration importante par



rapport à l'ancien SIRENaC pour planifier les activités de contrôle par l'État du port et surveiller le travail des inspecteurs. De plus, la majorité des autorités maritimes utilisent la base de données THETIS pour surveiller régulièrement les progrès accomplis vis-à-vis du respect de leur engagement annuel en matière d'inspections. Les fonctionnalités plus perfectionnées de THETIS, telles que l'outil Jasper Business Intelligence, sont relativement rarement utilisées et des problèmes relatifs à l'utilisation de l'outil ont été signalés.

#### Cohérence

Nous estimons nécessaire d'améliorer la coordination entre les directives sur les transbordeurs rouliers et les engins à passagers à grande vitesse. Toutefois, cette coordination étant déjà abordée dans le cadre de la révision de la directive sur les transbordeurs rouliers, aucune recommandation spécifique s'y rapportant n'est formulée à ce stade. Concernant la directive relative à l'État du pavillon, les parties prenantes estiment qu'il n'est pas nécessaire d'améliorer la cohérence et la coordination. En fait, dans certains pays, les inspecteurs chargés des contrôles par l'État du port effectuent également les enquêtes sur l'État du pavillon. En ce qui concerne la coordination avec les autres domaines d'action (directive 2016/802 concernant une réduction de la teneur en soufre de certains combustibles liquides, règlement 1257/2013 relatif au recyclage des navires et directive 2000/59/CE sur les installations de réception portuaires pour les déchets d'exploitation des navires et les résidus de cargaison), les autorités maritimes sont moins convaincues quant aux bénéfices.

#### Valeur ajoutée de l'UE

En conclusion, la directive apporte une valeur ajoutée, principalement en mettant en place un régime contraignant qui peut être appliqué de manière efficace dans les États membres par la Commission européenne. Les États membres sont tenus par la directive d'engager les ressources nécessaires pour les contrôles par l'État du port.

## 1 INTRODUCTION

### 1.1 Purpose and scope of evaluation

The ex-post evaluation of Directive 2009/16/EC on Port State Control (PSC) was initiated as a part of the Maritime Fitness Check under the Commission Work Programme 2016 (see Text box 1.1). Hence, the evaluation forms part of the Commission's REFIT programme and pays particular attention to potential areas for administrative burden reduction and simplification.

The evaluation was initiated in October 2016 and finalised in June 2017. Its purpose is to assess the relevance, effectiveness, efficiency, coherence and EU added value of the PSC regime as provided for in Directive 2009/16/EC as amended.

#### **Text box 1.1 Maritime Fitness Check**

The overall justification of the maritime fitness check is to look more closely at the interaction between the concerned legislative acts and their implementation – including the supportive role the European Maritime Safety Agency (EMSA) can play – 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 maritime fitness check encompasses the following legislative acts:

1. Directive 2010/65/EC dealing with reporting formalities for ships arriving and/or departing from ports (RFD)
2. Directive 2002/59/EC dealing with vessel traffic monitoring and information system (VTMIS)
3. **Directive 2009/16/EC dealing with port State control (PSC)**
4. Directive 2009/21/EC dealing with compliance with flag State requirements (FS)
5. Directive 2009/18/EC dealing with accident investigation (AI).

### 1.2 Scope of evaluation

The evaluation examines the application and impacts of the PSC Directive (as amended) from 1 January 2011, when it started to apply, until 30 June 2016 in the 23 EU Member States in which it is implemented. Furthermore, as shown in Table 1.1, the evaluation focuses on answering ten specific evaluation questions within the five evaluation criteria:

**Table 1.1 Evaluation criteria and evaluation questions**

Evaluation criterion	Evaluation question
Relevance	1 To what extent is the layer of defence provided by PSC (safety, working conditions, and environmental protection) still required and appropriate?
Effectiveness	2 To what extent is the targeting of what are described as higher risk vessels effective? Would other risk factors contribute to increase target effectiveness? 3 To what extent are all eligible ships covered by inspections (PSC, flag state, environmental regimes)? Are there any gaps in coverage? 4 To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions? 5 How does the inspectors' training and qualification perform? How can the (present and future) availability of qualified inspectors be ensured and promoted? 6 How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?
Efficiency	7 What are the administrative costs incurred by stakeholders? To what extent are these proportional to the benefits of improved safety? 8 To what extent is there an efficient usage of the THETIS database? To what extent is the interaction between THETIS and other related databases optimal?
Coherence	9 To what extent is the Directive coherent having regard to the other legislation applicable in this area such as Directive 99/35, flag state surveys and environmental regimes? Are there any gaps or overlaps?
EU added value	10 What does the Directive add to the work being done by MS either individually or within the context of the Paris MoU?

### 1.3 Context, scope and objectives of PSC Directive

The responsibility for the continuous maintenance of a ship and its equipment and for complying with the requirements of rules and regulations applicable to the ship lies with the shipowner.<sup>1</sup> Shipowners, who do not respect the rules and who sail under flags of flag States that do not enforce them properly, allow noncompliant ships to sail and trade around the world. This situation creates not only a competitive advantage for those ships but also a higher risk in terms of accidents, security or pollution. Such noncompliant ships are commonly referred to as 'substandard' ships. They are fought

<sup>1</sup> This is sometimes referred to as the first line of defence against 'substandard' shipping. In this context, the flag State requirements comprise the second line of defence, and the PSC the third line of defence.

against by two lines of defence, where PSC is often referred to as the second line of defence whereas the first line of defence is the flag State itself.

Hence, the primary responsibility for monitoring the compliance of ships with international standards for safety, pollution prevention and on-board living and working conditions lies with the flag State.

The foundation for such international standards – i.e. the basis for laws and principles for all nations to follow concerning the sea – is established by the United Nations Convention on the Law of the Sea (UNCLOS).<sup>2</sup> This is an umbrella convention that sets the scene for the International Maritime Organisation (IMO) conventions ILO conventions etc. For example, UNCLOS makes clear that the right of owning a ship and flying the flag of a State makes the ship a part of national property, which entails duties and responsibilities including taking the measures for ships flying its flag that are necessary to ensure safety at sea (e.g. construction, equipment and seaworthiness of the ship).<sup>3</sup>

Hence with UNCLOS as basis, the International Convention for the Safety of Life at Sea (SOLAS)<sup>4</sup>, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)<sup>5</sup> and, most recently, the Maritime Labour Convention (MLC)<sup>6</sup> define flag State obligations, while the International Convention for the Prevention of Pollution from Ships (MARPOL)<sup>7</sup>, adopted on 2 November 1973 at the IMO, defines the obligations of the Contracting Parties to take such measures for ships flying their flag as are necessary to ensure the protection of marine environment. Similarly, the International Convention on Load Lines (ILLC).<sup>8</sup>

Furthermore, the implementation of flag State (and coastal and port State) obligations under IMO instruments are guided by the IMO's Implementation Code (III Code, Resolution A.1070(28)<sup>9</sup>). The III Code was developed to form the basis of IMO's audit standard and has in this context added to the obligations of the Parties to the conventions.<sup>10</sup>

The various conventions are transposed into national legislations. For EU Member States, Directive 2009/21/EC<sup>11</sup> – which is subject to the parallel Ecorys evaluation – aims to ensure that EU Member States effectively and consistently discharge their obligations as flag States. It is therefore also flag States that are responsible for monitoring through surveys (for ship certification) and have the power (and obligation) to sanction non-compliance<sup>12</sup>. In practice, however, flag State surveys are often delegated to classification societies (recognised organisations - RO) that, on

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<sup>2</sup> To which the European Union is also party.

<sup>3</sup> UNCLOS, Article 94, [http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf)

<sup>4</sup> [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-\(SOLAS\),-1974.aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx)

<sup>5</sup> <http://www.imo.org/en/OurWork/HumanElement/TrainingCertification/Pages/STCW-Convention.aspx>

<sup>6</sup> <http://ilo.org/global/standards/maritime-labour-convention/lang--en/index.htm>

<sup>7</sup> [http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-prevention-of-pollution-from-ships-\(marpol\).aspx](http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-prevention-of-pollution-from-ships-(marpol).aspx)

<sup>8</sup> <http://www.imo.org/en/About/Conventions/listofconventions/pages/international-convention-on-load-lines.aspx>

<sup>9</sup> [http://www.crclass.org/english/eccr-3/ec3t/78/2-11%20A%2028-Res.1070%20-%20Adopted%20on%204%20December%202013,%20\(Agenda%20item%2010\)%20\(the%20Secretary-General\).pdf](http://www.crclass.org/english/eccr-3/ec3t/78/2-11%20A%2028-Res.1070%20-%20Adopted%20on%204%20December%202013,%20(Agenda%20item%2010)%20(the%20Secretary-General).pdf)

<sup>10</sup> Scope of III Code: 1974 SOLAS and 1978 Protocol as amended, MARPOL 3/78 as amended, STCW 1978 as amended, LOADLINES 1966 as modified by the 1988 Protocol, TONNAGE 1969, COLREG 1972.

<sup>11</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:131:0132:0135:EN:PDF>

<sup>12</sup> Port states do – as is the focus of the present evaluation – also have the power to sanction non-compliance, e.g. via detaining ships.

behalf of the flag State, may also issue the statutory certificates required in terms of the above mentioned conventions, and that survey ships to verify that the ships remain in compliance with the applicable rules.

Although the majority of flag States carry out their responsibilities well, others do not. In 1978, a number of European countries agreed in The Hague to inspect whether the labour conditions on board ships were in accordance with ILO Convention no. 147.<sup>13</sup> However, just as the memorandum was about to come into effect in March 1978, a massive oil spill occurred off the coast of Brittany (France) as a result of the grounding of the VLCC Amoco Cadiz. This incident caused a strong political and public outcry in Europe for far more stringent regulations with regard to the safety of shipping.

After the Amoco Cadiz incident, it was decided by the members of The Hague Memorandum to also inspect ship safety and environment protection. To this end, on 1 July 1982 the Paris MoU<sup>14</sup> was agreed upon, establishing a common understanding of the implementation of PSC based on international conventions, as a second line of defence<sup>15</sup> against 'substandard' shipping.

The development of the Paris MoU was thus a reaction to the failure of the flag States – especially for flags of convenience at the time (that may have delegated their task to classification societies, which when operating on behalf of flag states are known as ROs) – to comply with their duties. Hence, the PSC obligations adopted by the Paris MoU derive from the same conventions as those for the flag State obligations discussed above, and their implementation is also guided by the IMO III Code. Furthermore, they are based upon the IMO procedures for PSC provided in Resolution A.1052(27).<sup>16</sup> It is, however, important to underline that the Paris MoU is an administrative arrangement and so the PSC obligations are not legally binding upon their Members and therefore not enforceable.

Since 1982, the Paris MoU has been amended several times to accommodate new safety and marine environment requirements stemming from the IMO and ILO requirements related to working and living conditions of seafarers. Nowadays, 27 countries are members to the Paris MoU, including Russia and Canada.

The success of the Paris MoU led, among other things, to the establishment of MoUs in other parts of the world<sup>17</sup>: in the Caribbean, Indian Ocean, Asia-Pacific (the Tokyo MoU), West and Central Africa, Latin America (Viña del Mar Agreement), Black Sea, Riyadh and the Mediterranean. However, some of the poorer countries do not have resources to comply with MoU requirements and hence PSC is often of lower standards. The IMO provides support to these countries to develop their PSC capacity.

The original agreement between the Paris MoU members was to inspect 25% of individual ships arriving at Paris MoU members' ports. Global maritime developments, the introduction of new IMO instruments and the need for a better balanced method of targeting and inspection of ships led eventually the Paris MoU members to abandon the 25% quota. A task force led by the EC/EMSA developed a New Inspection Regime

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<sup>13</sup> The Hague Memorandum also covered IMO instruments (SOLAS, MARPOL ILCC, STWC).

<sup>14</sup> [https://www.parismou.org/system/files/Paris%20MoU%2C%20including%2039th%20amendment%20rev%20final\\_.pdf](https://www.parismou.org/system/files/Paris%20MoU%2C%20including%2039th%20amendment%20rev%20final_.pdf)

<sup>15</sup> Mandaraka-Sheppard, A.: Modern Maritime Law (Volume 2), 2013, p. 70.

<sup>16</sup> [http://www.imo.org/en/KnowledgeCentre/indexofimoresolutions/documents/a%20-%20assembly/1052\(27\).pdf](http://www.imo.org/en/KnowledgeCentre/indexofimoresolutions/documents/a%20-%20assembly/1052(27).pdf)

<sup>17</sup> In January 2001, the US Coast Guard implemented an initiative to identify high-quality ships, and provide incentives to encourage quality operations. This initiative is called QUALSHIP 21, quality shipping for the 21st century, and includes certain incentives for qualifying ships.

(NIR) based on a fair share scheme and a risk-based approach to targeting ships. The NIR was adopted by the Paris MoU in 2009.

EU law on PSC was initiated in the beginning of the 1990s with Directive 95/21/EC<sup>18</sup> to enforce PSC measures among Member States through legislation – i.e. pursuing maritime safety within the context of harmonisation aspects and equal treatment at the EU level. The PSC Directive formed part of the two first pieces of maritime safety legislation following the first maritime safety Communication<sup>19</sup> - 'A common policy on safe seas' (the other was Directive 95/57/EC regarding flag States and ROs).

Following the accidents of the 'Erika' in 1999 and the 'Prestige' in 2002, the Commission initiated additional rules and standards – known as the Erika I and II packages – for maritime safety, in particular for the prevention of oil pollution at sea. With the Third Maritime Safety Package (Erika III) in November 2005, the Commission adopted seven measures intended to supplement and improve the efficiency of the existing European legislation on maritime safety by means of a more proactive and preventive policy.

The 1995 Directive has been amended to include the rules agreed in the Paris MoU, in particular the NIR. Its current consolidated (re-cast) version is Directive 2009/16/EC on Port State Control ('the PSC Directive'<sup>20</sup>), which entered into force in June 2009 and applicable as of 1 January 2011.

The PSC Directive 2009/16/EC, and its implementing regulations<sup>21</sup>, aim to ensure that there is a harmonised, effective and efficient control of compliance and enforcement with relevant international and EU standards by ships irrespective of flag in EU ports. As such the Directive aims to 1) improve safety, 2) reduce risk of environmental pollution, 3) ensure maritime security and 4) improve on-board living and working conditions.<sup>22</sup> Moreover, the Directive seeks to avoid distortions of competition between operators and between ports in the EU.

In addition, specific rules apply to the surveys of ro-ro ferries and high speed passenger craft. These rules are laid down in Directive 99/35/EC, which is currently under revision with the view of eliminating overlaps between various inspection regimes.<sup>23</sup>

In general, PSC is based on the idea of targeted inspections, where a PSC regime ensures that ships calling at ports in the region are regularly inspected. If an inspected ship does not comply with the relevant standards it will be required to rectify the identified deficiencies before leaving port or within a fixed period of time. If the deficiencies are sufficiently serious, it may lead to the ship being detained. The key

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<sup>18</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31995L0021&from=EN>

<sup>19</sup> COM (93) 66. <http://aei.pitt.edu/4929/>.

<sup>20</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:131:0057:0100:EN:PDF>

<sup>21</sup> Commission Regulation (EU) No 428/2010 as regards expanded inspection of ships: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R0428&from=EN>, Commission Regulation (EU) No 801/2010 as regards the flag State criteria: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R0801&from=EN> and Commission Regulation (EU) No 802/2010 as regards company performance: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R1205&from=EN>.

<sup>22</sup> Source: European Commission, REFIT Evaluation of Directive 2009/16/EC on port State control, Evaluation Roadmap, 2016. [http://ec.europa.eu/smart-regulation/roadmaps/docs/2016\\_move\\_058\\_evaluation\\_port\\_state\\_control\\_en.pdf](http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_move_058_evaluation_port_state_control_en.pdf)

<sup>23</sup> Proposal for a Directive on a system of inspections for the safe operation of ro-ro ferry and high-speed passenger craft in regular service and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC COM(2016) 371 final.

elements of the EU PSC regime are in this context:

- Harmonised approach to inspections and detentions
- Annual inspection commitment
- Targeting of ships for inspection based on a ship risk profile
- Company performance
- Record keeping and information sharing (inspection database)

The PSC Directive aims to establish a harmonised approach for enforcement of relevant international and EU standards by establishing common criteria for control of ships by the port State and harmonising procedures on inspection and detention (Article 1(c) of the Directive). Such harmonised procedures seek to avoid distortion of competition within the EU and ultimately ensure that safety is not compromised in certain parts of the region due to less stringent enforcement of the existing standards. To this effect, harmonised procedures govern: 1) the selection of ships of inspection and the frequency of inspections, 2) the scope of the inspections (initial, more detailed and expanded), 3) procedures and guidelines to be followed by the inspectors, 4) the refusal of access and criteria for detention of a ship, and 5) the qualification criteria for inspectors.

The inspection commitment of the PSC Directive aims to ensure a balanced inspection share between Member States. According to Article 5(2) of the PSC Directive each Member State is obliged to inspect all Priority I ships and, at the same time, to carry out annually a total number of inspections of Priority I and Priority II ships corresponding at least to its share of the total number of inspections to be carried out annually within the EU and the Paris MoU region (the so-called 'fair share'). A Member State may, while still complying with its commitment according to Article 6, miss 5% of Priority I ships with a high risk profile calling at its ports and anchorages, and 10% of Priority I ships other than those with a high risk profile. Furthermore, a Member State in which the total number of calls of Priority I ships exceeds its inspection share may, according to Article 7(1) miss<sup>24</sup> up to 30% of total number of Priority I ships calling at its ports and anchorages, and still comply with its inspection commitment.

The fair share scheme takes account of individual ship calls in a Member State versus the individual ship calls within the region. The regional commitment for the year is calculated on the basis of the average number of inspections carried out in the previous three years. Hence, the inspection commitment for each Member State is the three-year average number of individual ships calling at the Member State as a percentage of the number of individual ships calling in the region.

The targeting of ships under the NIR is based on a so-called 'Ship Risk Profile' (SRP) (Article 10). A SRP determines, together with the time interval since the last inspection, the respective priority of a ship for inspection. The NIR aims at rewarding good-performing ships and targeting poor-performing ships.<sup>25</sup> Simply put, quality shipping is rewarded with a reduced inspection burden, whereas ships considered to be high risk are subject to more frequent and in-depth inspections. At the same time, Member States' inspection resources are put to a more efficient use by targeting those ships that constitute a higher risk of non-compliance with maritime safety, maritime security, marine environment and maritime labour standards.

Based on generic and historic parameters, ships are assigned high, standard or low risk. Generic parameters include the type of ship, age of ship, flag State performance, recognised organisation performance and company performance. Historical

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<sup>24</sup> See Section 3.3.1 for more on miss rates, and under- and overburdened Member States.

<sup>25</sup> EMSA, A New Inspection regime for port State control in all Paris MoU countries, 2010.

parameters include previous detentions and deficiencies of the ship.

Company performance is one of the criteria for the calculation of a SRP. The company performance criterion is a new parameter introduced with the NIR. It takes into consideration the deficiencies and detentions in the last 36 months of the company's fleet and compares this to the average of all ships inspected in the EU and the Paris MoU region. Based on this, companies are ranked into very low, low, medium and high company performance.

Companies whose performance has been considered low and/or very low for a period of 36 months and more are published on the public part of the THETIS database (see below). At the same time a calculator is provided on the EMSA and Paris MoU websites, allowing companies to monitor their own performance. This is part of the more proactive approach to monitoring compliance enshrined in the PSC Directive and Regulation 1205/2012.<sup>26</sup>

The implementation of the NIR is facilitated by an information system developed and maintained by EMSA. The Hybrid European Targeting and Information System ('THETIS') assists Member States with targeting and selecting ships for inspection through continuous profiling of seagoing ships and in sharing of relevant inspection information (results of inspections and various statistics) between its users.

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<sup>26</sup> Commission Regulation (EU) No 1205/2012 implementing Article 10(3) and Article 27 of Directive 2009/16/EC of the European Parliament and of the Council as regards company performance.



## 2 METHODOLOGY

We have applied a standard data triangulation approach where we address the evaluation questions from different angles:

- Desk study
- Interviews
- Surveys

### 2.1 Desk Study

As unveiled in the analysis in the next chapter, most of our desk study is based on very comprehensive and detailed data received from EMSA. This PSC data set comprises time series for the number of inspections, deficiencies, and detentions – by Paris MoU member, by age of ship, by SRP, by priority, and by type of deficiency.

The distinction between Paris MoU members in the data set has, for example, enabled us to look into geographical differences in the size and development in 'substandard' shipping, and to identify possible barriers for a harmonised PSC approach across the Paris MoU. For the analysis to be manageable, we have grouped the data according to sea basins – by making use of the following definitions: Baltic Sea [Denmark, Sweden, Finland, Estonia, Latvia, Lithuania, Poland], North Sea [Germany, Netherlands, Belgium, France, Ireland, UK, Portugal], Mediterranean Sea [Spain, Italy, Slovenia, Croatia, Malta, Greece, Cyprus], Black Sea [Bulgaria, Romania], and Non-EU<sup>27</sup> [Norway, Iceland, Russia, Canada]. We do acknowledge that this is not a perfect distinction – e.g. some of the French PSC inspections will take place in the Mediterranean Sea and not the North Sea. Similarly, Germany has ports in both the North Sea and the Baltic Sea.

Furthermore, where data are available both before and after the NIR, we distinguish in the presentation and the analysis of the data between the two periods: 2007-2010 and 2011-2016. The reason is that the inspection, deficiency, and detention data are not fully comparable as the PSC activities have taken place in different PSC regimes.

To put the amount of and development in the Paris MoU PSC inspections, deficiencies and detentions in an even wider international perspective, we compare some of the Paris MoU data with those of the Mediterranean, Indian Ocean and Tokyo MoUs. This is also done with an eye on the pursuance of global PSC harmonisation, as well as on the question whether the Paris MoU PSC inspections have pushed 'substandard' shipping elsewhere.

The data on PSC inspections, deficiencies and detentions – particularly those provided by EMSA/THETIS, but also those provided by the other MoUs – are assessed to be very reliable and so provide strong evidence. In other words, we assume that the data provide a sufficiently factual picture of the current situation as well as recent developments.

### 2.2 Interviews

Most information gathering efforts have been spend on interviews with targeted

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<sup>27</sup> Note that this Non-EU group just has been established to keep the presentation of the data at a manageable level. However, when evaluating the Directive – hereunder comparing with the operations of the Paris MoU – it should be borne in mind that Norway and Island are covered by the Directive through the EEA agreement, while Russia and Canada are not.

stakeholders. We have, in agreement with DG MOVE, selected stakeholders from the major stakeholder groups:

- Maritime authorities in EU Member States responsible for PSC
- Shipowners engaged in different types of trade (i.e. container shipping, bulk carriers, chemical tankers and passenger transport)
- Ship agents
- Third (non-EU) States whose ships call in EU ports
- Recognised organisations
- Seafarers and their organisations
- Other actors involved in maritime transport, who are involved in the application of the Directive, such as pilots, ports and port operators and other national and international bodies involved in PSC.

The stakeholder interviews were guided by targeted interview guides. Hence, while all the interview guides revolve around the ten main evaluation questions and while some questions are common to the stakeholders, there are a number of specific questions (or specific formulations) targeted at the stakeholder group in question.

We have (see Appendix B) carried out 34 stakeholder interviews – 4 out these were in the inception phase carried out in the form of exploratory interviews, while 30 were carried out using the targeted interview guides.

The stakeholders for interviews were selected based on a number of criteria, taking into account among other things, their geographical location across sea basins and the number of PSC inspections (for maritime authorities), the types of trade and the rating of the flag on the White-Grey-Black list of the Paris MoU (for shipowners), the size, location and type of trade involved (for ports), the size of the flag and the position of the flag on the White-Grey-Black list of the Paris MoU (for third States).

The responses to the interview questions were analysed with respect to finding any consensus between the stakeholder groups and between Member States as well as with respect to identifying differences. A key term has in this context been 'harmonisation' – i.e. we have throughout the evaluation assessed the success (or feasibility) of carrying out PSC inspections similarly across the Paris MoU area.

Additionally, we have in the inception phase benefited from a two-day workshop at EMSA premises with the relevant staff from EMSA and the Commission.

We experienced a great willingness of the contacted stakeholders to participate in interviews. Furthermore, the stakeholders were overall very open at the interviews to provide their answers to all evaluation questions. Hence, we are confident that the answers obtained overall are very reliable and so provide strong evidence for our evaluation findings.

### 2.3 Surveys

A targeted survey (survey questions are presented in Appendix C) was launched together with a survey carried out in the evaluation of the flag State/Accident Investigation Directive evaluation to mitigate possible stakeholder fatigue and so to improve response rates. Existing stakeholder associations/organisations have also been used to promote the questionnaire (ECSA and IACS). Despite these efforts the survey has suffered from a survey fatigue resulting in a relatively low response rate as regards most groups of stakeholders. The only exception is the maritime authorities,

which also is the category where most interviews have been carried out. During the interview we did encourage the representatives to respond to the survey.

This being said, the responses to the targeted survey overall support the findings of the stakeholder interviews.

An Open Public Consultation (OPC) on the fitness of EU legislation for maritime transport safety and efficiency was launched on 7 October 2016 and was closed on 20 January 2017.<sup>28</sup> Only 5 of the 50 questions posed or statements made are directly related to the PSC Directive.

The findings from the OPC are presented in a separate report. However, it should be underlined that the responses to the OPC support our evaluation findings. For example, most respondents (36 out of 45) agree strongly that the inspection of foreign vessels in EU ports is essential for ensuring maritime safety and the prevention of maritime accidents and pollution. Furthermore, more than half of the respondents (27 out of 43) believe that the EU to a great extent should provide administrative support and expertise to the Member States in carrying out PSC inspections.

As just mentioned, we experienced a relatively low response rate within our own targeted survey, and the response to the OPC cannot be claimed to be high. This said, the survey answers do support the findings from the two other angles, but we consider this support to be based on medium evidence.

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<sup>28</sup> [https://ec.europa.eu/transport/modes/maritime/consultations/2016-refit\\_en\\_en](https://ec.europa.eu/transport/modes/maritime/consultations/2016-refit_en_en).



### 3 Findings and analysis

As introduced above, the evaluation of the PSC Directive takes outset in ten evaluation questions that we in this chapter answer one by one.

#### 3.1 Relevance

The evaluation of the relevance of the PSC Directive is based on one evaluation question that focuses on the extent to which the layer of defence provided by PSC is still required and appropriate for ensuring that internationally agreed standards regarding maritime safety, security, living and working conditions and pollution prevention are complied with by ships calling at EU ports.

##### 3.1.1 EQ1: To what extent is the layer of defence provided by PSC (safety, working conditions, and environmental protection) still required and appropriate?

All stakeholders consulted provided their view on how important PSC is as a second line of defence against 'substandard' shipping, and about in which ship standard areas it is most important. Hence, the question is much about whether shipowners (and ROs) make sure that their ships are in safe conditions and whether the flag States – being the first line of defence – follow up on this. Furthermore, the number of deficiencies and detentions, hereunder their development over time, registered in EU/Paris MoU waters – as well as in other MoU waters – comprise well-documented evidence for the extent of 'substandard' shipping. Finally, we briefly look into external factors, such as the recent economic crisis, that may have influenced developments.

We find that there is a need for PSC as a defence against 'substandard' shipping. Although deficiencies and detentions have fallen with the introduction of the NIR, 'substandard' shipping remains in the Paris MoU areas and in other MoU areas. Furthermore, it is a global problem and PSC is often considered as the only line of defence against ships from low-performing flag States.

The number of deficiencies in the Paris MoU area fell – as shown in Table 3.1 and Table 3.2 both before and after the introduction of the NIR. Furthermore, while detentions also followed a declining trend before the NIR, they have somehow levelled out afterwards. This levelling out for detentions covers, however, over a continuous decline in the ports around the Mediterranean Sea. In contrast, the number of detentions has more than doubled since 2011 in the non-EU area (Norway, Iceland, Russia, and Canada), and has also increased significantly in the Black Sea area and the Baltic Sea.

Hence, from this perspective – and the fact that the number of ships on the 'banning list'<sup>29</sup> still is notable – we conclude that 'substandard' shipping remains in the Paris MoU area and so PSC is still required. Furthermore, the higher figures before the NIR could indicate that an abolishment of the NIR provisions or PSC efforts in general may be at the risk of a return to a higher level of 'substandard' shipping in the Paris MoU area.

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<sup>29</sup> I.e. list of ships that have been refused access: <https://portal.emsa.europa.eu/web/thetis/refusal-of-access>.

**Table 3.1 Deficiencies and detentions in the Paris MoU, 2007 and 2010**

Sea basin	Type	2007	2010	Change 2007-2010	
				absolute	%
Baltic Sea	Deficiency	6067	5078	-989	-16%
	Deficiency – ground for detention	178	100	-78	-44%
	Detention	59	36	-23	-39%
North Sea	Deficiency	30368	22615	-7753	-26%
	Deficiency – ground for detention	2394	1041	-1353	-57%
	Detention	465	250	-215	-46%
Mediterranean Sea	Deficiency	26905	22627	-4278	-16%
	Deficiency – ground for detention	3605	2036	-1569	-44%
	Detention	633	350	-283	-45%
Black Sea	Deficiency	7019	5965	-1054	-15%
	Deficiency – ground for detention	398	313	-85	-21%
	Detention	88	71	-17	-19%
Non-EU	Deficiency	7322	7926	604	8%
	Deficiency – ground for detention	348	346	-2	-1%
	Detention	97	91	-6	-6%
<b>Total Paris MoU</b>	<b>Deficiency</b>	<b>77681</b>	<b>64211</b>	<b>-13470</b>	<b>-17%</b>
	<b>Deficiency – ground for detention</b>	<b>6923</b>	<b>3836</b>	<b>-3087</b>	<b>-45%</b>
	<b>Detention</b>	<b>1342</b>	<b>798</b>	<b>-544</b>	<b>-41%</b>

Source: EMSA/THETIS.

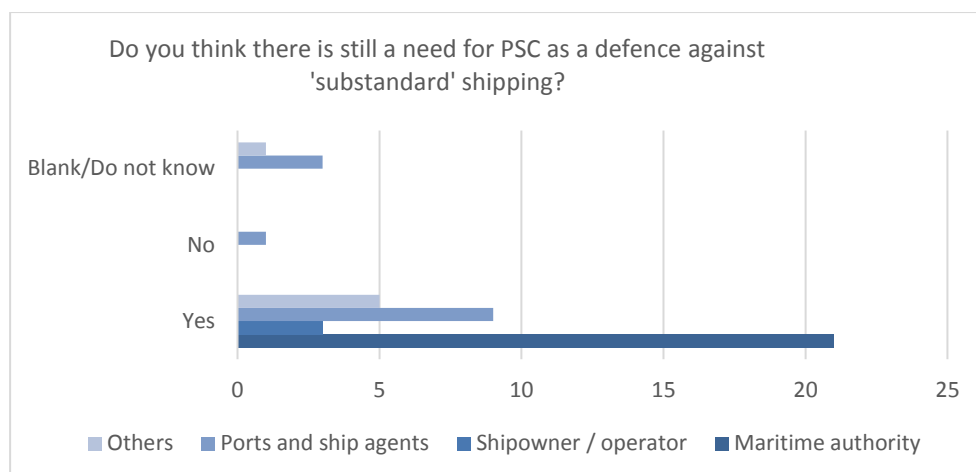
**Table 3.2 Deficiencies and detentions in the Paris MoU, 2011 and 2016**

Sea basin	Type	2011	2016	Change 2011-2016	
				absolute	%
Baltic Sea	Deficiency	3227	3133	-94	-3%
	Deficiency – ground for detention	76	184	108	142%
	Detention	22	36	14	64%
North Sea	Deficiency	18999	14688	-4311	-23%
	Deficiency – ground for detention	756	1162	406	54%
	Detention	210	207	-3	-1%
Mediterranean Sea	Deficiency	16977	12750	-4227	-25%
	Deficiency – ground for detention	1946	1555	-391	-20%
	Detention	360	223	-137	-38%
Black Sea	Deficiency	4174	3486	-688	-16%
	Deficiency – ground for detention	188	408	220	117%
	Detention	41	73	32	78%
Non-EU	Deficiency	6584	8129	1545	23%
	Deficiency – ground for detention	174	578	404	232%
	Detention	69	151	82	119%
<b>Total Paris MoU</b>	<b>Deficiency</b>	<b>49961</b>	<b>42186</b>	<b>-7775</b>	<b>-16%</b>
	<b>Deficiency – ground for detention</b>	<b>3140</b>	<b>3887</b>	<b>747</b>	<b>24%</b>
	<b>Detention</b>	<b>702</b>	<b>690</b>	<b>-12</b>	<b>-2%</b>

Source: EMSA/THETIS.

The conclusion of a remaining need for PSC is supported by all the interviewed stakeholder groups (i.e. maritime authorities, shipping industry, ports, recognised organisations, shipbrokers and agents and international and regional stakeholders). One stakeholder expressed it bluntly that “peace without an army is very difficult”. Several maritime authorities do not only see PSC as being important for monitoring and enforcing compliance of ships with international standards and conventions, but also to increase awareness among seafarers of the requirements of international conventions. Hence, PSC activities are considered to be important for keeping the impact of human errors on ships as low as possible. Furthermore, continuous implementation of new international instruments (such as MLC 2006, Ballast Water Management Convention, etc.) was said to require a second line of defence. The recently increased focus on working arrangements and living conditions in particular was mentioned to lead to the detection and rectification of adverse conditions in these areas.

Similarly, Figure 3.1 shows that out of those that responded to the survey only one respondent responded negatively to the question if there is still a need for PSC.

**Figure 3.1 Relevance of PSC (n=43)**


Source: COWI/Ecorys survey.

The fall in the number of deficiencies and detentions is, however, not isolated to the Paris MoU area. Table 3.3 shows that falls also have happened within some of the other MoUs. Hence, from this perspective there is no evidence that 'substandard' shipping has moved from the Paris MoU area to these areas. Furthermore, 'substandard' shipping also remains in these other MoU areas, and so there is also still a need for PSC in these parts of the world. In this context, the Paris MoU has a role in setting PSC standards and encouraging harmonisation across MoUs.

**Table 3.3 Deficiencies and detentions in other MoUs, 2007, 2011 and 2013/14/15**

MoU	Type	2007	2011	2013/ 14/15 <sup>(1)</sup>	Change 2007- 2013/14/15 <sup>(1)</sup>	
					absolute	%
Mediterranean	Deficiency	27896	22315	15092	-12804	-46%
	Detention	921	412	298	-623	-68%
Indian Ocean	Deficiency	15392	19219	13777	-1615	-10%
	Detention	453	600	376	-77	-17%
Tokyo	Deficiency	83950	103549	83606	-344	0%
	Detention	1238	1562	1153	-85	-7%

Sources: Annual reports of Mediterranean MoU, Indian Ocean MoU, and Tokyo MoU.

Note: <sup>(1)</sup> Latest year of data availability differs – i.e. Indian Ocean (2013), Mediterranean (2014), Tokyo (2015).

The fall in the number of deficiencies and detentions is as shown in Table 3.4 and



Table 3.5 not a result of fewer inspections being carried out, as the average number of deficiencies per inspection decreased from 3.4 in 2007 to 2.7 in 2010, and from 2.7 in 2011 to 2.4 in 2016. Hence, from this overall<sup>30</sup> perspective we find that ships entering Paris MoU ports on average have become safer over time. This said, the decreases have mainly taken place within the ports of the Mediterranean Sea area, while the trend is less clear for the other areas.

In any case, overall it may be an indication that some 'substandard' ships have been sent for business elsewhere – or of course may have rectified deficiencies or have been decommissioned. In this context, Table 3.6 indicates that the 'substandard' ships have not been sent for business in the ports of these three MoUs. On the other hand, the number of inspections has increased in the Indian Ocean and the Tokyo MoUs<sup>31</sup> – indicating an increase in their share of world shipping.

**Table 3.4 Deficiencies and detentions per inspection in the Paris MoU, 2007 and 2010**

Sea basin	Type	2007	2010	Change 2007-2010	
				absolute	%
Baltic Sea	Inspections	3287	3349	62	2%
	Deficiencies per inspection	1.8	1.5	-0.3	-18%
	Detention rate in %	1.8%	1.1%		-0.7 pp
North Sea	Inspections	9019	8787	-232	-3%
	Deficiencies per inspection	3.4	2.6	-0.8	-24%
	Detention rate in %	5.2%	2.8%		-2.3 pp
Mediterranean Sea	Inspections	6543	6334	-209	-3%
	Deficiencies per inspection	4.1	3.6	-0.5	-13%
	Detention rate in %	9.7%	5.5%		-4.1 pp
Black Sea	Inspections	1424	1743	319	22%
	Deficiencies per inspection	4.9	3.4	-1.5	-31%
	Detention rate in %	6.2%	4.1%		-2.1 pp
None-EU	Inspections	2723	3215	492	18%
	Deficiencies per inspection	2.7	2.5	-0.2	-8%
	Detention rate in %	3.6%	2.8%		-0.7 pp
<b>Total Paris MoU</b>	<b>Inspections</b>	<b>22996</b>	<b>23428</b>	<b>432</b>	<b>2%</b>
	<b>Deficiencies per inspection</b>	<b>3.4</b>	<b>2.7</b>	<b>-0.6</b>	<b>-19%</b>
	<b>Detention rate in %</b>	<b>5.8%</b>	<b>3.4%</b>		<b>-2.4 pp</b>

Source: EMSA/THETIS.

<sup>30</sup> This overall decrease may not only be a result of the single ships having become safer, but also as a result of the composition of type and age of ships entering the Paris MoU ports. We look at this later on in this report.

<sup>31</sup> Note that the Tokyo MoU also introduced a risk-based approach in 2014 to selecting ships for PSC inspections.

**Table 3.5 Deficiencies and detentions per inspection in the Paris MoU, 2011 and 2016**

Sea basin	Type	2011	2016	Change 2011-2016	
				absolute	%
Baltic Sea	Inspections	1823	2083	260	14%
	Deficiencies per inspection	1.8	1.5	-0.3	-15%
	Detention rate in %	1.2%	1.7%		0.5 pp
North Sea	Inspections	7605	6646	-959	-13%
	Deficiencies per inspection	2.5	2.2	-0.3	-12%
	Detention rate in %	2.8%	3.1%		0.4 pp
Mediterranean Sea	Inspections	5445	4950	-495	-9%
	Deficiencies per inspection	3.1	2.6	-0.5	-17%
	Detention rate in %	6.6%	4.5%		-2.1 pp
Black Sea	Inspections	1331	853	-478	-36%
	Deficiencies per inspection	3.1	4.1	1.0	30%
	Detention rate in %	3.1%	8.6%		5.5 pp
None-EU	Inspections	2610	2871	261	10%
	Deficiencies per inspection	2.5	2.8	0.3	12%
	Detention rate in %	2.6%	5.3%		2.6 pp
<b>Total Paris MoU</b>	<b>Inspections</b>	<b>18814</b>	<b>17403</b>	<b>-1411</b>	<b>-7%</b>
	<b>Deficiencies per inspection</b>	<b>2.7</b>	<b>2.4</b>	<b>-0.2</b>	<b>-9%</b>
	<b>Detention rate in %</b>	<b>3.7%</b>	<b>4.0%</b>		<b>0.2 pp</b>

Source: EMSA/THETIS.

**Table 3.6 Deficiencies and detentions per inspection in other MoUs, 2007, 2011 and 2013/14/15**

MoU	Type	2007	2011	2013/ 14/15 <sup>(1)</sup>	Change 2007- 2013/14/15 <sup>(1)</sup>	
					absolute	%
Mediterranean	Inspections	5868	6225	5049	-819	-14%
	Deficiencies per inspection	4.8	3.6	3.0	-1.8	-37%
	Detention rate in %	15.7%	6.6%	5.9%		-9.8 pp
Indian Ocean	Inspections	4810	5550	5320	510	11%
	Deficiencies per inspection	3.2	3.5	2.6	-0.6	-19%
	Detention rate in %	9.4%	10.8%	7.1%		-2.4 pp
Tokyo	Inspections	22039	28627	31407	9368	43%
	Deficiencies per inspection	3.8	3.6	2.7	-1.1	-30%
	Detention rate in %	5.6%	5.5%	3.7%		-1.9 pp

Sources: Annual reports of Mediterranean MoU, Indian Ocean MoU, and Tokyo MoU.

Note: <sup>(1)</sup> Latest year of data availability differs – i.e. Indian Ocean (2013), Mediterranean (2014), Tokyo (2015).

As already emphasised 'substandard' shipping is a global problem since shipping inherently is a global industry. Hence, PSC in the EU (Paris MoU) area will continue to be relevant as long as there are flags on the 'black list' of the Paris MoU – or simply because some flags are not doing a proper job. In other words, the need for PSC remains as long as there are differences in the standards and the quality of the controls across the different regions around the world. In this context, it should be underlined, that most Paris MoU flags are on the 'White list', but that there are still some on the 'Grey list'.

In this context, PSC is in fact the only line of defence that takes action when everything else fails. In this connection, the fact that PSC is independent from the industry (unlike RO's to whom a number of flags delegate their survey tasks and who are also linked to the owner for classification work), and that a PSC is not announced beforehand (unlike vetting, RO surveys and other inspections) were highlighted by several stakeholders as being very important.

The need for PSC was also recognised by ROs. From their point of view, the role of PSC is to check the ships in the periods between the RO surveys. In addition, the scope of PSC inspections is different than an RO survey. This being said, the interviewed ROs point out that their image and so their business may suffer from having provided services to poor-performing flag States.

Furthermore, the ship brokers and agents represented in FONASBA find PSC/the Directive important to ensure that common standards are developed and enforced throughout Europe. PSC ensures that relevant actions can be taken and that deficiencies are followed up, ultimately by a detention.

Ports are generally not in a position to assess the relevance of PSC. While EU ports are aware of PSC inspections, they typically do not communicate with PSC inspectors directly unless a ship is detained. However, there are some ports that have a special position in relation to PSC (especially when ports also have their own inspectors visiting ships). One such example is the Port of Rotterdam, the largest port in the EU, which has its own inspection team. The team adds an extra layer of protection to PSC. However, the inspections are different from PSC and focus on issues that affect ship handling in the port – e.g. safety and environmental issues connected with the transported goods or with the separation of goods and garbage.

In the context of global shipping competition, PSC is perceived as an important tool for ensuring that there is continuous awareness of the different standards applicable within the industry (i.e. as a safety instrument), but also for ensuring fair competition among shipping companies (i.e. a level playing field). Furthermore, high standard shipping – as evidenced by a good PSC record – is considered by the industry to be an important competitiveness parameter. This is the case even for types of trade characterised by extensive inspections by the industry – e.g. chemical and oil tankers.

Furthermore, PSC is typically used as a tool in internal quality management systems. However, it was also highlighted that the value – and thus the continuous need for PSC – is subject to the condition that there is a credibility in the PSC system. In this connection, shipowners highlight that the discussion of what is a 'substandard' ship is important – i.e. the question of whether a particular issue is a question of quality or whether it is a pure technicality. Furthermore, the credibility of controls may be at risk if PSCs are not becoming better coordinated with other controls, such as the work of flag States and ROs.

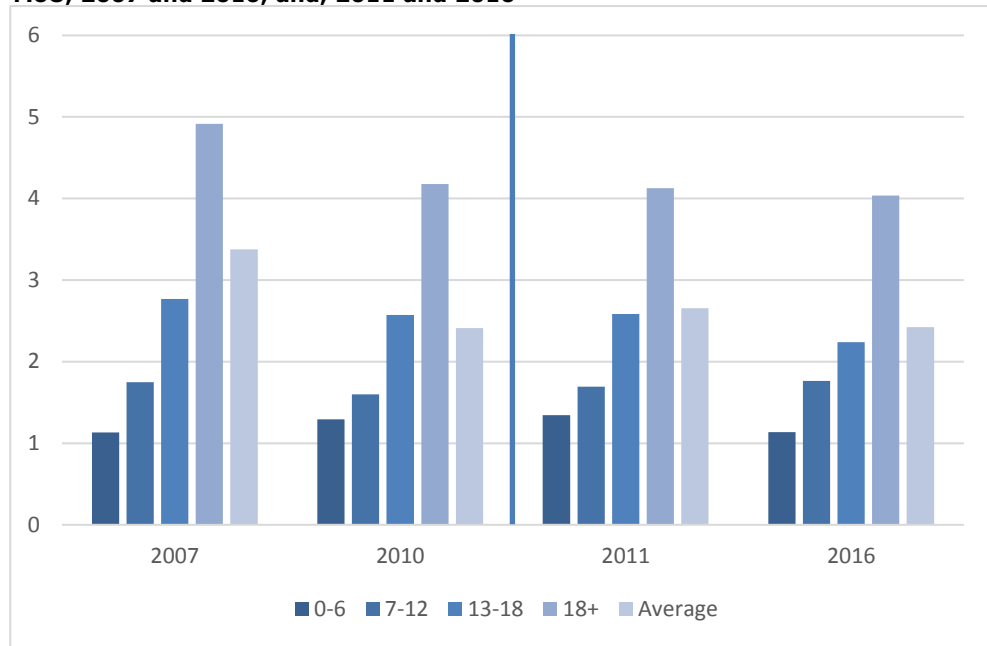
Regarding possible other factors influencing the extent of 'substandard' shipping, larger shipping companies reported no significant changes in their maintenance budgets. They indicated that other parts of the industry, and smaller shipowners in particular, have been – and some continue to be – under a considerable economic pressure which has likely had an effects on the maintenance efforts undertaken.

For example, one shipowner association indicated that while overall maintenance of older ships has increased as a result of the implementation of the NIR, the economic crisis has had the consequence that less resources for maintenance of ships are available. As confirmed by another shipowner, maintenance is often the area looked at when savings have to be made.

Since PSC is generally a useful tool to secure that increased financial pressures do not result in undesirable compromises regarding maritime safety, security, working conditions and pollution prevention, we find that the external economic environment, such as the recent economic crisis, further highlights the need for PSC.

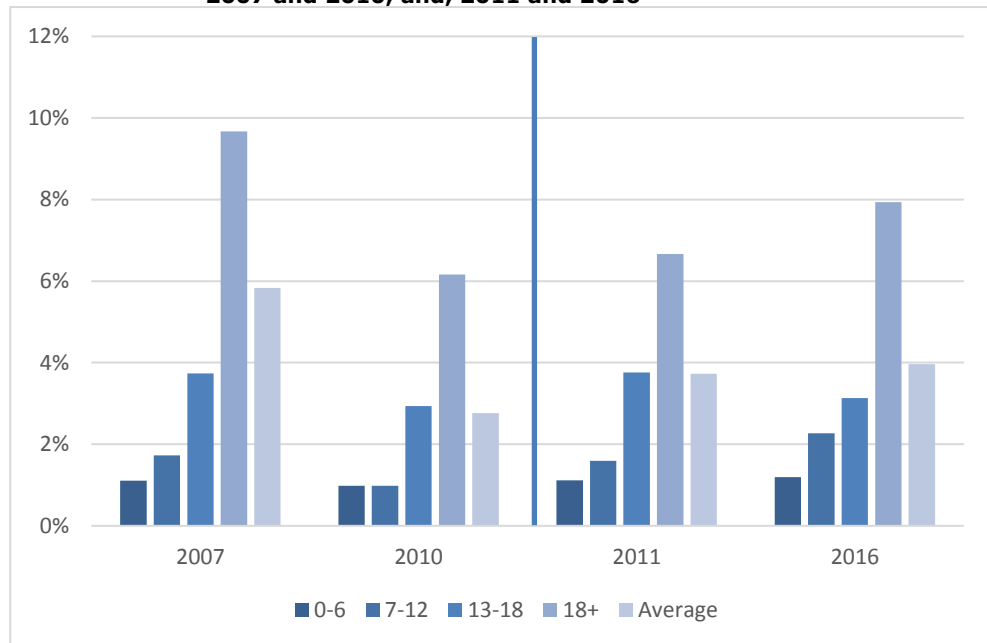
While both the number of deficiencies per inspection and the detention rate – as shown in Figure 3.2 and Figure 3.3 – fell for the older ships prior to the NIR, the former trend has somewhat levelled out afterwards, i.e. from 2011 to 2016, and there has been an increase for the already relatively high detention rate. This may well be an indication that maintenance efforts during the economic crisis has not been sufficient for the older ships.

**Figure 3.2** Deficiencies per inspection by age of ship, average Paris MoU, 2007 and 2010, and, 2011 and 2016



Source: EMSA/THETIS.

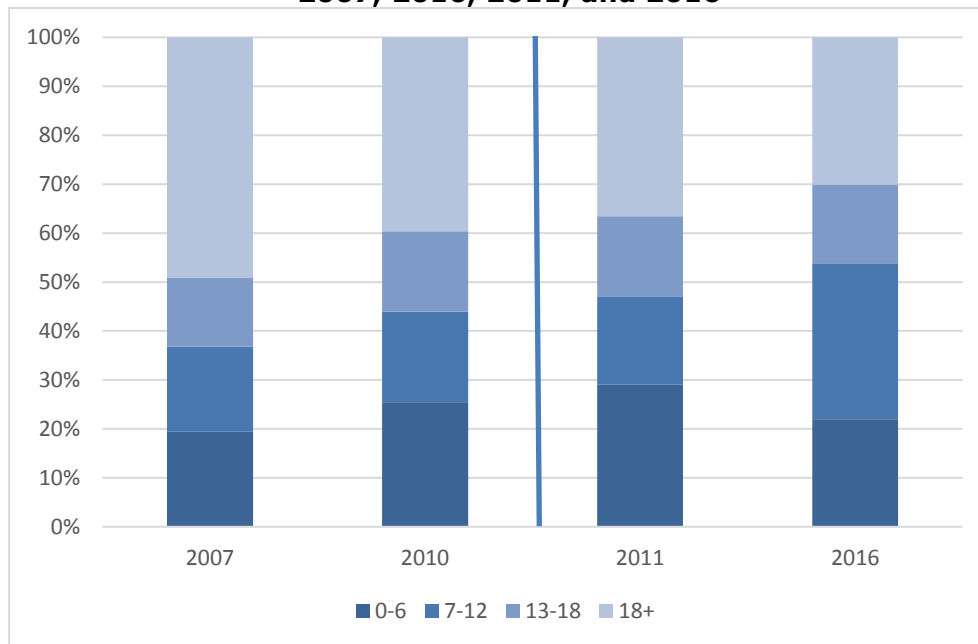
**Figure 3.3** Detention rate by age of ship, average Paris MoU, 2007 and 2010, and, 2011 and 2016



Source: EMSA/THETIS.

Furthermore, it might have been expected that the average age of the ships have increased – and so relatively many old ships are being inspected. However, this is as shown in Figure 3.4 not the case.

**Figure 3.4** Shares of inspections by age of ship, average Paris MoU, 2007, 2010, 2011, and 2016



Source: EMSA/THETIS.

### 3.2 Effectiveness

The evaluation of the effectiveness of the PSC Directive is based on five evaluation questions that focus on the extent to which its objectives have been achieved:

- EQ2: To what extent is the targeting of what are described as higher risk vessels effective? Would other risk factor contribute to increase target effectiveness?
- EQ3: To what extent are all eligible ships covered by inspections (PSC, flag State, EU legislation)? Are there any gaps in coverage?
- EQ4: To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions?
- EQ5: How does the inspectors' training and qualification perform? How can (the present and the future) availability of qualified inspectors be ensured and promoted?
- EQ6: How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?

#### 3.2.1 EQ2: To what extent is the targeting of what are described as higher risk vessels effective? Would other risk factor contribute to increase target effectiveness?

The answer to this question is primarily based on views gathered from stakeholders – with much focus on the way the ship risk profile is calculated, and so on whether the design of the ship risk profile could be improved – e.g. by including additional risk parameters or discarding parameters that are no longer relevant. Furthermore, we have looked into the extent ships are selected for inspections without having a priority assigned by THETIS, and we analyse the levels and developments in the number of deficiencies and detentions both by ship risk profile and by priority.

We find that the targeting of high risk ships using THETIS – via the priority-setting system – is effective in the sense that it leads to the inspection of ships that pose a high risk of noncomplying with the agreed international/EU standards. However, there is room for improvements to the design of the ship risk profile – e.g. via more weight on

individual ship risk factors.

The majority of maritime authorities performing PSC indicated that they almost solely rely on THETIS for the selection of ships for inspection – i.e. the priority of the ship that again is based on the ship risk profile and on the time since last inspection of the given ship. Only a minor share of the inspected ships are selected on the basis of overriding or unexpected factors. This is also confirmed by the COWI/Ecorys survey where 15 out of the 21 authorities confirmed that they solely use the targeting system of the Paris MoU/PSC Directive. Other factors influencing the selection process of the maritime authorities are reports from other Member States, sulphur emission monitoring information, enforcement of the Port Reception Facilities Directive, VTS information, reports from pilots – e.g. notices of ships not sailing straight or leaking oil, and from the crew – e.g. as regards working conditions on board of the ship or, as has been the case relatively frequently during the economic crisis, non-payment of salaries. Hence, such information and reports can lead to the change of priority of a ship.

Overall stakeholders assess that the current design of the ship risk profile applied according to the Paris MoU and the PSC Directive results in the targeting of low-performing ships. For example, 18 out of the 21 that responded to the COWI/Ecorys survey confirmed this. There is, however, room for improvement to the design of the risk profile. We have identified the following possible areas of improvement, some of which we understand already have been discussed – or are currently being discussed – in the Paris MoU Task Force 31:

- Weighting of generic and individual risk factors
- Formula for calculating flag State performance
- Provision regarding IMO audit
- Green focus

Firstly, it may be considered a weakness that the ship risk profile primarily includes generic parameters – such as the age and the type of ship, and to some extent the company<sup>32</sup> performance and the RO – that may have a less direct impact on the safety performance of a specific ship. For example, tanker ships (chemical, gas, and oil), bulk carriers and passenger ships are automatically allocated 2 weighting points without further deliberation of the safety standard of the given ship. Actually, oil or chemical tankers generally tend to perform very well given the extensive level of supervision by the chemical/oil industry. This said, one tanker shipowner did not perceive the current point allocation as a problem or an unnecessary administrative burden. Rather, the competitive effect of being able to show good inspection results was appreciated.

Furthermore, while there are relatively many deficiencies in older ships, there may well be newer ships that lack maintenance or where the shipowner has not paid salaries. For the latter issue, it will though be difficult to get hold of good data.

Regarding individual parameters, the number of deficiencies has no impact on whether a given ship is categorised as a standard and as a high risk ship. Hence, only low risk ships are here distinguished from the other by having 5 or less deficiencies recorded in each inspection within the previous 36 months.

Consequently, several maritime authorities suggested – in line with the ongoing work by the Paris MoU Task Force 31 – to redistribute, as experience has been gained, the weighting points to give more weight to individual factors – such as the number of deficiencies and detentions – compared to generic parameters.

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<sup>32</sup> While the company may have secured high safety performance of a specific ship, 'company performance' will be low if the other ships from the company have low safety performance.

Another aspect frequently mentioned during the interviews – primarily with maritime authorities and third flag States – was the formula for calculation of flag performance, where there was a general consensus that the current statistical 'yardstick' formula needs to be revised. One reason is that the formula was designed to work when the average detention rate is around 7% (i.e. the 'yardstick'). Hence, it does not work properly with an average detention rate having fallen to around 4%. Another reason is that the formula can result in the 'punishment' of small flag States – and so ships flying their flag – since the detention of one or a few ships may turn the flag State into a Grey or Black Listed flag. Task Force 31 of the Paris MoU is currently discussing this issue and will propose a change to the current formula.

With IMO audits becoming mandatory, the parameter of whether or not the Flag has been IMO audited voluntarily will become obsolete. As discussed within Task Force 31 of the Paris MoU this risk parameter may in the future be replaced by a parameter reflecting the ratification of relevant instruments by the flag State as well as publication of the IMO Audit report and any follow-up by the flag State.

Finally, the inclusion of a 'green focus' in the profile calculation has been suggested. The inclusion of such green focus may also be used as a tool to offset the allocation of points based on ship type (e.g. tanker ship can still be considered 'low risk' despite their ship type).

Table 3.7 indicates that the targeting of high risk ships for inspection has improved during the first six years of the NIR with an increasing, not least relative, extent of deficiencies and – in particular – detentions for the high risk ships (HRS).

**Table 3.7 Deficiencies and detentions per inspection in the Paris MoU, by ship risk profile, 2011 and 2016**

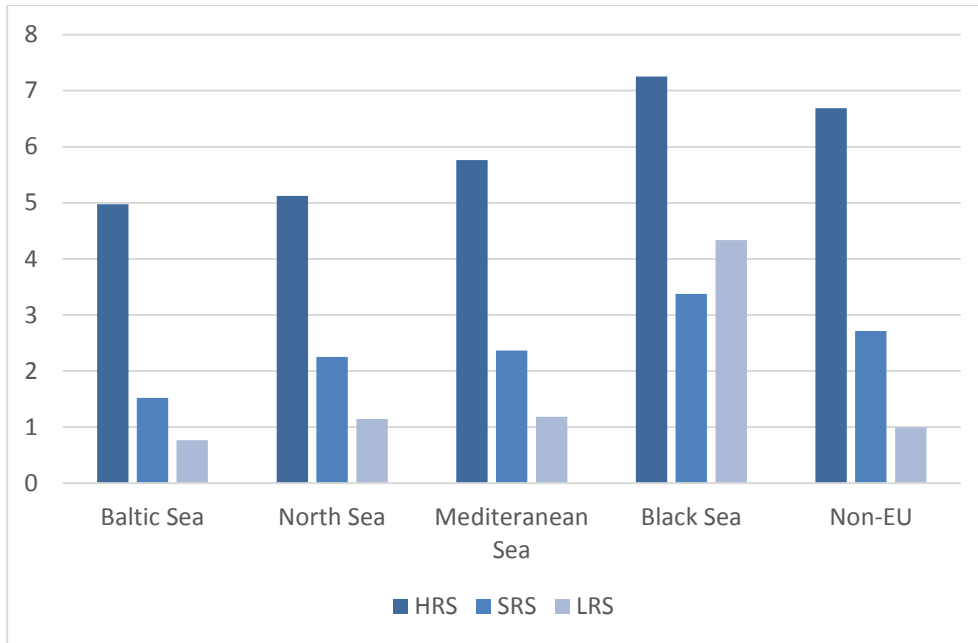
		Change 2011-2016				
	Ship risk profile	2011	2016	Absolute	%	
Deficiencies inspection per	HRS	5.9	6.1	0.2	4.0%	
	SRS	2.4	2.3	-0.1	-3.6%	
	LRS	1.4	1.0	-0.4	-26.2%	
Detention rate in %	HRS	8.9%	14.5%		5.6 pp	
	SRS	3.5%	3.6%		0.1 pp	
	LRS	1.8%	1.8%		0.0 pp	

Source: EMSA/THETIS.

Figure 3.5 and Figure 3.6 below show that the relatively higher number of deficiencies and detentions among the higher risk ships in 2016 is prevalent in the ports of all sea basins. Hence, from this perspective there is no sign of high risk ships particularly – i.e. in comparison with low and standard risk ships – seek 'ports of convenience', and, as some stakeholders have suggested, try to avoid the port of the Baltic Sea and North Sea areas.

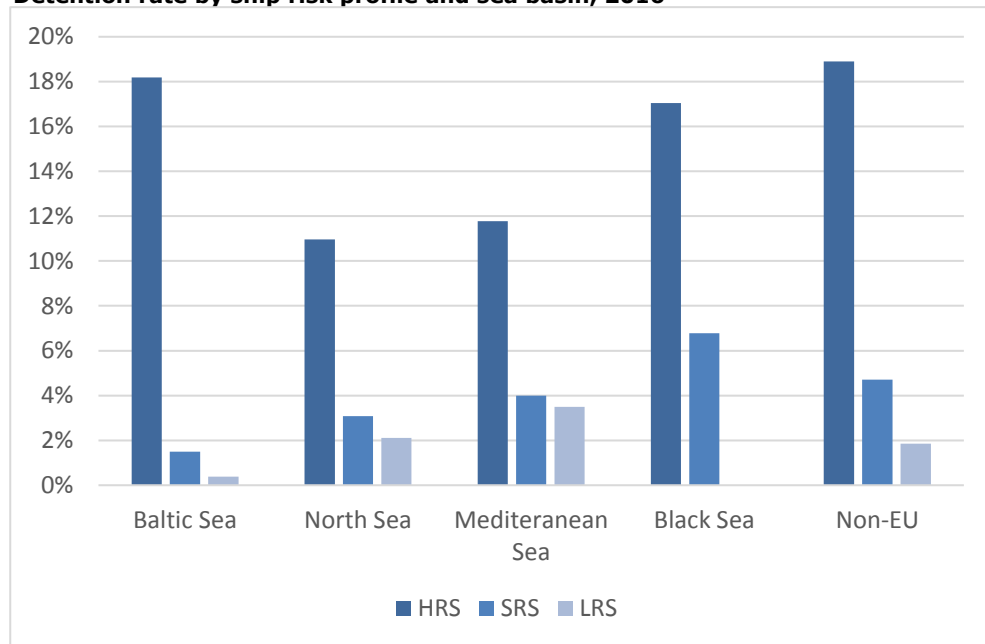


**Figure 3.5 Deficiencies per inspection by ship risk profile and sea basin, 2016**



Source: EMSA/THETIS.

**Figure 3.6 Detention rate by ship risk profile and sea basin, 2016**



Source: EMSA/THETIS.

Note: There was no detentions of LRS in the Black Sea area in 2016.

The fact that the average number of deficiencies and detention rates, as shown in Table 3.8, are fairly similar (in 2011 but also in 2016) indicate that the ships – whether of Priority I or of Priority II – are inspected at the right time. This said, the somewhat higher detention rate in 2016 for Priority II ships could be an indication of proficient targeting of the lowest performing Priority II ships. Furthermore, the relatively few (see also Figure 3.9) no-priority ships do not distinguish themselves from this picture having similar a number of deficiencies per inspection and similar detention rates.

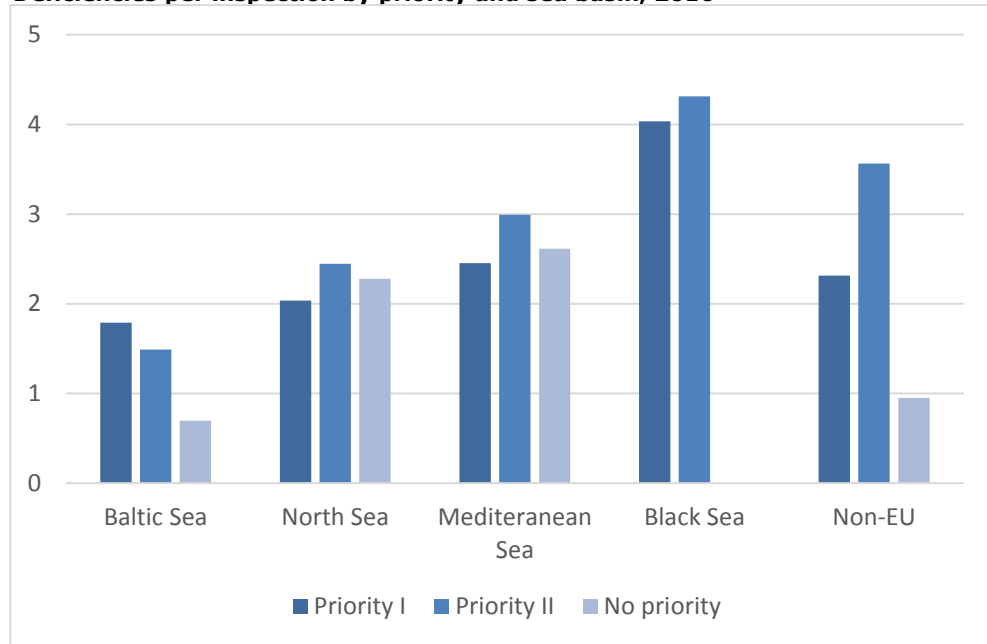
**Table 3.8** Deficiencies and detentions per inspection in the Paris MoU, by priority, 2011 and 2016

	Priority	2011	2016	Change 2011-2016	
				Absolute	%
Deficiencies per inspection	Priority I	2.7	2.4	-0.4	-13.4%
	Priority II	2.6	2.6	0.0	-0.9%
	No priority	2.5	1.7	-0.8	-31.2%
Detention rate in %	Priority I	3.7%	3.4%		-0.3 pp
	Priority II	3.8%	4.9%		1.2 pp
	No priority	3.2%	2.0%		-1.2 pp

Source: EMSA/THETIS.

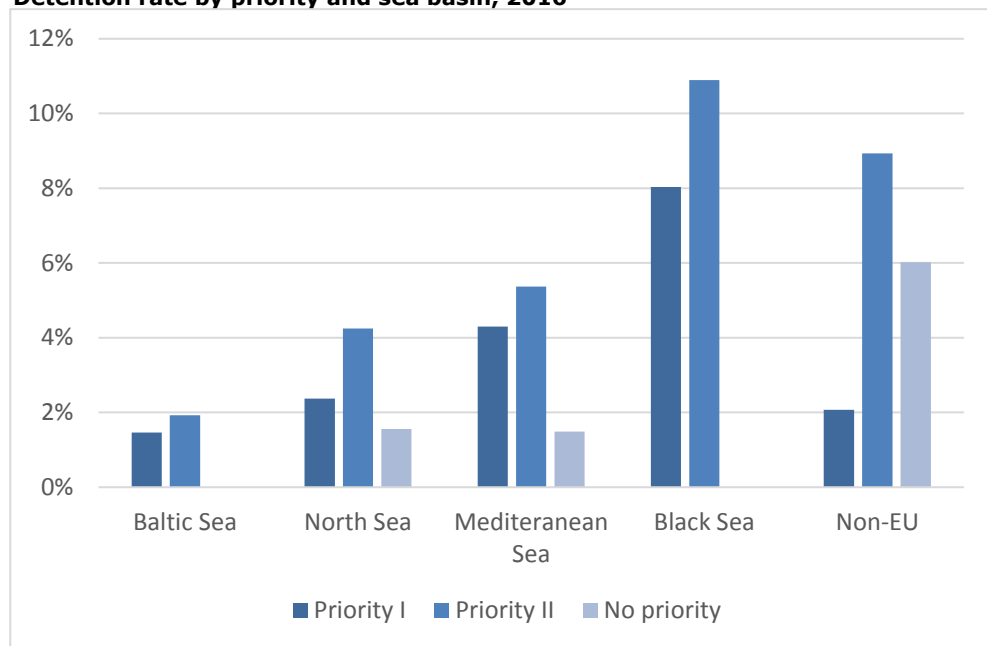
Figure 3.7 shows similar balanced Priority I and Priority II profiles by sea basin in 2016. However, in the ports of the Baltic Sea area the Priority II figures are (relatively) lowest, which might be a result of having to select many (well-performing) ships to fulfil the annual commitment. A similar picture is found in Figure 3.8 – i.e. a relatively low detention rate in the Baltic Sea area.

**Figure 3.7 Deficiencies per inspection by priority and sea basin, 2016**



Source: EMSA/THETIS.

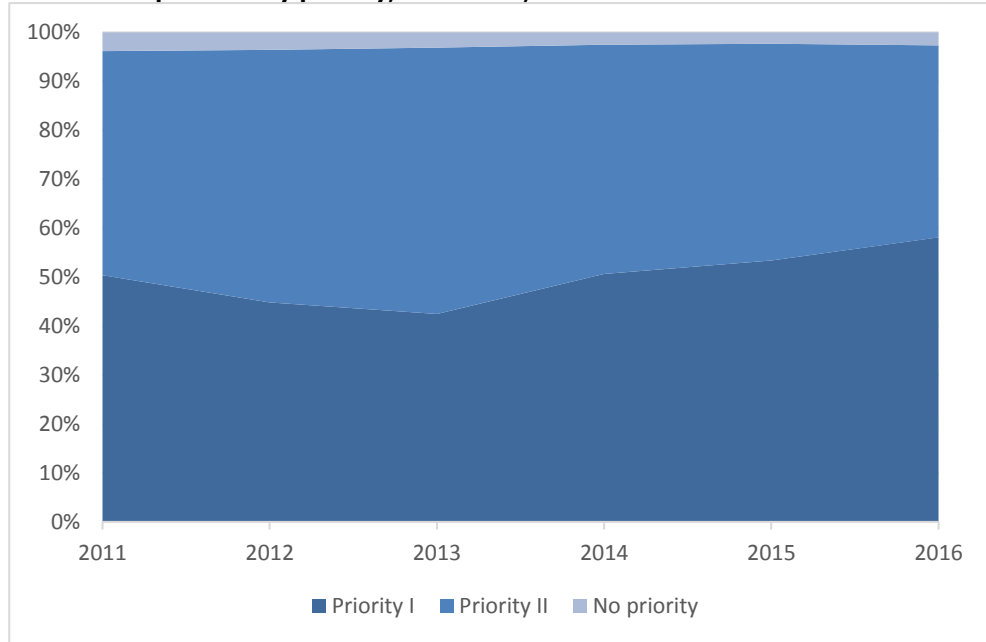
**Figure 3.8 Detention rate by priority and sea basin, 2016**



Source: EMSA/THETIS.

Finally, Figure 3.9 shows that the inspection shares of Priority I, Priority II, no-priority ships have reached a stable level – also indicating that the targeting system works well.

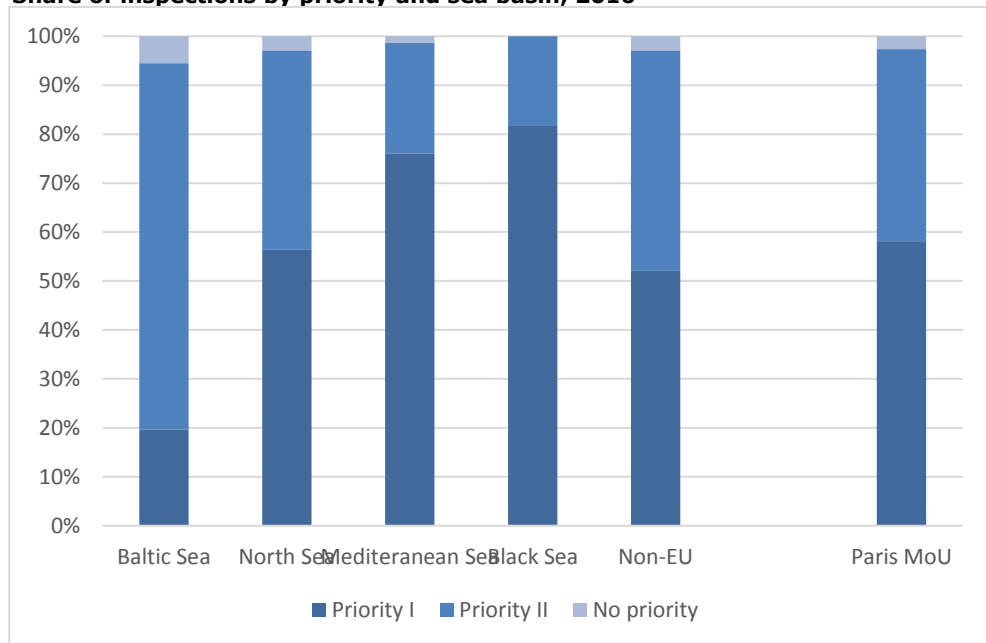
**Figure 3.9 Share of inspections by priority, Paris MoU, 2011-2016**



Source: EMSA/THETIS.

This said, as shown in Figure 3.10, there are significant differences between the shares of inspection by priority for the sea basins – with relatively many Priority II ships being inspected in the ports of the Baltic Sea area. One reason for this is that Member States with ports in the Baltic Sea are under-burdened, and so Priority II ships are in effect mandatory for them. This may, as discussed under the efficiency evaluations questions, lead to differences in the costs of the PSC inspections.

**Figure 3.10 Share of inspections by priority and sea basin, 2016**



Source: EMSA/THETIS.

3.2.2 EQ3: To what extent are all eligible ships covered by inspections (PSC, flag State, EU legislation)? Are there any gaps in coverage?

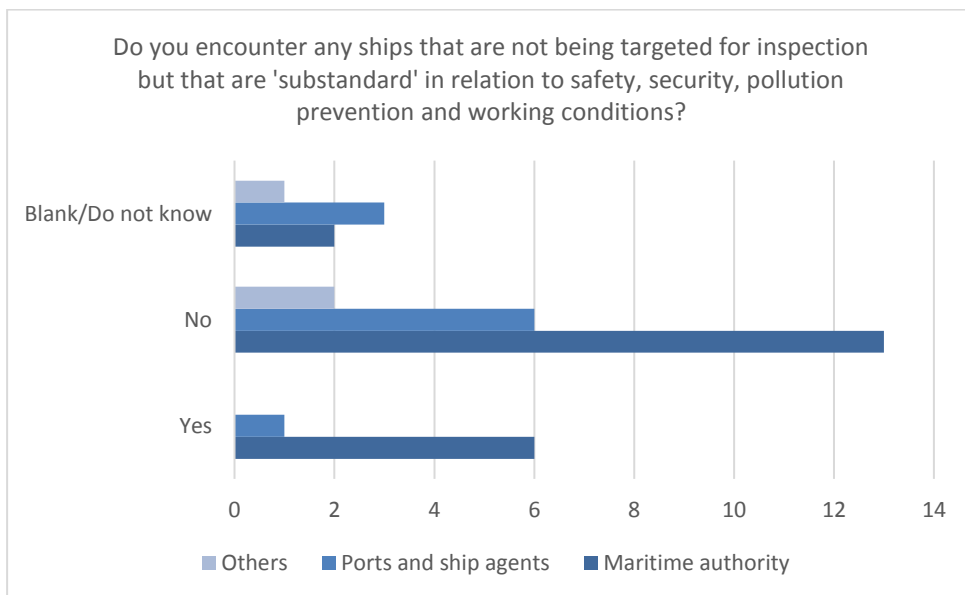
The PSC inspections in the EU/Paris MoU, and so the EMSA/THETIS data analysed above, cover from the outset all ships calling at the ports in the area – apart from fishing vessels, warships, naval auxiliaries, wooden ships of a primitive build, government ships used for non-commercial purposes and pleasure yachts not engaged in trade. For these non-covered ships, we do (at least within this study) not have much evidence on safety, security, pollution prevention and working conditions. For smaller ships, the Directive specifies in Article 3(2): "Where the gross tonnage of a ship is less than 500, Member States shall apply those requirements of a relevant Convention which are applicable and shall, to the extent that a Convention does not apply, take such action as may be necessary to ensure that the ships concerned are not clearly hazardous to safety, health or the environment. In applying this paragraph, Member States shall be guided by Annex 1 to the Paris MoU".

We have not identified any significant gaps in the PSC inspection coverage. The vast majority of maritime authorities indicated that they are not aware of any ships that are not being targeted for PSC inspections. Furthermore, there seems to be only little evidence of ships – hereunder 'substandard' ships – that escape PSC inspections. As an exception to this, two types of ships were mentioned: fishing vessels and smaller ships.

Firstly, it should be underlined that there may well be 'substandard' ships in transit sailing in Paris MoU waters – that are not calling at Paris MoU ports. Hence, such 'substandard' ships are not subject to PSC inspections. Actually, several maritime authorities claim that some of the high risk ships selected for PSC inspections are such transit ships that because of an adverse incidence have been forced to seek a Paris MoU port.

Secondly, most maritime authorities confirm as shown in Figure 3.11 below that PSC ensures that all substandard ships are being targeted by the existing PSC system. In other words, most stakeholders do not encounter non-targeted 'substandard' ships.

**Figure 3.11 Prevalence of 'substandard' ships (n=38)**



Source: COWI/Ecorys survey.

Fishing vessels are, as already pointed out, currently not covered by PSC. However, they are covered by MARPOL, COLREG etc. and all port States have a right – but not an

obligation – to inspect such ships, but only as national inspections (flag State inspections). From these, working conditions – and in particular on the larger fishing vessels – were often reported to be very poor.

Secondly, the NIR was designed for conventional ships. However, as stipulated by Article 3(2) (see above), Member States shall take action as may be necessary to ensure that the ships concerned are not clearly hazardous to safety, health or the environment. Interviewed stakeholders suggest that although they typically do not pose a major risk in terms of pollution – smaller ships were said to often be in bad shape as regards safety. However, in practice there are often no proper tools/legal reference to carry out inspections of such ships.

Overall we consider these 'gaps' to be of limited scope, likely 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.

### 3.2.3 EQ4: To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions?

When answering this effectiveness question it is important to acknowledge that it is not straightforward to attribute improvements in safety<sup>33</sup>, environmental protection and social conditions to the PSC Directive. This is because some of the improvements may have happened anyway – e.g. as a consequence of IMO compliance, Paris MoU provisions, flag State surveys, and shipowner actions and/or as a consequence of other events such as economic developments. Hence, we are merely looking for indications of reductions in deficiencies and detentions that may have been caused by the Directive, and for stakeholders' views on the effect of the Directive vis-à-vis other contributing factors.

The overall finding is that the Directive has contributed to the intended objectives of improving maritime safety, security, pollution prevention and working conditions. The Directive has served as a supporting enforcement mechanism that has ensured compliance with agreed international and EU standards in the respective areas. The fact that effective measures are in place to ensure compliance with the PSC Directive by all EU Member States, the operation and maintenance of THETIS, and the harmonised training provided by EMSA (see EQ5) are perceived by stakeholders as the three major factors behind the effectiveness of the Directive.

Both the stakeholders interviewed and the stakeholders surveyed pointed to a number of different factors by which the PSC Directive has contributed to safety, environmental protection and social conditions. These include enforcement of PSC requirements, encouragement of harmonisation across the EU/Paris MoU area, the establishment of the common information and targeting system, THETIS, and EMSA training and distance learning.

In the following, we address some of these factors in more detail. It should, however, be underlined that it is not always straightforward to distinguish between the contributions to effectiveness and the contributions to efficiency – the latter covered by EQ7 and EQ8 (e.g. the benefits from THETIS) below.

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<sup>33</sup> The parallel Ecorys evaluation of Directive 2009/18/EC establishing the fundamental principles governing the investigation of accidents in the maritime transport sector provides some statistics on maritime safety trends. These data shows a decline in ship losses (mostly fishing vessels) in recent years, but an increase in marine incidences and injuries. Overall, it is acknowledged that there is not a consolidated picture of the developments.

In Table 3.9 and

Table 3.10 it should be noticed that the number of deficiencies has fallen for almost all types between 2007 and 2010, and for all types since the implementation of the NIR in 2011.

Regarding pollution prevention, in the Port of Rotterdam the port inspection team believes that more could be done about ship emissions. It is one of the main environmental problems in the port. The port has joined an economic incentives programme, the Environmental Ship Index (ESI), which lowers port fees for ships with a certain environmental performance. Shipowners can get reduced fees if they document that their ship perform over and above current international legislation (IMO). The programme gives a numerical representation of the environmental performance of ships regarding air pollutants and CO<sub>2</sub>, scores NO<sub>x</sub> and SO<sub>x</sub> emissions directly and proportionally, and gives a fixed bonus for documentation and management of energy efficiency. We do, however, not have any information to shed light on whether joining the ESI has led to fewer pollution prevention-related deficiencies in the Port of Rotterdam.

**Table 3.9 Deficiencies by type of deficiency in the Paris MoU, 2007 and 2010**

Type of deficiency	2007	2010	Change 2007-2010	
			Absolute	%
<b>Pollution prevention</b>	<b>2816</b>	<b>2628</b>	<b>-188</b>	<b>-7%</b>
Pollution prevention	2816	2628	-188	-7%
<b>Safety</b>	<b>62217</b>	<b>50878</b>	<b>-11339</b>	<b>-18%</b>
Alarms	540	499	-41	-8%
Cargo operations including equipment	388	313	-75	-19%
Certificate & documentation	13514	9991	-3523	-26%
Dangerous goods	210	224	14	7%
Emergency systems	2733	2164	-569	-21%
Fire safety	9144	7506	-1638	-18%
ISM	4740	3419	-1321	-28%
Lifesaving appliances	6346	5513	-833	-13%
Other	715	490	-225	-31%
Propulsion and auxiliary machinery	4817	4226	-591	-12%
Radio communications	3342	2185	-1157	-35%
Safety of navigation	8461	8583	122	1%
Structural conditions	3624	2931	-693	-19%
Water/Weathertight conditions	3643	2834	-809	-22%
<b>Security</b>	<b>778</b>	<b>861</b>	<b>83</b>	<b>11%</b>
ISPS	778	861	83	11%
<b>Working and living conditions</b>	<b>11870</b>	<b>9844</b>	<b>-2026</b>	<b>-17%</b>
Labour conditions				
Living and working conditions	11870	9844	-2026	-17%
<b>TOTAL</b>	<b>77681</b>	<b>64211</b>	<b>-13470</b>	<b>-17%</b>

Source: EMSA/THETIS.

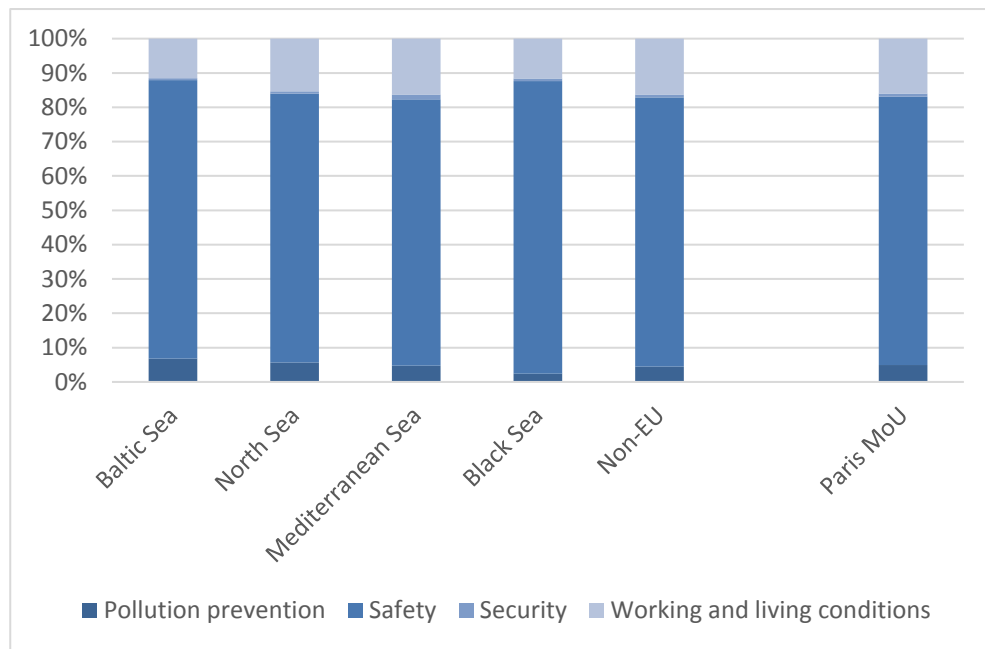


**Table 3.10 Deficiencies by type of deficiency in the Paris MoU, 2011 and 2016**

Type of deficiency	2011	2016	Change 2011-2016	
			absolute	%
<b>Pollution prevention</b>	<b>2333</b>	<b>2088</b>	<b>-245</b>	<b>-11%</b>
Pollution prevention	2333	2088	-245	-11%
<b>Safety</b>	<b>39679</b>	<b>32968</b>	<b>-6711</b>	<b>-17%</b>
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%
<b>Security</b>	<b>510</b>	<b>376</b>	<b>-134</b>	<b>-26%</b>
ISPS	510	376	-134	-26%
<b>Working and living conditions</b>	<b>7439</b>	<b>6754</b>	<b>-685</b>	<b>-9%</b>
Labour conditions		5785		
Living and working conditions	7439	969	-6470	-87%
<b>TOTAL</b>	<b>49961</b>	<b>42186</b>	<b>-7775</b>	<b>-16%</b>

Source: EMSA/THETIS.

Figure 3.12 shows that safety-related deficiencies comprise most of the deficiencies detected in the ports of all the sea basins in 2016.

**Figure 3.12 Share of deficiencies by type of deficiency and sea basin, 2016**

Source: EMSA/THETIS.

Several stakeholders indicate that the legal provisions of the PSC Directive have forced the ministries of finance in the EU Member States to allocate sufficient funds for carrying out the required PSC activities. This has in recent years particularly been important for the southern Member States that have suffered most from the economic downturn. This said, some of the maritime authorities believe that they anyway would have complied with the 'gentlemen agreement' of the Paris MoU.

Shipowners agree that for some types of ships the Directive has pushed shipowners to have an improved safety system on board. Also, control procedures before arrival in each port are said to have improved. Hence, larger shipowners typically have their own internal system to manage the quality of their fleet and to monitor the results of various inspections (including flag/RO surveys, PSC inspections in other PSC regimes than the Paris MoU and – for some shipowners – also internal inspections).

The enforcement of the PSC requirements is also assessed to have contributed to the harmonisation of the PSC activities across the EU. This is in itself an intended mean in the pursuance of an effective PSC system – i.e. that ships are not encouraged to 'shop around' for the most lenient PSC inspectors.

Furthermore, by providing an effective mechanism for the enforcement of relevant standards, the Directive provides a motivating factor for the industry to invest in quality and thereby improve safety, security, pollution prevention and working conditions on board ships calling at EU ports. Furthermore, and as already mentioned, market competition is likely to continue to play a predominant role in improving quality and safety of shipping in the EU. The effect of PSC is thus mostly indirect – i.e. a clean PSC sheet is perceived by shipowners as a competitiveness factor.

This being said, many European shipowners would – both with and without PSC – for business reasons anyway secure high ship standards, but a clean PSC sheet does help to prove this. Similarly, in lines of business such as shipping of oil and chemicals, high standards are needed to attract customers. Such lines of business claim that they are subject to industry standards that are generally much higher than those required under the PSC Directive, and ships engaged in this type of shipping are subject to frequent and in depth inspections by the industry. Such inspections have of course also the purpose of avoiding PSC detentions in the first place – given the commercial factor and the

judgment by the (potential) charterer.

In this context, Equasis<sup>34</sup> aims at collecting and disseminating high quality, safety-related information on the world's merchant fleet that has been provided by the holders of such information. By providing factual information, its users will be able to build their own opinions on ships and/or companies and act accordingly.

For maritime authorities major unintended effects of the PSC Directive relate to the need to change working arrangements as a result of the need to carry out inspections during weekends, holidays, etc. (and the associated change in administrative costs – see EQ7). This is further exacerbated by the fact that the inspection priority of a ship can change overnight, leaving the competent authority little time to react.

Moreover, an issue raised by a number of authorities in connection with the annual inspection commitment relates to the so-called 'under-burdened' Member States – i.e. Member States in which the total number of Priority I and Priority II calls amounts to less than the inspection share (see also EQ7). Such Member States are said to be under big pressure to establish and maintain a mechanism in all ports to ensure that no inspection is missed. They are effectively forced to work from the beginning of the year on inspecting Priority II ships (i.e. inspections on Priority II ships become 'obligatory') and only at the end of the year to slow down and focus on Priority I ships. A different problem arises when the goal changes throughout the year (e.g. an under-burdened country suddenly becomes 'normal' or over-burdened).

Another unintended effect relates to unequal treatment of small and large flags reflected in the White-Grey-Black list. Countries with a small fleet and a small amount of inspections can remain on the Grey list for long even though they have no detentions for some time, while countries with large fleets and many inspections can have many detentions and still remain on the White list.

As far as ports are concerned, no negative experiences have been reported. There is no evidence to support the view that PSC may cause serious delays and so affect port business. Despite the fact that there are differences between ports when it comes to the importance associated with safety and security (i.e. some ports seem to be more business-minded and thus less focused on security and safety issues), the European Sea Ports Organisation concludes that ships do not generally refrain from visiting a port because they know that the PSC regime is stricter compared to other ports.

3.2.4 EQ5: How does the inspectors' training and qualification perform? How can the (present and future) availability of qualified inspectors be ensured and promoted?

The evidence is here threefold. Firstly, we look into the qualifications of the PSC inspectors – not least from the viewpoint of the shipowners whose ships are being inspected. Secondly, we look at the way the PSC inspectors are being trained and in the context of pursuing harmonisation, at differences and similarities between Member States. Thirdly, we have asked the maritime authorities about the current and likely future prospects for recruiting qualified PSC inspectors.

Overall, inspectors carrying out PSC inspections in EU ports are sufficiently trained and well qualified. Member States do not experience any major difficulties in complying with the training/qualification requirements of the Paris MoU/PSC Directive. The level of training provided at EU and national level is adequate. Only minor gaps in the training offered have been identified.

Since the first introduction of the PSC Directive in 1995 serious efforts on all parts

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<sup>34</sup> [http://www.equasis.org/EquasisWeb/public/About?fs=HomePage&P\\_ABOUT=MainConcern.html](http://www.equasis.org/EquasisWeb/public/About?fs=HomePage&P_ABOUT=MainConcern.html)

involved have led to that inspections today are carried out in a harmonised way throughout the EU. However, differences in the culture of checking exist, in particular between the Southern and Northern European countries and between countries with civilian vs. military approaches to PSC inspections.

Many Member States experience difficulties in recruiting qualified PSC inspector candidates. Such problems are less pronounced, or virtually non-existent, in countries in which PSC inspectors form part of the country's military organisation.

Overall, PSC inspectors inspecting ships at EU ports are by the shipowners and the ROs considered to be qualified. PSC inspectors in the EU use the same approach and the quality of inspections is fairly similar. However, even in Europe there are differences in the culture of checking – e.g. whether the aim of the inspection is to find something or it is to find the most important deficiencies. In some Member States it is accepted that a deficiency is fixed on the spot and not reported as a deficiency by the PSC inspector. In other Member States all deficiencies are reported no matter if it can be fixed on the spot. Differences also result from the personal factor – i.e. some inspectors projecting their personal opinions during the inspections. This has an effect on the items being checked and verified.<sup>35</sup>

As a specific issue, it was mentioned that some PSC inspectors focus too much on details and make their own interpretations on installations and construction-related issues even if the ships carry clear and issued statutory and class certificates. The consequences for the ship company can be serious (e.g. tankers can lose the whole business according to the vetting rules).

Finally, the inspection system in the Paris MoU region is seen more harmonised than in other MoUs, e.g. because inspections are based on a risk-based model and interaction and cooperation with the ports is as a rule present.

Overall, stakeholders assess that the PSC inspectors' education and training have improved in recent years, but that there is still work to do to achieve a more harmonised inspection approach. Furthermore, stakeholders generally agree that inspectors' background makes a difference both on the overall quality, but also the focus of inspections – e.g. masters tend to focus more on navigation, while engineers tend to focus more on technical matters. Seagoing background is considered particularly important.

The majority of maritime authorities interviewed indicated that their PSC inspectors are, as a rule, required to have a seagoing background. However, since some Member States experience a shortage of seafarers – e.g. because their fleet is decreasing – dedicated schools/programmes have been established to provide education for PSC inspectors (e.g. the Master course provided at the University of Nantes, and the coast guard military school in Italy). Overall, we find that the number of inspectors with formal educational background is increasing, while the number of inspectors with a maritime background is decreasing.

Table 3.11 provides a brief overview of the profile of PSC inspectors in the Member States interviewed.

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<sup>35</sup> PSC audits, e.g. for Denmark, have pointed to a 'Nordic approach' that is being criticised for not registering all observed deficiencies – which is considered necessary, not least for statistical reasons.

**Table 3.11 Profile of PSC inspectors**

Member State	Profile of PSC inspectors
Croatia	Seagoing experience is important. Experience shows that 5 years of seagoing background is adequate. The best solution is combination of experience and dedicated education. National regulation specifies higher qualifications requirements for inspectors than the PSC Directive requires. Internal training scheme (CPD programme) is used.
Denmark	Danish PSC inspectors have 10-15 years' experience at sea. The training provided is targeted (i.e. needs-based), hereunder by making use of the training supplied by EMSA. There is focus on that inspectors should be able to assess the situation based on their experience and professional assessment (i.e. risk-based approach).
France	France does not have a big fleet and the number of seafarers is limited. There is a dedicated school in Nantes (minimum scientific licences entrance level). The study covers both technical and legal aspects (conventions). Then the PSC inspector candidates join PSC inspections as new entrants and follow a professional development scheme. There is also one week practical training and one year experience at a local office. Candidates also participate in the New Entrant Training in EMSA.
Germany	Inspectors have a seafarer or similar background. They have completed a 12-month training scheme and must have carried out 70-80 accompanied PSC inspections (i.e. much more than the required 25). Then they have participated in the EMSA training.
Greece	A Presidential degree has established a national school for PSC inspectors. Coast guard (military) personnel is selected to participate in the educational programme (5 months). Afterwards candidates participate in 25 inspections with experienced inspectors. Subsequently they undergo EMSA training courses.
Italy	All PSC inspectors – especially officers – have some technical background and a relevant degree. There is an intensive coast guard training programme – also for those with no technical background – lasting two years in Genoa. It may include a PSC/FS programme: where the participants must pass a 16 weeks course – then practical training both FS (min 10 inspections) and PSC (min 25 inspections), and then 6 weeks course to finally become an inspector. Furthermore, the PSC inspectors may follow EMSA training courses and long-distance training (which is relatively new).
Malta	It can take up to 10 years to become PSC officer. Criteria should become more pragmatic, adapting to the changed circumstances. Specific training programmes could be considered as an alternative or addition to some criteria.
Netherlands	PSC inspectors must comply with the requirements as set forth in the PSC Directive. PSC inspectors go through a national training program to become authorised.
Poland	The Polish legislation lays down strict conditions for potential PSC inspectors have to comply with. PSC inspectors typically have a seagoing background, naval architects are an exception. PSC inspection candidates act as FS officers or assistant to PSC officer for one year. There is a programme for new entrants – based on the instructions based on the Paris MoU training policy. The programme includes conventions, targeting, information systems (local system + THETIS). All courses have to be passed within the first year.
Portugal	Portugal has a small administration. Training centres in Spain and Italy are used to provide relevant training. PSC inspectors are as a rule former FS inspectors. Most are deck, engine and naval architects and follow training of the Paris MoU and participate in EMSA training.
Sweden	Sweden complies with the requirements of the PSC Directive – i.e. a PSC inspector must have the right training/education/experience (seafarer or engineer), have participated in the required course (e.g. at EMSA), and have been a flag State inspector for a year.
United Kingdom	Candidates for PSC inspectors go through an internal (coast guard = civil organisation) special surveyor's training programme (both FS and PSC) according to the Paris MoU development scheme, and they participate in the EMSA training and e-modules, and also the EMSA 5-yearly refreshment course.

Source: Stakeholder interviews.

No specific issues in relation to complying with the training requirements of the PSC

Directive have been identified. As the requirements are formulated, Member States are in general able to find candidates for the PSC inspections. However, as noted above, the total number of inspectors in the EU with a seagoing background has been decreasing.

Occasions have been reported when inspectors had to be relocated in order to comply with the qualification requirements regarding the number of PSC inspections that a PSC inspector must carry out during a certain period of time. Also, such requirements put a limit on how many PSC inspectors a Member State can keep occupied. Accordingly, it may be considered making the requirements more flexible, e.g. by having a more qualitative approach to determine 'qualifications' and training needs.

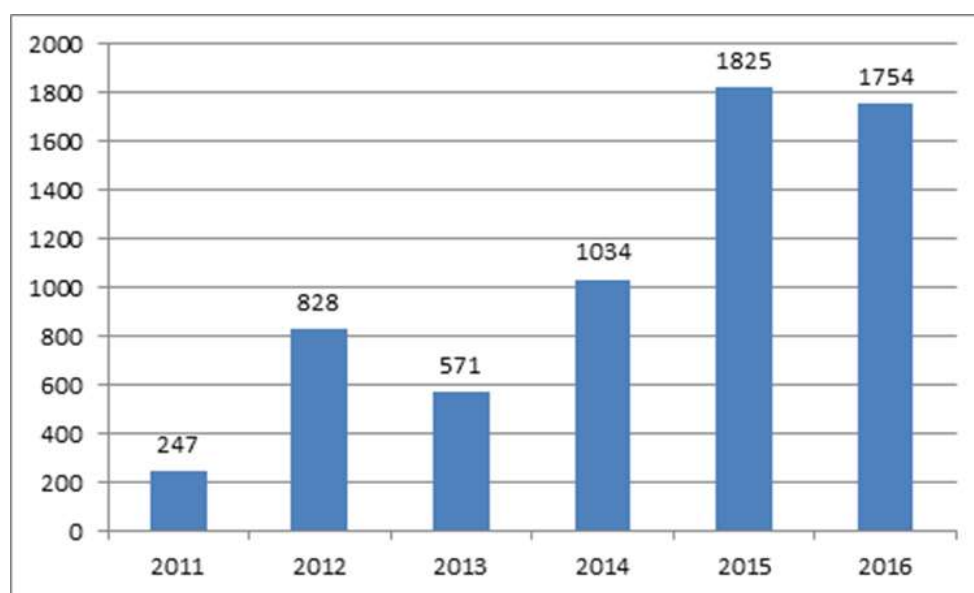
EMSA training and distance learning (see Table 3.12 and Figure 3.13) is appreciated by all stakeholders. While in-person training is as a rule more effective, distance learning modules are considered to provide excellent support. In Denmark it was highlighted that while it is important to have a harmonised approach to training in the EU, it is crucial that there is room for individual assessment. Also, it was suggested that EMSA training is made needs-based, rather than mandatory.

**Table 3.12 PSC seminars conducted by EMSA**

	2011	2012	2013	2014	2015	2016
Number	6	6	4	4	4	4
Participants	236	270	176	175	158	168

Source: EMSA/THETIS.

**Figure 3.13 Number of PSC inspectors completed EMSA e-learning modules per year, 2011-2016**



Source: EMSA.

No major gaps in the training provided (at EU or national level) were identified. Training needs and gaps are currently being accessed by EMSA, and a number of specialised courses has in this context been mentioned as examples of courses that could be introduced at EU level. These include a liability and compensation course in connection with Directive 2009/20 on the insurance of shipowners, a course on high voltage on board, training on dangerous goods, concentrated inspection campaigns and refreshment courses for relevant nautical and marine engineering.

Furthermore, there was a suggestion to make the training more comprehensive, so that (some) Member States do not need to set up their own training systems.

A number of EU Member States – i.e. those in which PSC inspectors are recruited from among civilians – face challenges in recruiting qualified PSC inspectors. In countries in which PSC inspectorates are part of military structures, recruiting challenges are effectively overcome by recruiting PSC inspectors from among military personnel.

The economic factor – hereunder budget restrictions – is the factor most frequently cited in connection with such challenges. The main issue now and in the future is significantly higher salaries on-board or in the private sector comparing to the salaries that could be offered for PSC inspectors (e.g. in Poland the salary that can be offered to a PSC inspector amounts to approximately 1/10 of an average salary of a captain).

Finally, there is an overall shortage of qualified seafarers and, as a result some Member States experience challenges when seeking to recruit candidates with a seagoing background (an issue specifically mentioned in France, Sweden, and the UK).

### 3.2.5 EQ6: How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?

Company performance is one of the generic parameters determining the risk profile of a ship, and a list of companies with low and very low performance is published and regularly updated by EMSA. We have asked stakeholders whether and how such publication has affected their behaviour.

There is no conclusive evidence that the publication of the list of companies with low and very low performance has had an effect in terms of improvements in safety, security, pollution prevention and working conditions.

Most stakeholders interviewed had no or very limited knowledge of and experience with the list of low and very low performing ISM companies. In our survey, only three shipowners responded to the question whether the publication of the list has an effect on behaviour. Of these three, two confirmed that it has some effect for business and ship maintenance planning. While the importance of the PSC Directive in terms of motivating improvements to safety, etc. was generally recognized (see above under EQ4), no concrete improvements following the publication of companies on the list could be identified.

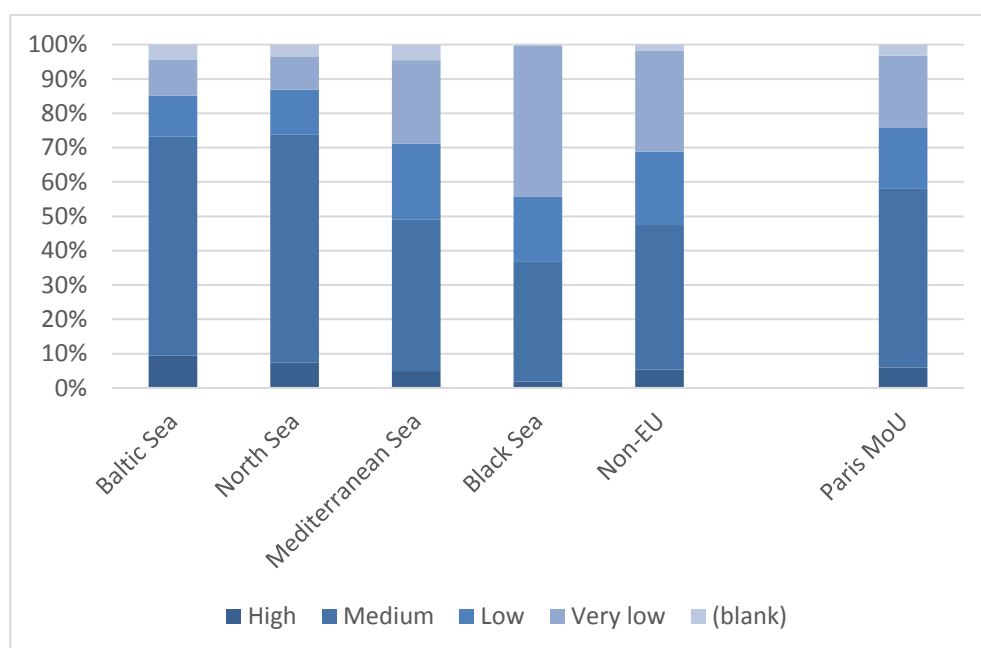
However, Table 3.13 shows that there is a need for improvement for the very low-performing companies as they face many deficiencies and detentions – a situation that has not improved between 2011 and 2016. Furthermore,

Figure 3.14 and Figure 3.15 show that most of the deficiencies and detentions among low-performing companies are at the ports of the Black Sea, Non-EU, and Mediterranean Sea areas.

**Table 3.13 Deficiencies and detentions per inspection in the Paris MoU, by company performance, 2011 and 2016**

	Company performance	2011	2016	Change 2011-2016	
				absolute	%
Deficiencies per inspection	High	1.4	1.1	-0.3	-22%
	Medium	2.2	2.0	-0.2	-11%
	Low	4.3	3.8	-0.4	-9%
	Very low	5.7	6.4	0.8	13%
	(blank)	3.2	2.1	-1.1	-34%
	<b>Total</b>		2.7	2.4	-0.2
Detention rate in %	High	1.7%	1.6%		0.0 pp
	Medium	2.7%	2.4%		-0.4 pp
	Low	2.1%	2.1%		0.0 pp
	Very low	6.2%	7.2%		1.0 pp
	(blank)	10.4%	16.4%		6.0 pp
	<b>Total</b>		3.7%	4.0%	

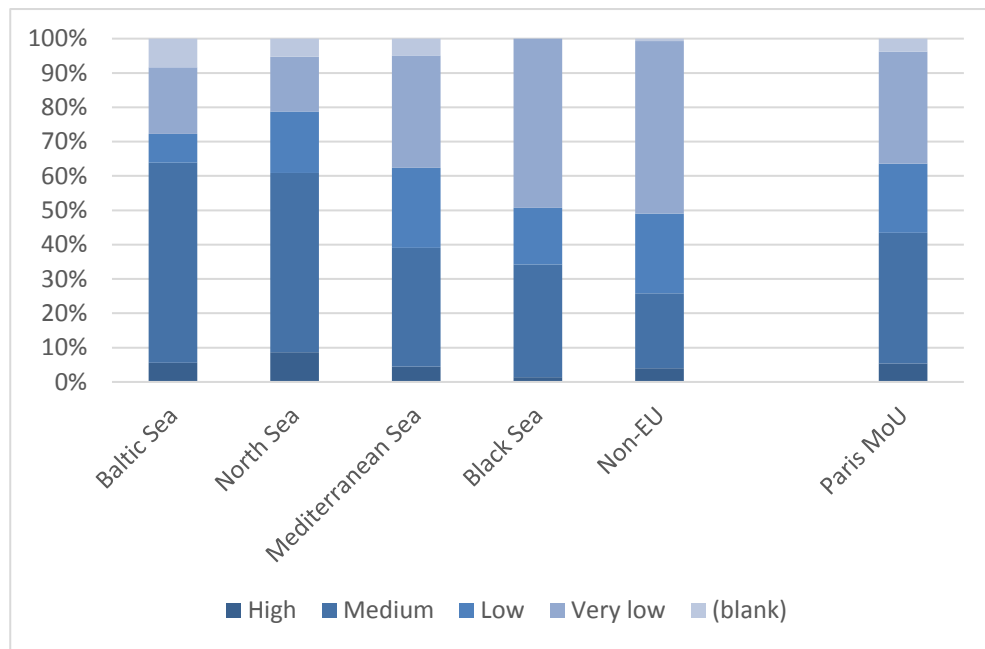
Source: EMSA/THETIS.

**Figure 3.14 Share of deficiencies by company performance and sea basin, 2016**


Source: EMSA/THETIS.



**Figure 3.15 Share of detentions by company performance and sea basin, 2016**



Source: EMSA/THETIS.

### 3.3 Efficiency

#### 3.3.1 EQ7: What are the administrative costs incurred by stakeholders? To what extent are these proportional to the risks?

The first efficiency question focuses on the administrative costs incurred by different categories of stakeholders in connection with carrying out, undergoing or being otherwise involved in PSC inspections. The assessment is partly based on a rough estimate of the administrative costs<sup>36</sup> incurred by maritime authorities and partly by stakeholder assessments. Specifically, we have asked them to assess whether such costs have increased, decreased or remained the same as a result of introduction of the NIR. Subsequently, we seek to answer the question of whether resources are spent in an efficient manner (e.g. NIR results in targeting of sub-standard ships) and whether they are proportional to the goal of eliminating 'substandard' shipping.

Some maritime authorities have experienced an increase in administrative costs, others a decrease, and then again others no change, following the introduction of the NIR/PSC Directive. Hence, overall we find that the average costs across the Member States have remained almost unchanged. However, we find that such costs are not always proportional to the goal of eliminating 'substandard shipping'. We have thus identified a room for improvement in providing additional operational flexibility to the PSC regime, for example by being able to justify missed inspections.

Shipowners generally perceive the administrative costs, and the frequency and scope of PSC inspections as proportional to the goal of eliminating 'substandard' shipping and have not reported any significant delays associated with undergoing PSC inspections in EU ports. However, PSC inspections are demanding and occasionally interfere with the crews' scheduled rest periods.

We find that less inspections are carried out in the Paris MoU today compared with 2011, possibly as experience is gained, e.g. with using postponement provisions and with complying with commitment provisions. At the same time, the share of Priority I

<sup>36</sup> The cost estimate covers the costs of PSC inspections.

inspections have increased, which means that less resources are used for Priority II inspections. Likewise, resources are increasingly used for initial inspections compared to more detailed and expanded inspections.

Table 3.14 provides a very rough estimate of PSC costs (average for the Member States in 2012 prices) in 2007/10 and 2011/16. The estimate is based on inspection data from EMSA/THETIS, estimates for man-hours per inspection made by EMSA for the period after the NIR, while we have assumed that inspections before the NIR on average had a scope in between an initial inspection and a more detailed inspection. Furthermore, we have made use of labour cost data provided by Eurostat, and assumed that allowances have increased with the NIR as requirements to geographical coverage have increased (see further below). Our rough estimate suggests that administrative costs for maritime authorities on average in the Member States have remained almost unchanged over the years, hereunder before and after the NIR – i.e. the higher cost per inspection is offset by fewer inspections.

**Table 3.14 PSC inspection costs, average for Member States, 2012 prices, 2007 and 2010, and, 2011 and 2016**

	2007	2010	2011	2016
<b>Inspections</b> (number) <sup>(1)</sup>	<b>22996</b>	<b>23428</b>	<b>18814</b>	<b>17403</b>
- Initial inspections (share)			28%	36%
- More detailed inspections (share)			57%	51%
- Expanded inspections (share)			15%	13%
<b>Cost per inspection</b> (Euro)	<b>189</b>	<b>189</b>	<b>257</b>	<b>248</b>
Man-hours per inspection (hours) <sup>(2)</sup>	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) <sup>(3)</sup>	26.5	26.5	26.5	26.5
Allowances (% of labour costs) <sup>(4)</sup>	10%	10%	25%	25%
Cost per man-hour - incl. allowances (Euro)	29.2	29.2	33.1	33.1
<b>Total costs</b> (mill Euro)	<b>4.4</b>	<b>4.4</b>	<b>4.8</b>	<b>4.3</b>

Sources/notes: <sup>(1)</sup>EMSA/THETIS

<sup>(2)</sup> 2011/16: EMSA (2016), "Port State Control Cost-Effectiveness - Pilot Study"; 2007/11: own assumptions.

<sup>(3)</sup> Eurostat database, Labour Cost Survey 2012, lc\_ncost\_r2, "Other professional, scientific and technical activities".

<sup>(4)</sup> Own assumptions based on stakeholder interviews.

Figure 3.16 support the above finding – i.e. some Member States (e.g. Denmark, Greece, Cyprus, France, Italy, Sweden, UK) suggest that costs have increased or remained the same (e.g. Germany). Others suggest that they have decreased.

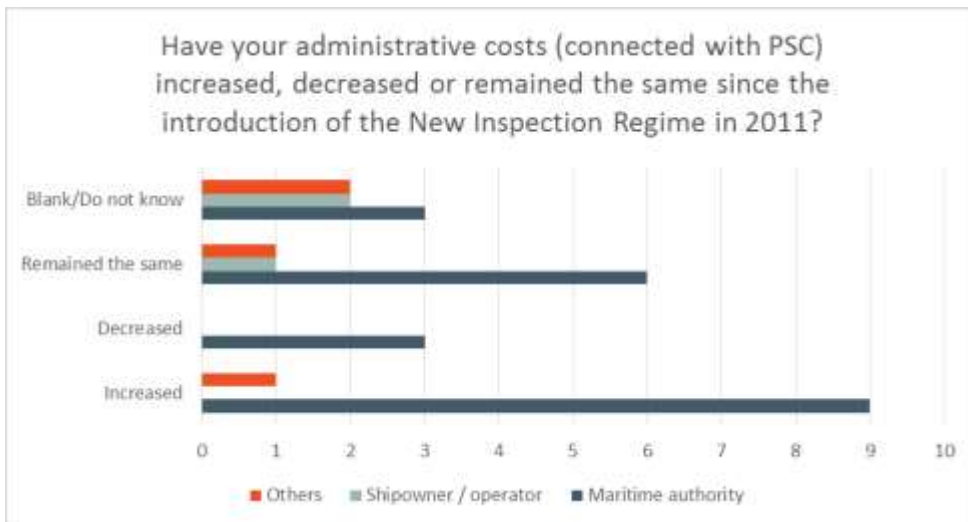
The increase in administrative cost per inspection incurred by some maritime authorities results potentially from a number of factors: payment for work outside of normal working hours (e.g. in France an additional bonus of 200/250 EUR is provided for inspections carried out during a Saturday or a Sunday), transportation and accommodation costs, administrative work connected with monitoring of incoming ships, but also an increase in the number of inspectors and the associated training needs, etc.

We have also identified Member States in which the effect of the NIR on administrative costs has been rather marginal. For example, Poland reported that one-off investments have been made in upgrading PSC inspectors' equipment (e.g. mobile phones, printers,

etc.). This is the case of Member States (e.g. Poland) that prior to the introduction of the NIR had an officer on a stand-by duty or in which inspections are being carried out in a reasonable range from the inspectorates (e.g. Croatia).

Furthermore, it should be mentioned that some maritime authorities (e.g. Croatia) reported a decrease in their administrative costs as a result of a decrease in the number of PSC inspections being carried out. Other Member States (e.g. Portugal) experienced a small decrease in the number of inspectors and, accordingly costs, but this decrease was said to result mainly from inspectors retiring and new inspectors not being hired due to financial pressures.<sup>37</sup> Still, an increase in travel costs has been reported by Portugal, having the effect of somewhat offsetting the decrease in labour costs.<sup>38</sup>

**Figure 3.16 Administrative costs associated with the introduction of NIR (n=28)**



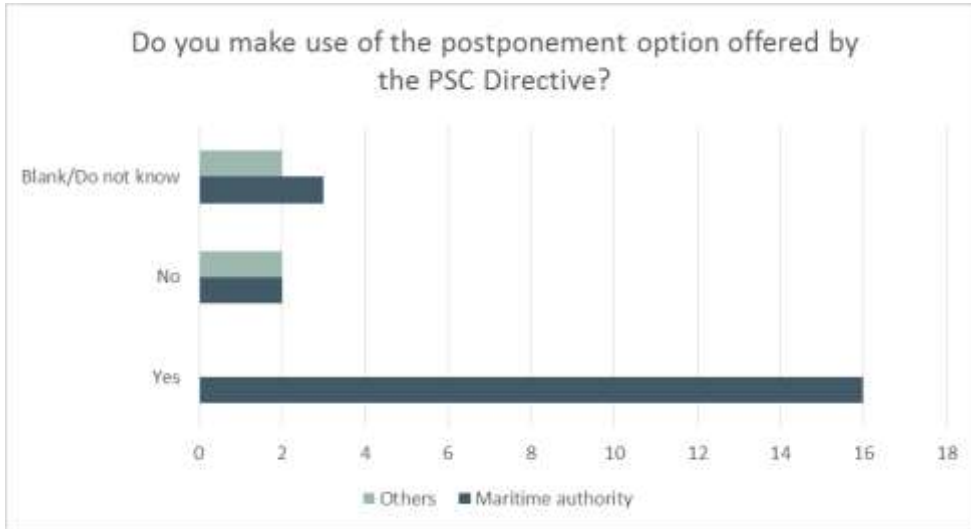
Source: COWI/Ecorys survey.

The postponement option is considered a good option for Member States, and the cooperation between administrations in neighbouring countries is described to function well. As presented below, a clear majority of the maritime authorities indicate that they make use of this option.

<sup>37</sup> A consequence of this is said to be that Portugal does not carry out the required number of inspections.

<sup>38</sup> European Maritime Safety Agency (2016), PSC Cost-effectiveness Pilot Study – Summary Report, EMSA.2016.017458. The study examined the costs in relation to PSC inspectors' travel time and found that Member States with a long coastline appeared to have a lower number of travelling hours per PSC inspector compared with countries with a short coastline (p.20).

**Figure 3.17 Use of the postponement option (n=25)**



Source: COWI/Ecorys survey.

Table 3.15 supports that Member States make use of postponement significantly more in 2016 compared to 2011. Particularly, the maritime authorities in the ports of the North Sea and Mediterranean Sea have increased the postponement frequency with more than 50%. However, also the number of both justified misses and misses has increased significantly. Particularly in the Mediterranean Sea the number of misses has increased significantly (78%).

**Table 3.15 Postponements and misses by sea basin, 2011 and 2016**

		2011	2016	Change 2011-2016	
				absolute	%
Baltic Sea	Postponement	64	26	-38	-59%
	Total miss	48	21	-27	-56%
	Justified miss	36	17	-19	-53%
	Miss	12	4	-8	-67%
North Sea	Postponement	1191	1879	688	58%
	Total miss	856	1418	562	66%
	Justified miss	552	998	446	81%
	Miss	304	420	116	38%
Mediterranean Sea	Postponement	1786	2733	947	53%
	Total miss	1467	2231	764	52%
	Justified miss	1003	1403	400	40%
	Miss	464	828	364	78%
Black Sea	Postponement	31	42	11	35%
	Total miss	28	37	9	32%
	Justified miss	24	27	3	13%
	Miss	4	10	6	150%
None-EU	Postponement	155	189	34	22%
	Total miss	115	136	21	18%
	Justified miss	87	104	17	20%
	Miss	28	32	4	14%
<b>Paris MoU</b>	<b>Postponement</b>	<b>3227</b>	<b>4869</b>	<b>1642</b>	<b>51%</b>
	<b>Total miss</b>	<b>2514</b>	<b>3843</b>	<b>1329</b>	<b>53%</b>
	<b>Justified miss</b>	<b>1702</b>	<b>2549</b>	<b>847</b>	<b>50%</b>
	<b>Miss</b>	<b>812</b>	<b>1294</b>	<b>482</b>	<b>59%</b>

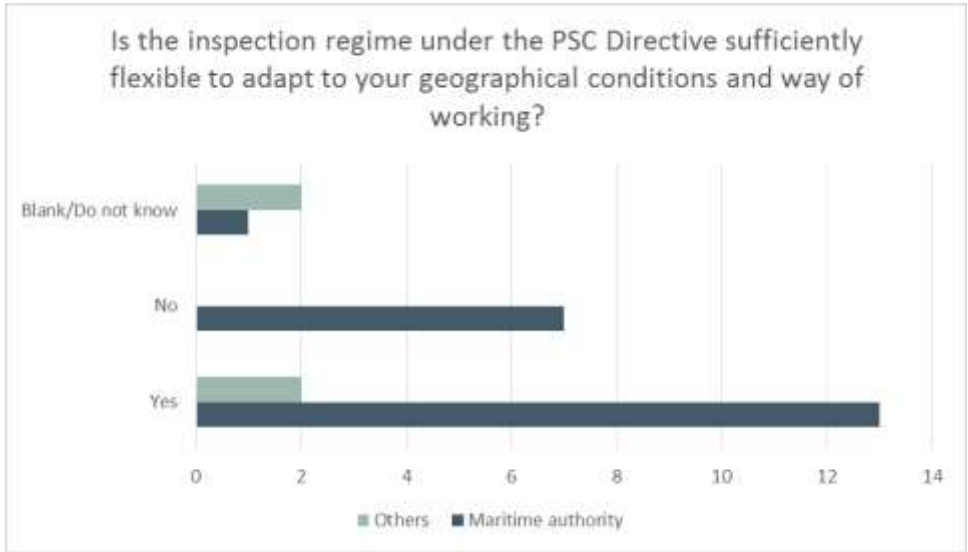
Source: EMSA/THETIS.

The above sea basin figures cover some variety between countries in the same sea basin in the use of postponement. Some Member States indicate that it is often more seen as a last option if the situation is difficult. The overall challenge mentioned in connection with the use of the postponement option is the risk that the Member State of the next port may agree to take the inspection, but in the end it may not be able to carry out the inspection (e.g. because the ship changes course). This would count as a miss. Also, the use of the postponement could be resource demanding (e.g. if the inspection is to be carried out during a weekend) and, accordingly, it may sometimes be cheaper to accept a missed inspection.

Some stakeholders also indicated that they have a limited possibility to postpone inspections since ships visiting their ports do not call at other EU ports (Cyprus) or that using postponement makes it difficult to fulfil the inspection commitment (Sweden).

The current – risk-based – PSC regime is generally perceived as an improvement by all categories of stakeholders (see also EQ2). As shown in Figure 3.18, most maritime authorities indicate that the inspection regime is sufficiently flexible.

**Figure 3.18 Flexibility of the inspection regime (n=25)**



Source: COWI/Ecorys survey.

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

Geographical conditions is in this context a challenge. For example, in Denmark the 400 inspections are divided among 120 ports and some locations require the inspector to be transported by helicopter. Similarly, Greece has a very large island complex and many ports to cover, Sweden's geography is characterised by a long distance between ports, and the United Kingdom has many remote ports. Cases of bad weather may prevent the transportation of the PSC inspector(s) to such ports. There are also examples of PSC inspectors located in ports where there are fishing vessels but no maritime traffic, and where it is too expensive/impossible to move them. Furthermore, occasions have been reported where PSC inspectors had to be relocated in order to comply with the qualification requirements regarding the number of PSC inspections that a PSC inspector must carry out during a certain period of time.

Furthermore, the provision that inspections need to occur when ships are at anchor puts also a strong burden on available resources. Anchorage areas are typically several miles of the coast, in non-sheltered waters, which also has implications for the safety of PSC inspectors. Finally, bunkering for a few hours brings additional inspection requirements. There is a considerable time pressure to perform these inspections for ships calling ports for only a few hours.

Accordingly, it is suggested by Member States with geographical challenges that the PSC Directive in the future makes justification for a missed inspection more flexible (e.g. in line with the justification for missed inspections as provided in Article 8(3) of the Directive). This may also include the provision of a "transitional period" (e.g. 24 hours) after which a change in priority takes effect (and will be counted as a miss).

Shipowners reported not to have experienced any major increases or decreases in costs as a result of the introduction of the NIR. The direct costs in connection with PSC inspections are said to be acceptable. Costs nonetheless occur as a result of the need of keeping and updating records from the inspections (deficiencies and detention records) and following up on deficiencies. However, shipowners generally do not perceive such costs to be disproportionate to the effects. As mentioned above under EQ1, the results of PSC inspections are as a rule actively used as an element in shipowners' internal quality

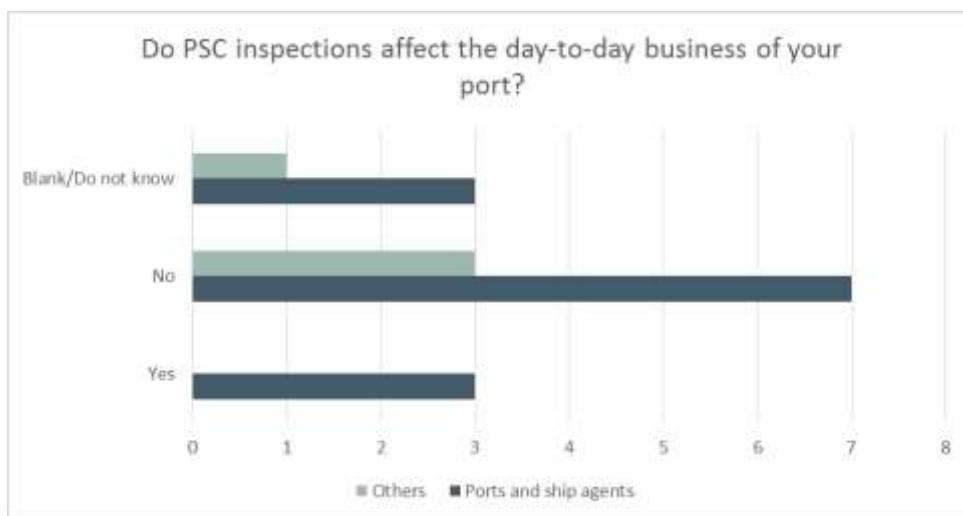
system. The goal is to use the inspections in a positive way to help to follow-up on findings.

As far as costs of PSC inspections are concerned, for shipowners the main issue revolves around the resources needed to assist PSC inspectors when they conduct inspections on board. Shipowners report that it is difficult for the captain/crew to be part of PSC at the same time as ongoing loading or other activities are competing in the same time frame. Moreover, PSC inspections were said to often interfere with the crews' rest periods, scheduled pursuant to the applicable legislation on hours of work/rest. This is especially a problem for the captain of the ship.

Delays in connection with undergoing PSC inspections are reported to occur very rarely. However, when they do the resulting costs could be significant, in particular for shipping with low freight rate (dry cargo ships). Furthermore, some shipowners point out that they are tired of frequent inspections, and in particular unscheduled, inspections. For them, inspections represent an additional administrative burden. Ships are being inspected under different instruments (flag State, ROs, MARPOL, by charters and clients in general, and internally) but also in different PSC regimes (i.e. ships sailing between different MoUs regions are subjected to multiple PSC inspections during the year).

As shown in Figure 3.19, PSC most often functions well in EU ports and provides minor disturbances. A situation where PSC creates disturbances can be in the process of detention where berth and accommodation of the ship after cargo operations has to be taken care of. The main challenge in most cases when a ship is detained for a longer period is to find a good (private or public) berth. Detention and resulting berth occupancy or other consequences have to be dealt with by the port.

**Figure 3.19 Influence of PSC inspection on day-to-day business of ports (n=17)**



Source: COWI/Ecorys survey.

A few shipbrokers and ship agents report that PSC sometimes delays<sup>39</sup> ships as an inspection typically takes a day, and there may be a direct cost to the shipowner due to repair work. If the ship is delayed by a day due to repair work (tugs, pilots, etc.) the shipowner has the final responsibility. In this way it is in the interest of the shipowner to keep the ship up to standards and ensure as few deficiencies as possible.

Finally, RO's report that the amount of services rendered by them to shipowners/flag States has increased since the introduction of the NIR. There is more written communication going on – mostly with flag States.

Over the period 2011-2016 resources spend on inspections in nearly all sea basins have increasingly been used on Priority I inspections and less so on Priority II (see Table 3.16

<sup>39</sup> Such delays are considered justified.

below). In 2016, Priority I inspections constituted 59.7% of all inspections compared to 52.4% in 2011. Overall, Priority II inspections have been reduced by 21% over the period 2011-2016. In the larger sea basins (Mediterranean and North Sea) even more significant decreases in Priority II inspections have occurred.

When we compare the number of inspections carried out with the total commitment (the fair share) it is obvious that the number of non-relevant inspections carried out has increased since 2011. In 2011, the number of inspections carried out compared with the commitment figure showed that only 88% of the committed inspections were undertaken – i.e. too few inspections were carried out. This tendency has reversed in 2016 where inspections undertaken exceed commitments by 21%. The reason is that some of the Member States exceed their fair share significantly. The Mediterranean Sea basin illustrates the problem as the fair share fell by 36% but the actual inspections undertaken only fell by 7%. Several Member States particularly in the Mediterranean and the Black Sea inspect too many Priority I ships. As a result they incur higher costs.

The consequence of exceeding the fair share calculation is detailed in EMSA's recent cost-effectiveness study, where it is indicated "the excess of required effective inspections (Priority I + Priority II inspections) can result in a potential waste of resource and may affect and disrupt future fair share calculations." (p.15)<sup>40</sup>- The study stresses that "considering the rationale of the New Inspection Regime, the more priority inspections that are carried out by one Member State (well above its fair share), the more difficult it will be for another Member State to comply with its own fair share requirement of inspecting its national commitment. Furthermore, this excess of priority inspections would also cause a disruption of fair share calculations in the following years." (p. 9). In this way Paris MoU members are interlinked in the calculation of fair share and the system assumes that members live up to their fair share, no more, no less.

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<sup>40</sup> European Maritime Safety Agency (2016), PSC Cost-effectiveness Pilot Study – Summary Report, EMSA.2016.017458.



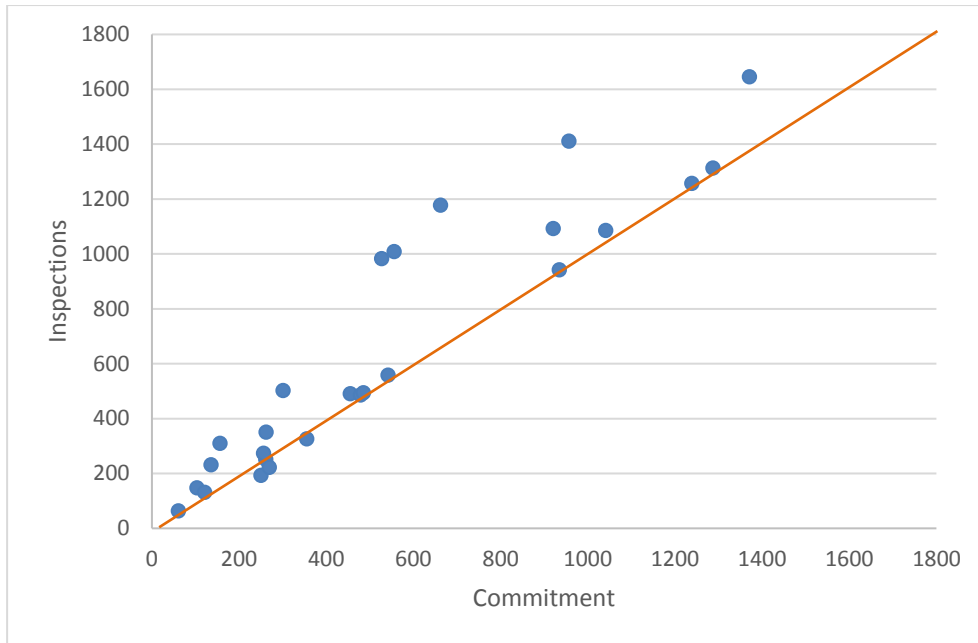
**Table 3.16 Annual commitment and inspections by sea basin, 2011 and 2016**

		2011	2016	Change 2011-2016	
				absolute	%
Baltic Sea	Commitment	2952	2069	-883	-30%
	Inspections	1717	1968	251	15%
	Priority I	540	410	-130	-24%
	Priority II	1177	1558	381	32%
	Inspections - commitment	-1235	-101		
North Sea	Commitment	9029	6164	-2865	-32%
	Inspections	7403	6458	-945	-13%
	Priority I	3595	3748	153	4%
	Priority II	3808	2710	-1098	-29%
	Inspections - commitment	-1626	294		
Mediterranean Sea	Commitment	5335	3400	-1935	-36%
	Inspections	5278	4884	-394	-7%
	Priority I	3400	3765	365	11%
	Priority II	1878	1119	-759	-40%
	Inspections - commitment	-57	1484		
Black Sea	Commitment	843	563	-280	-33%
	Inspections	1304	853	-451	-65%
	Priority I	612	697	85	14%
	Priority II	692	156	-536	-77%
	Inspections - commitment	461	290		
None-EU	Commitment	2349	1792	-557	-24%
	Inspections	2447	2782	335	14%
	Priority I	1362	1495	133	10%
	Priority II	1085	1287	202	19%
	Inspections - commitment	98	990		
<b>Paris MoU</b>	<b>Commitment</b>	<b>20508</b>	<b>13988</b>	<b>-6520</b>	<b>-32%</b>
	<b>Inspections</b>	<b>18149</b>	<b>16945</b>	<b>-1204</b>	<b>-7%</b>
	<b>  Priority I</b>	<b>9509</b>	<b>10115</b>	<b>606</b>	<b>6%</b>
	<b>  Priority II</b>	<b>8640</b>	<b>6830</b>	<b>-1810</b>	<b>-21%</b>
	<b>Inspections - commitment</b>	<b>-2359</b>	<b>2957</b>		

Source: EMSA/THETIS.

Figure 3.20 illustrates that the problem of exceeding the fair share significantly is confined to seven Member States in 2016.

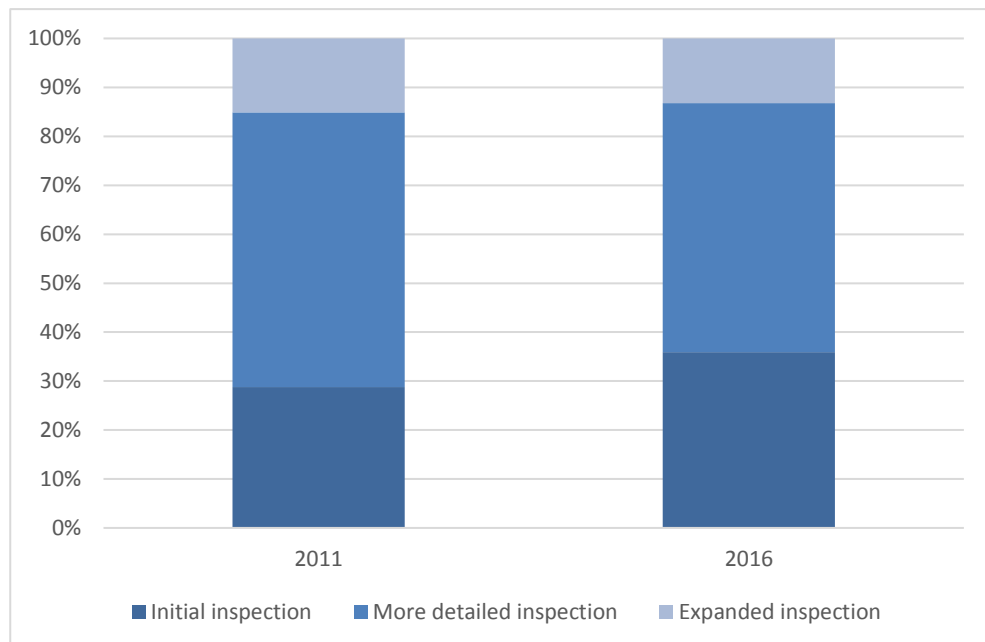
**Figure 3.20 Commitment and inspections by Paris MoU members, 2016**



Source: EMSA/THETIS.

Another way of assessing resource use from the beginning of the NIR until 2016 is by looking at the share of initial inspections compared to more detailed and expanded inspections. Figure 3.21 shows that while initial inspections have increased in the period 2011-2016, more detailed and expanded inspections have fallen in numbers. This means that the resources spent for each inspection over the period have decreased as initial inspections are less time consuming. However, the fall is not equally divided across the Paris MoU area.

**Figure 3.21 Share of inspections by type of inspection, Paris MoU, 2011 and 2016**

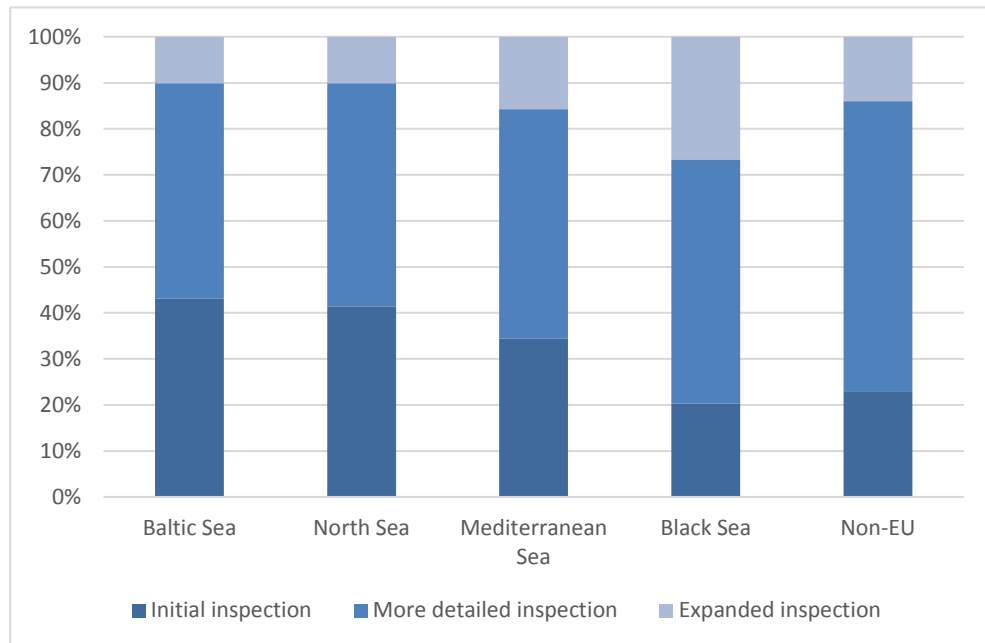


Source: EMSA/THETIS.

Figure 3.22 shows the variety of the type of inspections between sea basins for 2016. The Black Sea stands out as the sea basin with relatively fewest initial inspections and the largest number of expanded inspections. This also means that the duration and resource requirement of each inspection is higher in the Black Sea compared to e.g. the

North Sea or the Baltic Sea.

**Figure 3.22 Share of inspections by type of inspection and sea basin, 2016**



Source: EMSA/THETIS.

**3.3.2 EQ8: To what extent is there an efficient usage of the THETIS database? To what extent is the interaction between THETIS and SafeSeaNet optimal? To what extent a single targeting mechanism would reduce administrative burden?**

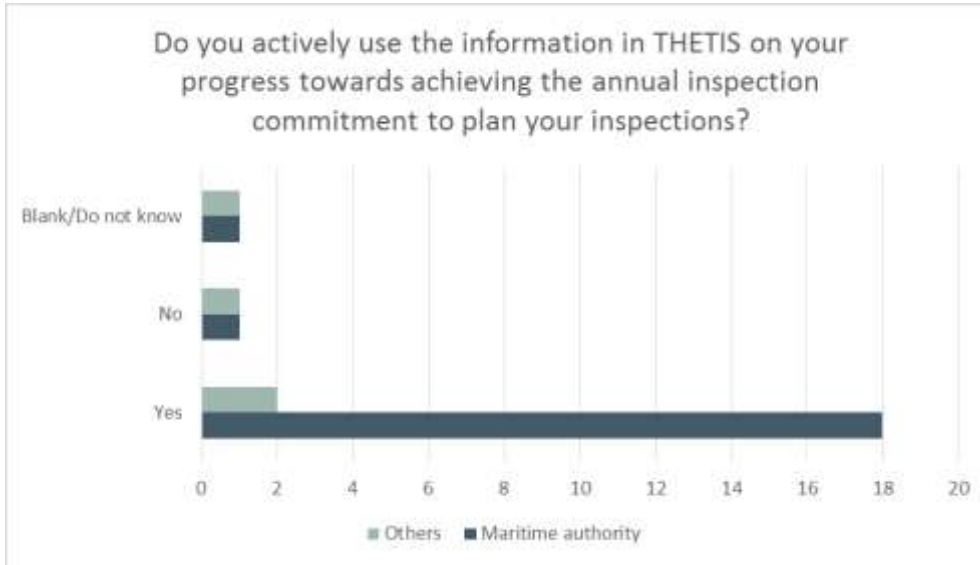
The second efficiency question focuses on the THETIS database and specifically the issue of whether the database is being used in an efficient manner and, if not, how its value could be increased. This latter includes, among other things, the interface between SafeSeaNet and THETIS. To answer the question we have explored the ways in which different stakeholders make use of the database and whether any explanation could be provided for cases of relatively 'low use'.

THETIS is used efficiently by maritime authorities responsible for PSC. It is perceived as a useful tool – and a significant improvement compared to the former SIRENaC – to plan PSC activities, but also to monitor the work of PSC inspectors. Moreover, the majority of maritime authorities make use of THETIS to regularly monitor their progress towards achieving their annual inspection commitment.

On the other hand, more advanced features of THETIS, such as the Jasper Business Intelligence Tool are used relative rarely and problems when using the tool have been reported. Accordingly, we find that there is a potential in further improving the efficient usage of the database.

Maritime authorities use THETIS most commonly to monitor and plan their inspection efforts – i.e. to confirm information and to monitor the daily movements regarding ships that are coming and need to undergo a PSC inspection. THETIS data is often being cross-checked with national information systems.

**Figure 3.23 Use of THETIS to monitor and plan inspections (n=24)**

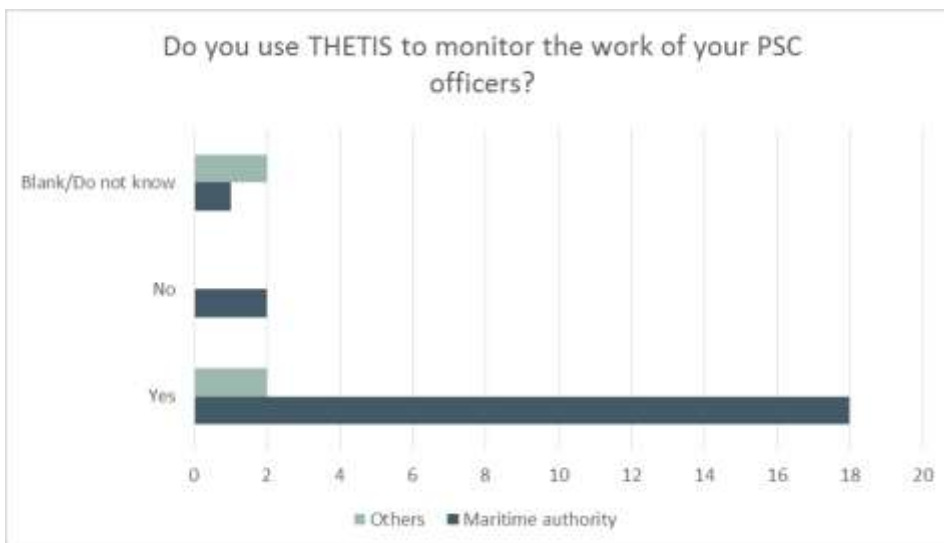


Source: COWI/Ecorys survey.

THETIS is also used to monitor the progress towards achieving the annual inspection commitment. The majority of maritime authorities interviewed do so regularly throughout the year (e.g. on a daily or monthly basis) as this is necessary to keep track of the commitment. Some Member States indicated that they use THETIS for this purpose mostly towards the end of the year. For example, Denmark does not receive a sufficient number of Priority I ships and accordingly focuses on inspecting as many Priority II ships throughout the year as possible. Another example is France, where – given the number of Priority I and II ships – it is sufficient to check the progress towards the second half of the year to decide on the extent that Priority II ships should be inspected.

As seen in Figure 3.24 several Member States also report to use THETIS as a tool to monitor the work of PSC inspectors. For example, in Greece, there is a supervising system with local validators and coordinators, who validate the work of PSC inspectors. Similarly, a validation process is in place e.g. in Germany and Sweden where another (senior) PSC inspector from head office checks the inspection report before it is entered into THETIS.

**Figure 3.24 Use of THETIS to monitor the work of PSC officers (n=25)**



Source: COWI/Ecorys survey.

Other Member States (e.g. Denmark, United Kingdom) prefer other means to monitor the

work of their inspectors and, accordingly, use THETIS for this purpose to a limited extent only.

Finally, some Member States (e.g. Romania) also noted that they regularly use THETIS to count the number of inspections they have carried out in order to make sure the inspectors comply with the required number of inspections in order to remain qualified.

All in all, the usefulness of THETIS is unanimously recognised by maritime authorities. The role of EMSA in managing the system, working on continuous improvements to the system and providing day-to-day assistance is appreciated. A number of issues with a potential room for improvement has nonetheless been identified. For example, some Member States (e.g. Germany) reported difficulties when entering data in the recently updated version of THETIS.

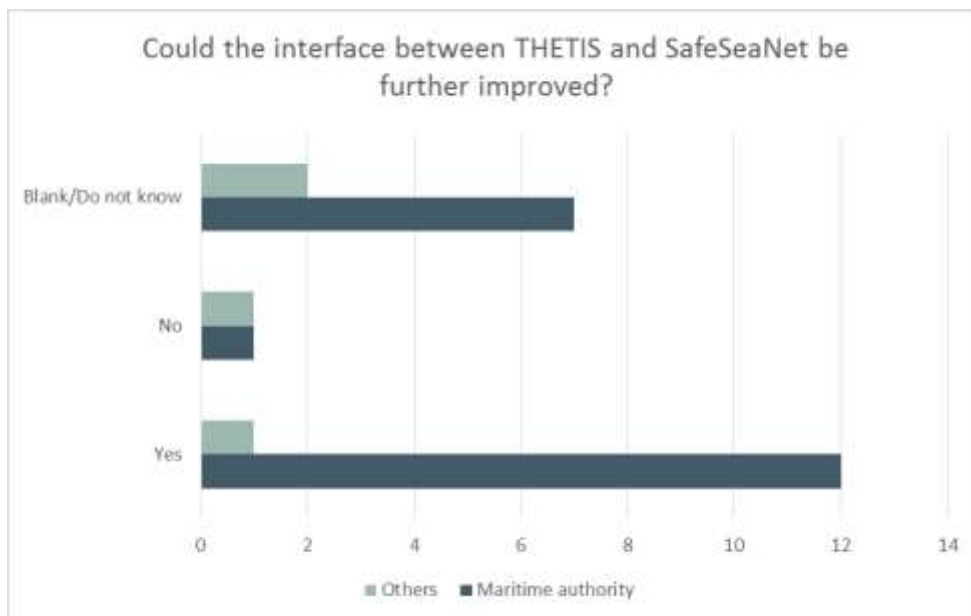
There is a potential to improve the efficiency of some of the more advanced tools of THETIS, such as the Jasper Business Intelligence Model, e.g. by improving the user-friendliness of the system or by providing additional training.

Currently, in order to generate statistics a number of Member States have indicated a preference to receive individual assistance from EMSA. Only a few Member States report to make regular use of the Jasper tool to generate statistics (e.g. Poland, France, and Sweden). Others (e.g. Greece) indicated a lack of familiarity with the tool or infrequent use of the tool (e.g. Croatia). Speed/response time problems have also been reported (e.g. Germany, Denmark and the United Kingdom).

A few Member States point out that the specific THETIS modules that have been developed for non-PSC activities, such as Port Reception Facilities, can create confusion for the PSC inspector in the daily job. It is therefore suggested to rename THETIS-EU with a more distinguishing name in order to prevent misunderstandings.

Overall, stakeholders find the interface between THETIS and SafeSeaNet to work fine (Figure 3.25), but suggest a number of areas in which the interface could be further improved.

**Figure 3.25 Interface between THETIS and SafeSeaNet (n=24)**



Source: COWI/Ecorys survey.

Firstly, some stakeholders referred to the link between THETIS and SafeSeaNet in that, e.g. a simple typing error in SafeSeaNet disturbs the information in THETIS. Accordingly, improvement could be done by implementation of better data input control. Incidents were also mentioned when information was missing in THETIS and had to be inserted

manually. Moreover, it was pointed out that information between SafeSeaNet and THETIS should ideally be transmitted in real time or within some minutes. Currently, a delay is experienced.

Some Member States reported challenges when required to notify the actual time of arrival in the system. For example, in Denmark most ports are publicly- owned and with 24-hour manning in only about 1/3 of them. This makes it difficult to secure that the actual time of arrival is reported. However, overall, the majority of maritime authorities reported to – despite difficulties in the past – have overcome the majority of reporting challenges.

A number of specific issues were reported to arise in connection with the arrival of a ship at anchorage/departure for an anchorage. Firstly, although Article 24(2) seems very clear, some maritime authorities indicate that there is a lack of clarity in whether the arrival at port or at anchorage should be reported in the system. For example, in Poland, the actual time of arrival registered is the time when the ship drops its anchor with the intention of entering the port. When the ship is moving from the anchorage to the port, the time has to be updated. Problems (missed call) could arise if the ship has taken the anchor up and moved away.<sup>41</sup> An issue could also arise if the port does not mark the ship as 'in anchorage' – in such cases, it is difficult to justify a miss. Finally, the destination port is not known because the ship is going to anchorage. In such cases the information of the destination port cannot be entered. This locks the system and creates problems.

ETA and ETD is reported as a challenge in every port as it depends on information from many different parties. ETA/ETD depends on e.g. availability of pilots, terminals ready for ships, prepared, etc. Hence, 'port call optimisation' is an ongoing issue for many ports as this is a continuous requirement by ship owners and agents that port operations should be improved.

Ship agents also use SSN for reporting but have not noticed any complaints about the use of the system. Furthermore, there is awareness of THETIS among shipowners, but the database is rarely used (in particular when internal monitoring systems are in place). Some shipowners suggested that the efficiency of THETIS could be further improved by providing a more detailed presentation of data on the causes of non-compliance and the levels of non-compliance on the public part of the database.

### 3.4 Coherence

#### 3.4.1 EQ9: To what extent is the Directive coherent having regard to the other legislation applicable in this area such as Directive 99/35 and flag state surveys? Are there any gaps or overlaps?

The evaluation question seeks to assess the coherence of the PSC Directive and other relevant EU legislation<sup>42</sup>, such as the Directive on compliance with flag State requirements, Directive on ro-ro ferries and high speed passenger craft, Directive 2016/802 on reduction in the sulphur content of certain liquid fuels, Regulation 1257/2013 on ship recycling and Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues. To answer the question we have explored to what extent stakeholders feel a need for better coordination between the different legal instruments.

We find that there is a need for better coordination with the Directive on ro-ro ferries and

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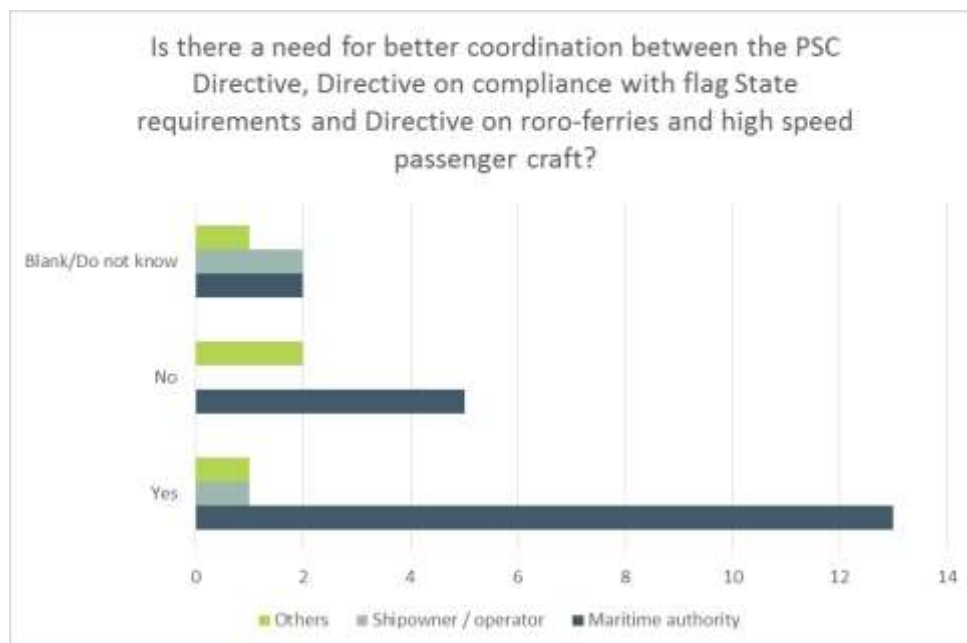
<sup>41</sup> Note that if there here is no ship port interface the anchorage call should not be reported and then will not create a miss.

<sup>42</sup> With the evaluation being part of a Fitness Check, focus has been on external coherence. However, we have when analysing the effectiveness and efficiency of the different articles of the Directive not come across any internal incoherence – i.e. articles that work against each other.

high speed passenger craft. However, since this coordination is already being addressed in the context of the revision of the roro Directive, no specific recommendations to improve the coordination are made at this stage.

As illustrated in Figure 3.26, most stakeholders find that there is a need for better coordination with the Directive on roro-ferries and high speed passenger craft.

**Figure 3.26** Need for better coordination between the PSC Directive and related Directives (n= 27)

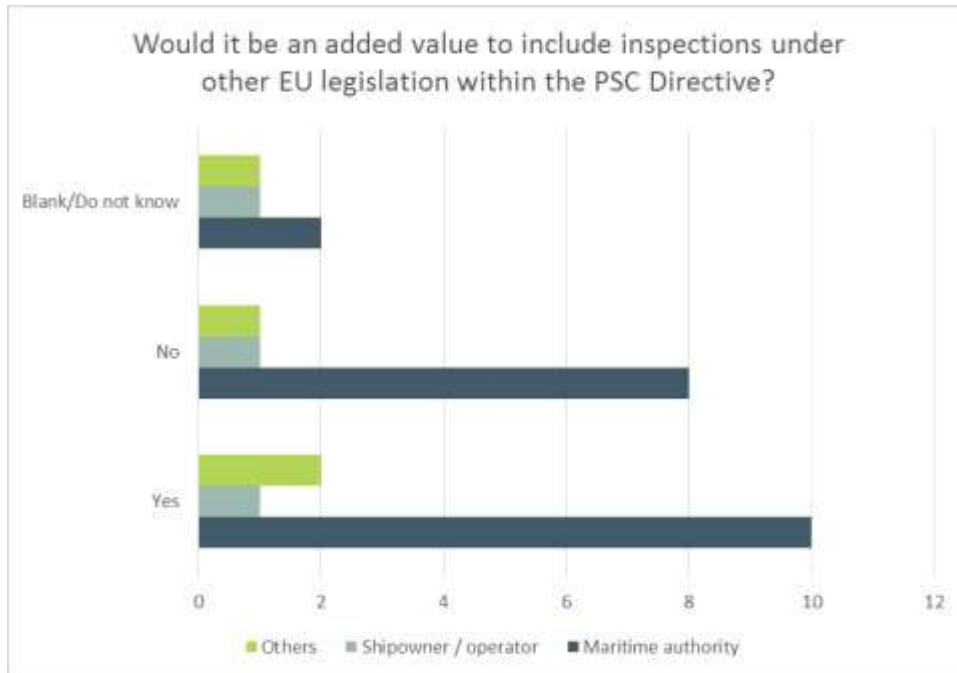


Source: COWI/Ecorys survey.

Stakeholders do, however, not see an obvious need for more coherence and coordination with the flag State Directive. Actually, in some countries, it is also the PSC inspectors who carry out the flag State surveys (e.g. Denmark).

As for other EU legislation inspections are currently carried out under a number of different legal instruments: Directive 2016/802 on reduction in the sulphur content of certain liquid fuels, Regulation 1257/2013 on ship recycling and Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues. Such inspections are to a varying extent coordinated in the Member States with PSC inspections. While some Member States reported to experience efficiency gains from such coordination others do not. Also in terms of coordination with other policy areas, maritime authorities are less convinced about the advantages. They point at issues such as the complexity of cross-sector coordination and the division of tasks beyond PSC which vary between countries and make it difficult to proceed towards more coordination with other policy areas. We also acknowledge that provisions for coordination with other EU legislation may not be appropriate for the non-EU members of the Paris MoU.

Generally, as illustrated below, stakeholders disagree as to the extent to what different inspection regimes should be coordinated at European level.

**Figure 3.27 Inclusion of inspections under other EU legislation (n=27)**

Source: COWI/Ecorys survey.

While shipowners generally tend to have a preference for a more coordinated approach, so that the total number of unscheduled inspections is reduced, maritime authorities are more reserved given the complexity of cross-sector coordination and division of tasks beyond PSC.

### 3.5 EU added value

#### 3.5.1 EQ10: What does the Directive add to the work being done by MS either individually or within the context of the PMoU?

This evaluation question ultimately seeks to explore the role and value of the EU intervention that is additional to the interventions initiated by Member States or of the Paris MoU. The assessment is based primarily on qualitative data from the responses to the above effectiveness questions.

Our key finding is that the PSC Directive adds value, mainly by providing a legally binding regime – which results in the commitment of the necessary resources – that can be effectively enforced vis-à-vis Member States by the Commission.

The introduction of banning is mentioned as a specific example of an achievement of the Directive. Shipowners across the EU see the value of applying the same rules/procedures to inspections. Likewise, stakeholders recognise THETIS and the training and other assistance (including IT support) provided by EMSA to be of great 'added' value.

The annual inspection commitment does not consider geographic aspects in the sense that some locations in Europe are more in the frontline and face more risks than others.

As previously presented under EQ4, there is a firm belief among stakeholders that the legal force behind the Directive is a strong driver for compliance with the standards of the Directive. Compared to the Paris MoU where there is no enforcement of legal compliance and harmonisation with the agreed PSC standards, the Directive enforcement possibilities ensure that Member States implement a harmonised PSC regime and allocate appropriate budget shares for PSC to be in compliance with Directive obligations and to

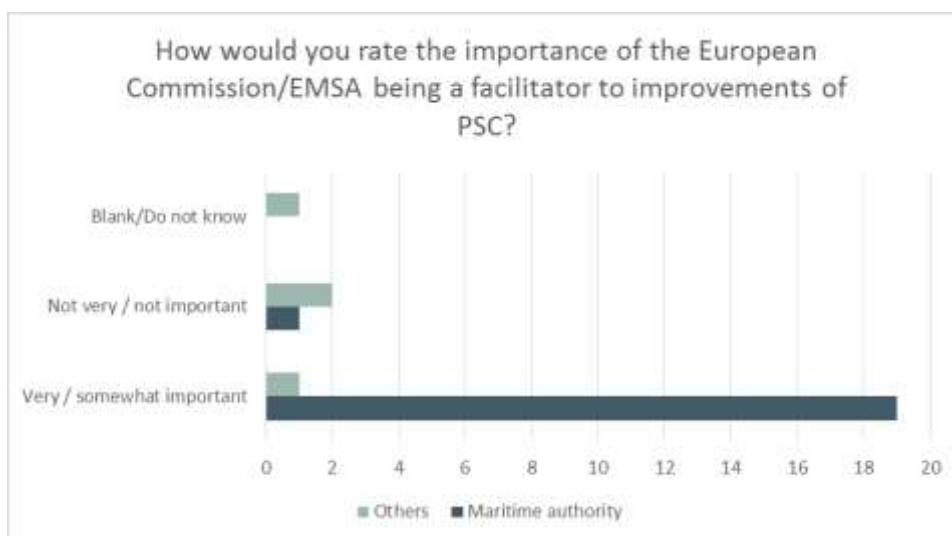


avoid legal action by the Commission.

EMSA training and distance learning programmes, guidance, and coordination of procedures have been instrumental to the harmonised PSC implementation in Member States. While PSC inspectors have different experiences and face different educational requirements (military, civilian, seagoing, etc.), which potentially could result in differences in the way PSC is carried out, the professional training courses offered by EMSA are appreciated by everybody and ensure that common standards are established between Member States. The EMSA training and distance learning programmes have contributed significantly towards harmonisation of practices and focus among PSC inspectors.

Likewise, EMSA's management of the essential PSC IT platforms such as SafeSeaNet, THETIS, and Rulecheck is critical for the implementation of the Directive. Stakeholders view on the role of the EC and EMSA shows a strong support for this role, which underlines the EU added value.

**Figure 3.28 Importance of the EC and EMSA for PSC (n=24)**



Source: COWI/Ecorys survey.

Some Member States also point at the codifying of PSC inspection instruction in the Directive has turned it into 'PSC inspection procedures', which makes it more difficult to focus inspections based on decisions by the Paris MoU or based on the expert opinion of the PSC inspector. The decision procedure – if something needs to be changed in the Directive – is significantly different and slower compared to the Paris MoU procedure. Although, the Commission has the right to initiative, in practice, to change the Directive, Member States first need to align discussion points within the European Shipping Working Party prior to submitting these points to the Paris MoU Port State Control Committee or its Technical Evaluation Group. This can be a time consuming and complicated process. This limits national maritime authorities in bringing forth comments of concern and hampers their flexibility in the discussions and decision making, generally on strictly technical issues, within the Paris MoU. The incorporation of the Paris MoU regime in the Directive was done just because of the well-established practice and professional judgement in the Paris MoU, which is now hampered by that same Directive. This, in turn, can create tension between the EU and non-EU Paris MoU participants, which lacks the flexibility to change standards when needed.

Finally, the added value of having one system across the EU to determine the annual inspection burden among Member States also has a downside as some countries have geographical challenges in fulfilling their inspection shares while others are doing more inspections than their fair share. As a result, some Member States need to inspect all Priority II ships as there are too few Priority I ships.



## 4 Conclusions and recommendations

Our overall conclusion based on the conclusions for relevance, effectiveness, efficiency, coherence and EU added value – presented below – is that the PSC Directive adds value by combining a PSC control framework with a legal enforcement mechanism to ensure that it is implemented in Member States. The assistance of EMSA has supported the EU PSC regime in important ways, primarily through encouraging a harmonised European PSC approach.

Hence, overall the evaluation shows that the PSC Directive continues to play a key role in the defence against 'substandard' shipping operating in EU waters. In fact, the relevance of PSC remains as long as there are differences in the standards and the quality of the controls across the different regions and PSC regimes around the world. By the use of the THETIS system and the targeting of high risk ships through a risk-based approach – i.e. the NIR, the PSC regime is effective as it catches those ships with the highest risk of non-compliance with the agreed international/EU standards, at the same time 'awarding' quality operators and as such this is a way of (transport) facilitation for the sector. In this way, PSC has contributed to the intended objectives to improve maritime safety, security, pollution prevention and working conditions. The evaluation finds that while several countries have trouble in recruiting qualified PSC inspector candidates, those inspectors that carry out PSC inspections in EU ports are adequately qualified, which means that PSC inspections are carried out in a harmonised way throughout the EU.

With the introduction of the NIR, the total number of inspections have fallen and there are more 'initial inspections'. However, some Member States continue to inspect more Priority I ships than they are supposed to according to their fair share commitment. This conduct affects other Member States negatively as it leads to more inspections than required (unless called for by safety reasons). While some Member States claim that administrative costs have increased since the introduction of the NIR, others claim that they have decreased or remained unchanged. Data on the cost of inspections across Member States shows that the costs in 2016 are more or less the same as in 2011. However, increased operational flexibility may decrease costs for some Member States. From a shipowner perspective, however, costs related to PSC are viewed as proportional to the objective and that a good PSC record is important as it is seen as a competitive factor.

### 4.1 Relevance

We find that there continues to be a need for PSC as a defence against 'substandard' shipping. Although deficiencies and detentions have fallen with the introduction of the NIR, 'substandard' shipping remains in the Paris MoU area and in other MoU areas. Furthermore, it is a global problem and PSC is often considered as the only line of defence against ships from low-performing flag States.

Data shows that the number of deficiencies and detentions have fallen since before the NIR. This could indicate that an abolishment of the NIR provisions or PSC efforts in general may be at the risk of a return to a higher level of 'substandard' shipping in the Paris MoU area.

As already emphasised 'substandard' shipping is a global problem since shipping inherently is a global industry. Hence, PSC in the EU (Paris MoU) area will continue to be relevant as long as there are flags on the 'black list' of the Paris MoU – or simply because some flags are not doing a proper job. In other words, the need for PSC remains as long as there are differences in the standards and the quality of the controls between flag States and across the different regions around the world.

Stakeholders particularly emphasise that PSC is independent from the industry (unlike ROs to whom a number of flags delegated their survey tasks and who are linked to the owner), and that PSC is not announced beforehand (unlike vetting, RO inspections and other inspections) as key features that makes it very important.

**Text box 4.1 Recommendation 1**

*Commission/EMSA:*

The Directive shall remain as there continues to be a need for PSC as a defence against 'substandard' shipping – but the Commission and EMSA could together with the Member States explore the need for more flexibility to increase effectiveness and efficiency and to align with Paris MoU processes to increase the EU added value.

*Member States:*

Should continue to comply with the PSC Directive provisions as they will remain, but at the same time continue to inform about weaknesses that could be taken account of in a possible future revision of the PSC Directive.

#### 4.2 Effectiveness

The evaluation shows that the PSC Directive through effective targeting of 'substandard' ships has contributed to the objective of securing maritime safety, security, pollution prevention and good working conditions. No major gaps have been identified. The Directive has served as a supporting enforcement mechanism that has ensured compliance with agreed international and EU standards.

The fact that effective measures are in place to ensure compliance with the PSC Directive by all EU Member States, the operation and maintenance of THETIS, and the harmonised training provided by EMSA are perceived by stakeholders as the three major factors behind the effectiveness of the Directive.

A good PSC record is a competitive factor for quality shipping. Thus, the Directive has also provided a motivating factor for the shipping industry to maintain high standards and thereby improve safety, security, pollution prevention and working conditions on board ships calling at EU ports.

Since 2007 the number of deficiencies has fallen for all deficiency types. This pattern continued after the implementation of the NIR in 2011. Safety related deficiencies are the most widespread deficiency type in 2016.

While the targeting of high risk ships using the THETIS database – hereunder via the priority-setting system – is effective as it leads to the inspection of low-performing ships, there is room for improvement to the design of the ship risk profile. We have identified the following possible areas of improvement, some of which we understand already have been discussed – or are currently being discussed – in the Paris MoU Task Force 31: weighting of generic and individual risk factors, formula for calculating flag State performance, provision regarding IMO audit, and green focus.

Another unintended effect relates to unequal treatment of small and large flags reflected in the White-Grey-Black list (WGB). Countries with a small fleet and a small amount of inspections can remain on the Grey list for long even if they have no detentions, while countries with large fleets and many inspections can have many detentions and still remain on the White list.

**Text box 4.2 Recommendation 2**

*Commission/EMSA:*

Continue<sup>43</sup> the process of improving the design of the ship risk profile – e.g. by looking at:

- Weighting of generic and individual risk factors
- Formula for calculating flag State performance (WGB)
- Provision regarding IMO auditGreen focus

Effective PSC requires a corps of inspectors with the right qualifications in all the Member States. The evaluation shows that PSC inspectors in EU ports are well-trained and qualified, and that the Member States do not experience any major difficulties in complying with the training and qualification requirements of the Paris MoU/PSC Directive. The number of inspectors with formal PSC educational background appears to be on the increase while inspectors with a maritime background is decreasing. However, the majority of Member States experience difficulties in recruiting qualified PSC inspector candidates. Such problems are less pronounced, or virtually non-existent – in countries in which PSC inspectors form part of the country's military (navy/coastguard) organisation. There is also an economic factor, i.e. that now and in the future significantly higher salaries are offered for positions on-board or in the private sector compared to the salaries that can be offered for PSC inspectors (e.g. in Poland the salary that can be offered to a PSC inspector amounts to approximately 1/10 of an average salary of a captain).

The level of training provided at EU and national level is adequate. Only minor gaps in the training offered have been identified. Generally, inspections are carried out in a harmonised way throughout the EU, but differences in the culture of checking exist, in particular between the Southern and Northern European countries and countries with civilian/military approach to PSC inspections. As a result there are differences in the culture of checking – e.g. whether the aim of the inspection is to find something or it is to find the most important deficiencies.

Occasions have been reported where PSC inspectors had to be relocated in order to comply with the qualification requirements regarding the number of PSC inspections that a PSC inspector must carry out during a certain period of time. Also, such requirements put a limit to how many PSC inspectors a Member State can keep occupied.

**Text box 4.3 Recommendation 3**

*Commission/EMSA:*

EMSA should continue its provision of common training – in pursuance of high-quality and harmonised PSC inspections.

Considerations could be made to encourage more flexible requirements, e.g. by having a more qualitative approach to determine 'qualifications' and training needs.

*Member States:*

Should provide EMSA with their wishes to needs-based training, try to learn from the strengths of existing approaches to training/background/recruitment, and work actively towards a harmonised training approach.

**4.3 Efficiency**

Some maritime authorities have experienced an increase in administrative costs, others a decrease, and then again others no change, following the introduction of the NIR/PSC

<sup>43</sup> It should here again be underlined that this already has been discussed – or is currently being discussed – in the Paris MoU Task Force 31.

Directive. Hence, overall we find that the average costs across the Member States have remained almost unchanged. However, we find that such costs are not always proportional to the goal of eliminating 'substandard shipping'. We have thus identified a room for improvement in providing additional operational flexibility to the PSC regime, for example by being able to justify missed inspections.

Shipowners generally perceive the administrative costs, and the frequency and scope of PSC inspections as proportional to the goal of eliminating 'substandard' shipping and have not reported any significant delays associated with undergoing PSC inspections in EU ports. However, PSC inspections are demanding and occasionally interfere with the crews' scheduled rest periods.

When comparing inspections in the period 2011-2016, significantly less inspections are carried out in 2016, and the share of Priority I inspections have increased. Likewise, the number of initial inspections has increased compared to more detailed and expanded inspections. Both factors reduce the costs of inspections, but increase the focus on 'substandard' ships.

However, there is a potential for further reducing the costs. When we compare the number of inspections carried out with the total commitment, the number of non-relevant inspections has increased significantly for some Member States since 2011. This practice distorts the overall calculation of the fair share for the other Member States. Another difficulty is that some Member States need to inspect a large share of Priority II ships in order to fulfil their fair share of inspections.

In this way the Paris MoU members are interlinked in the calculation of fair share as it assumes that Member States live up to their fair share, no more, no less.

Member States also make use of postponement significantly more in 2016 compared to 2011. Particularly, the North Sea and Mediterranean Sea have increased the postponement frequency with more than 50%. However, the number of misses has also increased significantly in some sea basins (e.g. in the Mediterranean Sea misses increased by 78%).

**Text box 4.4 Recommendation 4**

*Commission/EMSA:*

Should assess the need for increased operational flexibility: justification for a missed inspection should be made more flexible (e.g. in line with the justification for missed inspections as provided in Article 8(3) of the Directive). This could include the provision of a 'transitional period' (e.g. 24 hours) after which a change in priority takes an effect (and can be counted as a miss). These measures should increase flexibility to raise grounds to justify a missed inspection.

The Commission could also explore ways of taking the geographical dimension into consideration in the fair share allocation of inspection commitments.

*Member States:*

Should respect the agreed inspection commitment and not exceed the number of inspections significantly.

The evaluation shows that the THETIS database is viewed upon as an efficient tool by maritime authorities - and a significant improvement compared to the former SIRENaC - to plan PSC activities, and to monitor the work of PSC inspectors. Moreover, the majority of maritime authorities make use of THETIS to regularly monitor progress towards achieving the annual inspection commitment. More advanced features of THETIS, such as the Jasper Business Intelligence Tool are used relative rarely and problems when using the tool have been reported.

The interface between THETIS and SafeSeaNet works reasonably well with potentials for improvements.

**Text box 4.5 Recommendation 5**

*EU Commission/EMSA:*

The interphase between SafeSeaNet and THETIS should continuously be developed in response to user feedback. Maritime authorities pointed at better data input control, transmission of data in real time (or with some minutes delay), inclusion of ships above 100 GT (currently it is above 300), the identification of ships based on IMO number, and direct access to reporting of ship incidents in SafeSeaNet (and CleanSeaNet).

*Member States:*

Should continue to provide feedback to EMSA on the functioning of THETIS, SafeSeaNet, Jasper Business Intelligence Tool.

#### 4.4 Coherence

We find that there is a need for better coordination between the Directive on ro-ro ferries and high speed passenger craft. However, since this coordination is already being addressed in the context of the revision of the ro-ro Directive, no specific recommendations to improve the coordination are made at this stage.

For the flag State Directive, stakeholders believe that there is no need for more coherence and coordination. In fact, in some countries, PSC inspectors also carry out flag State surveys and the other way around.

In terms of coordination with other policy areas: Directive 2016/802 on reduction in the sulphur content of certain liquid fuels, Regulation 1257/2013 on ship recycling and Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues, maritime authorities are less convinced about the advantages. Maritime authorities point at issues such as the complexity of cross-sector coordination and the division of tasks beyond PSC which vary between countries and make it difficult to proceed towards more coordination with other policy areas. We also acknowledge that provisions for coordination with other EU legislation may not be appropriate for the non-EU members of the Paris MoU.

#### 4.5 EU added value

The Directive adds value – mainly by providing a legally binding regime that can be effectively enforced vis-à-vis Member States by the European Commission. In the Member States the Directive obligations result in the commitment of the necessary resources for PSC.

The introduction of banning is mentioned as a specific example of achievements of the Directive. Shipowners across the EU see the value of having the same rules/procedures to inspections. Likewise, stakeholders recognize THETIS and the training and other technical assistance (including IT support) provided by EMSA to be of great 'added' value.

On the other hand, the Directive, by adding an additional regulatory layer, as that by its very nature in part removes the flexibility of the Paris MoU.

Also, the annual inspection commitment does not consider geographic aspects in the sense that some locations in Europe are more in the frontline and face more risks than others.





## Appendix A Evaluation framework

<b>Relevance</b>	
<b>1. To what extent is the layer of defence provided by PSC (safety, working conditions, and environmental protection) still required and appropriate?</b>	
<b>What do we want to measure?</b>	
<p>One of the motivations for PSC as stated in Directive 2009/16/EC is that there has been a serious and persistent failure on the part of a number of flag States to implement and enforce international standards. Similarly, some ship owners also fail to observe international standards. Henceforth, as a third line of defence against substandard shipping, the monitoring of compliance with international standards for safety, pollution prevention and on-board living and working conditions should also be ensured by Port State Control (PSC).</p> <p>Our aim is to measure whether a significant number of flag States still fail to implement and enforce international standards. Where the flag States are Member States, we envisage that the parallel evaluation of the flag State Directives 2009/21/EC and 2009/18/EC will inform the effectiveness of this first line of defence. Where the flag States are not Member States, we will look elsewhere for evidence on developments in compliance with standards. For instance, we will look at the PSC inspection reports that identify serious issues on board vessels. It will indicate whether both Flag States and/or ship owners fail to implement and comply with international conventions and standards.</p> <p>Another motivation for having a PSC Directive – that is linked to the evaluation questions of coherence and EU added value – is the need for a harmonised approach for enforcement of international standards to be effective and to avoid distortions of competition. Hence, we want to measure whether there is still a need to support the effectiveness of international standards, and whether failure to do so contributes to distortions of competition.</p> <p>Finally, we will assess developments in international fora such the IMO, ILO and Paris MoU and how changes decided within these bodies can impact the practice of PSC in the EU context, and vice versa. In other words, we will on the basis of stakeholder views measure how PSC is influenced by international standards and vice versa, and whether the layer of defence provided by PSC is still relevant.</p>	
<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Effectiveness of the first line of Member State defence (i.e. answers to the effectiveness questions of the parallel DG MOVE evaluation)</li> <li>• Effectiveness of the first line of non-Member State defence (e.g. content of inspection reports, number of vessels/share of fleet which are subject to extended checks)</li> <li>• Developments in the indicators defined to measure safety, working and living conditions, and environmental protection</li> </ul>	<ul style="list-style-type: none"> <li>• Parallel DG MOVE evaluation of Directives 2009/21/EC and 2009/18/EC</li> <li>• Any assessments of flag State compliance made by e.g. EMSA, IMO, or ILO</li> <li>• Transport Statistical Pocketbook 2015</li> <li>• EMSA monitoring data – EMCIP accident investigation results</li> <li>• EMSA annual overview of marine casualties and accidents</li> <li>• Latest developments in IMO, ILO and Paris MoU</li> <li>• Equasis database</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>

**Relevance**

**1. To what extent is the layer of defence provided by PSC (safety, working conditions, and environmental protection) still required and appropriate?**

<p>Stakeholder input relating to:</p> <ul style="list-style-type: none"> <li>• State of the first line of defence</li> <li>• Needs for the PSC line of defence</li> <li>• Awareness among stakeholders on developments in safety, working conditions, and environmental protection</li> <li>• Appropriateness of the provisions of Directive 2009/16/EC</li> </ul>	<ul style="list-style-type: none"> <li>• Answers to the relevance questions in the Open Public Consultation</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Targeted interviews with Member State stakeholders</li> </ul>
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**Methodological approach**

Responding to the relevance question therefore concerns developing and analysing the baseline for the evaluation. For instance, what are the most recent developments in safety, working conditions, and environmental protection? How have these changes been impacted by the actions taken by flag States and ship owner? and what actions are still needed from the port State perspective? and how can these actions be encouraged by PSC Directive?

Hence, responding to this question involves looking back as well as looking forward. We will be looking backwards in the sense that we will look into the relevant developments and assess whether e.g. working conditions have improved or deteriorated. If they have improved, the Directive may appear less relevant than when it was decided upon. This said, the Directive may have caused some of these improvements – but this is an issue for the effectiveness evaluation questions. Being forward-looking is about the further scope for improvement to be encouraged by PSC Directive.

**Effectiveness**

**2. To what extent is the targeting of what are described as higher risk vessels effective?**

**Would other risk factors contribute to increase target effectiveness?**

**What do we want to measure?**

The first effectiveness question is about whether the selection of ships for inspection under the New Inspection Regime (NIR) (guided by Article 12 of Directive 2009/16/EC), according to their risk profiles (guided by Article 10), has led to the highest possible positive contribution to safety, working conditions, and environmental protection. In other words, it is about whether the introduction of the NIR, and particularly factors used for identifying higher risk ships, has led to a reduction of substandard shipping by increasing the frequency of inspection of substandard ships while reducing the frequency of inspection of quality ships.

The measurement of these effects involves three elements. First, we will measure how the NIR has led to a different system of targeting of ships – a targeting system that may seem less attractive from a cost-efficiency perspective. Hence, as the NIR requires all Priority I ships to be inspected (guided by Article 5), we will assess whether this provision led to a development away from selecting the relatively easy inspections of well-performing ships to inspecting higher risk ships. We will also examine whether the frequency of higher risk inspections has increased and whether expanded and/or more detailed inspections were performed on those ships. Furthermore, we will look whether the targeting of higher risk ships contributed to a higher number of ships being sanctioned – leading to increased pressure on substandard ships. We will also assess whether the targeting of higher risk ships led to any unintended effects.

Secondly, we will measure whether the increased experience from inspecting the most substandard ships has improved inspection results, and so improved safety, working conditions, and environmental protection.

Thirdly, we will try to assess the effectiveness of selecting the most substandard ships on the basis of their risk profiles (as specified in Annex II to the Directive). We will measure whether the right ships are being targeted based on ship risk profile factors and thus selected for inspection applying these factors. Finally, we will analyse the appropriateness of the risk factors and derive recommendations for changes to these.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Number of HRS, SRS and LRS inspections per Member State</li> <li>• Number of initial, expanded and more detailed inspections and their content</li> <li>• Number of detained and refused access ships</li> <li>• Number of sanctioned ships</li> <li>• Number of ships inspected at anchorage</li> <li>• Number of black/grey/white flag states and its development throughout years</li> </ul>	<ul style="list-style-type: none"> <li>• THETIS</li> <li>• Transport Statistical Pocketbook 2015</li> <li>• EMSA Horizontal Analysis of Visits to Member States 2015</li> <li>• Paris MoU Annual Report, 2015</li> <li>• Ex-Post Impact Assessment on the Implementation and Effects of the Third Maritime Safety Package, EPRS, 2014</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
<p>Stakeholder input relating to:</p> <ul style="list-style-type: none"> <li>• Balance/dilemma between cost-efficiency and the higher costs of inspecting the most substandard ships</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>

**Effectiveness**

**2. To what extent is the targeting of what are described as higher risk vessels effective?**

**Would other risk factors contribute to increase target effectiveness?**

- Value of learning-by-doing from inspections
- Views on appropriateness of risk profile design

**Methodological approach**

The evaluation of the effectiveness of targeting inspections of higher risk vessels will benefit from comparisons with the inspection targeting behaviour prior to the Directive (that may have been relatively more biased towards cost-efficiency than effectiveness). Hence, we will try to establish a historical baseline – i.e. indicator values – that starts a number of years before 2009 and then compare an extrapolation of this baseline up to the present day (i.e. an estimate of the counterfactual situation) that may be compared with the actual indicator values. The data on the number of higher risk ships inspected and the use of expanded and/or more detailed inspections after 2011 will be gathered through THETIS database, whereas data prior to the Directive will be collected through other sources (e.g. Paris MoU Annual Reports and EMSA data).

Regarding the evaluation of the design of the risk profiles of ships used for the targeting of inspections, we will use already existing studies on risk at sea, experience in implementing the Directive as well as interviews with the experts in the field, and then assess whether the criteria are appropriate.

**Effectiveness**

**3. To what extent are all eligible ships covered by inspections (PSC, flag state, EU legislation)?**

**Are there any gaps in coverage?**

**What do we want to measure?**

Building on the first effectiveness question, we want here to assess whether or not there is a gap in the coverage of ships by inspections influences the effectiveness of securing safety, working conditions, and environmental protection, and if there is such a gap, what is its extent.

Article 3.4 of the Directive 2009/16/EC excludes from its scope fishing vessels, warships, naval auxiliaries, wooden ships of a primitive build, government ships used for non-commercial purposes and pleasure yachts not engaged in trade. Similarly, Directive 2009/18/EC excludes such ships flying the flag of one of the Member States. Given that these vessels are currently excluded from the scope of the Directive, in this evaluation question we will assess whether there is a need to consider extension of the scope to cover other ship types – particularly fishing vessels. In doing so, we will bear in mind that the port state control of merchant ships and fishing vessels is not of the same nature, considering the risks and consequences of IUU fishing.

Furthermore, according to Article 5 of Directive, Member States have to inspect all Priority I ships calling at its ports and anchorages, as well as carry out annually a total number of inspections of Priority I and Priority II corresponding to at least its share of inspections.<sup>44</sup> However, as the Commission's report assessing implementation of the Directive pointed out, some Member States do not meet their commitments and as such, a number of high risk ships are not being inspected. Thus, a first step in measuring this aspect of effectiveness is to establish an account of which ships are not covered by inspections and how many Priority I and Priority II ships are missed compared with the inspected ones. In addition, Article 8 provides a possibility to postpone Priority I inspection in certain circumstances (i.e. if inspection would create a risk to safety, ship call takes place in the night); thus we want to measure whether this provision is used, how often and what effect it has. It is also interesting to analyse how many of the Priority I ships are missed in over-burdened Member States<sup>45</sup> (i.e. where the number of Priority I calls exceeds the inspection share).

Moreover, the under-burdened Member States (i.e. where the total number of Priority I and II calls is less than the inspection share) have to inspect all Priority I ships and at least 85% of the total number of Priority II. This requirement of Priority II can lead to over-inspection of 'safer ships' and thus we want to measure the potential effects of this on the intended objectives.

A second step is then to assess whether or how much such gaps impact the level of effectiveness – i.e. whether it affects the choice of ship used and/or whether the excluded ships provide different risks regarding safety, working conditions, and environmental protection.

**Indicators**

**Sources**

<sup>44</sup> Article 6 and 7 allows some deviation from compliance with the inspection commitment.

<sup>45</sup> In 2011, the over-burdened Member States were France, Greece, Ireland, Italy and Spain.

Effectiveness	
<b>3. To what extent are all eligible ships covered by inspections (PSC, flag state, EU legislation)?</b>	
<b>Are there any gaps in coverage?</b>	
<ul style="list-style-type: none"> <li>• Number and type of ships not being inspected</li> <li>• Number of missed Priority I and Priority II ships per Member State</li> <li>• Number of postponed inspections and exceptional circumstances</li> <li>• Level of standard of ships not being inspected vs. those being inspected – regarding safety, working condition and environmental risks</li> </ul>	<ul style="list-style-type: none"> <li>• THETIS</li> <li>• EMSA Horizontal Analysis of Visits to Member States 2015</li> <li>• Ship registers</li> <li>• Interviews with national authorities and inspectors</li> <li>• Directives 2009/21/EC and 2009/18/EC</li> <li>• Other EU legislation</li> <li>• Report assessing the implementation and the impact of the measures taken according to the Directive 2009/16/EC on port State control, COM (2012(660)) final</li> <li>• Paris MoU Annual Report, 2015</li> <li>• Ex-Post Impact Assessment on the Implementation and Effects of the Third Maritime Safety Package, EPRS, 2014</li> <li>• IMO and ILO</li> <li>• Equasis database</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
<p>Stakeholder input relating to:</p> <ul style="list-style-type: none"> <li>• Views on whether exclusion of ships eligible for inspections affect behaviour of ship owners</li> <li>• Views on whether other types of vessels should be covered under the Directive</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with shipowners</li> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>
<b>Methodological approach</b>	
<p>The methodology to be applied for this evaluation question will therefore partly make use of hard evidence and soft evidence.</p> <p>The hard evidence on the number of ships not being inspected and missed Priority I and Priority II ships will be used as an indicator of effectiveness from a coverage point of view – i.e. the more Priority I ships not being inspected the higher likelihood for adverse effect on safety, working condition and environmental protection. We will use the THETIS database to identify the missed inspections and assess their risk profiles. We will devote specific focus to the over-burdened Member States and their share of missed Priority I and Priority II inspections. We will also assess the effects of inspecting more Priority II ships in the under-burdened Member States.</p> <p>The soft evidence gathered through interviews with relevant stakeholders and through desk research will be used to identify further gaps in the coverage. We will use existing studies such as the EMSA's Horizontal Analysis of Visits to Member States (2015) and the Ex-post IA of Third Maritime Safety Package (2014), as well as interviews with stakeholders, to understand the gaps in coverage and the reasons behind them. Finally, we will look at what prevents national authorities from inspecting all eligible ships and whether there is a need to extend the scope of the Directive to other types of ships.</p>	



**Effectiveness****4. To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions?****What do we want to measure?**

While the two first effectiveness questions relate to the selection of ships for inspection, this third effectiveness question more directly concerns whether or not the Directive as a whole has led to improvements in safety, environmental protection and social conditions, and the extent to which it has contributed to the intended objectives.

In this context, it should be acknowledged that the Directive does not provide specific targets for safety, environmental protection, and social conditions. In any case, we are fully aware that these issues are influenced by many other Directives and legislation, as well as by other developments such as sea traffic, trade volumes, and weather conditions.

Hence, the measurement of effectiveness here is about understanding recent developments in safety, environmental protection and social condition indicators, assessing whether they have moved in the right or wrong direction, and assessing how much influence the Directive has had on this.

Furthermore, we will use the main findings from Question 1 and Question 2 on Effectiveness to understand their contribution to improving safety, environmental protection and social conditions. In other words, we will use the findings on, for instance, whether targeting higher risk ships has led to a reduction in the number substandard ships in the EU waters – which in return could lead to a safer environment and better social conditions.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Safety (e.g. number of accidents, marine casualties, traffic volume)</li> <li>• Environmental protection (e.g. number of marine pollution incidents, GHG reduction, length of polluted shoreline, number of endangered species)</li> <li>• Social conditions (e.g. number of occupational accidents: sickness days or deaths)</li> </ul>	<ul style="list-style-type: none"> <li>• EMSA statistics</li> <li>• Eurostat statistics</li> <li>• Recent relevant studies</li> <li>• EMSA Horizontal Analysis of Visits to Member States 2015</li> <li>• European Marine Casualty Information Database (EMCIP)</li> <li>• Other legal documents</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
Stakeholder input relating to: <ul style="list-style-type: none"> <li>• Views on contribution of the Directive to the identified indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Findings from other evaluation questions</li> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>



## Effectiveness

### ***4. To what extent has the Directive contributed to the intended objectives in terms of improvements in safety, environmental protection and social conditions?***

#### **Methodological approach**

Effectiveness here will thus be measured via analysing the developments in a number of indicators – and in doing this, assessing which of these developments – safety, environmental protection, and social conditions – have been most positive or negative.

Furthermore, we will – mainly on the basis of views received from national authorities and inspectors – assess the Directive's contribution to any improvements observed, hereunder where the Directive has had most and least success regarding improving safety, environmental protection or social conditions.

Finally, we will examine the main findings of question 1 and question 2 on Effectiveness, and examine if these findings contribute to the intended objectives. For instance, we will look at whether targeting higher risk ships for inspection has reduced the number of substandard ships in EU waters and, as such, has contributed to safety, environmental protection and social conditions. We will use the main findings of the question 1 and question 2 as well as interviews with national authorities, inspectors and other relevant stakeholders.

**Effectiveness**

**5. How does the inspectors' training and qualification perform? How can the (present and future) availability of qualified inspectors be ensured and promoted?**

**What do we want to measure?**

The fourth effectiveness question goes beyond the third question by seeking to ascertain the importance or contribution of inspectors' training and qualifications for improvements in safety, environmental protection and social conditions.

Article 4 of the Directive requires that Member States maintain appropriate competent authorities with the requisite number of qualified inspectors. Furthermore, Article 22 states that inspections should only be carried out by inspectors who fulfil the minimum qualification criteria set in Annex XI of the Directive and are authorised by the competent authorities. The inspectors must have *inter alia* completed a minimum of one year's service as a flag State inspector, either by dealing with surveys and certification or by being involved in the monitoring of the activities of recognised organisations to which statutory tasks have been delegated. However, many of flag States have delegated their flag State surveys to classification societies (i.e. recognised organisations), which can make it difficult for inspectors to gain experience and comply with the criteria set out above.

In this evaluation question, we want to assess whether the number of inspectors (both full-time and part-time) is appropriate to carry out the required inspections and whether they fulfil the minimum criteria requirement. We also want to measure their performance and how it relates to their training and qualifications. This measuring will be measured in different ways. We will, for example, ask for stakeholder views on their experience with the quality/qualifications of the inspectors they meet, views on possible recruitment problems, and views on the training being offered.

Furthermore, we want to explore ways to ensure that qualified inspectors are available now and in the future. As EMSA is responsible for developing and implementing a 'Harmonized Community Scheme' for the training and assessment of competences of port state control inspectors by Member States, we will assess whether this scheme ensures and promotes the availability of qualified inspectors. We will also measure whether the inspectors make use of other available training tools *inter alia* EMSA's seminars and Distance Learning Programmes.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Number of inspectors (part-time and full-time)</li> <li>• Number of inspectors fulfilling qualification criteria and other data on qualifications (e.g. years in service)</li> <li>• Use of harmonised training tools for PSC officers</li> <li>• Number of training seminars available and use of them</li> <li>• Number of Distance Learning Programmes available and use of them</li> <li>• Spending on training of inspectors</li> </ul>	<ul style="list-style-type: none"> <li>• EMSA Horizontal Analysis of Visits to Member States 2015</li> <li>• EMSA 'Harmonised Community Scheme' for inspectors</li> <li>• EMSA's seminars and Distance Learning programmes</li> <li>• Staff records</li> <li>• Annual accounts of inspecting authorities</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>

**Effectiveness**

**5. How does the inspectors' training and qualification perform? How can the (present and future) availability of qualified inspectors be ensured and promoted?**

<p>Stakeholder input relating to:</p> <ul style="list-style-type: none"> <li>• Views on the performance of inspectors' training and qualification (e.g. content/quality of training, availability of training (does it match MS needs?))</li> <li>• MS views on challenges in respect to ensuring qualified inspectors now and in the future</li> </ul>	<ul style="list-style-type: none"> <li>• EMSA's evaluation of training activities</li> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>
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**Methodological approach**

A methodological challenge when measuring performance is that this question has aspects of both efficiency – that is also covered by Questions 7 and 8 below – and effectiveness. For example, an increase in the number of inspectors may indicate higher effectiveness as it may lead to further improvements in safety, environmental protection and social conditions. A decrease in the number of inspectors may in turn indicate an increase in efficiency as fewer inspectors may be able to do the job – and maybe because they have been better trained than before.

Hence, we will have to examine this by answering questions such as:

- are there enough inspectors to carry out the required inspections?
- do they fulfil the minimum criteria set out in Annex XI?
- are they sufficiently trained/qualified to carry out the increasingly complex inspections as a result of the NIR (targeting of higher risk profile ships)?
- do inspectors make use of available training tools (e.g. seminars and Distance Learning Programmes) provided by EMSA?
- could training activities be improved to further increase the qualifications of the inspectors?

To answer these and other questions, we will analyse the information collected by EMSA during the Member States visits as well as conduct interviews with both inspectors and national authorities.

**Effectiveness****6. How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?****What do we want to measure?**

The final effectiveness question also goes beyond the third effectiveness question by attempting to assess the importance of EMSA's publication of company performance for improvements in safety, environmental protection and social conditions as well as for avoiding distortion of competition.

According to Article 5 of the Directive, ships are targeted for inspection based on their risk profile, which is determined, amongst other factors, by company performance (guided by Article 10 and Annex 1). The company performance is established by the number of inspections, deficiencies and detention rates of all ships in a company's fleet, which have been subject to an inspection within the EU or in other States party to the Paris MoU.<sup>46</sup> A list of companies whose performance has been low or very low for a continuous period of 36 months (guided by Annex of Regulation No 802/2010) is published by EMSA. The inspections, deficiencies and detentions, as well as all ship and company information, are recorded and validated in THETIS database.

For this evaluation question, we want to measure whether or not the publication of company performance has led to improved safety, environmental protection and social conditions. To do so, we want to measure whether the behaviour of low and very low performing companies have changed once they have been placed on the publically available list. In other words, we want to assess whether the placement on the list has led to improved company performance through reduction of deficiencies and detentions.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Number of companies with low and very low performance listed on the website<sup>47</sup></li> <li>• Number of companies that have improved their company performance status, i.e. analysis of time-trends per company</li> <li>• Share of such companies listed on the public website</li> </ul>	<ul style="list-style-type: none"> <li>• EMSA website</li> <li>• THETIS</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
Stakeholder input relating to: <ul style="list-style-type: none"> <li>• Views on the developments in the share of transport carried out by substandard ships</li> <li>• Views on the effect of website on safety, environmental protection, and social condition</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>

<sup>46</sup> Commission Implementing Regulation No 1205/2012 of 14 December 2012 amending Regulation No 802/2010 as regards the company performance

<sup>47</sup> The list of low and very low performing companies is available here: <https://portal.emsa.europa.eu/web/thetis/company-performance>

**Effectiveness**

**6. How has the publication of company performance in accordance with Article 27 and Commission Regulation 802/2010 (as amended) worked?**

**Methodological approach**

The methodology applied for this evaluation question will also partly make use of hard evidence and soft evidence.

The hard evidence on the development in the number of companies with low and very low company performance listed on EMSA's website will be used as an indicator of how many companies demonstrate failure to comply with the international conventions on maritime safety, protection of environment and maritime labour standards. Furthermore, we want to measure whether the placement on the list led to different behaviour, and as such, we will endeavour to gather quantitative data on how many companies have actually moved from the list due to improvements in the company performance.

The soft evidence will be used to understand the developments and the reasons behind these developments of the companies placed on the list. Through interviews with different stakeholders (potentially with companies placed on the list), we will try to assess whether the companies were motivated to improve their performance in order to be removed from the list.

**Efficiency**

**7. What are the administrative costs incurred by stakeholders? To what extent are these proportional to the risks?**

**What do we want to measure?**

We understand this evaluation question concerns whether or not the administrative costs of the Directive incurred by different stakeholders are proportionate compared with avoidance of safety risks, environmental protection risks and social condition risks.

First, we want to measure the extent of the administrative costs incurred by different stakeholders (i.e. national authorities, inspectors, different ship owners and others) due to the introduction of the Directive. For instance, this covers whether or not the introduction of higher risk ships targeting has led to the use of more complex inspections, which in return are more costly for the port State control authorities and are more resource demanding for inspectors. On the other hand, the introduction of higher risk ships targeting have led to fewer inspections of well performing ship companies and, as such, may have contributed to lower administrative costs for these companies. We also want to assess the impact on avoiding distortion of competition.

Second, we want to measure whether the identified administrative costs incurred by different stakeholders are proportionate to the risks associated with not having the Directive in place.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>Administrative costs per different type of inspection (taking into account different stakeholders)</li> <li>Other administrative costs (training of inspectors, maintenance of THETIS, etc.)</li> <li>Number of inspections (by complexity)</li> </ul>	<ul style="list-style-type: none"> <li>THETIS</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
Stakeholder input relating to: <ul style="list-style-type: none"> <li>Views on the balance between administrative costs and the quality of inspections</li> </ul>	<ul style="list-style-type: none"> <li>Interviews with national authorities</li> <li>Interviews with inspectors</li> <li>Interviews with ship owners</li> </ul>

**Methodological approach**

The calculations will be based on the EU Standard Cost Model for estimating administrative costs (Better Regulation Guidelines, Tool #53). This method ensures the proper assessment of the net costs imposed by the Directive (net costs = costs introduced by the Directive, minus the costs it would eliminate at EU and/or national level). We will follow the step by step application of the model as presented below:

**PHASE I: PREPARATORY ANALYSIS**

<b>STEP 1:</b>	Identification and classification of information obligations (e.g. Priority I inspection) & data requirements
<b>STEP 2:</b>	Identification of required actions (e.g. training of inspectors )
<b>STEP 3:</b>	Classification by regulatory origin (e.g. EU Directive)
<b>STEP 4</b>	Identification of target group(s), also called segmentation(e.g. national port authorities)
<b>STEP 5</b>	Identification of the frequency of required actions(e.g. all Priority I inspections)
<b>STEP 6</b>	Identification of relevant cost parameters

**Efficiency**

**7. What are the administrative costs incurred by stakeholders? To what extent are these proportional to the risks?**

	Qualitative assessment of significant burdens (i.e. applying de minimis threshold test to determine which information obligations need to be quantified)
<b>STEP 7</b>	Choice of data sources and, if necessary, development of data capture tool(s)
<b>PHASE II: DATA CAPTURE AND STANDARDISATION</b>	
<b>STEP 8</b>	Assessment of the number of entities concerned (e.g. 23 national authorities)
<b>STEP 9</b>	Assessment of the performance of a 'normally efficient entity' in each target group, taking into account cost parameters identified in step 6
<b>PHASE III: CALCULATION AND REPORTING</b>	
<b>STEP 10</b>	Extrapolation of validated data to EU level
<b>STEP 11</b>	Final reporting and transfer to the database

Following these steps, we will quantify the net cost of the Directive. Finally, we will assess the magnitude of the risks associated with not having the Directive in place.

**Efficiency**

**8. To what extent is there an efficient usage of the THETIS database? To what extent is the interaction between THETIS and SafeSeaNet optimal? To what extent would a single targeting mechanism reduce administrative burden?**

**What do we want to measure?**

The second efficiency question goes beyond the first by assessing the success in selecting the most substandard ships for inspection by THETIS, and via this targeting, reduce the administrative burden. More precisely, we want to measure if the THETIS database is being used in an efficient manner, and if not, how could its value be increased.

THETIS is a centralised information system that supports the New Inspection Regime (NIR) and assists Member States with the harmonisation of PSC procedures and execution. It also assists Member States with targeting and selecting the right vessels for inspection through continuous profiling of the vessels and provides statistics on inspection results and performance. Currently, THETIS records around 18,000 inspections per year by 600 authorised users from 27 countries. Thus, for this evaluation question, we first want to measure the usage of the database and assess the efficiency of the system. We want to measure whether all inspections are recorded in the system and whether the reports provided by inspectors are complete. Furthermore, we want to assess whether there are any issues related to efficiency of the system.

In order to facilitate planning of the inspections, the database is linked to the SafeSeaNet system. SafeSeaNet provides information on ships in or expected at all ports of the Member States. As this is a crucial feature for planning of the inspections, we also want to measure how well the two systems interact and assess whether there are any inefficiencies here including the experience at the vessels.

THETIS interfaces with a number of other maritime safety-related databases (e.g. databases of EU recognised classification societies, national information systems), which helps to provide a full picture for inspectors. We want to measure how THETIS interacts with other databases and whether it provides additional value for inspectors.

Finally, we want to assess whether a single targeting mechanism would reduce administrative burdens of Member States.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Number of uses of THETIS</li> <li>• Number of problems/errors recorded by users of THETIS</li> <li>• Number of empty/missing inspection reports</li> <li>• Types of ships selected from THETIS</li> </ul>	<ul style="list-style-type: none"> <li>• THETIS database</li> <li>• SafeSeaNet</li> <li>• EMSA Horizontal Analysis of Visits to Member States 2015</li> <li>• EMSA information</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
Stakeholder input relating to: <ul style="list-style-type: none"> <li>• Views on the appropriateness of ships selected for inspections</li> <li>• Views on THETIS contribution to reduce the administrative burden.</li> <li>• Views on the potential for a single targeting mechanism among the users of THETIS and SafeSeaNet</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>
<b>Methodological approach</b>	



**Efficiency**

**8. *To what extent is there an efficient usage of the THETIS database? To what extent is the interaction between THETIS and SafeSeaNet optimal? To what extent would a single targeting mechanism reduce administrative burden?***

The methodology applied for this evaluation question will also partly make use of hard evidence and soft evidence.

The hard evidence on the usage of THETIS database, number of error/problems recorded, number of incomplete reports submitted will be used to assess the efficiency of the system. Furthermore, we will collect quantitative data, if available, on interaction of THETIS with SafeSeaNet and other maritime safety-related databases.

The soft evidence collected through interviews with inspectors and national authorities will be used to evaluate the database and assess whether and how it provides additional value for both inspectors and national authorities.

**Coherence****9. To what extent is the Directive coherent having regard to the other legislation applicable in this area such as Directive 99/35 and flag state surveys? Are there any gaps or overlaps?****What do we want to measure?**

This Directive, together with its four implementing regulations, ensures that there is effective compliance with international standards by ships in EU ports. The Directive was a part of the Third Maritime Safety Package that consisted of seven legislative proposals aiming at improving the level of maritime safety and prevention of accidental pollution by ships.

Thus, in this evaluation question of coherence, we want to assess how well the Directive works together with other EU and international maritime legislation (e.g. IMO, ILO, Paris MoU) in order to contribute to improvements in safety, environmental protection and social conditions. Particularly, we want to measure whether the Directive works well with other EU maritime legislations inter alia:

- Directive 99/35/EC on regular ro-ro ferry and high-speed passenger craft services
- Directive 2009/21/EC on compliance with flag State requirements
- Directive 2002/59/EC on Community vessel traffic monitoring and information system as amended
- Directive 2009/20/EC on the insurance of ship owners
- Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues

Additionally, we want to assess the areas where there are inefficiencies or contradictions, if any.

With regards to Directive 99/35/EC on mandatory regular checks on regular ro-ro ferries and high-speed passenger craft, these vessels are subject to bi-annual inspections and according to recital 22 of the PSC Directive should be taken into account toward the fulfilment of the NIR inspection commitment. However, the Ex-post IA on Third Maritime Safety Package (2014) noted that in practical terms those vessels are qualified as 'no priority' and as such are not 'counted in'. Accordingly, the resources used in the inspections of those vessels are not reflected in the fulfilment of the inspections' commitment. In addition, a flag State and host State (i.e. port State) may be the same country (e.g. a Danish ferry operating between two Danish cities), which may result in 'overinspection' from a shipping company's point of view. Thus, for this evaluation question, we will look for inconsistencies (as described above) and synergies in achieving the intended objectives and its administrative impact.

With regard to Directive 2009/21/EC, the primary responsibility to ensure that ships comply with the international standards lies with the flag State. However, where it has been established that there is a serious failure on the part of flag States to implement and enforce international standards, the port State control regime provides a safety net for reducing the substandard shipping. For this evaluation question, we also want to examine whether or not the PSC Directive provides this intended safety net against substandard shipping and whether or not there are any gaps and overlaps with the flag State Directive.

Finally, we will use the assessment completed for the relevance question (i.e. question 1) on international fora such as the IMO, ILO and Paris MoU to evaluate whether the PSC regime is coherent with the international standards.

**Indicators****Sources**

<b>Coherence</b>	
<b>9. To what extent is the Directive coherent having regard to the other legislation applicable in this area such as Directive 99/35 and flag state surveys? Are there any gaps or overlaps?</b>	
<ul style="list-style-type: none"> <li>• Inconsistencies and synergies in achieving intended objectives</li> <li>• The level of coherence of the Directive with the rest of Third Maritime Safety Package</li> </ul>	<ul style="list-style-type: none"> <li>• EUR-Lex</li> <li>• Parallel DG MOVE evaluation of Directives 2009/21/EC and 2009/18/EC</li> <li>• Third Maritime Safety Package</li> <li>• Ex-Post Impact Assessment on the Implementation and Effects of the Third Maritime Safety Package, EPRS, 2014</li> <li>• Latest developments in IMO, ILO and Paris MoU</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
<p>Stakeholder input relating to:</p> <ul style="list-style-type: none"> <li>• stakeholder input on the coherence of the Directive with the Third Maritime Safety Package</li> <li>• views on whether and how PSC works well with other EU requirements (e.g. insurance, vessel traffic monitoring and information system, etc.)</li> <li>• views of inspectors on whether some rules overlap (i.e. requiring additional resources)</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>
<p><b>Methodological approach</b></p> <p>We will answer this evaluation question through an analysis of the requirements of the Directive and other legislation in the area of maritime safety in the EU (i.e. Directive 99/35/EC, Directive 2009/21/EC, Directive 2002/59/EC, Directive 2009/20/EC, Directive 2000/59/EC) and internationally. We will assess whether or not there are any overlaps, inconsistencies or synergies in their provisions.</p> <p>Furthermore, we will also assess whether there are any gaps or inconsistencies in the contribution to improvements in safety, environmental protection and social conditions. Further, the impact assessment of the Third Maritime Safety Package will be reviewed in depth to address the coherence in the impacts of the implementation of the Directive next to those of the rest of the legislative package.</p>	

**EU added value**

**10. What does the Directive add to the work being done by MS either individually or within the context of the PMoU?**

**What do we want to measure?**

Finally, we would like to measure EU added value, which concern the achievements of PSC that can reasonably be argued are due to the Directive, and so would not have been made by the Member States individually or within the context of the Paris MoU.

Hence, this last evaluation question concerns the principle of subsidiarity (Article 5 of the TEU) stating that the EU should only act when the objectives can be better achieved by EU action rather than potentially varying action by Member States. The EU added value test provided by Tool #3 of the Better Regulation Guidelines could here be useful to revisit.

Furthermore, the Better Regulation Guidelines, Tool #42: "Identifying the evaluation criteria and questions" sets the scene for measuring EU added value on the basis of the following three criteria:

- Effectiveness – where we would like to measure whether EU action is the only way to achieve the intended objectives and secure any missing PSC achievements, to avoid fragmentation of ship inspections and distortion of competition, and to realise the potential of a border-free Europe.
- Efficiency – where we would like to measure whether the EU offers better value for money, e.g. that PSC can be better coordinated between Member States or that resources or expertise can be pooled. For instance, a ship inspected in one EU port does not need to be inspected in the next Member State, because of the harmonized regime and banning of substandard ships.
- Synergy – where we, in continuation of the above coherence question, would like to measure whether the EU action is needed to complement, stimulate, and leverage action to reduce disparities of ship inspections, raise their standards, and create synergies between authorities.

Furthermore, we will compare the added value provided by the Directive compared to Paris MoU, as the EU regime goes further by requiring enforcement of the international standards and any EU standard which may apply (i.e. ferries in regular service, insurance requirements, control of ship generated waste)<sup>48</sup>.

<b>Indicators</b>	<b>Sources</b>
<ul style="list-style-type: none"> <li>• Share of PSC achievements that can be attributed to the Directive</li> <li>• Cost savings that can be attributed to the Directive</li> </ul>	<ul style="list-style-type: none"> <li>• Other EU legal documents (e.g. Directive 99/35/EC, Directive 2009/20/EC, Directive 200/59/EC)</li> <li>• Paris MoU</li> <li>• Interviews with national authorities</li> <li>• Interviews with inspectors</li> <li>• Interviews with ship owners</li> </ul>
<b>Additional information for evaluation</b>	<b>Sources</b>
Stakeholder input relating to answering the questions: <ul style="list-style-type: none"> <li>• What is the additional value resulting from the EU PSC regime?</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with Member State authorities and inspectors</li> <li>• Interviews with EMSA, IMO, and Paris MoU</li> <li>• Targeted questionnaire survey</li> <li>• Open Public Consultation</li> </ul>

<sup>48</sup> Directive 99/35/EC, Directive 2009/20/EC and Directive 200/59/EC.

**EU added value**

**10. What does the Directive add to the work being done by MS either individually or within the context of the PMoU?**

- What actions, if any, would be easier to achieve by Member States individually?
- To what extent do the issues (safety, environmental protection and social conditions) addressed by the PSC regime continue to require action at EU level?
- What would be the most likely consequences of stopping or withdrawing from the EU PSC?

**Methodological approach**

As mentioned above, our analysis will be based on the Better Regulation Guidelines, namely on Tool #42: "Identifying the evaluation criteria and questions". In doing this, and as indicated our formulation of indicators and our selection of information sources, most of the measurement of EU added value will be limited to qualitative measures. In any case, for the measurement of EU added value it is challenging to identify the counterfactual situation. We will explain this and the above limitation as part of answering the evaluation question.



## Appendix B Stakeholders consulted

<b>Stakeholder type</b>	<b>Stakeholder</b>	<b>Country</b>	<b>No. of interviews</b>
Maritime authorities responsible for PSC	Maritime and Coastguard Agency	United Kingdom	14
	Ministère de l'Ecologie, du Développement Durable, des Transport et du Logement - Direction des Affaires Maritimes - Sous direction de la sécurité maritime	France	
	Berufsgenossenschaft Verkehrswirtschaft Post-Logistik Telekommunikation	Germany	
	Swedish Transport Agency Civil Aviation and Maritime Department	Sweden	
	Maritime Office Gdynia, Inspectorate of Port State Control	Poland	
	Ministry of Economy Infrastructure Shipping & Tourism, Safety of Navigation Directorate, PSC Head Office	Greece	
	Comando Generale del Corpo delle Capitanerie di Porto	Italy	
	Dept. of Merchant Shipping (DMS), Head Office	Cyprus	
	Inspectorate for Transport, Public Work and Water Management, Netherlands Shipping Inspectorate, Maritime Shipping Enforcement, Port State Control	Netherlands	
	Transport Malta	Malta	
	Croatian Ministry of Maritime Affairs	Croatia	
	DGRM – Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos	Portugal	
	Danish Maritime Authority	Denmark	
	Romanian Naval Authority	Romania	
Shipowners	Union of Greek Shipowners	Greece	6
	Stena Line Scandinavia	Sweden	
	Polska Zegluga Morska P.P.	Poland	
	Croatian Shipowner Association	Croatia	
	DFDS	Denmark	
	Nordic Tankers	Denmark	
Ports	Port of Rotterdam	Netherlands	3
	Copenhagen-Malmö Port	Denmark/Sweden <sup>49</sup>	
	Port of Barcelona	Spain <sup>50</sup>	
Ship agents	FONASBA	International/European	1
Recognized organisations	Lloyds' register	United Kingdom	2
	Croatian register of shipping	Croatia	

<sup>49</sup> Answers provided in writing.

<sup>50</sup> Answers provided in writing.

<b>Stakeholder type</b>	<b>Stakeholder</b>	<b>Country</b>	<b>No. of interviews</b>
Third flag States	Maritime Cook Islands, Corporate Administration of the Cook Islands Ship Registry	Cook Islands	1
Pilot organisations	EMPA	European	1
EU, regional and international bodies	IMO	International	2
	Paris MoU	Regional	



## Appendix C Survey questions

### Introduction to the survey

The European Commission, Directorate-General for Mobility and Transport (DG MOVE), has decided to conduct evaluations of the following maritime Directives:

- Directives 2009/21/EC on compliance with flag State requirements (FSD)
- Directive 2009/18/EC dealing with Accident Investigation (AID)
- Directive 2009/16/EC dealing with port State control (PSC).

Ecorys and COWI have been contracted to assist the Commission in this work.

Your participation in the survey is of high importance as it will provide an opportunity to express your views on the functioning of these Directives. The results of the evaluations will provide the basis for future work of the Commission and will be shared with you once the final evaluation reports are published. In parallel with the survey, we are also conducting interviews with selected officials and experts. Even if you have already participated in an interview, we would very much appreciate your efforts in taking time to answer the survey questions.

The survey questions are tailored to you and answering them should take no more than 10-15 minutes.

### Confidentiality clause

Ecorys and COWI adhere to the EU's legislation on the protection of personal data (Regulation (EC) 45/2001). Any data collected through this survey will be managed in line with these requirements and will not be shared with third parties. The survey results will thereto be stored in a confidential manner. The data collected will be aggregated and presented anonymously in the evaluation reports. It will be guaranteed that individual answers will not be traceable to the entities surveyed. Please inform us should your policy require additional safeguards with regard to compliance. We would be pleased to cooperate on this matter.

### Part 1 – Respondent Information

1. In what country or region are you based? Select one answer.

<input type="radio"/> Belgium	<input type="radio"/> Netherlands
<input type="radio"/> Bulgaria	<input type="radio"/> Austria
<input type="radio"/> Czech Republic	<input type="radio"/> Poland
<input type="radio"/> Denmark	<input type="radio"/> Portugal
<input type="radio"/> Germany	<input type="radio"/> Romania
<input type="radio"/> Estonia	<input type="radio"/> Slovenia
<input type="radio"/> Ireland	<input type="radio"/> Slovakia
<input type="radio"/> Greece	<input type="radio"/> Finland
<input type="radio"/> Spain	<input type="radio"/> Sweden
<input type="radio"/> France	<input type="radio"/> United Kingdom
<input type="radio"/> Croatia	<input type="radio"/> Europe - non-EU
<input type="radio"/> Italy	<input type="radio"/> USA
<input type="radio"/> Cyprus	<input type="radio"/> Canada
<input type="radio"/> Latvia	<input type="radio"/> South America
<input type="radio"/> Lithuania	<input type="radio"/> Asia
<input type="radio"/> Luxembourg	<input type="radio"/> Africa
<input type="radio"/> Hungary	<input type="radio"/> Australia

- Malta

2. Please indicate the sectors in which you are engaged?

Sector	Select at least one	
• Maritime authority – Flag State	○	
• Maritime authority – Port State Control	○	
• Accident Investigation	○	
• Ministry	○	
• Shipowner/operator	○	
• Ports and ship agents	○	
• Recognised organisation	○	
• Seafarers	○	
• Other, please specify...	○	<i>text</i>

3. In what capacity are you completing this questionnaire?

11 Capacity	12 Select one
• My personal capacity	○
• Private sector company	○
• Industry association or NGO	○
• Public authority	○

## Part II – Survey Questions

1. FLAG STATE DIRECTIVE AND ACCIDENT INVESTIGATION DIRECTIVE

- [Not included]

2. PORT STATE CONTROL DIRECTIVE

### Q1.1 Relevance

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you think there is still a need for PSC as a defence against 'substandard' shipping?

- Yes
- No
- Do not know

Please explain, why:

### Q1.2 Relevance

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

- Has the economic crisis had an effect on seafarers' working conditions?

- Yes (please specify in box below)
- No
- Do not know

What effect?

### Q2.1 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you rely solely on the targeting system of the Paris MoU/PSC Directive?

- Yes
- No (please specify in box below)
- Do not know

Which other factors do you use?

### Q2.2 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Does the design of the ship risk profile result in targeting of low performing ships?

- Yes
- No
- Do not know

- Optional comments:

### Q2.3 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Could the design of the ship risk profile used for targeting of ships for inspections be improved?

- Yes (please specify in box below)
- No
- Do not know

How?

### Q2.4 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Does the annual inspection commitment secure that 'substandard' ships are being inspected?

- Yes
- No
- Do not know

> Optional comments:

### Q2.5 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Is the frequency of PSC inspections proportional in relation to the goal of eliminating 'substandard' shipping?

- Fully appropriate
- Mostly appropriate overall
- Occasionally too frequent
- Too frequent
- Do not know

> You may explain your answer below (*not mandatory*).

### Q2.6 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Is the scope of PSC inspections proportional in relation to the goal of eliminating 'substandard' shipping?

- Fully appropriate
- Mostly appropriate
- Occasionally too wide in scope (e.g. for particular ship types, regions or time periods)
- Too wide in scope
- Do not know

> You may explain your answer below (*not mandatory*).

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### Q3.1 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you encounter any ships that are not being targeted for inspection but that are 'substandard' in relation to safety, security, pollution prevention and working conditions?

- Yes (please specify in box below)
- No
- Do not know

Which ship types?
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### Q4.1 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you agree with the following statements:

13		14	Fully agree	15	Mostly agree	16	Mostly disagree	17	Fully disagree	18	No opinion
19	<b>A) The PSC Directive has contributed to improvements in maritime safety?</b>	20	o	21	o	22	o	23	o	24	o
25	<b>B) The PSC Directive has contributed to improvements in maritime security?</b>	26	o	27	o	28	o	29	o	30	o
31	<b>C) The PSC Directive has contributed to improvements in maritime pollution prevention?</b>	32	o	33	o	34	o	35	o	36	o
37	<b>D) The PSC Directive has contributed to improvements in maritime working conditions?</b>	38	o	39	o	40	o	41	o	42	o
43	<b>E) The PSC Directive has prevented distortion of competition?</b>	44	o	45	o	46	o	47	o	48	o

### Q4.2 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

What are the major contributing factors of the Directive:

49		50	Significant role	51	Some role	52	Little role	53	No role	54	Do not know
55	<b>A) Harmonisation effect?</b>	56	o	57	o	58	o	59	o	60	o
61	<b>B) EU enforcement mechanism?</b>	62	o	63	o	64	o	65	o	66	o
67	<b>C) Common information and targeting system?</b>	68	o	69	o	70	o	71	o	72	o
73	<b>D) THETIS?</b>	74	o	75	o	76	o	77	o	78	o
79	<b>E) EMSA training and distance learning</b>	80	o	81	o	82	o	83	o	84	o
85	<b>F) Other technical assistance provided by EMSA?</b>	86	o	87	o	88	o	89	o	90	o
91	<b>G) Other factors? (please specify in box below)</b>	92	o	93	o	94	o	95	o	96	o

Which other factors?

### Q4.3 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

In your opinion, does the Directive provide an incentive to the industry to invest in quality shipping?

- Significant incentive
- Some incentive
- Little incentive
- No incentive
- Do not know

> You may explain your answer below (*not mandatory*).

#### Q4.4 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Has the Directive had any unintended impacts (positive or negative)?

- Yes (please specify in box below)
- No
- Do not know

Which unintended impacts:

#### Q4.5 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you use the results of PSC inspections in your internal safety management efforts?

- Regular and systematic use (e.g. part of internal quality management system)
- Regular use in out ship maintenance planning
- Occasional use
- No use
- Do not know

> You may explain your answer below (*not mandatory*).

#### Q4.6 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

If Flag performance in PSCs being considered when deciding where to flag a ship?

- PSC is the decisive factor
- Effect on the decision, but not the decisive factor
- Little effect compared to other factors
- No effect on the decision
- Do not know

> You may explain your answer below (*not mandatory*).

**Q4.7 Effectiveness**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Has the Directive contributed to establishing fair competition between EU ports?

- Yes (please specify in box below)
- No
- Do not know

How?
------

**Q4.8 Effectiveness**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

In your opinion, does the Directive provide an incentive to the industry to invest in improving working conditions?

- Yes (please specify in box below)
- No
- Do not know

How?
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**Q5.1 Effectiveness**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you have problems complying with the PSC officer qualification requirements of the PSC Directive/Paris MoU?

- Yes (please specify in box below)
- No
- Do not know

Which problems?
-----------------



### Q5.2 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Is there any training for PSC officers that is currently not provided (at national or EU level) that could be useful?

- Yes (please specify in box below)
- No
- Do not know

Which training?

### Q5.3 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you experience or expect any challenges when recruiting PSC officers?

- Yes (please specify in box below)
- No
- Do not know

Which challenges?

### Q5.4 Effectiveness

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Are PSC officers inspecting ships at EU ports qualified? (Please tick the statements that characterise the PSC officers – you can tick more than one. If none applies please leave blank)

- Formally qualified
- Having practical experience
- Trustworthy and unbiased
- Efficient

> You may explain your answer below (*not mandatory*).

**Q5.5 Effectiveness**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you experience major differences in the approach to how PSC inspections are being carried out across the EU which impact on the quality of the inspections?

- Harmonised approach
- Few differences but no major effects on the quality of the inspections
- Some differences with some effect on the quality of the inspections
- Major differences affecting quality of the inspections
- Do not know

> You may explain your answer below *(not mandatory)*.

**Q6.1 Effectiveness**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Does the publication of the list of low and very low performance companies have an effect on your behaviour?

- Major importance for business and ship maintenance planning
- Some effect for business and ship maintenance planning
- The list is monitored, but no effect in practice
- Not aware of the list/no effect

> You may explain your answer below *(not mandatory)*.

**Q7.1 Efficiency**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you bear any costs in connection with PSC inspections that are not proportional to the goal of eliminating 'substandard' shipping (e.g. delays, increased demands on the crew)?

- Yes (please specify in box below)
- No
- Do not know

Which costs?

### Q7.2 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Have your administrative costs (connected with PSC) increased, decreased or remained the same since the introduction of the New Inspection Regime in 2011?

- Increased
- Decreased
- Remained the same
- Do not know

> You may explain your answer below (*not mandatory*).

### Q7.3 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Is the inspection regime under the PSC Directive sufficiently flexible to adapt to your geographical conditions and way of working?

- Yes
- No (please specify in box below)
- Do not know

Why and what can be improved?

### Q7.4 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you make use of the postponement option offered by the PSC Directive?

- Yes (please specify in box below)
- No (please specify in box below)
- Do not know

Why or why not?

### Q7.5 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do PSC inspections affect the day-to-day business of your port (e.g. delays, congestions)?

- Yes (please specify in box below)
- No
- Do not know

How?

### Q8.1 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you use THETIS to monitor the work of your PSC officers?

- Yes (please specify in box below)
- No (please specify in box below)
- Do not know

Why or why not?

### Q8.2 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you use (the public part) of THETIS?

- Use on a regular basis
- Use, but not on a regular basis
- Aware of its existence
- Not aware of its existence

> You may explain your answer below (*not mandatory*).

### Q8.3 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
---------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you actively use the information in THETIS on your progress towards achieving the annual inspection commitment to plan your inspections?

- Yes (please specify in box below)
- No (please specify in box below)
- Do not know

Why or why not?

#### Q8.4 Efficiency

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Could the interface between THETIS and SafeSeaNet be further improved?

- Yes (please specify in box below)
- No
- Do not know

How?

#### Q9.1 Coherence

For Ports and ship agents: Coherence questions to be posed only if the efficiency question (Q7.5) was "Yes".

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Is there a need for better coordination between the PSC Directive, Directive on compliance with flag State requirements and Directive on ro-ro ferries and high speed passenger craft?

- Yes
- No
- Do not know

> You may explain your answer below (*not mandatory*).

#### Q9.2 Coherence

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you find it problematic that PSC regimes are not harmonised around the world?

- Yes
- No
- Do not know

> You may explain your answers below (*not mandatory*).

**Q9.3 Coherence**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Would it be an added value to include inspections under other EU legislation within the PSC Directive? (Directive 2016/802 on reduction in the sulphur content of certain liquid fuels, Regulation 1257/2013 on ship recycling and Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues)?

- Yes
- No
- Do not know

> You may explain your answer below (*not mandatory*).

**Q10.1 Added value**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

Do you experience any significant differences regarding the quality of inspections carried out at EU ports compared to non-EU Paris MoU ports (Russia, Iceland, Canada, Norway)?

- Yes (please specify in box below)
- No
- Do not know

What differences?

**Q10.2 Added value**

Maritime authority PSC	AI Bodies	Ministry	Ship owners	Ports and ship agents	Recognised organisations	Seafarers	Other actors
------------------------	-----------	----------	-------------	-----------------------	--------------------------	-----------	--------------

How would you rate the importance of the European Commission/EMSA being a facilitator to improvements of PSC?

- Very important
- Important
- Little important
- Not important
- Do not know

> You may explain your answer below (*not mandatory*).

**Part III – Country profile information**

[Not included]





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