

Port State Control

Consolidating Progress

Annual Report

2013

THE PARIS MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL

Paris MoU



on Port State Control



Annual Report

2013

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The year 2013 was a busy and important year for the Paris MoU as a Harmonized Verification Programme (HAVEP) was conducted on cruise liners and a Concentrated Inspection Campaign (CIC) on Propulsion and Auxiliary Machinery was carried out during inspections of other ship types. We will share the results of the HAVEP and CIC with the wider maritime transport community through the International Maritime Organization (IMO).

Statement by the Paris MoU chairman

2013:
a busy and important
year for the Paris MoU

This year also saw the entry into force of the International Labour Organization's (ILO) Maritime Labour Convention (MLC) in August. This was a key event in our industry and the Convention will play an important part of port State control in the coming years.

We held our Port State Control Committee's 46th Meeting in Valetta, Malta, in May 2013. The meeting coincided with the European Maritime Day being held in Malta and this provided an opportunity to place the work of the Paris MoU in a wider context. The meeting adopted several significant matters improving



the port State control regime, many of which you can read about in this Annual Report. The meeting itself was a success and strengthens the Paris MoU for the future and Malta is to be complimented on the hosting and organisation for our meeting.

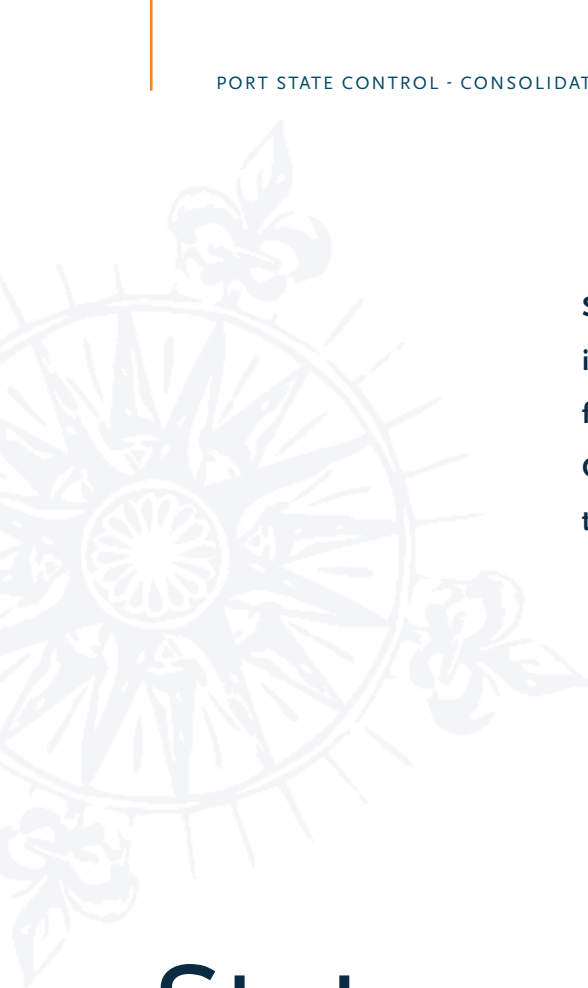
The Paris MoU relationship with other regional port State control agreements is growing. We are very proud of our co-operation with them and with the United States Coast Guard. We are also very proud of the role played by MoUs at the IMO meetings. This year we also welcomed back the Viña del Mar Agreement as an observer at Paris MoU meetings.

The Paris MoU Secretariat again continued to serve its members well during the year and I would like to thank them for their contribution. I also wish to thank the Member Authorities for their contributions to all of the different fora of the Paris MoU, including: the Technical Evaluation Group (TEG) and its Chairman; all of the contributors to our Task Forces; and finally to the members of the MoU Advisory Board (MAB), all of whom have made a tremendous contribution during the year.

I would also like to thank the European Commission and the European Maritime Safety Agency

(EMSA) for the excellent co-operation and strong working relationship with the Paris MoU. In conclusion, the Port State Control Officers (PSCOs) and Administrators in the Member Authorities of the Paris MoU are the people who ensure the success of our endeavours. They are the ones who are the core of the Paris MoU and continue to deliver on our common objectives. They deserve our special thanks and appreciation.

Brian Hogan



Since the adoption of the Maritime Labour Convention (MLC) in February 2006, it took a further 7 years for it to enter into force. Time was needed for flag States, port States, Recognized Organizations (ROs) and the maritime industry to prepare for this and meet the requirements of the Convention.

Statement by the Secretary General

Gearing up for the Maritime Labour Convention

“The Maritime Labour Convention is not about paperwork but about people and their working and living environment on board.”

Although the Paris MoU already had 30 years of experience with enforcement of working and living conditions under the umbrella of ILO Convention No. 147, new areas of compliance would now be included. These areas include employment agreements, hours of work and rest, payment of wages, repatriation at the end of contract and seafarers' complaint handling.

Several maritime conferences were dedicated to the MLC, 2006 and included sessions questioning what port State control would do after entry into force. For the Paris MoU it has been clear from the start: the MLC would become a “relevant instrument”



and enforcement would take place including the principle of “no more favourable treatment” for flags which had not ratified.

In order to reach a harmonized approach our members had to agree on formal amendments of the Memorandum to form a base line for enforcement. The PSCOs needed practical guidelines to assist them during inspections. Several training courses would be needed to bring the level of knowledge, in particular on the new areas, to the required level.

In May 2013 the amendments were adopted, the guidelines agreed and the training completed. The Paris MoU was ready for 20 August 2013, when the MLC came into force. Some Member States could not apply the new instrument because it had not

entered into force for them. For these members the “old” Convention No. 147 would remain relevant.

Closer to the entry into force date the maritime industry expressed concerns that port States could be overzealous in their enforcement and large numbers of ships would be detained. A resolution adopted by the ILO invited port States to take a pragmatic approach. And the Paris MoU has done exactly that. By issuing a press release, flag States and the industry were informed how ships would be treated in our ports. Ships have been detained only in cases of significant non-compliance. Since the MLC entered into force, detentions were issued against 21 ships for detainable MLC deficiencies with regard to wages (10), calculation and payment of wages (7), fitness for duty – hours of

work and rest (5) quantity of provisions (4) and sanitary facilities (2).

Overall the entry into force of the MLC has gone relatively smoothly from a port State control point of view. The “seafarers’ bill of rights” has made a significant contribution in securing decent working and living conditions on board ships.

The Paris MoU has firmly supported these goals in the past and will continue to do so in the future.

Richard W.J. Schiferli

With a total number of 28 ships refused access to Paris MoU ports, this was the highest number recorded since 2005. Although it was anticipated that the number of banned ships would rise, an increase of 87% compared to last year was not anticipated. Most ships have been banned for multiple detentions (17), while a significant number (9) were banned for failing to call at an indicated repair yard. Over a 3 year period the flags of the United Republic of Tanzania, the Republic of Moldova, Saint Vincent and the Grenadines and Togo have recorded the highest number of bannings.

Executive summary

One ship, the ro-ro cargo ship “Carolyn”, flag United Republic of Tanzania, was banned twice in one year - once by Malta in February and again by Italy in November 2013.

Considered to be the worldwide index for flag performance, the Paris MoU “White, Grey and Black Lists” indicate further improvements towards quality shipping.

Last year Thailand and the United States of America were congratulated for their efforts to move up to the “White List”. This year Kazakhstan, Saudi Arabia and Switzerland moved from the “Grey List” to the “White List”. A very successful achievement and an example to other flags that, through determined actions and political courage, changes can be made. Portugal and Vanuatu moved from the “White List” to the “Grey List”. Georgia, Lebanon, Saint Kitts and Nevis, Libya and Albania moved from the “Black List” to the “Grey List”. The worst performing flag of last





year the Plurinational State of Bolivia disappeared from the “Black List” due to an insufficient number of inspections and was replaced by the United Republic of Tanzania.

There are now 46 flags on the “White List”, 1 more compared with last year. France is still leading the list, followed by Norway and Sweden. Several flags have made a significant move upwards on the “White List” into the top 10: Norway, Italy, the United Kingdom and Finland. Other flags have made a significant move downwards in the “White List” and are no longer in the top 10: Bahamas and Greece.

Recognized Organizations (ROs) are delegated by flag States to carry out statutory surveys on behalf of flags. For this very reason, it is important to monitor their performance. The best performing RO over the period 2011-2013 was Lloyds Register (LR), followed by American Bureau of Shipping (ABS)

and Det Norske Veritas (DNV). Korean Register of Shipping (KRS) has dropped out of the top 5 and has been replaced by Nippon Kaiji Kyokai (NKK).

Phoenix Register of Shipping (PH.R.S) showed a remarkable increase in performance and moved from “very low performance” to “medium performance”. INCLAMAR is now at the bottom of the list in terms of poor performance. For several years a joint submission with the Tokyo MoU to IMO has addressed the correlation between flags and ROs working on their behalf. For the first time this information has been published in the Annual Report. The combinations of the Republic of Moldova with Dromon Bureau of Shipping and Maritime Lloyd (Georgia), as well as Togo with International Naval Surveys Bureau, and Sierra Leone with Phoenix Register of Shipping resulted each in a 9% detention rate over a 3-year rolling period.

The introduction of the New Inspection Regime in 2011 has also had an impact on the 2013 figures. A decrease in total number of inspections has continued, as well as the total number of deficiencies. Compared to 2012 the detention percentage has slightly increased to 3.8%. Italy, the Netherlands, Spain and the United Kingdom contribute most to the overall inspection efforts in terms of percentage. High Risk Ships have been operating mostly in the southern part of the region, while Low Risk Ships have been calling in the north-western part of the region.

With 1,188 inspections and 154 detentions the ships flying a “black listed flag” score a detention rate of 12.96%. For ships flying a “grey listed flag” the detention rate is 7.64% (851 inspections, 65 detentions) and for ships flying a “white listed flag” 2.82% (15,551 inspections and 439 detentions).

Once a year the Port State Control Committee (PSCC), which is the executive body of the Paris MoU, meets in one of the Member States. The Committee considers policy matters concerning regional enforcement of port State control, reviews the work of the Technical Evaluation Group and Task Forces and decides on administrative procedures.

Paris MoU

developments

The Task Forces, of which 10 were active in 2013, are each assigned a specific work programme to investigate improvement of operational, technical and administrative port State control procedures. Reports of the Task Forces are submitted to the Technical Evaluation Group (TEG) in which all Paris MoU members and observers are represented. The evaluation of the TEG is submitted to the Committee for final consideration and decision-making.

The MoU Advisory Board (MAB) advises the Port State Control Committee on matters of a political and strategic nature, and provides direction to the Task Forces and Secretariat between meetings of the Committee. The Board meets several times a year and in 2013 comprised participants from Germany, Italy, Norway, Russian Federation and the European Commission.

Port State Control Committee

The Port State Control Committee held its 46th meeting in Valletta, Malta from 20-24 May 2013. The MoU has 27 member States. The Committee adopted amendments to the Memorandum to include the Maritime Labour Convention 2006 as a relevant instrument. Guidelines for port State control under this Convention were also agreed, providing practical guidance for PSCOs to inspect ships starting 20 August 2013.

High importance was given to Concentrated Inspection Campaigns (CICs). A CIC on Propulsion and Auxiliary Machinery was scheduled from September to November 2013. A CIC on Hours of Rest under the STCW Convention was scheduled in 2014 and a CIC focussing on Crew Familiarisation and Entry of Enclosed Spaces in 2015. These campaigns will be carried out jointly with the Tokyo MoU and other MoUs may join as well.

In addition, the Committee considered a number of options for other joint CICs with the Tokyo MoU for 2016 and beyond. The report of the CIC on Fire Safety Systems, carried out in September to November of 2012, was presented to PSCC46. Concerns were expressed on the high percentage of CIC related detentions. The results will be published and submitted to the IMO in 2014.

The Committee also agreed on PSC guidelines for the Ballast Water Management Convention. The proposed guidelines will be submitted to the IMO correspondence group of FSI for consideration.

The Committee also considered the first results of the Harmonized Verification Programme on operational safety of passenger ships.

The Committee adopted the 2012 Annual Report, including the new White, Grey and Black List and the performance



list of Recognized Organizations. This year Thailand and the United States of America moved from the “Grey List” to the “White List”.

Technical Evaluation Group

The TEG convened in Reykjavik, Iceland, in December 2013. Ten Task Forces submitted reports to the TEG for evaluation before submission to the Port State Control Committee.

Issues considered by the TEG included:

- Improvement of the THETIS information system
- Evaluation of Paris MoU statistics
- Revision of the guidelines for PSCOs for the Maritime Labour Convention
- Development of guidelines for PSCOs regarding Ballast Water Management
- Development of the training policy
- Development of a CIC on Hours of Rest according to STCW
- Enhanced Monitoring and Reporting
- Revision of the guidelines on MARPOL Annex I

Port State Control training initiatives

The Paris MoU will continue to invest in the training and development of Port State Control Officers in order to establish a higher degree of harmonisation and standardisation in inspections throughout the region.

The Secretariat organises three different training programmes for Port State Control Officers:

- Seminars (twice a year)
- Expert Training (twice a year)
- Specialized Training (once a year)

The Seminars are open to members, co-operating members and observers. The agenda is more topical and deals with current issues such as inspection campaigns and new requirements.

Expert and Specialized Training aim to promote a higher degree of professional knowledge and harmonisation of more complex port State control issues and procedures.

Since 2012 the IMO has been sponsoring PSCOs from other PSC agreements to attend the Paris MoU Expert training programmes. In 2013, 12 PSCOs from 6 other MoUs attended Paris MoU training programmes.

The Paris MoU is also assisting EMSA in the preparation and delivery of New Entrant and Refresher Programmes for PSCOs from throughout the region.

PSC Seminar 55

The 55th Port State Control Seminar was held from 11 to 13 June 2013 in Malmö, Sweden. PSCOs from the Paris MoU and the Black Sea MoU attended the Seminar. The main topic of discussion was the train the trainer for the CIC on Propulsion and Auxiliary Machinery. Furthermore there were presentations on the dangers of self closing doors by Gard SA and several case studies on the application of Paris MoU procedures. The Secretariat presented an overview of developments



in the Paris MoU and a representative from EMSA gave a presentation on the developments within the EU and EMSA.

PSC Seminar 56

The 56th Port State Control Seminar was held from 5 to 7 November 2013 in St George's Bay, Malta. PSCOs from the Paris MoU member States attended the Seminar as well as a PSCO from a co-operating member. The main topics of discussion were the Ballast Water Management Convention, the inspection of commercial yachts and the PSCCInstruction on ISM. The Secretariat presented an overview of developments in the Paris MoU.

Train the Trainer MLC, 2006

In February 2013 two special 1.5 day "train-the-trainer" programmes were held in The Hague, Netherlands, providing member States with up

to date information on the MLC, 2006. The program focussed on the PSCCInstruction and the application of the MLC in PSC inspections.

Expert and Specialized Training

For the Expert Training the central themes are "The Human Element" and "Safety and Environment". The theme of the Specialized Training changes every year. In 2013 this training dealt with ships carrying bulk cargoes, bulk carriers and more complex related issues. Both training programmes are intended for experienced PSCOs. Using that experience, the participants can work together to establish a higher degree of harmonisation and standardisation of their inspection practice. Lecturers for the training programmes are invited from the Paris MoU Authorities and the maritime industry. For the training programmes in 2013 the United

Kingdom, Germany, the Netherlands, Spain, Italy and several Recognized Organizations, P&I Clubs and service companies, among others, provided lecturers.

The 9th Expert Training "Safety and Environment"

The ninth Expert Training programme was held in The Hague, Netherlands, in March 2013. Important issues during this training were MARPOL, SOLAS, Load Lines, life saving appliances and oil filtering equipment. Participants from the Black Sea MoU, Indian Ocean MoU, Caribbean MoU, Mediterranean MoU, Riyadh MoU and the Viña del Mar Agreement took part in the training.

The 5th Specialized Training on Bulk Cargoes

The fifth Specialized Training programme on Bulk Cargoes was held in Gijon, Spain, in April 2013. During

the training, the construction and certification, and the procedures for more detailed and expanded inspections, of ships carrying bulk cargoes were discussed. Also discussed were the properties of different types of bulk cargoes and the important issues for port State control in each case highlighted.

The 12th Expert Training “The Human Element”

In October 2013 the twelfth Expert Training programme was held in Leiden, Netherlands, with the Human Element as the central theme. The programme was dedicated to the MLC, 2006. Both the articles of the Convention as well as the flag State requirements and the PSC inspection procedures were discussed. Representatives from the ITF and ICS also attended the training to discuss with PSCOs their involvement in the MLC, specifically where a Rectification Action Plan has been issued during a PSC inspection. Participants from Member States as well as from the Black Sea MoU, Indian Ocean MoU, Caribbean MoU, Mediterranean MoU, Riyadh MoU and the Viña del Mar Agreement took part in the training.

Training in cooperation with EMSA

The Paris MoU assists EMSA in the training delivered to PSCOs from all Member States.

New Entrant and Refresher PSC Seminars

In 2013 the fully established Professional Development Scheme (PDS) of the Paris MoU encompassed 4 EMSA/Paris MoU Seminars for PSCOs.

The Paris MoU inspection regime focuses on sub-standard shipping and pivots on rewarding good performing ships in terms of the inspection frequency. It translates to “less, but better inspections”. The regime is underpinned by new and enhanced procedures, all aiming at providing more guidance for better inspections.

These ongoing improvements and performance measurement through inspection results require strict adherence to the established procedures. For the seminars organised for PSCOs held during 2013 the earlier adopted approach was followed in order to maximise the awareness concerning procedures governing port State control inspections.

The overarching goal for the seminars remained the establishment of a common understanding and harmonised approach in the area of the Paris MoU. Feedback sessions with participants during the seminars indicated that indeed a wider understanding of the procedures and the available tools such as the Paris MoU manual, RuleCheck and the distance learning modules was established. The constantly evolving methodology of delivering the lectures during the seminars is deemed effective in achieving the goals.

All seminars were organised by EMSA and held at its premises in Lisbon, Portugal. Lecturers were provided both by EMSA and the Paris MoU Secretariat. The 171 participants attending these Seminars during 2013 originated from all Paris MoU Member States.

Detention Review Panel

Flag States or ROs which cannot resolve a dispute concerning a detention with the port State may submit their case for review. The detention review panel comprises representatives of four different MoU Authorities, on a rotating basis, plus the Secretariat.

In 2013 the Secretariat received seven requests for review. Three cases did not comply with the requirements for consideration. These cases were either submitted beyond the 120 days limit, were handled at National Courts or originated from ship owners instead of flag States or ROs.

Four cases met the criteria and were submitted to MoU members for review. In two cases the detention review panel concluded that the port State's decision to detain was not justified. The panel requested this port State to reconsider the detention. In two cases the panel concluded that the detaining port State would not have to reconsider the decision to detain.

Quality management

Since 15 March 2011 the Paris MoU Secretariat has been ISO9001:2008 certified for its services and products. During 2013, the Secretariat has focused on improvement of the Quality Manual and also making preparations for recertification for a new 3-year period in 2014. The outcome of the third general customer survey concerning the products and services of the Secretariat shows that the overall scores have improved and that the customer service especially was highly rated by the Paris MoU Member States.



Paris MoU on the Internet

In 2013 the website enjoyed an ever increasing demand from a variety of visitors. In particular from flag and port States, government agencies, charterers, insurers and classification societies. They were able to monitor their performance and the performance of others on a continuous basis. The port State enters ships that are currently under detention in a listing. Validated port State control reports could be accessed and offered visitors more detailed information.

Since the contract with the hosting provider expired, a new party was contracted to host the Paris MoU website. The wish to make the site more user-friendly was also taken into account. This resulted in the development of a new design of the website, which started in the summer of 2013. The new restyled and more contemporary website was launched on 1st November 2013.

To increase public awareness of unsafe ships, particularly serious port State control detentions are published under the heading 'Caught in the Net'. These detentions are described in detail and illustrated with photographs.

In 2013 details were published of the following ships:

- Suat Bey, flag Panama
- Safi, flag Togo
- Oceanic Force, flag Comoros

The annual award for best contribution to the 'Caught in the Net' has been presented to port State Italy.

Other information of interest such as the current detentions and bannings, monthly detention lists, the Annual Report, the performance lists and news items can be downloaded from the website, which is found at www.parismou.org.

Concentrated Inspection Campaigns

Several Concentrated Inspection Campaigns (CICs) have been held in the Paris MoU region over the past years. These campaigns focus on a particular area of compliance with international regulations with the aim of gathering information and enforcing the level of compliance. Each campaign is prepared by experts and identifies a number of specific items

for inspection. Experience shows that they serve to draw attention to the chosen area of compliance.

CIC 2013 Propulsion and Auxiliary Machinery

During the period from 1 September 2013 to 30 November 2013 a CIC was carried out on Propulsion and Auxiliary Machinery.

The CIC questionnaire was completed during 3,879 inspections, a total of 1,105 CIC-related deficiencies were recorded and 68 ships (1.8%) were detained for CIC-related deficiencies.

During the campaign most inspections concerned general cargo/multi-

purpose ships with 1,270 (33%) inspections, followed by bulk carriers with 805 (21%) inspections, container ships with 458 (12%) inspections, chemical tankers with 343 (9%) inspections and oil tankers with 272 (7%) inspections.

Of the ships detained for CIC-related deficiencies, 34 (50%) were general cargo/multipurpose ships, 9 (13%) were bulk carriers and 9 (13%) were container ships. Among the other detained ships were 6 oil tankers, 4 chemical tankers and 3 refrigerated cargo ships. 54% of the detained ships were over 20 years old.



Analysis of the recorded deficiencies shows that most deficiencies relate to propulsion main engine (20%), cleanliness of the engine room (18%), emergency source of power/emergency generator (12%) and emergency lighting/batteries/switches (12%).

Most inspections were carried out on ships under the flags of Panama (495 inspections), Liberia (322 inspections), Malta (317 inspections) and Antigua and Barbuda (246 inspections). The flags with the highest number of CIC-topic related detentions were the United Republic of Tanzania with 6 CIC-topic related detentions during 27 inspections and Togo with 4 CIC-topic related detentions during 35 inspections.

Co-operation with other organizations

Nine regional MoUs have been established so far.

In order to provide co-operation to these MoUs, they may apply for observer status. Regional agreements seeking observer status must demonstrate that their Member Authorities invest in training of PSCOs, publish inspection data, have a code of good practice, have been granted official IGO-status at IMO and have a similar approach in terms of commitment and goals to that of the Paris MoU.

Six regional agreements have obtained official observer status to the Paris MoU: the Tokyo MoU, Caribbean

MoU, Mediterranean MoU, Black Sea MoU, Riyadh MoU and the Viña del Mar Agreement. The United States Coast Guard is also an observer at Paris MoU meetings.

The International Labour Organization and the International Maritime Organization have participated in the meetings of the Paris MoU on a regular basis since 1982. In 2006 the Paris MoU obtained official status at the IMO as an Inter Governmental Organization. A delegation of the MoU participated in the 21st session of the Sub-Committee on Flag State Implementation in March 2013.

The 2011 Annual Report including inspection data in a new format, the





performance of flags and Recognized Organizations, a combined list of flags targeted by the Paris MoU, Tokyo MoU and USCG and the results of the 2011 CIC on Structural Safety and the International Convention on Load Lines and information on the improvement of flag performance were submitted to the Sub-Committee on Flag State Implementation.

Membership of the Paris MoU

In preparation for prospective new members of the Paris MoU, the Port State Control Committee has adopted criteria for co-operating status for non-member States and observer/associate status for other PSC regions.

Specific criteria, including a self-evaluation exercise, have to be met before co-operating status can be granted.

In 2011 the Maritime Authority of Montenegro joined the MoU as a co-operating member with the prospect of becoming a full member in the future.

The Paris MoU currently has 8 members with dual or even triple membership: Canada and the Russian Federation with the Tokyo MoU, while the Russian Federation is also a member of the Black Sea MoU. With Bulgaria and Romania

there are further ties with the Black Sea MoU. Malta and Cyprus are also members of the Mediterranean MoU. The Netherlands and France have ties to the Caribbean MoU. France is also member of the Indian Ocean MoU.

In the following pages the facts and figures of 2013 are listed.

The trend that begun in 2011 when the New Inspection Regime entered into force has continued. For the third year in a row the inspection figures show a decrease in the number of inspections but an increase in the detention rate.

Facts & Figures

2013

Inspections

With a total number of 17,687 inspections performed in 2013 the inspection figures showed a decrease of 3% compared with the figures of 2012. Each individual ship was inspected an average of 1.3 times per year, a rate which has been comparable to that of 2012.

The drop in the number of inspections that started with the introduction of the New Inspection Regime in January 2011, has continued in 2012 and 2013. New features of this inspections regime are that the annual inspection target for each Member State is based on ship movement data rather than individual ship calls. Also dedicated quality shipping is awarded with longer intervals between inspections. As a result, the number of inspections performed in the region has dropped, but the detention rate increases.

Deficiencies

In 2011 the number of deficiencies recorded was 50,738. In 2012 the number of deficiencies was 49,261. In 2013 the number of deficiencies decreased further to 49,074.

During 58% of all inspections performed, one or more deficiencies were recorded. In 2012 this figure was 57%.

The average number of deficiencies per inspection also increased from 2.7 in 2012 to 2.8 in 2013.

Detentions

Some deficiencies are clearly hazardous to safety, health or the environment and the ship is detained until they are rectified. Detention rates are expressed as a percentage of the number of inspections, rather than the number of individual ships inspected to take account of the fact

that some ships are detained more than once a year.

Compared with 2012, the number of detentions has decreased by one from 669 to 668 detentions. The average detention rate in 2013 is 3.78%. In 2012 the detention rate was 3.65%. In 2011 the detention rate was 3.61%. This is the third year that the average detention rate has increased.

“White, Grey and Black List”

The “White, Grey and Black (WGB) List” presents the full spectrum, from quality flags to flags with a poor performance that are considered high or very high risk. It is based on the total number of inspections and detentions over a 3-year rolling period for flags with at least 30 inspections in the period.

On the “White, Grey and Black list” for 2013 a total number of 75 flags are



listed: 46 on the “White List”, 19 on the “Grey List” and 10 on the “Black list”. In 2012 the number of flags listed totalled 78 flags, namely 45 on the “White List”, 19 on the “Grey List” and 14 on the “Black List”.

The “White List” represents quality flags with a consistently low detention record. Compared with last year, the number of flags on the “White List” has increased by 1 flag to a total number of 46 flags. New on the “White List” are Kazakhstan, Saudi Arabia and Switzerland, which last year were on the “Grey List”.

France has been placed highest on the list in terms of performance. The next in line of the best performing flags in 2013 are Norway, Sweden, Denmark and Italy.

Flags with an average performance are shown on the “Grey List”. Their

appearance on this list may act as an incentive to improve and move to the “White List”. At the same time flags at the lower end of the “Grey List” should be careful not to neglect control over their ships and risk ending up on the “Black List” next year.

On this year’s “Grey List” a total number of 19 flags is recorded. Last year the “Grey List” also recorded 19 flags. New on the “Grey List” are Georgia, Lebanon, Saint Kitts and Nevis, Libya and Albania, which last year were on the “Black List”.

The poorest performing flags are the United Republic of Tanzania, Honduras, Dominica and Togo.

A graph of the distribution of listed and not listed flags indicates that only 0.7% of the ships inspected are from flags not listed on the WGB list.

Ship type

In 2013 the top 5 detention rates were for: general cargo/multipurpose ships at 6.28% (up from 5.99% in 2012); commercial yachts at 6.00% (not listed in 2012), tugs at 5.88% (up from 3.39% in 2012); refrigerated cargo ships at 5.25% (up from 4.23% in 2012) and bulk carriers at 3.55% (up from 2.60% in 2012). The remaining ship types have lower detention rates and they are similar to or lower than the 2012 detention rates.

Performance of Recognized Organizations

For several years the Committee has closely monitored the performance of classification societies acting as ROs for flags. To calculate the performance of the Recognized Organizations, the same formula to calculate the excess factor of the flags is used. A minimum number of 60 inspections per RO are needed before the performance

is taken into account for the list. In 2013 36 ROs are recorded on the performance list.

Among the best performing Recognized Organizations were:

- Lloyd's Register (LR)
- American Bureau of Shipping (ABS)
- Det Norske Veritas (DNV)

The lowest performing Recognized Organizations were:

- INCLAMAR
- Bulgarian Register of Shipping (BRS)
- Universal Shipping Bureau Inc. (USB)

Compared with last year's performance level, a small shift in RO performance

in 2013 can be noticed. This year fewer organisations have been placed in the very low performing parts of the list and more organisations have been placed in the medium part of the list.

Details of the responsibility of Recognized Organizations for detainable deficiencies have been published since 1999. When one or more detainable deficiencies are attributed to a Recognized Organization in accordance with the criteria, it is recorded "RO responsible" and the RO is informed. Out of 668 detentions recorded in 2013, 106 or 15.87% were considered RO related.

Refusal of access of ships

A total of 28 ships were banned from the Paris MoU region in 2013 for reasons of multiple detentions (17), failure to call at an indicated repair yard (9) and jumping detention (2). A number of ships remain banned from previous years.

Deficiencies per major category

The number of deficiencies in the following areas (certificate & documentation, fire safety, safety of navigation and working & living conditions) accounted for approximately 55% of the total number of deficiencies. The trends in these areas are clarified below.





Certificate & Documentation

The number of deficiencies recorded as related to ships' certificates, crew certificates and documents showed a decrease of 4.5% from 7,158 in 2012 to 6,836 in 2013.

Safety of navigation

In 2013, deficiencies in Safety of Navigation accounted for 13.98% of all deficiencies recorded (an increase from 13.84% in 2012). The number of deficiencies in Safety of Navigation shows an increase of 0.7%, from 6,816 deficiencies in 2012 to 6,861 in 2013.

Fire safety

In 2013 deficiencies in fire safety accounted for 13.57% of all deficiencies recorded (a decrease from 15.20% in 2012). The number of deficiencies in this area decreased by 11.1% from 7,488 in 2012 to 6,657 in 2013.

Pollution prevention

Deficiencies in MARPOL Annex I show a decrease of 5.9% in 2013 (1,060), compared with 2012 (1,127). Deficiencies in MARPOL Annex IV show an increase of 5.2% in 2013 (341), compared with 2012 (324). Deficiencies in MARPOL Annex VI show an increase of 9.6% in 2013 (492), compared with 2012 (449).

Working and living conditions

In 2013, deficiencies in working and living conditions accounted for 14.82% of all deficiencies recorded (an increase from 14.71% in 2012). Deficiencies in working conditions (ILO P147) decreased by 9.6% from 5,067 in 2012 to 4,579 in 2013. Deficiencies in living conditions (ILO P147) decreased by 10.8% from 2,182 in 2012 to 1,946 in 2013.

On 20 August 2013 the Maritime Labour Convention 2006 entered into force. Only Member States of the Paris MoU that had ratified the MLC, 2006 on or before 20 August 2012 were entitled to conduct PSC inspections on MLC, 2006 requirements from 20 August 2013. For member States of the Paris MoU that have not ratified the MLC, 2006, enforcement of the Merchant Shipping (Minimum Standards) Convention (ILO 147) and the protocol of 1996 to that Convention (ILO P147) will initially continue.

Management

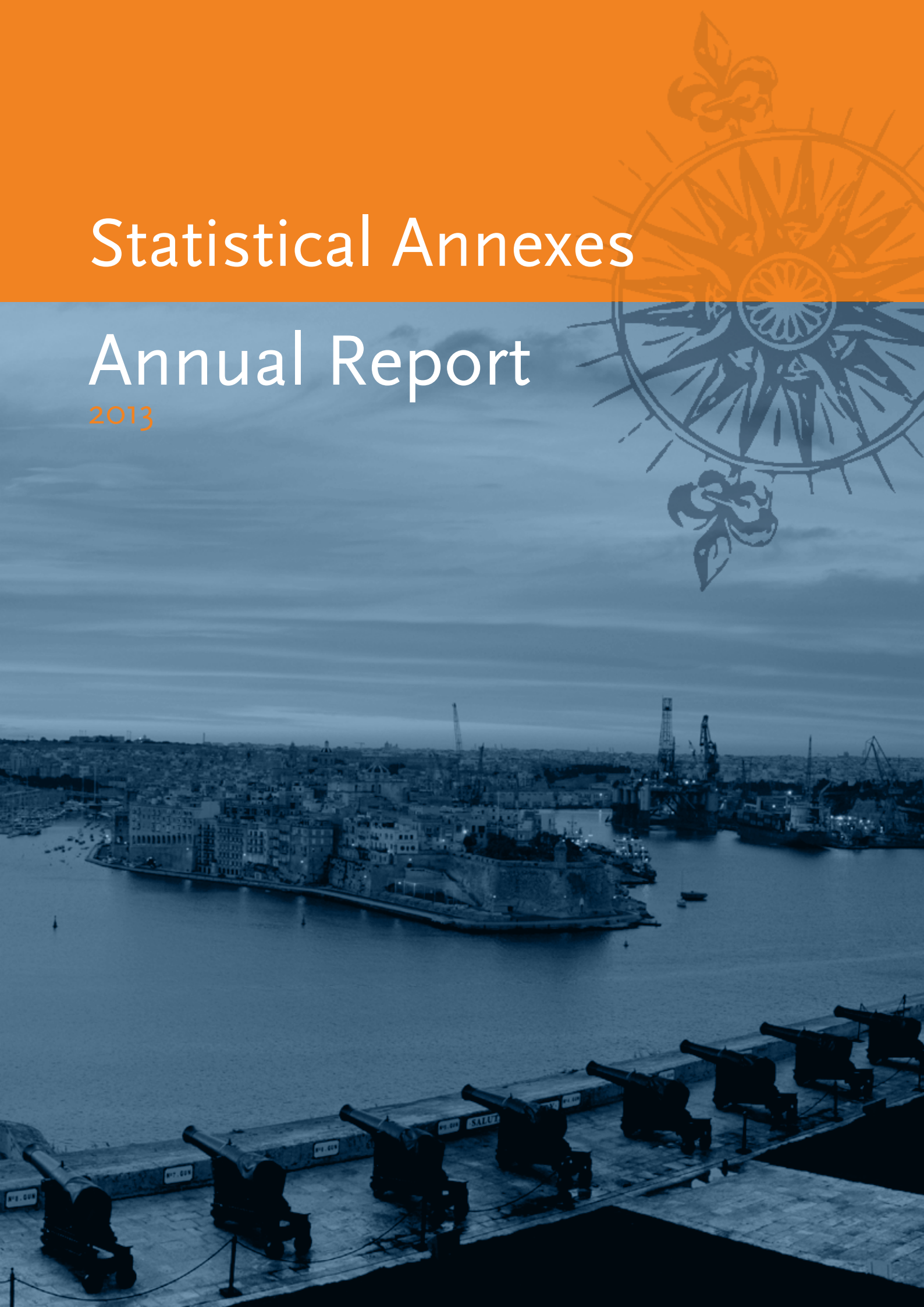
The number of ISM related deficiencies showed an increase of 4.9% from 1,736 in 2012 to 1,821 in 2013.



Statistical Annexes

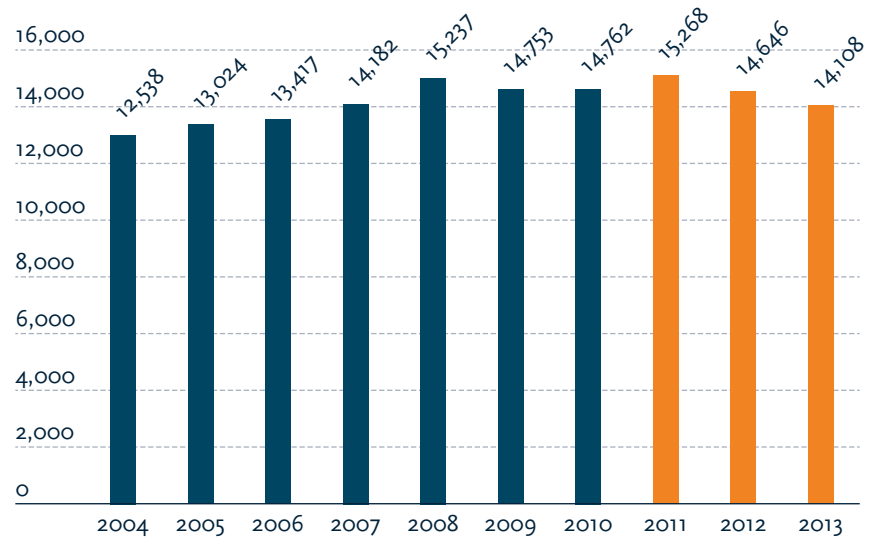
Annual Report

2013

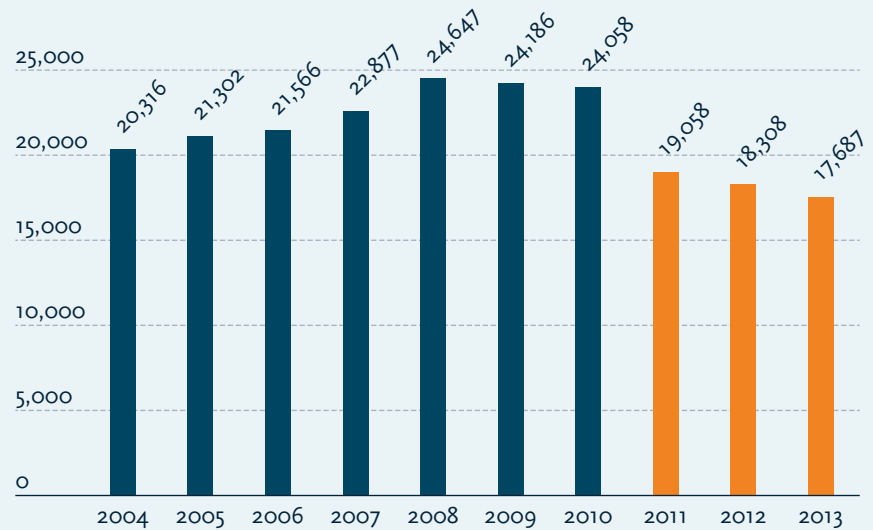


Basic port State control figures 2013

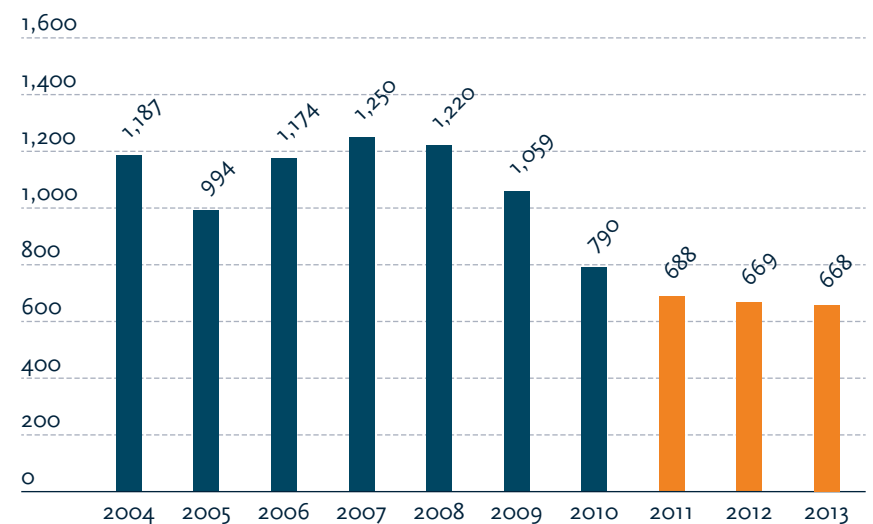
Number of individual ships inspected



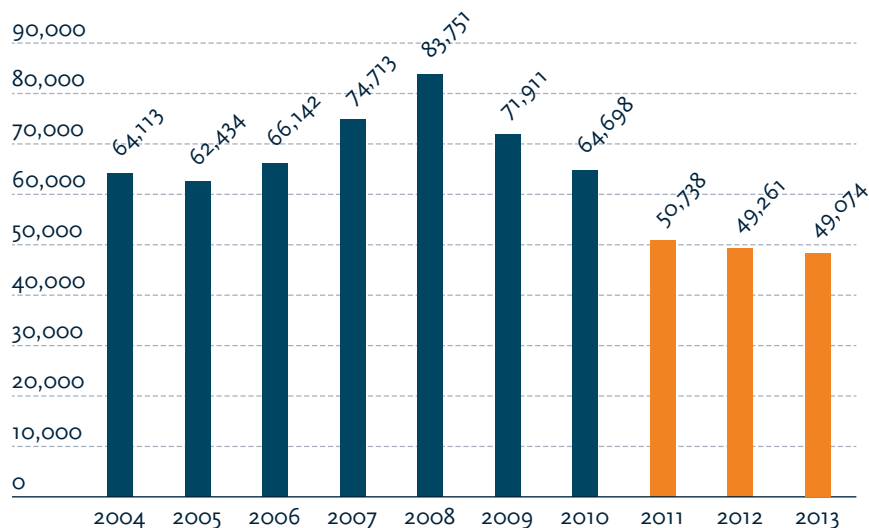
Number of inspections



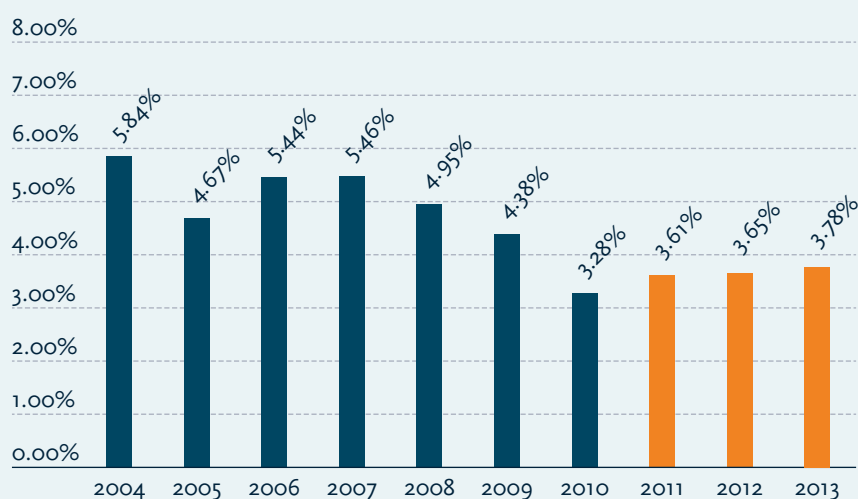
Number of detentions



Number of deficiencies



Detentions in % of inspections

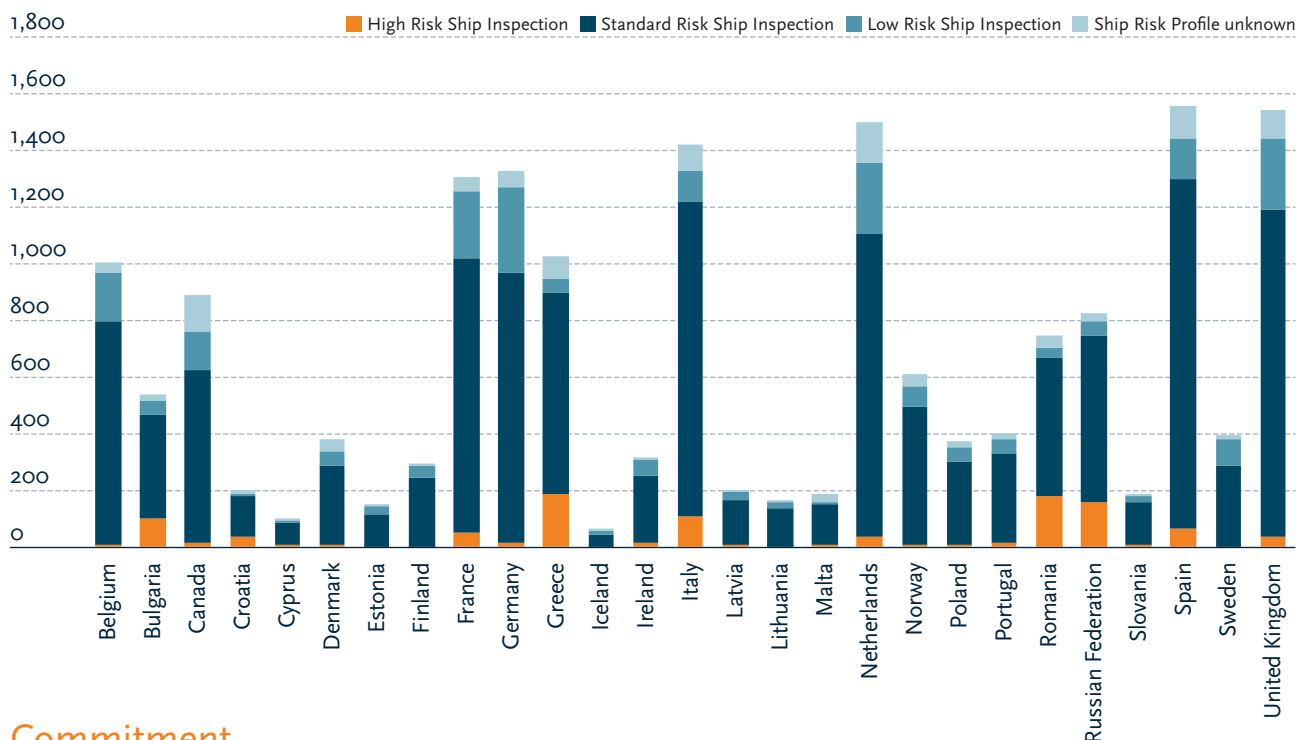


Note: The New Inspection Regime entered into force on the 1st of January 2011. Consequently the targeting of ships for inspection has changed; inspection figures from 2011 onwards should not be compared to the ones from 2010 and before.

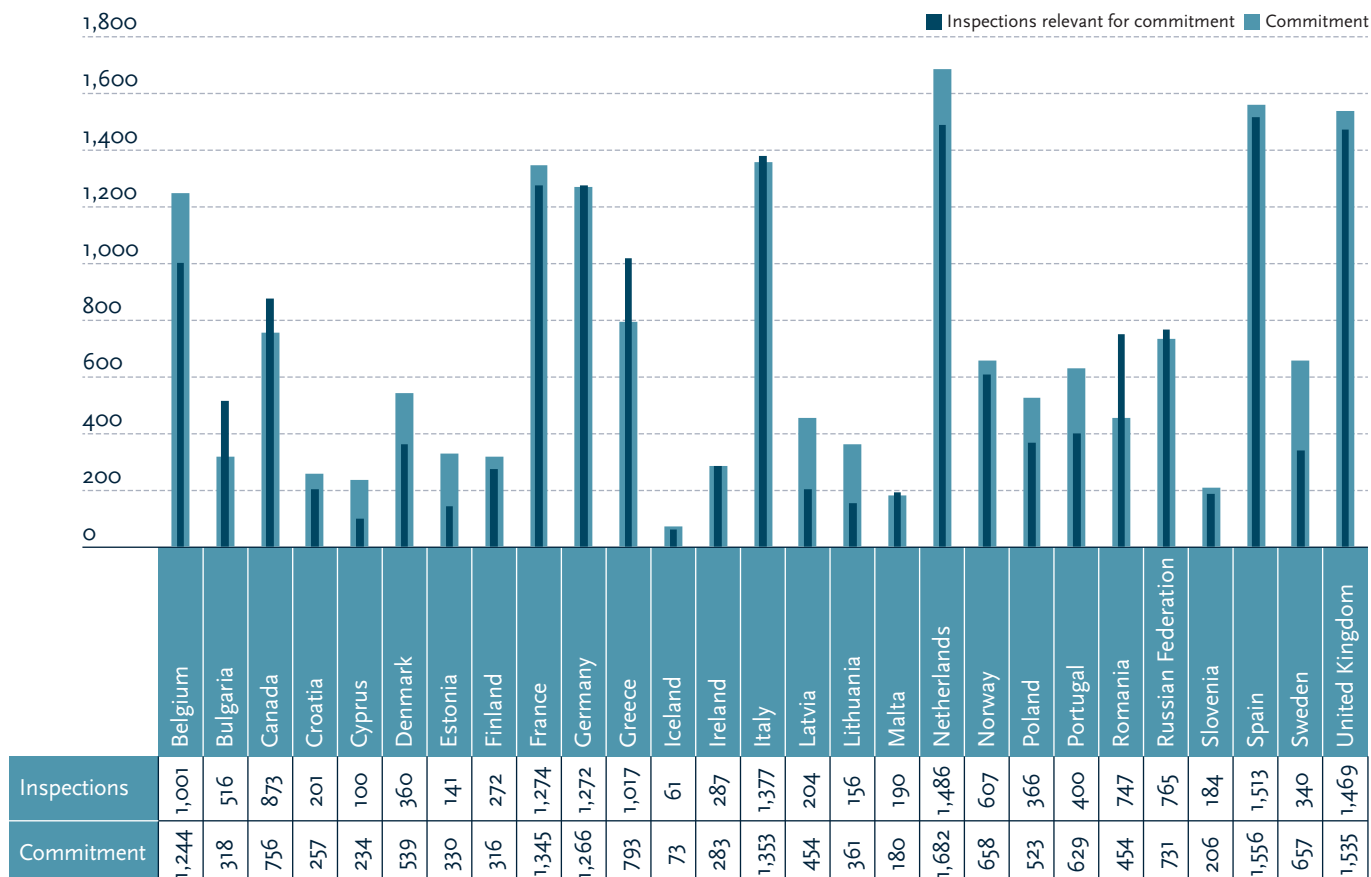
Note: The cut-off date for inspection data to be included in the Annual Report 2013 was 15 January 2014. Changes to inspection data after this date have as a rule not been taken into account.

Inspection efforts 2013

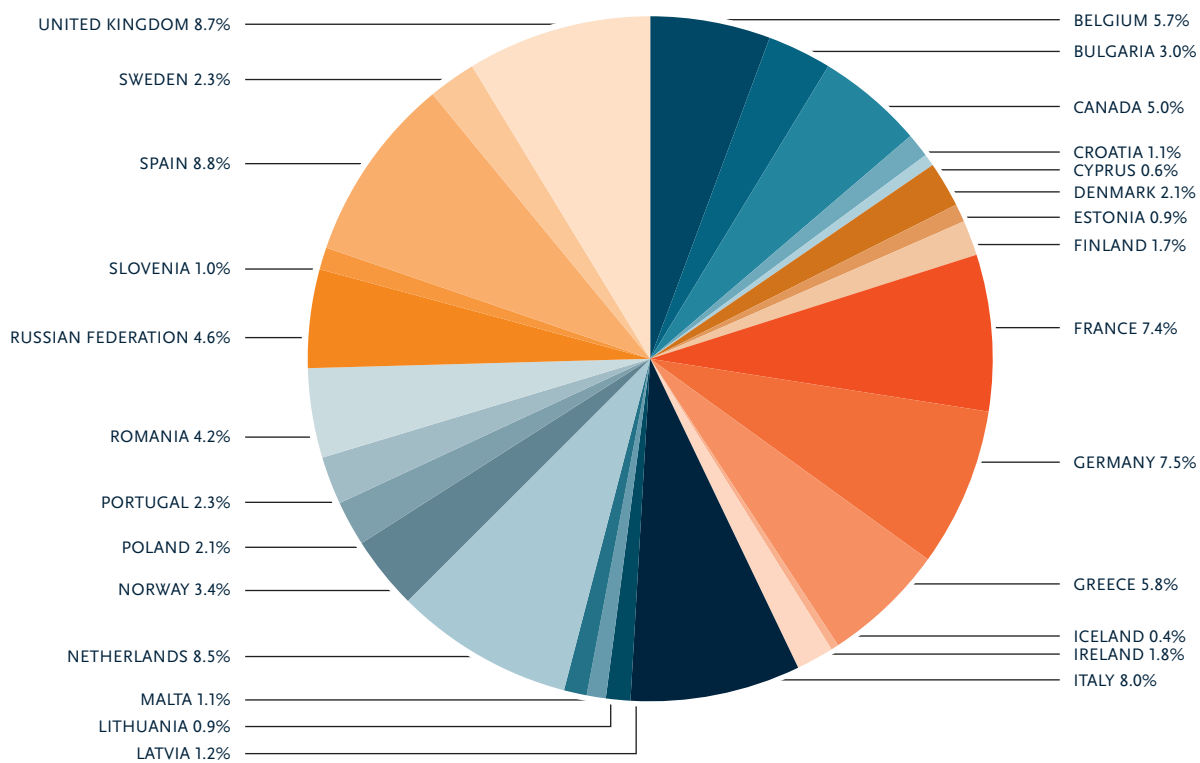
HRS, SRS and LRS inspections per member state



Commitment



Inspection efforts of members as percentage of MoU total

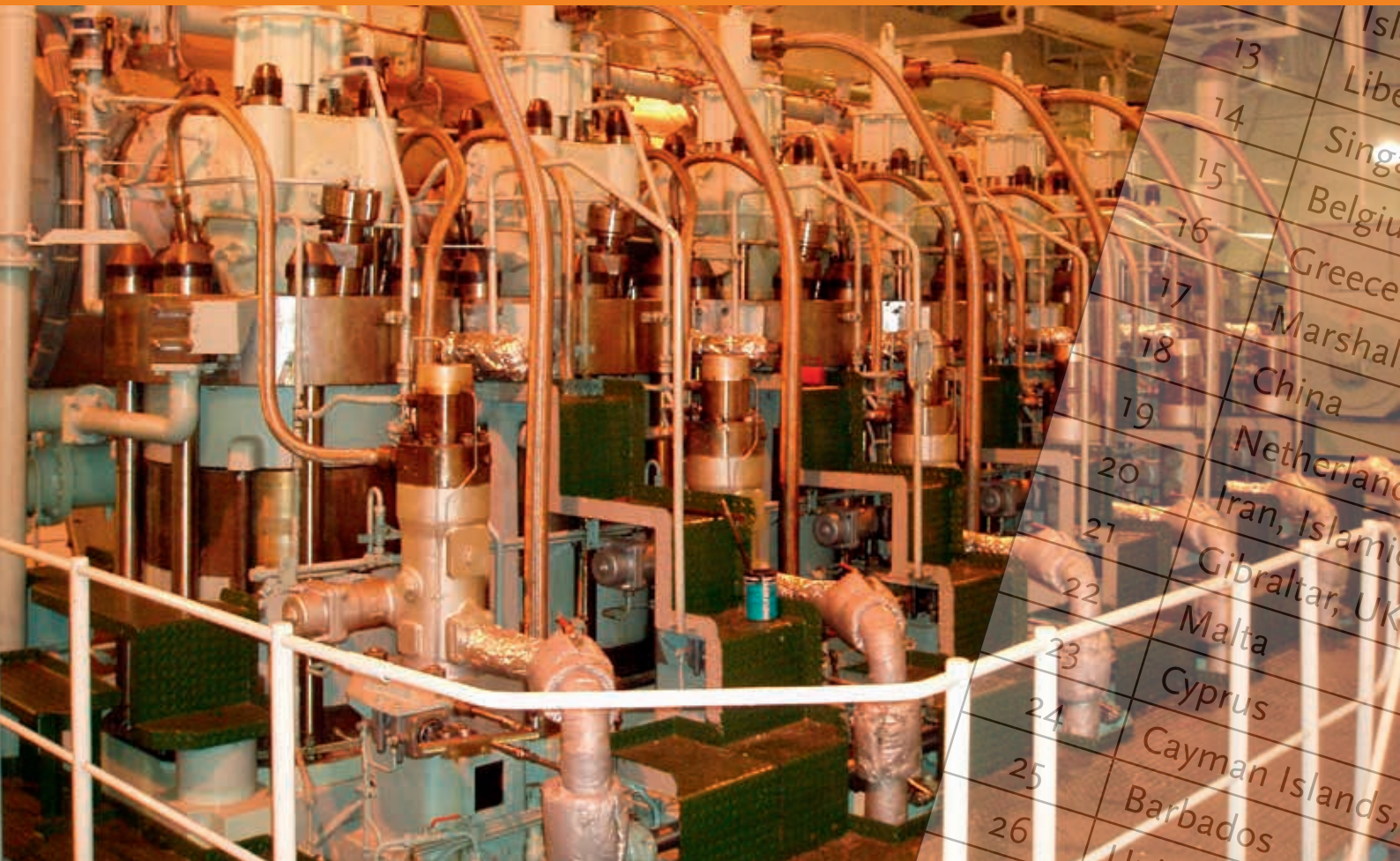


MoU port States's individual contributions to the total amount of inspections

MoU port State	Total nr of Inspections	Inspections with deficiencies	Inspections with detentions	Inspections with RO related detainable deficiencies	% Inspections with deficiencies	% Detentions	% Inspection of MoU total	% HRS	% SRS	% LSR	% SRP Unknown
Belgium	1,003	687	21	3	68.50	2.10	5.70	1.30	78.20	17.10	3.40
Bulgaria	536	368	20	9	68.70	3.70	3.00	19.00	68.30	8.60	4.10
Canada	890	462	33	5	51.90	3.70	5.00	1.90	68.40	15.10	14.60
Croatia	200	125	13	3	62.50	6.50	1.10	19.00	70.50	5.50	5.00
Cyprus	100	60	8	1	60.00	8.00	0.60	9.00	83.00	6.00	2.00
Denmark	379	172	3	0	45.40	0.80	2.10	2.10	74.70	13.50	9.80
Estonia	151	57	1	0	37.70	0.70	0.90	1.30	76.80	17.20	4.60
Finland	294	82	3	0	27.90	1.00	1.70	1.00	81.60	16.30	1.00
France	1,305	770	41	3	59.00	3.10	7.40	4.10	73.80	18.30	3.80
Germany	1,325	661	29	3	49.90	2.20	7.50	1.10	71.80	22.90	4.20
Greece	1,027	718	49	7	69.90	4.80	5.80	18.50	68.80	4.90	7.80
Iceland	63	30	2	1	47.60	3.20	0.40	6.30	65.10	23.80	4.80
Ireland	313	212	23	2	67.70	7.30	1.80	4.80	75.70	18.20	1.30
Italy	1,420	866	131	24	61.00	9.20	8.00	7.90	78.00	7.50	6.60
Latvia	204	55	1	0	27.00	0.50	1.20	4.90	76.50	14.20	4.40
Lithuania	160	88	4	1	55.00	2.50	0.90	2.50	85.00	10.60	1.90
Malta	190	110	17	3	57.90	8.90	1.10	6.80	74.70	4.20	14.20
Netherlands	1,496	865	57	7	57.80	3.80	8.50	2.80	71.20	16.30	9.70
Norway	609	203	9	1	33.30	1.50	3.40	1.60	80.00	11.50	6.90
Poland	376	279	12	2	74.20	3.20	2.10	2.90	77.10	13.30	6.60
Portugal	400	164	9	2	41.00	2.30	2.30	5.00	77.50	13.00	4.50
Romania	747	444	16	2	59.40	2.10	4.20	24.60	64.80	4.80	5.80
Russian Federation ¹	822	621	37	3	75.50	4.50	4.60	19.80	70.80	6.40	2.90
Slovenia	185	118	12	3	63.80	6.50	1.00	7.00	81.10	8.60	3.20
Spain	1,554	959	63	14	61.70	4.10	8.80	4.50	79.10	9.30	7.10
Sweden	398	112	3	0	28.10	0.80	2.30	0.50	72.40	23.60	3.50
United Kingdom	1,540	1,043	51	7	67.70	3.30	8.70	2.70	74.30	16.40	6.60
Total	17,687	10,331	668	106	58.40	3.78	100.00	6.60	74.00	13.20	6.20

¹ Only inspections in the Russian ports of the Baltic, Azov, Caspian and Barents Sea are included.





13	Isl
14	Lib
15	Sing
16	Belgiu
17	Greece
18	Marshall
19	China
20	Netherland
21	Iran, Islamic
22	Gibraltar, UK
23	Malta
24	Cyprus
25	Cayman Islands,
26	Barbados
27	United States of A
28	Latvia
29	Russian Federation
30	Estonia
31	Bermuda, UK
32	Japan
33	Korea, Republic of
34	Kazakhstan
35	Turkey
36	Saudi Arabia
37	Panama
38	Antigua and Barbuda
39	Faroe Islands, DK
40	Ireland
	Philin

White list

RANK	FLAG	INSPECTIONS 2011-2013	DETENTIONS 2011-2013	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
WHITE LIST						
1	France	278	0	27	12	-1.92
2	Norway	1,470	16	119	86	-1.79
3	Sweden	476	4	43	24	-1.69
4	Denmark	1,099	14	91	63	-1.68
5	Italy	1,243	17	102	72	-1.66
6	Hong Kong, China	1,583	23	128	94	-1.66
7	United Kingdom	1,513	23	123	89	-1.62
8	Finland	421	4	39	20	-1.61
9	Germany	881	12	75	49	-1.61
10	Croatia	147	0	16	5	-1.59
11	Bahamas	2,414	42	190	148	-1.59
12	Isle of Man, UK	677	9	59	36	-1.57
13	Liberia	4,046	82	310	256	-1.53
14	Singapore	1,367	26	112	80	-1.46
15	Belgium	235	2	23	10	-1.42
16	Greece	966	19	81	54	-1.38
17	Marshall Islands	2,521	63	198	155	-1.31
18	China	202	2	21	8	-1.26
19	Netherlands	3,083	83	240	192	-1.26
20	Iran, Islamic Republic of	92	0	11	2	-1.07
21	Gibraltar, UK	885	24	75	49	-1.06
22	Malta	4,426	149	338	281	-1.05
23	Cyprus	1,940	64	155	117	-0.98
24	Cayman Islands, UK	332	8	31	15	-0.87
25	Barbados	356	9	33	17	-0.85
26	United States of America	269	6	26	11	-0.84
27	Latvia	75	0	9	1	-0.79
28	Russian Federation	1,390	51	113	81	-0.79
29	Estonia	74	0	9	1	-0.77
30	Bermuda, UK	254	6	25	11	-0.76
31	Japan	71	0	9	1	-0.71
32	Korea, Republic of	103	1	12	2	-0.69
33	Kazakhstan	69	0	9	1	-0.67
34	Turkey	1,650	69	133	98	-0.64
35	Saudi Arabia	65	0	8	1	-0.57
36	Panama	6,238	305	470	403	-0.55
37	Antigua and Barbuda	3,746	178	288	236	-0.55
38	Faroe Islands, DK	241	7	24	10	-0.50
39	Ireland	88	1	11	2	-0.42
40	Philippines	198	6	20	7	-0.32
41	Spain	210	7	21	8	-0.23
42	Luxembourg	185	6	19	7	-0.18
43	Poland	162	5	17	5	-0.14
44	Switzerland	99	2	12	2	-0.13
45	Lithuania	176	6	18	6	-0.06
46	Thailand	48	0	7	0	0.00



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Curac

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Syrian A

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Egypt

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Morocco

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Ukraine

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Algeria

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Georgia

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Lebanon

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Saint Kitts and Nevis

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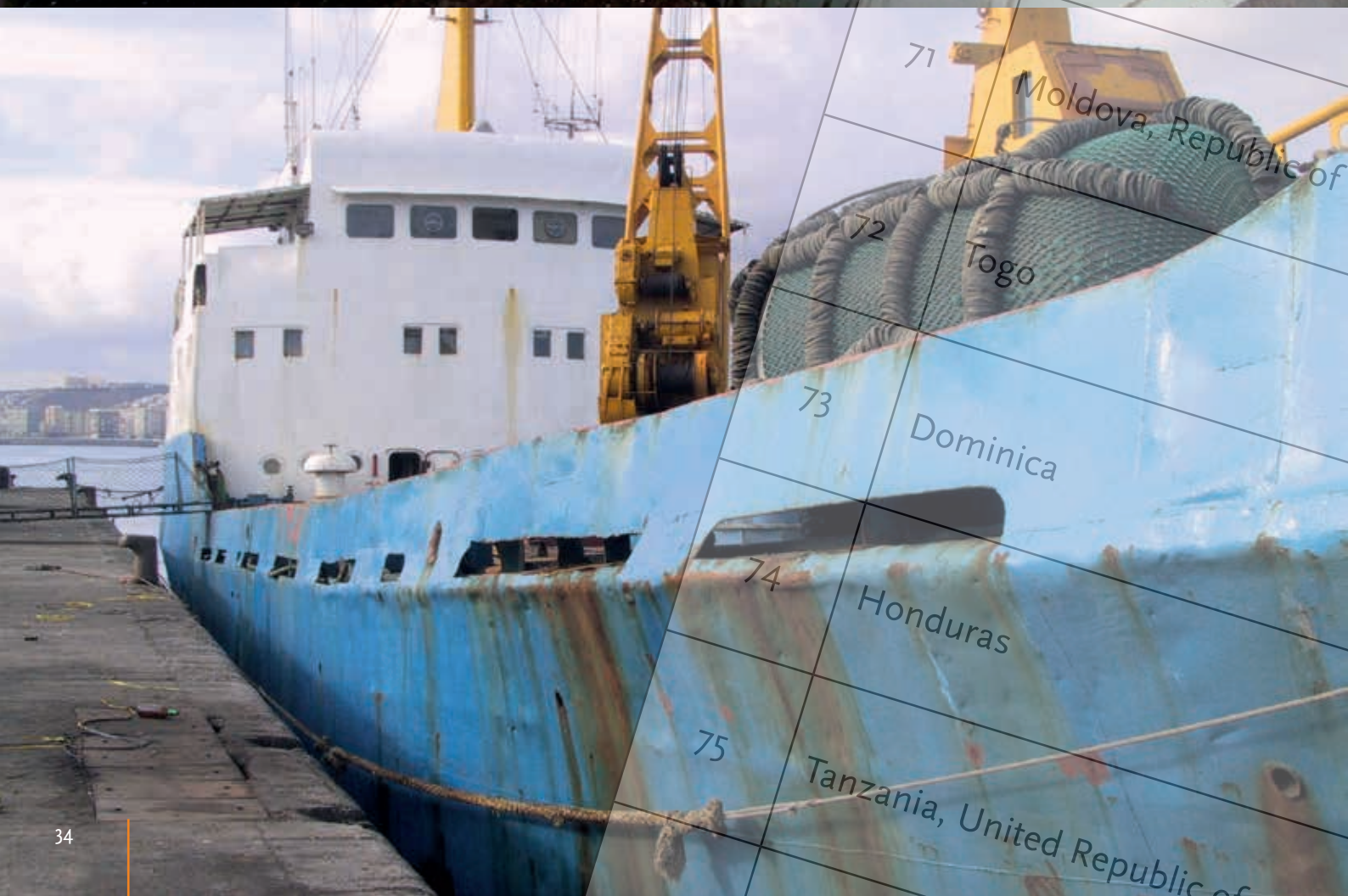
Libya

63

Tuvalu

Grey list

RANK	FLAG	INSPECTIONS 2011-2013	DETENTIONS 2011-2013	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
GREY LIST						
47	India	106	3	12	3	0.04
48	Tunisia	48	1	7	0	0.15
49	Portugal	366	20	34	17	0.17
50	Vanuatu	236	12	23	10	0.17
51	Malaysia	61	2	8	0	0.20
52	Bulgaria	58	2	8	0	0.22
53	Curacao	262	16	26	11	0.34
54	Syrian Arab Republic	42	2	6	0	0.35
55	Egypt	69	4	9	1	0.40
56	Morocco	65	4	8	1	0.43
57	Ukraine	237	17	24	10	0.53
58	Algeria	79	6	10	1	0.56
59	Georgia	160	13	17	5	0.65
60	Lebanon	81	7	10	1	0.66
61	Saint Kitts and Nevis	307	24	29	14	0.66
62	Libya	44	5	6	0	0.79
63	Tuvalu	42	5	6	0	0.82
64	Albania	117	13	13	3	0.98
65	Belize	570	50	50	29	0.98



Black list

RANK	FLAG	INSPECTIONS 2011-2013	DETENTIONS 2011-2013	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
BLACK LIST						
66	Cambodia	526	47	47	Medium Risk	1.00
67	Saint Vincent and the Grenadines	1,004	87	84		1.09
68	Comoros	350	37	33		1.35
69	Cook Islands	240	29	24		1.62
70	Sierra Leone	355	42	33		1.73
71	Moldova, Republic of	611	73	54	Medium to High Risk	1.96
72	Togo	282	37	27		2.00
73	Dominica	103	18	12		2.59
74	Honduras	30	7	5	High Risk	2.65
75	Tanzania, United Republic of	289	53	28		3.58

Flags meeting criteria for Low Risk Ships 2013

Flags meeting criteria for Low Risk Ships (as per 31 December 2013)	
Antigua and Barbuda	Japan
Bahamas	Korea, Republic of
Belgium	Latvia
Bermuda, UK	Liberia
Cayman Islands, UK	Lithuania
China	Luxembourg
Cyprus	Malta
Denmark	Marshall Islands
Estonia	Netherlands
Faroe Islands, DK	Norway
Finland	Panama
France	Poland
Germany	Russian Federation
Gibraltar, UK	Singapore
Greece	Spain
Hong Kong, China	Sweden
Ireland	United Kingdom
Isle of Man, UK	United States of America
Italy	

To meet the criteria for Low Risk Ships, flags should be on the Paris MoU White list and have submitted evidence of having undergone an IMO VIMSAS Audit.

Non listed flags having undergone IMO VIMSAS Audit	
Australia	Canada

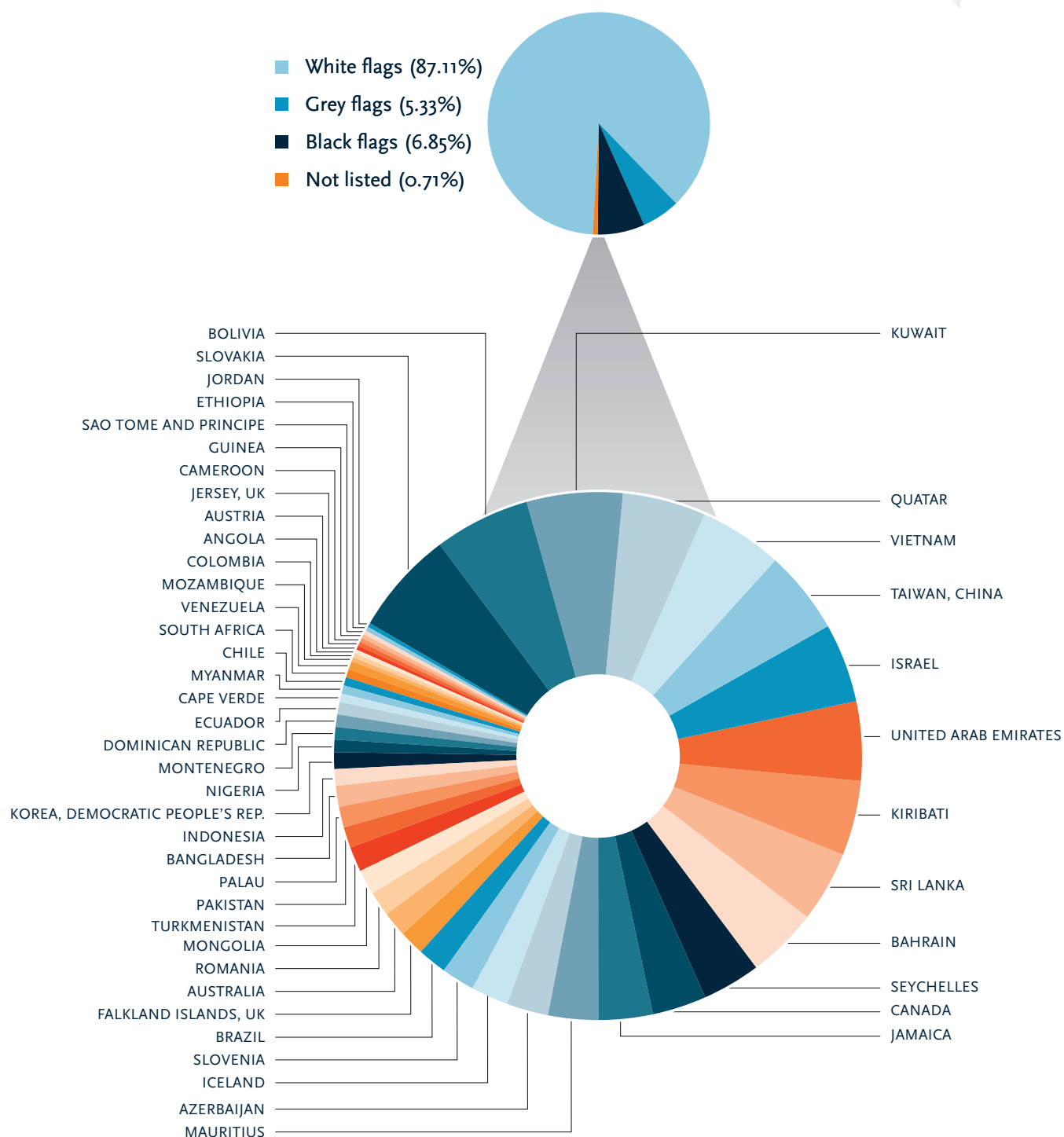
Flags who's total number of inspections over a 3-years rolling period does not meet the minimum of 30 are not included in the Paris MoU White list. Consequently some flags cannot meet the criteria for their ships to qualify as Low Risk Ships under the Paris MoU, despite having undergone the IMO VIMSAS Audit.

Non listed flags with no detentions 2011-2013*				
Angola (1)	Chile (2)	Iceland (9)	Montenegro (3)	Seychelles (14)
Australia (6)	Colombia (1)	Indonesia (4)	Mozambique (1)	Slovenia (8)
Austria (1)	Dominican Republic (3)	Israel (19)	Myanmar (2)	South Africa (2)
Brazil (8)	Ethiopia (1)	Jersey, UK (1)	Pakistan (5)	Sri Lanka (17)
Canada (13)	Falkland Islands, UK (6)	Jordan (1)	Qatar (20)	Turkmenistan (7)
Cape Verde (2)	Guinea (1)	Korea, Democratic People's Rep. (4)	Sao Tome and Principe (1)	

Flags who's total number of inspections over a 3-years rolling period does not meet the minimum of 30 are not included in the Paris MoU White, Grey and Black lists. The flags in this table had too few inspections to be included in the lists, but had no detentions in the period 2011-2013.


* Note: The flags are listed in alphabetical order. The number of inspections over the period 2011-2013 taken into account is shown in brackets. Flags on this list do not meet the criteria for Low Risk Ships.

Distribution of listed and non listed flags 2011-2013



Inspections, detentions and deficiencies 2013

Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of Individual ships inspected	% of Inspections with deficiencies	% of Inspections with detentions
Albania	31	30	4	13	96.80	12.90
Algeria	30	22	4	20	73.30	13.33
Antigua and Barbuda	1,182	764	48	802	64.60	4.06
Australia	2	1	0	2	50.00	0.00
Azerbaijan	1	1	0	1	100.00	0.00
Bahamas	736	394	12	584	53.50	1.63
Bahrain	4	3	1	3	75.00	25.00
Barbados	128	71	2	87	55.50	1.56
Belgium	65	35	0	58	53.80	0.00
Belize	197	167	22	149	84.80	11.17
Bermuda, UK	85	34	1	76	40.00	1.18
Bolivia	2	2	0	1	100.00	0.00
Brazil	1	1	0	1	100.00	0.00
Bulgaria	12	10	0	10	83.30	0.00
Cambodia	135	127	16	94	94.10	11.85
Cameroon	1	1	1	1	100.00	100.00
Canada	2	2	0	2	100.00	0.00
Cayman Islands, UK	111	54	3	107	48.60	2.70
China	71	38	0	65	53.50	0.00
Comoros	90	86	11	66	95.60	12.22
Cook Islands	107	88	18	75	82.20	16.82
Croatia	50	28	0	35	56.00	0.00
Curacao	68	55	5	51	80.90	7.35
Cyprus	649	361	26	489	55.60	4.01
Denmark	337	140	4	294	41.50	1.19
Dominica	23	19	4	16	82.60	17.39
Ecuador	1	1	0	1	100.00	0.00
Egypt	17	12	0	11	70.60	0.00
Estonia	21	5	0	16	23.80	0.00
Ethiopia	1	0	0	1	0.00	0.00
Falkland Islands, UK	2	1	0	2	50.00	0.00
Faroe Islands, DK	87	38	3	55	43.70	3.45
Finland	147	81	2	108	55.10	1.36
France	82	43	0	66	52.40	0.00
Georgia	2	2	0	1	100.00	0.00
Germany	251	136	5	209	54.20	1.99
Gibraltar, UK	282	152	5	211	53.90	1.77
Greece	290	140	9	256	48.30	3.10
Honduras	8	7	1	7	87.50	12.50



Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of Individual ships inspected	% of Inspections with deficiencies	% of Inspections with detentions
Hong Kong, China	556	280	8	505	50.40	1.44
Iceland	3	2	0	3	66.70	0.00
India	29	15	0	28	51.70	0.00
Indonesia	1	1	0	1	100.00	0.00
Iran, Islamic Republic of	30	23	0	26	76.70	0.00
Ireland	29	14	1	26	48.30	3.45
Isle of Man, UK	219	92	1	197	42.00	0.46
Israel	6	1	0	6	16.70	0.00
Italy	373	213	6	311	57.10	1.61
Jamaica	5	4	1	5	80.00	20.00
Japan	21	10	0	19	47.60	0.00
Jersey, UK	1	1	0	1	100.00	0.00
Kazakhstan	35	19	0	33	54.30	0.00
Kiribati	7	6	2	5	85.70	28.57
Korea, Republic of	31	21	1	28	67.70	3.23
Kuwait	5	2	1	4	40.00	20.00
Latvia	23	12	0	18	52.20	0.00
Lebanon	27	23	0	19	85.20	0.00
Liberia	1,390	723	35	1,188	52.00	2.52
Libya	20	12	2	14	60.00	10.00
Lithuania	53	31	2	36	58.50	3.77
Luxembourg	69	30	1	59	43.50	1.45
Malaysia	13	5	1	11	38.50	7.69
Malta	1,404	798	41	1,091	56.80	2.92
Marshall Islands	880	408	21	779	46.40	2.39
Mauritius	4	3	0	4	75.00	0.00
Moldova, Republic of	198	186	28	120	93.90	14.14
Montenegro	2	2	0	2	100.00	0.00
Morocco	13	10	1	12	76.90	7.69
Mozambique	1	0	0	1	0.00	0.00
Netherlands	1,060	599	30	773	56.50	2.83
Nigeria	1	1	0	1	100.00	0.00
Norway	455	239	5	402	52.50	1.10
Pakistan	1	1	0	1	100.00	0.00
Palau	5	3	1	2	60.00	20.00
Panama	2,021	1,233	114	1,721	61.00	5.64
Philippines	49	31	1	45	63.30	2.04
Poland	53	37	2	37	69.80	3.77
Portugal	109	59	3	86	54.10	2.75

Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of Individual ships inspected	% of Inspections with deficiencies	% of Inspections with detentions
Qatar	6	5	0	6	83.30	0.00
Romania	2	2	0	2	100.00	0.00
Russian Federation	474	310	21	391	65.40	4.43
Saint Kitts and Nevis	103	86	12	82	83.50	11.65
Saint Vincent and the Grenadines	288	220	26	209	76.40	9.03
Saudi Arabia	30	8	0	27	26.70	0.00
Seychelles	5	1	0	4	20.00	0.00
Sierra Leone	103	97	9	70	94.20	8.74
Singapore	436	208	7	397	47.70	1.61
Slovakia	1	1	0	1	100.00	0.00
Slovenia	2	0	0	2	0.00	0.00
South Africa	1	1	0	1	100.00	0.00
Spain	68	41	3	58	60.30	4.41
Sri Lanka	4	1	0	4	25.00	0.00
Sweden	132	53	0	93	40.20	0.00
Switzerland	40	27	1	30	67.50	2.50
Syrian Arab Republic	6	5	0	6	83.30	0.00
Taiwan, China	10	8	0	9	80.00	0.00
Tanzania, United Republic of	107	98	21	65	91.60	19.63
Thailand	19	13	0	16	68.40	0.00
Togo	129	119	20	84	92.20	15.50
Tunisia	14	11	0	9	78.60	0.00
Turkey	502	302	15	408	60.20	2.99
Turkmenistan	1	0	0	1	0.00	0.00
Tuvalu	11	10	1	8	90.90	9.09
Ukraine	59	49	3	45	83.10	5.08
United Arab Emirates	4	3	2	3	75.00	50.00
United Kingdom	448	240	3	390	53.60	0.67
United States	77	47	0	67	61.00	0.00
Vanuatu	90	62	7	77	68.90	7.78
Venezuela	1	0	0	1	0.00	0.00
Vietnam	1	1	1	1	100.00	100.00

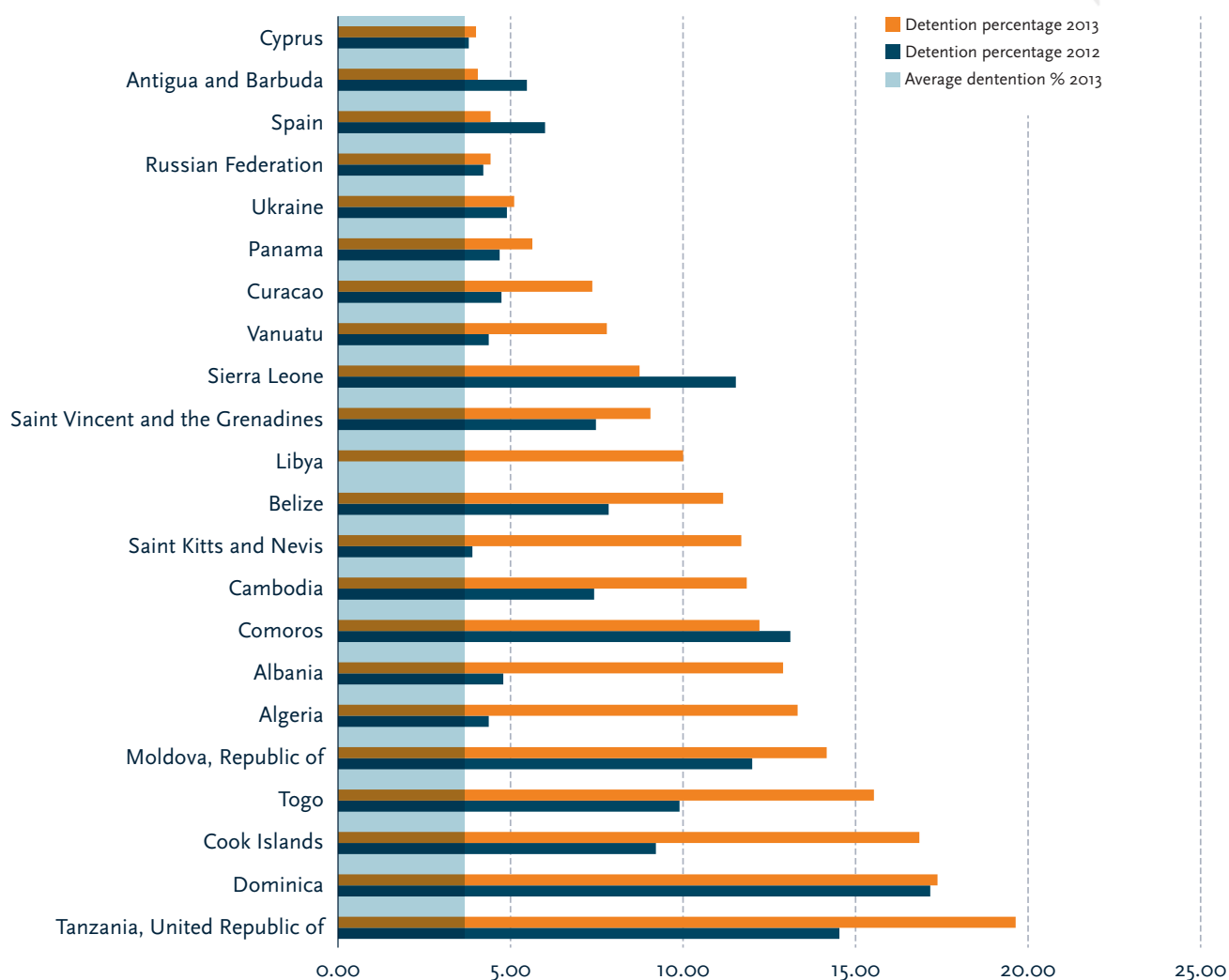


2013 detentions per flag, exceeding average percentage

Flag	Nr of Inspections	Inspections with detentions	% of Inspections with detentions	Excess of average 2013	Detentions % 2012	Excess of average 2012
Cyprus	649	26	4.01	0.23	3.80	0.14
Antigua and Barbuda	1,182	48	4.06	0.28	5.46	1.80
Spain	68	3	4.41	0.63	5.97	2.32
Russian Federation	474	21	4.43	0.65	4.21	0.56
Ukraine	59	3	5.08	1.30	4.88	1.22
Panama	2,021	114	5.64	1.86	4.69	1.03
Curacao	68	5	7.35	3.57	4.71	1.05
Vanuatu	90	7	7.78	4.00	4.35	0.69
Sierra Leone	103	9	8.74	4.96	11.54	7.88
Saint Vincent and the Grenadines	288	26	9.03	5.25	7.45	3.80
Libya	20	2	10.00	6.22	0.00	-3.65
Belize	197	22	11.17	7.39	7.85	4.20
Saint Kitts and Nevis	103	12	11.65	7.87	3.88	0.23
Cambodia	135	16	11.85	8.07	7.43	3.77
Comoros	90	11	12.22	8.44	13.11	9.46
Albania	31	4	12.90	9.12	4.76	1.11
Algeria	30	4	13.33	9.55	4.35	0.69
Moldova, Republic of	198	28	14.14	10.36	11.98	8.33
Togo	129	20	15.50	11.72	9.88	6.22
Cook Islands	107	18	16.82	13.04	9.21	5.56
Dominica	23	4	17.39	13.61	17.14	13.49
Tanzania, United Republic of	107	21	19.63	15.85	14.53	10.88

Only flags with 20 and more port State control inspections in 2013 and with a detention percentage exceeding the average percentage of 3.78% are recorded in this graph.

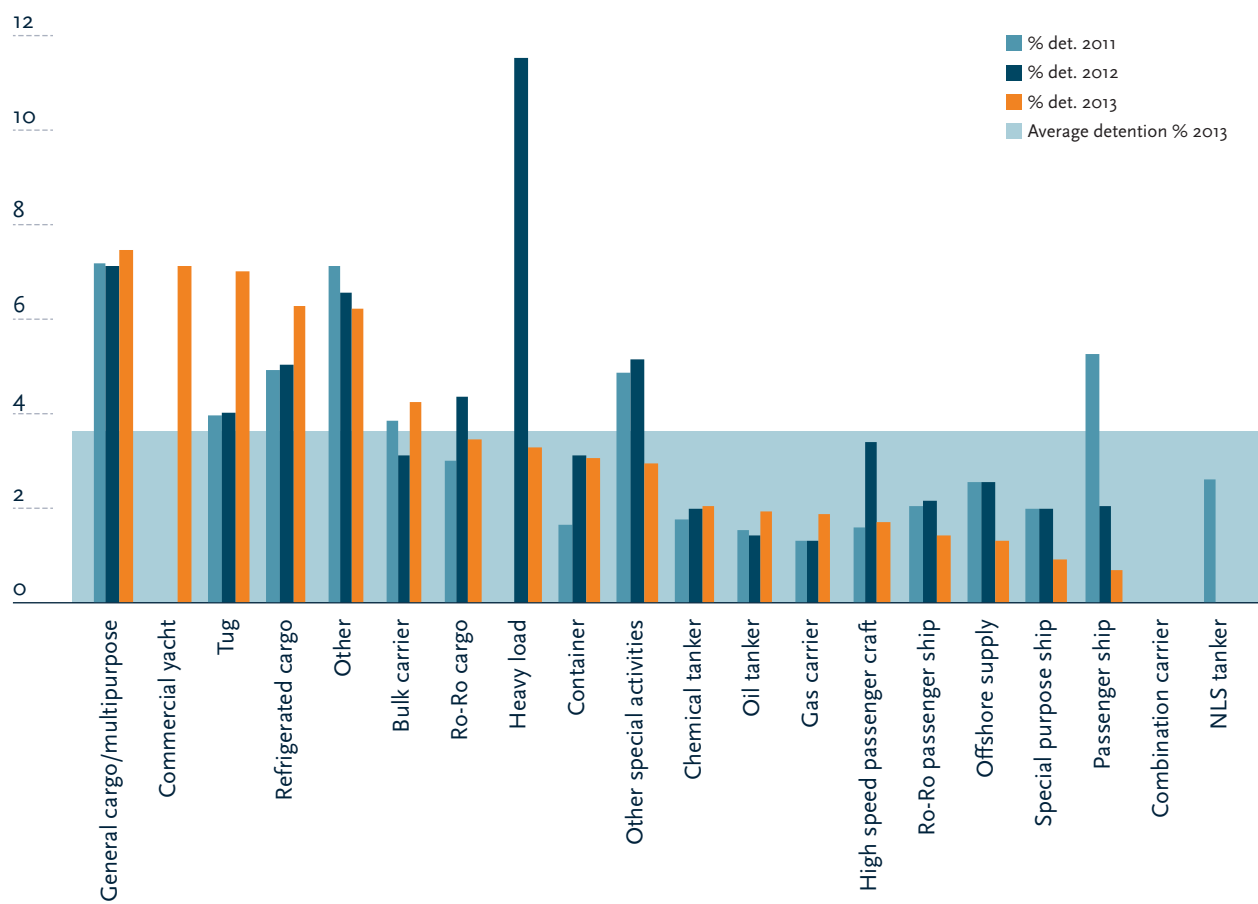
2013 detentions per flag, exceeding average percentage



- Only flags with 20 and more port State control inspections in 2013 and with a detention percentage exceeding the average percentage of 3.78% are recorded in this graph. In 2012 the average detentions percentage was 3.65%.
- The grey column represents the 2013 average detention percentage (3.78%).

Inspections and detentions 2013 PER SHIP TYPE

Ship type	Nr of Inspections	Inspections with deficiencies	% of inspections with deficiencies	Nr of Individual ships inspected	Inspections with detentions	% of detentions to inspections 2013	% of detentions to inspections 2012	% of detentions to inspections 2011	+ / - average detention 3.78%
Bulk carrier	3,237	1,851	57	2,814	115	3.55	2.60	3.25	-0.23
Chemical tanker	1,408	713	51	1,173	24	1.70	1.67	1.47	-2.08
Combination carrier	10	3	30	9	-	0.00	0.00	0.00	-3.78
Commercial yacht	50	32	64	48	3	6.00	0.00	0.00	2.22
Container	1,839	943	51	1,498	47	2.56	2.62	1.40	-1.22
Gas carrier	385	175	45	333	6	1.56	1.10	1.12	-2.22
General cargo/multipurpose	5,745	3,932	68	4,020	361	6.28	5.99	6.02	2.50
Heavy load	36	26	72	33	1	2.78	9.68	0.00	-1.00
High speed passenger craft	71	50	70	43	1	1.41	2.86	1.32	-2.37
NLS tanker	69	22	32	59	-	0.00	0.00	2.17	-3.78
Offshore supply	462	258	56	428	5	1.08	2.12	2.16	-2.70
Oil tanker	1,161	477	41	1,061	18	1.55	1.21	1.28	-2.23
Other	153	123	80	121	8	5.23	5.50	5.97	1.45
Other special activities	776	436	56	712	18	2.32	4.34	4.08	-1.46
Passenger ship	340	194	57	250	2	0.59	1.72	4.42	-3.19
Refrigerated cargo	343	221	64	277	18	5.25	4.23	4.12	1.47
Ro-Ro cargo	760	388	51	651	22	2.89	3.64	2.52	-0.89
Ro-Ro passenger ship	509	293	58	281	6	1.18	1.83	1.70	-2.60
Special purpose ship	129	66	51	118	1	0.78	1.68	1.68	-3.00
Tug	204	128	63	179	12	5.88	3.39	3.33	2.10



Major categories of deficiencies 2011-2013

Deficiencies Main Group	Category of deficiencies	2011		2012		2013	
		Def	Def %	Def	Def %	Def	Def %
Certificates & Documentation	Crew Certificates	1,101	2.15	1,005	2.04	1,013	2.06
	Documents	3,491	6.83	3,297	6.69	3,069	6.25
	Ship Certificates	3,046	5.96	2,856	5.80	2,754	5.61
Structural Condition		2,808	5.49	2,216	4.50	2,202	4.49
Water/Weathertight condition		2,597	5.08	2,121	4.31	2,111	4.30
Emergency Systems		1,952	3.82	2,029	4.12	2,184	4.45
Radio Communication		1,704	3.33	1,476	3.00	1,301	2.65
Cargo operations including equipment		332	0.65	319	0.65	329	0.67
Fire safety		6,591	12.89	7,488	15.20	6,657	13.57
Alarms		464	0.91	398	0.81	490	1.00
Working and Living Conditions (ILO 147)**	Living Conditions	2,313	4.52	2,182	4.43	1,946	3.97
	Working conditions	5,252	10.27	5,067	10.29	4,579	9.33
Working and Living Conditions (MLC, 2006)*	MLC, 2006 Title 1					14	0.03
	MLC, 2006 Title 2					88	0.18
	MLC, 2006 Title 3					258	0.53
	MLC, 2006 Title 4					390	0.79
Safety of Navigation		6,528	12.76	6,816	13.84	6,861	13.98
Life saving appliances		4,782	9.35	4,393	8.92	4,526	9.22
Dangerous goods		125	0.24	98	0.20	100	0.20
Propulsion and auxiliary machinery		2,951	5.77	2,442	4.96	2,710	5.52
Pollution prevention	Anti Fouling	15	0.03	23	0.05	25	0.05
	Marpol Annex I	1,318	2.58	1,127	2.29	1,060	2.16
	Marpol Annex II	36	0.07	29	0.06	30	0.06
	Marpol Annex III	18	0.04	12	0.02	9	0.02
	Marpol Annex IV	253	0.49	324	0.66	341	0.69
	Marpol Annex V	347	0.68	303	0.62	889	1.81
	Marpol Annex VI	358	0.70	449	0.91	492	1.00
ISM		1,644	3.21	1,736	3.52	1,821	3.71
ISPS		518	1.01	485	0.98	401	0.82
Other		602	1.18	570	1.16	424	0.86

* On 20 August 2013 the Maritime Labour Convention 2006 entered into force. Only Member States of the Paris MoU that had ratified the MLC, 2006 on or before 20 August 2012 were entitled to conduct PSC inspections on MLC,2006 requirements from 20 August 2013.

** For Member States of the Paris MoU that have not ratified the MLC, 2006, enforcement of the Merchant Shipping Convention (ILO 147) and the protocol of 1996 to the Merchant Shipping Convention (ILO P147) will initially continue.

Top 5 categories of deficiencies 2013

Category of deficiencies	Deficiencies	% Deficiencies
Safety of Navigation	6,861	13.98
Fire safety	6,657	13.57
Working and Living Conditions - Working Conditions	4,579	9.33
Life saving appliances	4,526	9.22
Certificates and Documentation - Document	3,069	6.25

Top 5 deficiencies 2013

Deficiencies	Deficiencies	% Deficiencies
ISM	1,821	3.71
Nautical publications	1,432	2.92
Charts	1,401	2.85
Fire doors/openings in fire-resisting divisions	1,106	2.25
Oil record book	753	1.53

Top 5 deficiencies MLC, 2006 2013

MLC deficiencies top 5	Deficiencies	% Deficiencies
Electrical	66	0.13
Access / structural features (ship)	44	0.09
Sanitary Facilities	38	0.08
Cold room, cold room cleanliness, cold room temperature	36	0.07
Personal equipment	30	0.06

Top 5 detainable deficiencies MLC, 2006 2013

MLC detainable deficiencies top 5	Deficiencies	% Deficiencies
Wages	10	0.02
Calculation and payment of wages	7	0.01
Fitness for duty - work and rest hours	5	0.01
Provisions quantity	4	0.01
Sanitary Facilities	2	0.00

Detentions of ships with RO related detainable deficiencies per Recognized Organization 2013

(CASES IN WHICH 10 OR MORE INSPECTIONS ARE INVOLVED)

Recognized Organization		Total number of inspections*	Number of individual ships inspected*	Total number of detentions**	Detention-% of total number of inspections	+/- Percentage of Average (0.44%)	Detention-% of individual ships	+/- Percentage of Average (0.56%)
American Bureau of Shipping	ABS	1,705	1,505	1	0.06	-0.39	0.07	-0.50
American Register of Shipping	AMRS	10	5	1	10.00	9.56	20.00	19.44
Bulgarian Register of Shipping	BRS	81	53	3	3.70	3.26	5.66	5.10
Bureau Veritas	BV	3,708	2,872	10	0.27	-0.18	0.35	-0.21
China Classification Society	CCS	255	230	-	0.00	-0.44	0.00	-0.56
China Corporation Register of Shipping	CCRS	14	13	-	0.00	-0.44	0.00	-0.56
Columbus American Register	COLAM-REG	17	15	-	0.00	-0.44	0.00	-0.56
Croatian Register of Shipping	CRS	57	40	-	0.00	-0.44	0.00	-0.56
Det Norske Veritas	DNV	3,288	2,809	3	0.09	-0.35	0.11	-0.45
Dromon Bureau of Shipping	DBS	164	98	7	4.27	3.82	7.14	6.58
Germanischer Lloyd	GL	4,158	3,159	17	0.41	-0.04	0.54	-0.02
Global Marine Bureau Inc.	GMB	39	30	1	2.56	2.12	3.33	2.77
Global Shipping Bureau Inc	GSB	29	21	1	3.45	3.00	4.76	4.20
Hellenic Register of Shipping	HRS	19	14	-	0.00	-0.44	0.00	-0.56
Indian Register of Shipping	IRS	26	25	-	0.00	-0.44	0.00	-0.56
Inspeccion y Clasificacion Maritima (INCLAMAR)	INCLA-MAR	23	12	1	4.35	3.90	8.33	7.77
Intermaritime Certification Services, ICS Class	ICS	27	23	-	0.00	-0.44	0.00	-0.56
International Naval Surveys Bureau	INSB	225	159	9	4.00	3.56	5.66	5.10
International Register of Shipping	IS	121	92	6	4.96	4.51	6.52	5.96
Iranian Classification Society	IRCS	20	16	-	0.00	-0.44	0.00	-0.56
Isthmus Bureau of Shipping, S.A.	IBS	64	51	-	0.00	-0.44	0.00	-0.56
Korean Register of Shipping	KRS	299	268	1	0.33	-0.11	0.37	-0.19
Lloyd's Register	LR	3,694	3,040	7	0.19	-0.26	0.23	-0.33
Macosnar Corporation	MC	24	18	-	0.00	-0.44	0.00	-0.56
Maritime Bureau of Shipping	MBS	25	17	-	0.00	-0.44	0.00	-0.56
Maritime Lloyd	ML	12	10	-	0.00	-0.44	0.00	-0.56
Maritime Lloyd - Georgia	MLG	53	34	2	3.77	3.33	5.88	5.32
National Shipping Adjuster Inc.	NASHA	15	11	-	0.00	-0.44	0.00	-0.56
Nippon Kaiji Kyokai	NKK	2,211	1,941	8	0.36	-0.08	0.41	-0.15
Other	OTHER	125	110	2	1.60	1.16	1.82	1.26
Overseas Marine Certification Services	OMCS	32	26	2	6.25	5.81	7.69	7.13
Panama Marine Survey and Certification Services Inc.	PMSCS	15	12	-	0.00	-0.44	0.00	-0.56
Panama Maritime Documentation Services	PMDS	33	26	1	3.03	2.59	3.85	3.28
Panama Register Corporation	PRC	30	26	1	3.33	2.89	3.85	3.28
Panama Shipping Registrar Inc.	PSR	16	12	1	6.25	5.81	8.33	7.77
Phoenix Register of Shipping	PHRS	60	44	1	1.67	1.22	2.27	1.71

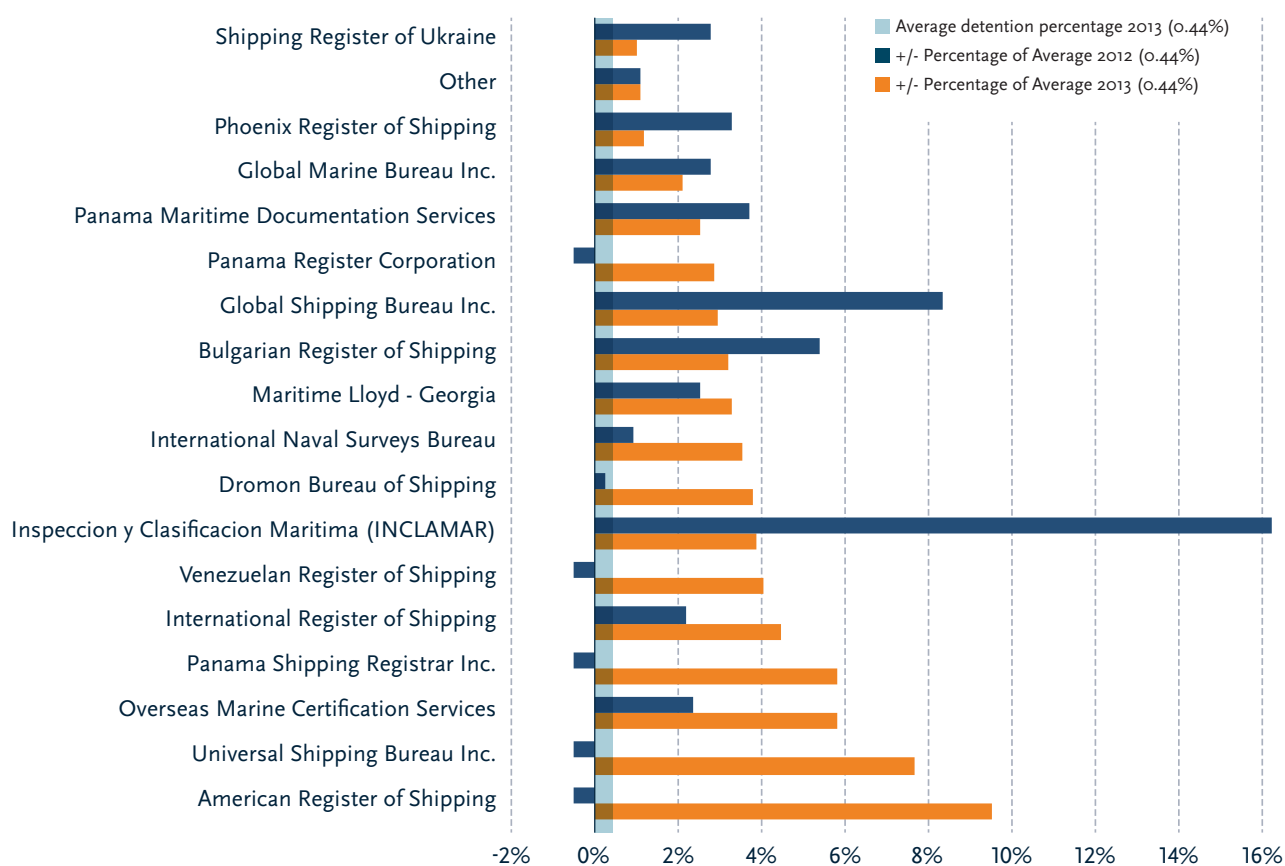
Recognized Organization		Total number of inspections*	Number of individual ships inspected*	Total number of detentions **	Detention-% of total number of inspections	+/- Percentage of Average (0.44%)	Detention-% of individual ships	+/- Percentage of Average (0.56%)
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	132	95	-	0.00	-0.44	0.00	-0.56
Register of Shipping (Albania)	RSA	31	13	-	0.00	-0.44	0.00	-0.56
Registro Italiano Navale	RINA	982	764	4	0.41	-0.04	0.52	-0.04
Russian Maritime Register of Shipping	RMRS	1,349	1,042	4	0.30	-0.15	0.38	-0.18
Shipping Register of Ukraine	SRU	200	128	3	1.50	1.06	2.34	1.78
Turkish Lloyd	TL	245	195	1	0.41	-0.04	0.51	-0.05
Universal Shipping Bureau Inc.	USB	49	38	4	8.16	7.72	10.53	9.96
Venezuelan Register of Shipping	VRS	67	43	3	4.48	4.03	6.98	6.42

* As more than one Recognized Organization might have issued or endorsed statutory certificates with regard to the same ship, an inspection can be relevant for more than one RO and might appear multiple times in this column.

** Only detentions with RO related detainable deficiencies are taken into account.

% of detentions of ships with RO related detainable deficiencies per Recognized Organization 2012-2013

(CASES IN WHICH MORE THAN 10 INSPECTIONS ARE INVOLVED)



* Only ROs with 10 and more port State control inspections in 2013 and with a detention percentage exceeding the average percentage of 0.44% are recorded in this graph. In 2012 the average detentions percentage was also 0.44%.

* The grey column represents the 2013 average detention percentage (0.44%).

Recognized Organization performance table 2011-2013

Recognized Organization		Inspections	Detentions	Low/medium limit	Medium / high limit	Excess Factor	Performance level
Lloyd's Register	LR	11,405	10	253	203	-1.89	HIGH
American Bureau of Shipping	ABS	5,323	4	124	89	-1.89	
Det Norske Veritas	DNV	10,382	9	232	184	-1.89	
China Classification Society	CCS	746	-	22	8	-1.83	
Nippon Kaiji Kyokai	NKK	6,584	18	151	112	-1.65	
Registro Italiano Navale	RINA	2,895	7	71	45	-1.63	
Bureau Veritas	BV	11,217	35	249	199	-1.63	
Germanischer Lloyd	GL	12,850	45	284	230	-1.59	
Korean Register of Shipping	KRS	825	1	24	9	-1.58	
Russian Maritime Register of Shipping	RMRS	4,338	18	102	71	-1.43	
Turkish Lloyd	TL	933	3	26	11	-1.19	
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	513	3	16	5	-0.43	
Croatian Register of Shipping	CRS	173	-	7	-	0.01	MEDIUM
Indian Register of Shipping	IRS	99	-	5	-	0.15	
ASIA Classification Society	ASIA	64	-	4	-	0.23	
Isthmus Bureau of Shipping, S.A.	IBS	185	2	7	0	0.27	
Panama Register Corporation	PRC	108	1	5	-	0.30	
Other	OTHER	315	5	11	2	0.36	
Shipping Register of Ukraine	SRU	670	13	20	7	0.47	
Hellenic Register of Shipping	HRS	90	2	4	-	0.54	
Maritime Bureau of Shipping	MBS	81	2	4	-	0.57	
Intermaritime Certification Services, ICS Class	ICS	70	2	4	-	0.62	
Phoenix Register of Shipping	PHRS	152	4	6	-	0.64	
Macosnar Corporation	MC	62	2	4	-	0.66	
Maritime Lloyd - Georgia	MLG	143	4	6	-	0.68	
Venezuelan Register of Shipping	VRS	98	3	5	-	0.69	
Global Marine Bureau Inc.	GMB	139	4	6	-	0.69	
International Naval Surveys Bureau	INSB	694	17	20	7	0.74	
Panama Maritime Documentation Services	PMDS	85	3	4	-	0.75	
Dromon Bureau of Shipping	DBS	362	10	12	2	0.78	
Register of Shipping (Albania)	RSA	118	5	5	-	0.94	
Overseas Marine Certification Services	OMCS	80	4	4	-	0.97	
International Register of Shipping	IS	472	16	15	4	1.18	LOW
Global Shipping Bureau Inc	GSB	69	4	4	-	1.19	
Universal Shipping Bureau Inc.	USB	157	7	7	-	1.22	
Bulgarian Register of Shipping	BRS	270	11	10	1	1.37	VERY LOW
Inspeccion y Clasificacion Maritima (INCLAMAR)	INCLAMAR	78	7	4	-	3.48	

In this table only Recognized Organizations that had 60 or more inspections in a 3-year period are taken into account.

The formula is identical to the one used for the White, Grey and Black list. However, the values for P and Q are adjusted to P=0.02 and Q=0.01.

Number of certificates covering RO responsible detainable deficiencies 2013

Recognized Organization		Certificates	Nr of RO detainable deficiencies	% deficiencies / certificates
American Bureau of Shipping	ABS	12,237	5	0.04
Bulgarian Register of Shipping	BRS	745	4	0.54
Bureau Veritas	BV	25,700	19	0.07
China Classification Society	CCS	2,022	-	0.00
Croatian Register of Shipping	CRS	514	-	0.00
Det Norske Veritas	DNV	22,856	3	0.01
Dromon Bureau of Shipping	DBS	1,527	18	1.18
Germanischer Lloyd	GL	34,360	42	0.12
Global Marine Bureau Inc.	GMB	370	2	0.54
Inspeccion y Clasificacion Maritima (INCLAMAR)	INCLAMAR	195	1	0.51
International Naval Surveys Bureau	INSB	1,636	57	3.48
International Register of Shipping	IS	776	27	3.48
Iranian Classification Society	IRCS	105	-	0.00
Isthmus Bureau of Shipping, S.A.	IBS	341	-	0.00
Korean Register of Shipping	KRS	2,829	6	0.21
Lloyd's Register	LR	22,579	11	0.05
Maritime Bureau of Shipping	MBS	248	-	0.00
Maritime Lloyd - Georgia	MLG	450	4	0.89
Nippon Kaiji Kyokai	NKK	19,191	13	0.07
Other	OTHER	431	8	1.86
Overseas Marine Certification Services	OMCS	181	4	2.21
Panama Maritime Documentation Services	PMDS	96	1	1.04
Panama Register Corporation	PRC	70	12	17.14
Panama Shipping Registrar Inc.	PSR	98	1	1.02
Phoenix Register of Shipping	PHRS	410	7	1.71
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	800	-	0.00
Register of Shipping (Albania)	RSA	351	-	0.00
Registro Italiano Navale	RINA	5,905	6	0.10
Russian Maritime Register of Shipping	RMRS	11,177	12	0.11
Shipping Register of Ukraine	SRU	1,641	3	0.18
Turkish Lloyd	TL	1,224	2	0.16
Universal Shipping Bureau Inc.	USB	236	36	15.25
Venezuelan Register of Shipping	VRS	601	12	2.00

Flags on the “Black List” in combination with Recognized Organizations that act on their behalf with a combined lower performance 2011-2013

“Black” flags with corresponding RO with an excess factor ≥ 0.50 detentions period 2011-2013

Flag State	Recognized Organization	Nr of Inspections	Inspections with detentions	Detentions %	(+/-) Average det % 2.04
Cambodia	Global Marine Bureau Inc.	39	1	2.56	0.52
	International Register of Shipping	20	0	0.00	-2.04
Comoros	Bulgarian Register of Shipping	21	1	4.76	2.72
	International Naval Surveys Bureau	35	1	2.86	0.82
Moldova, Republic of	Phoenix Register of Shipping	13	0	0.00	-2.04
	Bulgarian Register of Shipping	31	1	3.23	1.19
	Dromon Bureau of Shipping	22	2	9.09	7.05
	Maritime Bureau of Shipping	25	0	0.00	-2.04
	Maritime Lloyd - Georgia	22	2	9.09	7.05
Saint Vincent and the Grenadines	Venezuelan Register of Shipping	13	1	7.69	5.65
	Hellenic Register of Shipping	12	0	0.00	-2.04
	International Naval Surveys Bureau	53	1	1.89	-0.15
Sierra Leone	Dromon Bureau of Shipping	63	0	0.00	-2.04
	International Register of Shipping	23	1	4.35	2.31
	Phoenix Register of Shipping	11	1	9.09	7.05
Togo	Dromon Bureau of Shipping	62	3	4.84	2.80
	International Naval Surveys Bureau	44	3	6.82	4.78

Note: Criteria were developed to identify flag States and Recognized Organizations acting on their behalf that jointly have a lower performance. The targeted flags are the flags placed on the “Black List”. The targeted Recognized Organizations are ROs which act on behalf of a flag on the “Black List” and have an excess factor of ≥ 0.50 on the RO performance list in combination with ≥ 10 inspections for this flag.

ROs with corresponding “Black” flags with an average detention % > 2.04% period 2011-2013

Recognized Organization	Flag State	Nr of Inspections	Inspections with detentions	Detentions %	(+/-) Average det % 2.04
Bulgarian Register of Shipping	Comoros	21	1	4.76	2.72
Bulgarian Register of Shipping	Moldova, Republic of	31	1	3.23	1.19
Dromon Bureau of Shipping	Moldova, Republic of	22	2	9.09	7.05
Dromon Bureau of Shipping	Togo	62	3	4.84	2.80
Global Marine Bureau Inc.	Cambodia	39	1	2.56	0.52
International Naval Surveys Bureau	Togo	44	3	6.82	4.78
International Naval Surveys Bureau	Comoros	35	1	2.86	0.82
International Register of Shipping	Sierra Leone	23	1	4.35	2.31
Maritime Lloyd - Georgia	Moldova, Republic of	22	2	9.09	7.05
Phoenix Register of Shipping	Sierra Leone	11	1	9.09	7.05
Venezuelan Register of Shipping	Moldova, Republic of	13	1	7.69	5.65

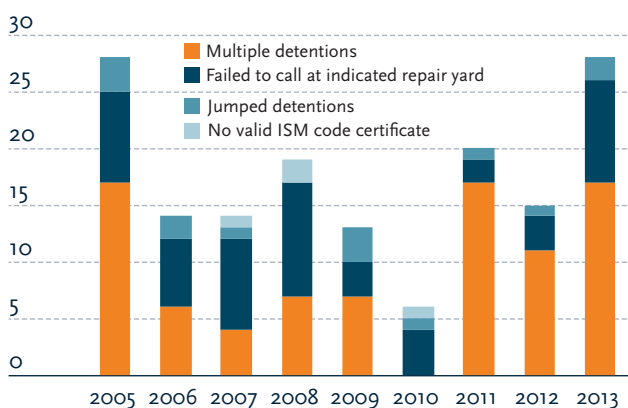
Note: To identify the poorest performing Recognized Organizations the average detention rate (2.04%) of the lower performing combinations of flags and ROs has been used as a limit. The outcome is a list of Recognized Organizations which performance on behalf of a flag on the Black list is poorer than the average performance of ROs performing below average.



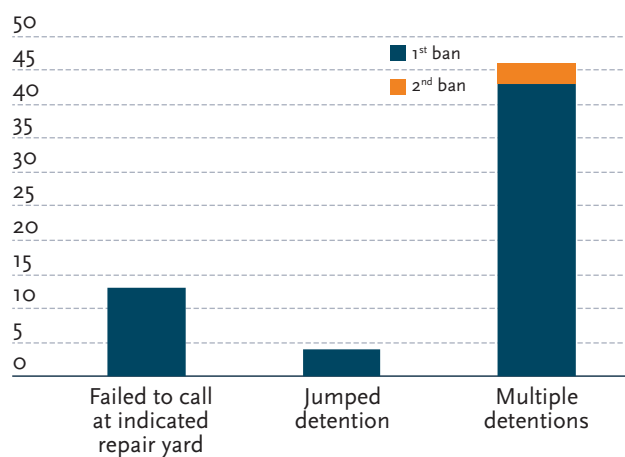
Refusal of access (banning) per flag 2011-2013

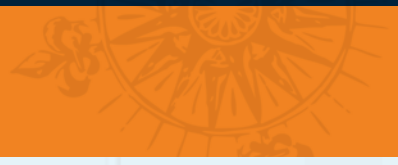
Flag	Failed to call at indicated repair yard	Jumped detention	Multiple detentions			Total Banned ships
			1 st ban	2 nd ban	3 rd ban	
Albania			1			1
Belize	1		2			3
Bolivia			1			1
Cambodia		1				1
Comoros			2			2
Curacao			1			1
Dominica			1			1
Libya			1			1
Moldova, Republic of	1		9	1		11
Mongolia		1				1
Panama	1		1			2
Russian Federation	1					1
Saint Kitts and Nevis			2			2
Saint Vincent and the Grenadines	1		7			8
Sierra Leone	2		1			3
Tanzania, United Republic of	2	2	8	1		13
Togo	3		5			8
Turkey	1					1
Ukraine			1	1		2
Total	13	4	43	3	0	63

Refusal of access 2005-2013



2011-2013





CIC 2013 on Propulsion and Auxiliary Machinery

Number of ships inspected during CIC	Nr of individual ships inspected during CIC	Nr of inspections performed with a CIC questionnaire	Nr of inspections without a CIC questionnaire
Inspections	4,126	3,879	444
Inspections with detentions	186	166	20
Detentions with <i>CIC-topic</i> related deficiencies	73	68	5

Number of inspections performed per ship during CIC	Nr of ships	% of total
1	3,808	99.1%
2	34	0.9%
3	1	0.0%
Total	3,843	100.0%

Ship type	Nr of inspections	Nr of detentions	detention as % of inspections	detentions <i>CIC-topic</i> related	detentions <i>CIC-topic</i> related as % of inspections
Bulk carrier	805	29	3.6%	9	1.1%
Chemical tanker	343	5	1.5%	4	1.2%
Combination carrier	3	0	0.0%	0	0.0%
Commercial yacht	15	1	6.7%	0	0.0%
Container	458	12	2.6%	9	2.0%
Gas carrier	102	1	1.0%	0	0.0%
General cargo/multipurpose	1,270	91	7.2%	34	2.7%
Heavy load	4	0	0.0%	0	0.0%
High speed passenger craft	2	0	0.0%	0	0.0%
NLS tanker	14	0	0.0%	0	0.0%
Offshore supply	81	2	2.5%	1	1.2%
Oil tanker	272	9	3.3%	6	2.2%
Other	33	0	0.0%	0	0.0%
Other special activities	147	6	4.1%	1	0.7%
Passenger ship	16	0	0.0%	0	0.0%
Refrigerated cargo	82	5	6.1%	3	3.7%
Ro-Ro cargo	142	2	1.4%	1	0.7%
Ro-Ro passenger ship	23	0	0.0%	0	0.0%
Special purpose ship	21	0	0.0%	0	0.0%
Tug	46	3	6.5%	0	0.0%
Total	3,879	166	4.3	68	1.8%



Explanatory note – “White”, “Grey” and “Black List”

The normative listing of Flags provides an independent categorization that has been prepared on the basis of Paris MoU port State inspection results over a 3-year period, based on binomial calculus.

The performance of each Flag is calculated using a standard formula for statistical calculations in which certain values have been fixed in accordance with agreed Paris MoU policy. Two limits have been included in the system, the ‘black to grey’ and the ‘grey to white’ limit, each with its own specific formula:

$$u_{black_to_grey} = N \cdot p + 0.5 + z \sqrt{N \cdot p \cdot (1 - p)}$$

$$u_{white_to_grey} = N \cdot p - 0.5 - z \sqrt{N \cdot p \cdot (1 - p)}$$

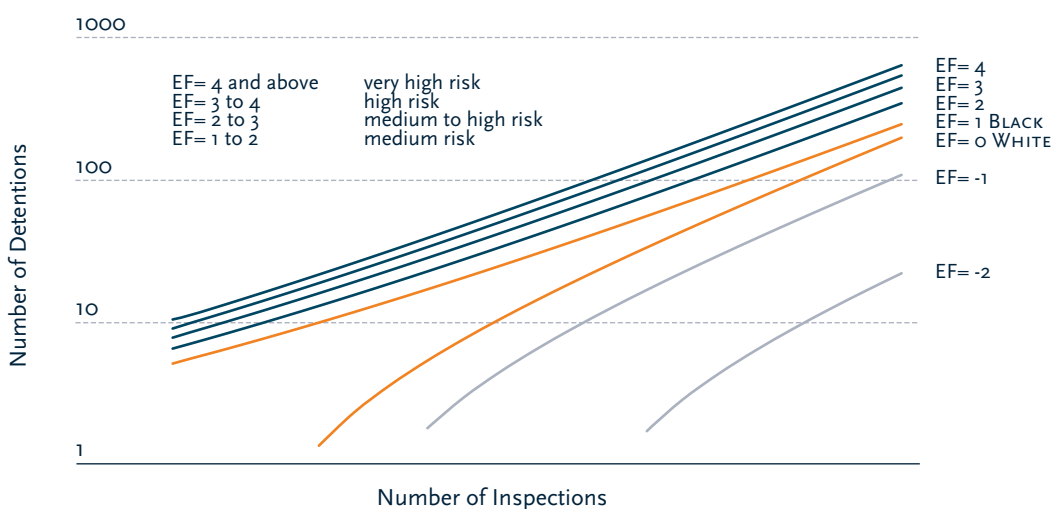
In the formula “N” is the number of inspections, “p” is the allowable detention limit (yardstick), set to 7% by the Paris MoU Port State Control Committee, and “z” is the significance requested (z=1.645 for a statistically acceptable certainty level of 95%). The result “u” is the allowed number of detentions for either the black or white list. The “u” results can be found in the table. A number of detentions

above this ‘black to grey’ limit means significantly worse than average, where a number of detentions below the ‘grey to white’ limit means significantly better than average. When the amount of detentions for a particular Flag is positioned between the two, the Flag will find itself on the grey list. The formula is applicable for sample sizes of 30 or more inspections over a 3-year period.

To sort results on the black or white list, simply alter the target and repeat the calculation. Flags which are still significantly above this second target, are worse than the flags which are not. This process can be repeated to create as many refinements as desired. (Of course the maximum detention rate remains 100%!) To make the flags’ performance comparable, the excess factor (EF) is introduced. Each incremental or decremental

step corresponds with one whole EF-point of difference. Thus the EF is an indication for the number of times the yardstick has to be altered and recalculated. Once the excess factor is determined for all flags, the flags can be ordered by EF. The excess factor can be found in the last column of the White, Grey or Black list. The target (yardstick) has been set on 7% and the size of the increment and decrement on 3%. The White/Grey/Black lists have been calculated in accordance with the principles above.

The graphical representation of the system below is showing the direct relations between the number of inspected ships and the number of detentions. Both axes have a logarithmic character as the ‘black to grey’ or the ‘grey to white’ limit.



Example flag on Black list:

Ships of Flag A were subject to 108 inspections of which 25 resulted in a detention. The “black to grey limit” is 12 detentions. The excess factor is 4.26.

N = total inspections

P = 7%

Q = 3%

Z = 1.645

How to determine the black to grey limit:

$$\begin{aligned}\mu_{blackto\text{grey}} &= N \cdot p + 0.5 + z \sqrt{N \cdot p \cdot (1 - p)} \\ \mu_{blackto\text{grey}} &= 108 \cdot 0.07 + 0.5 + 1.645 \sqrt{108 \cdot 0.07 \cdot 0.93} \\ \mu_{blackto\text{grey}} &= 12\end{aligned}$$

The excess factor is 4.26. This means that ‘p’ has to be adjusted in the formula. The black to grey limit has an excess factor of 1. so to determine the new value for ‘p’. ‘q’ has to be multiplied with 3.26 and the outcome has to be added to the normal value for ‘p’:

$$\begin{aligned}p + 3.26q &= 0.07 + (3.26 \cdot 0.03) = 0.1678 \\ \mu_{excess\text{factor}} &= 108 \cdot 0.1678 + 0.5 + 1.645 \sqrt{108 \cdot 0.1678 \cdot 0.8322} \\ \mu_{excess\text{factor}} &= 25\end{aligned}$$

Example flag on Grey list:

Ships of Flag B were subject to 141 inspections. of which 10 resulted in a detention. The ‘black to grey limit’ is 15 and the “grey to white limit” is 4. The excess factor is 0.51. How to determine the black to grey limit:

$$\begin{aligned}\mu_{blackto\text{grey}} &= 141 \cdot 0.07 + 0.5 + 1.645 \sqrt{141 \cdot 0.07 \cdot 0.93} \\ \mu_{blackto\text{grey}} &= 15\end{aligned}$$

How to determine the grey to white limit:

$$\begin{aligned}\mu_{greyto\text{white}} &= N \cdot p - 0.5 - z \sqrt{N \cdot p \cdot (1 - p)} \\ \mu_{greyto\text{white}} &= 141 \cdot 0.07 - 0.5 - 1.645 \sqrt{141 \cdot 0.07 \cdot 0.93} \\ \mu_{greyto\text{white}} &= 4\end{aligned}$$

To determine the excess factor the following formula is used: ef = Detentions – grey to white limit / grey to black limit – grey to white limit

$$\begin{aligned}ef &= (10 - 4) / (15 - 4) \\ ef &= 0.51\end{aligned}$$

Example flag on White list:

Ships of Flag C were subject to 297 inspections of which 11 resulted in detention. The “grey to white limit” is 13 detentions. The excess factor is –0.28. How to determine the grey to white limit:

$$\begin{aligned}\mu_{greyto\text{white}} &= N \cdot p - 0.5 - z \sqrt{N \cdot p \cdot (1 - p)} \\ \mu_{greyto\text{white}} &= 297 \cdot 0.07 - 0.5 - 1.645 \sqrt{297 \cdot 0.07 \cdot 0.93} \\ \mu_{greyto\text{white}} &= 13\end{aligned}$$

The excess factor is - 0.28 This means that ‘p’ has to be adjusted in the formula. The grey to white limit has an excess factor of 0. so to determine the new value for ‘p’. ‘q’ has to be multiplied with –0.28. and the outcome has to be added to the normal value for ‘p’:

$$\begin{aligned}p + (-0.28q) &= 0.07 + (-0.28 \cdot 0.03) = 0.0616 \\ \mu_{excess\text{factor}} &= 297 \cdot 0.0616 - 0.5 - 1.645 \sqrt{297 \cdot 0.0616 \cdot 0.9384} \\ \mu_{excess\text{factor}} &= 11\end{aligned}$$

Secretariat Paris Memorandum of Understanding on Port State Control



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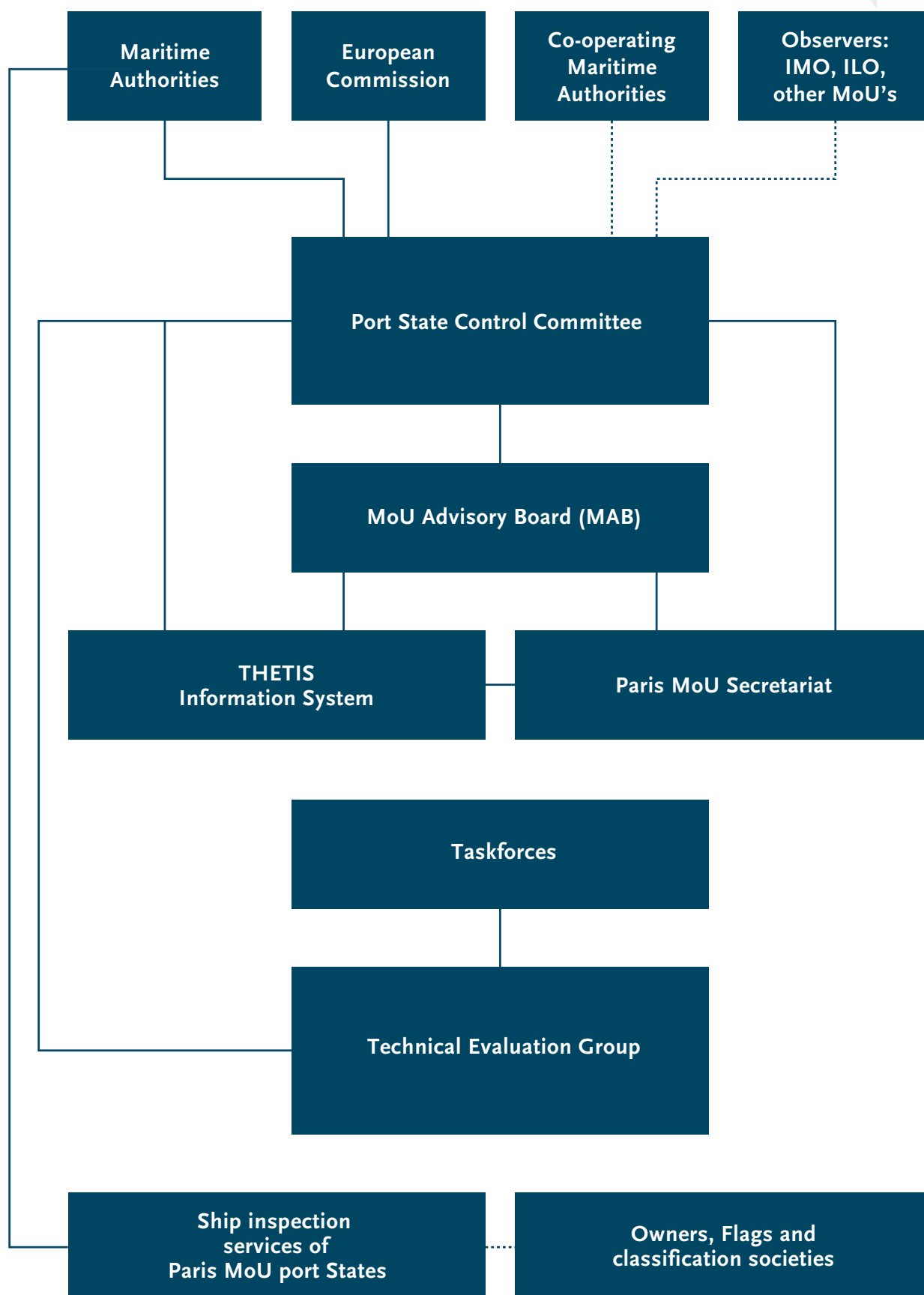
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