Paris MoU

on Port State Control



THE PARIS MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL

Port State Control

40 years of harmonisation

ANNUAL REPORT 2022

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Annual Report **2022**

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Introduction
CHAIRMAN AND SECRETARY-GENERAL



We look back on a year in which, after the Coronavirus Pandemic, the world and the Paris MoU were faced with the war in Ukraine. As a result, the Paris MoU membership of the Russian Maritime Authority was suspended in May of the year, with immediate effect and until further notice.

With regard to the Coronavirus Pandemic, we have now, fortunately, ended up in calmer waters. After having to endure a few years on which COVID-19 exerted a major impact, it is now some after-effects that play a role. This applies, for example, to the relatively large number of ships earmarked for an inspection in the ports of the Paris MoU members. It will be some time before that overshoot is reduced to regular numbers. Although the correlation is not easy to demonstrate, it is striking to see that the average detention rate has increased considerably to 4.18%; even when you compare it to the period before the pandemic started (2019, 2.98%). Apart from the possible relationship to COVID-19, it is worrying to see that after years of a slow but steady decline in the detention percentage, that percentage is now increasing again. This increase also has a noticeable impact on the performance lists of flag States.

This means that the importance of port State control as a safety net is increasing again. Where those with primary responsibility do not take their obligations sufficiently seriously, it is important that port States tackle those ships that pose a threat to safe, environment-friendly

shipping and safe working and living conditions on board. We hope, and in fact assume, that the chain partners in the maritime sector, each from their own responsibilities and possibilities, will also take measures to put a stop to this negative trend. The Paris MoU itself will also take further steps in the elimination of substandard shipping, including by focusing on strengthening cooperation with port State control regimes in other parts of the world.

These efforts have been ongoing for the past 40 years and on the 1st of July 2022 the Paris MoU celebrated its 40th Anniversary. To commemorate this, a promotional video on the history, development and goals of the Paris MoU was made and published on the Paris MoU website.
The Paris MoU members and bodies have continued to positively contribute to the goals and results of maritime safety. The European Commission and the European Maritime Safety Agency (EMSA) are also thanked for their pro-active co-operation and strong working relationship with the Paris MoU.

In conclusion, the port State control officers are the ones at the heart of the Paris MoU together with their colleagues in the maritime administrations and who together continue to deliver on our common objectives. Special thanks and appreciation go to them. ■



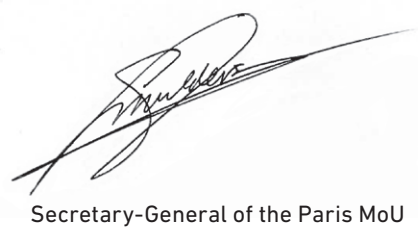
Brian Hogan



Chairman of the Paris MoU Committee



Luc Smulders



Secretary-General of the Paris MoU

Executive **SUMMARY**

During 2022, the efforts of the Paris MoU with regard to ship inspections have normalised compared to the two previous years. Inspections could be carried out again at a level that is customary for the Paris MoU. COVID-19 no longer imposed restrictions on the efforts. However, the information on inspection results from 2022 was difficult to compare with the two previous years because of the different circumstances regarding numbers of inspections and deficiencies. In some cases, it has therefore been decided to use the pre-COVID year 2019 as the reference year instead of 2021.

In 2022, 10 Refusal of Access Orders (bans) were issued. This is a significant decrease compared to the 25 bans issued in 2019.
The detention percentage has risen to 4.18% (3.49% in 2021), the highest in 10 years. Consequently, the number of detainable deficiencies has also increased to 4,873 (3,352 in 2021). The number of inspections carried out was 17,289. Comparable to the number of inspections in 2019: 17,916.

In the past three years 21 ships have been banned for multiple detentions, eight ships were banned "failing to call at an indicated repair yard". In the same period, four ships were banned for a second time.

Over a three-year period the flags of Comoros and the Republic of Moldova have recorded the highest number of bannings.

Looking at the Paris MoU "White, Grey and Black List", a small shift is noticeable in the quality of shipping, resulting in a smaller "Grey List" and a larger "Black List" compared to 2021. The total number of 39 flags on the "White List" is one less than that of 2021 (40). The "Grey List" contains 18 flags (21 in 2021); the "Black List" 9 flags (7 in 2021).

The number of inspections has clearly normalised; 17,289. The detention percentage in 2022 has risen substantially to 4.18% (3.49% in 2021). The highest in 10 years. The number of detainable deficiencies has also increased from 3,352 in 2021 to 4,873 this year.

The five most frequently recorded deficiencies in 2022 were "ISM" (4.8%, 2,248), "fire doors/openings in fire-resisting divisions" (2.9%, 1,373), "Seafarers' Employment Agreement" (1.6%, 765), "cleanliness of engine room" (1.5%, 707) and "auxiliary engine" (1.3%, 600). ■

Paris MoU 2022

on Port State Control

Three year trend detention %



2020: 2.92%

2021: 3.49%

2022: 4.18%

Inspection results



17,289 Inspections

9,340 Inspections with deficiencies

723 Detentions

10 Bannings

Number of White, Grey and Black flags



39

18

9

Performance in number of ROs



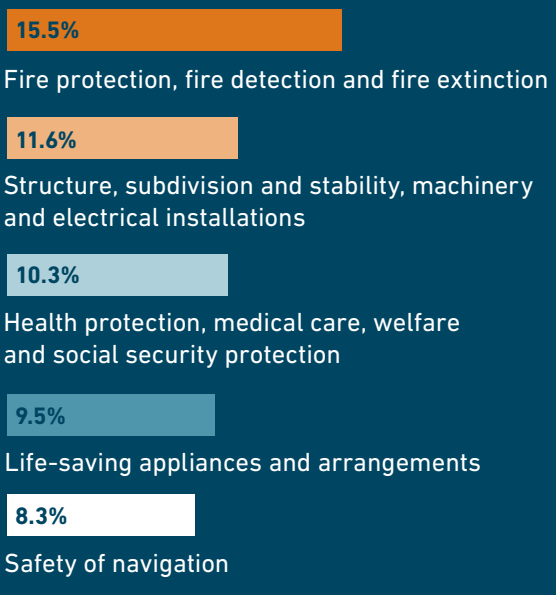
High 11

Medium 19

Low 1

Very low 1

Top 5 category of deficiencies



15.5% Fire protection, fire detection and fire extinction

11.6% Structure, subdivision and stability, machinery and electrical installations

10.3% Health protection, medical care, welfare and social security protection

9.5% Life-saving appliances and arrangements

8.3% Safety of navigation

40 years **PARIS MOU**



On 1 July 2022 the Paris MoU celebrated its 40th anniversary. To celebrate this, the Paris MoU has developed a promotional video explaining what the Paris MoU is, how it came about, how the Paris MoU works and what the result of its work are. The video is available on the Paris MoU website and can also be used by the industry to inform interested parties about the work of the Paris MoU and the methodology of port State control.

A quick link is provided with this QR code or use https://www.parismou.org/about-us/organisation.

The website also contains a full historical overview of the Paris MoU and important events. ■

40 YEARS OF Paris MoU on Port State Control

1978

Eight nations bordering the North Sea signed **"The Hague Memorandum"**. It was the first step in bringing port State control inspections into a harmonised environment. The co-operation centered around the **ILO convention 147**.

1980

2 December 1980 - A regional European Conference of Maritime Safety was held to establish a Memorandum of understanding on Port State Control. This was the **1st Ministerial Conference on Port State Control**. 14 European nations took part as well as the EC, ILO and IMO. The Memorandum now extended to the IMO conventions.

1982

The MoU entered into effect on **1 July 1982**. Signing members: Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom. The **1st PSC Committee meeting** was held in The Hague - Netherlands.

1978

16 March 1978 - The **Amoco Cadiz** ran aground of the coast of Brittany. **68 million** gallons of crude oil was spilled. This created an urgent demand by the public and politicians for action.

1982

26 January 1982 - The Memorandum of Understanding on PSC was adopted and signed by **14 maritime Authorities** during the 2nd Ministerial Conference on PSC. The MoU includes 7 relevant instruments.

- *The Netherlands' Ministry of Transport provided the Secretariat Paris MoU on PSC.*
- *The French Maritime Administration developed the 'information system on inspections' - SIReNaC.*

2019

The number of deficiencies related to emergency systems has been in the top 5 categories for many years. The PSC Committee decided to conduct a **CIC on Emergency Systems and Procedures** from 1 September to 30 November.

2020

Coping with COVID-19 circumstances, the Paris MoU held its 53rd Committee meeting by **virtual means** from 28 September to 2 October.

2021

Recalling the incident with the M/V HOEGH OSAKA in 2015, and noting the deficiencies in this area are serious and affect safety of the ship and the crew in general, the PSC Committee decided to conduct a **CIC on Stability (in general) in 2021**, from 1 September to 30 November.

2022

The Paris MoU celebrates its **40th anniversary** during the 55th PSC Committee meeting in Bucharest, Romania.

2020

The **COVID-19 crisis** has had a considerable effect on the maritime industry, with limited resources to do necessary surveys and inspection, postponement of the renewal of certificates and difficulties for crew members to board ships or take leave. The Paris MoU, in co-operation with the Tokyo MoU, have decided to **postpone the CIC for 2020**.

2021

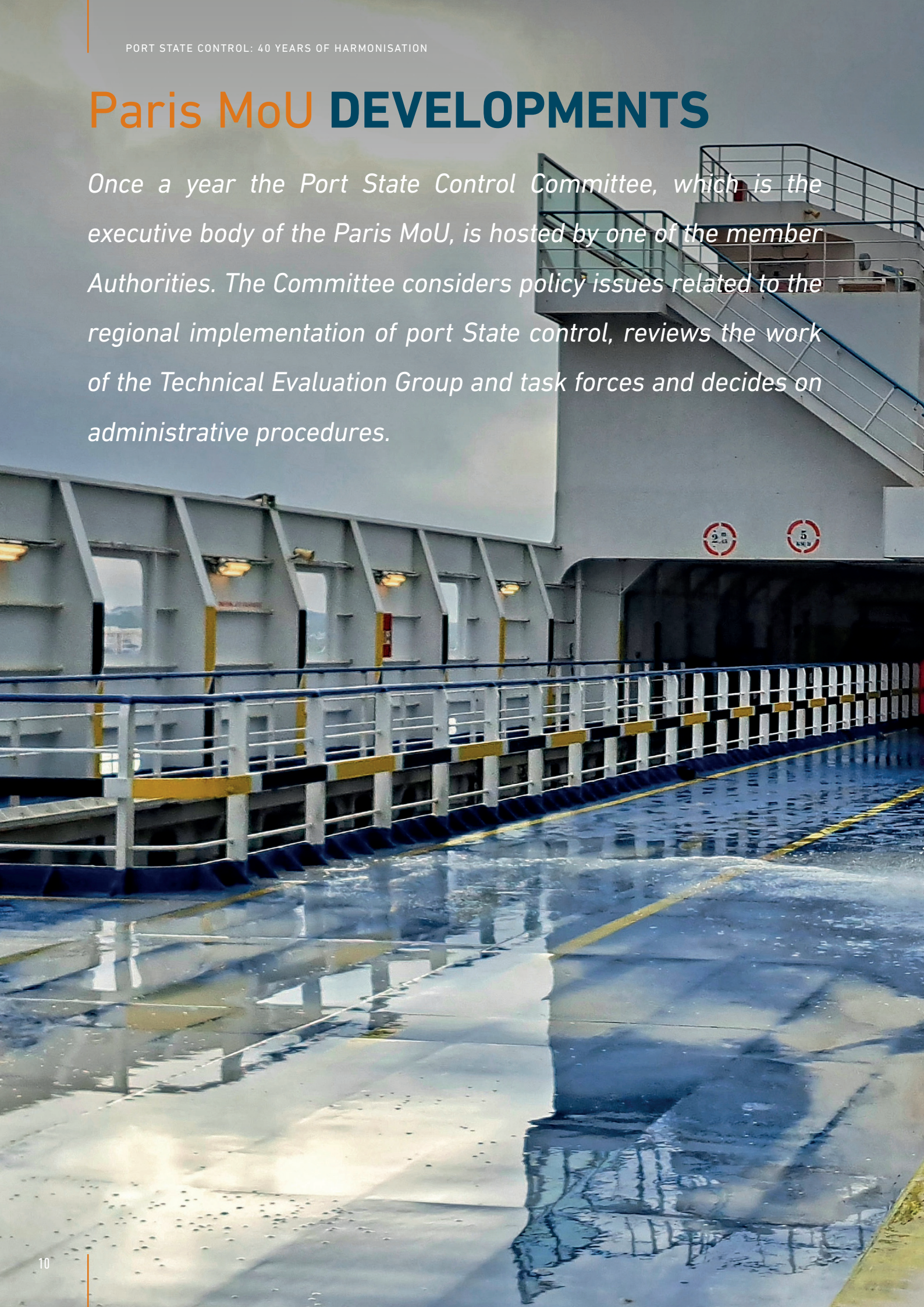
Still coping with COVID-19 circumstances, the Paris MoU held its 54th Committee meeting by **virtual means** from 17 - 21 May.
Issuance of **PSCircular 97** - guidance in relation to COVID-19 by the MoU Advisory Board (MAB).

Paris MoU on Port State Control 40th Anniversary 1982 - 2022

HISTORIC OVERVIEW OF THE PARIS MOU NOTING SIGNIFICANT DATES. VISIT THE WEBSITE FOR THE COMPLETE (HI)STORY.

Paris MoU **DEVELOPMENTS**

Once a year the Port State Control Committee, which is the executive body of the Paris MoU, is hosted by one of the member Authorities. The Committee considers policy issues related to the regional implementation of port State control, reviews the work of the Technical Evaluation Group and task forces and decides on administrative procedures.





The task forces are each assigned a specific work programme to examine the improvement of operational, technical and administrative port State control procedures. Reports from the task forces are submitted to the Technical Evaluation Group (TEG) in which all Paris MoU members and observers are represented. The evaluation by TEG is submitted to the Committee for final consideration and decision-making.

The MoU Advisory Board 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 2022 consisted of participants from Canada, Italy, the Netherlands, the United Kingdom and the European Commission.

PORT STATE CONTROL COMMITTEE

The Paris Memorandum of Understanding on Port State Control (Paris MoU) held its 55th Committee meeting face-to-face in Bucharest, Romania, from 16 to 20 May 2022. The Committee consists of 27[1] member Authorities and the European Commission.

During the meeting the Committee commemorated the 40th anniversary of the Paris MoU. A promotional video specially developed for the 40th anniversary was presented that could be used to inform the general public about port State control and the Paris MoU.

One of the priority elements discussed was the COVID-19 Pandemic and its impact on port State control. The number of port calls as well as the number of inspections seemed to return to normal. Relatively many of the ships entering the ports in the Paris MoU region had a high priority of inspection, the reason being that they had not been subject to a port State control inspection in the previous period due to COVID-19.

The Committee discussed the concentrated inspection campaigns (CICs) scheduled to start with an Inspection Campaign on the Polar Code in June and August 2022 and a CIC on STCW in the autumn of 2022, followed by a CIC on Fire Safety in 2023.

The Committee also adopted the 2021 Annual Report, including the "White, Grey and Black List" and the performance list of Recognized Organizations. These lists have been taken into account for the calculation of the Ship Risk Profile from 1 July 2022.

1 Of which the Russian Maritime Authority has been suspended until further notice in May 2022.



TECHNICAL EVALUATION GROUP

The Committee established a number of task forces each with substantive Terms of Reference including the requirement to report to the Technical Evaluation Group (TEG) that met in December 2022 and to the next meeting of the Port State Control Committee in May 2023. TEG was held face-to-face in Italy. The task forces addressed, among others, the following topics:

- Information System Developments;
- Evaluation of Paris MoU Statistics;
- CIC on STCW 2022;
- CIC on Fire Safety 2023;
- CIC on MLC, 2006 2024;
- CIC on BWM 2025.

PORT STATE CONTROL TRAINING AND SEMINARS

Training plays an important part in achieving the goals of the Paris MoU (the elimination of substandard shipping) and aims at a higher degree of harmonisation and standardisation of inspections throughout the region. During the year several trainings are organised by the Secretariat in cooperation with member Authorities:

1. Seminars;
2. Expert Training (Safety & Environment and The Human Element);
3. Specialised Training (Tanker, Bulk Carrier or Passenger Ships).

Participants from all member Authorities participated in one (or more) of the trainings and seminars. Representatives from other MoU Regions, such as the Tokyo MoU, Indian Ocean MoU, Caribbean MoU, Black Sea MoU, Mediterranean MoU, Abuja MoU and the United States Coast Guard participated in various training and seminars. In early 2022 the Safety & Environment training was, due to the COVID-19 Pandemic, still in a virtual way, but all other trainings (Tanker training in June and The Human Element training in October) and Seminars were face-to-face. The seminar in June was organised by Ireland and in November the seminar was organised by Norway. More than 175 Port State Control Officers participated in one of training courses and seminars.

TRAINING IN COOPERATION WITH THE EUROPEAN MARITIME SAFETY AGENCY

The European Maritime Safety Agency (EMSA) and the Paris MoU Secretariat jointly contributed to the planning and delivery of this year's PSC Seminars for Port State Control Officers (PSCOs); new entrants and existing PSCOs. The purpose of training is to ensure harmonisation, to exchange best practices and to refresh the knowledge on existing procedures for all PSCOs from each Paris MoU Member Authority. Given the ease of lifting restrictions associated with the end of lockdowns, a move from online to face-to-face training was possible this year.

The Paris MoU inspection regime focuses on elimination of substandard shipping and on rewarding well-performing ships in terms of the inspection frequency. It translates to "less, but higher quality inspections". The regime is supported by a comprehensive set of procedures, all aimed at providing more guidance for better inspections.

In 2022, between the first seminars – which were still held online at the time – and the post-summer ones, which were held physically at EMSA, 148 PSC Officers participated

in the trainings. Nevertheless, the trainings succeeded in maximising familiarisation with port State control inspection procedures.

Throughout all those seminars, the main objective of the training provided remained the establishment of a harmonised approach to port State control in the geographical working area of the Paris MoU. The discussion of real cases and feedback sessions with participants during the seminars showed that indeed a broader understanding of the procedures and the available tools such as the Paris MoU manual, THETIS, RuleCheck and more recently the new RuleCheck Flag State functionality. In addition, PSC seminars included scenarios developed for each seminar in VRESI, the Virtual Reality Environment for Ship Inspections, which allowed participants to experiment with specific aspects of a PSC inspection on board a virtual ship using their laptops.

DETENTION REVIEW PANEL

When ship managers, owners, flag States or ROs are unable to resolve a dispute regarding a detention with the port State, there are two ways to appeal a detention. There is the possibility to file a national appeal in the country of the port State according to the national legislation. Another possibility is a request, by the flag State or RO, for a detention review panel within the Paris MoU. The Detention Review Panel consists of representatives from four different Paris MoU member Authorities and the Secretariat and will consider the procedural and technical aspects of the inspection and detention based on the information provided by the flag State, Recognized Organization and the port State. If the views of the panel support the flag State's or Recognized Organization's complaint, the port State will be requested to reconsider its decision. The findings of the panel are not binding but may provide justification for the port State to amend its inspection data and the associated detention.

In 2022 two cases were submitted to the Secretariat. The cases met the criteria for the Detention Review Panel and were submitted to MoU members for review. In one case, the panel concluded that there was no need to request the port State for a reconsideration of the detention. In the other case, the panel concluded that the port State should be requested to reconsider the detention. Based on the recommendation by the Review Panel, the detention of this ship was revoked.

PARIS MOU ON THE INTERNET

The Paris MoU Secretariat is constantly improving the accessibility of information on the website.

Inspection search, current detentions, current bannings and publications are most popular webpages of 2022. Some pages on the website (inspection search & current detentions) are embedded pages made available by courtesy of EMSA.

The Paris MoU also developed a flexible information tool on inspections, detentions, deficiencies and flag States that is presented through the website. Flag and port States, government agencies, charterers, insurers and classification societies are constantly looking for data and information and in this way can continuously monitor their performance and that of others. This data is also made available in bulk through a data sharing service.

Other information of interest such as monthly detention lists, annual reports, performance lists and news items can be downloaded from our website: **www.parismou.org**

CO-OPERATION WITH OTHER ORGANISATIONS

The strength of regional regimes of port State control, which are bound by geographical circumstances and interests, is widely recognised. Apart from the Paris MoU, nine other regional PSC Agreements (including the US Coast Guard) have been established.

All other PSC Agreements have observer status at the Paris MoU. This facilitates the co-operation between the regional agreements. Regional agreements have demonstrated that their member Authorities invest demonstrably 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.

The regional agreements are: the Tokyo MoU, Caribbean MoU, Mediterranean MoU, Black Sea MoU, Riyadh MoU, Acuerdo de Viña del Mar, Abuja MoU and Indian Ocean MoU. 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.

Since 2006 the Paris MoU has had an official status at the IMO as an Inter-Governmental Organisation. The 8th session of the Sub-Committee on Implementation of IMO Instruments (III 8) was held virtually in July 2022 and was also attended by representatives from the Paris MoU.

The 2021 Annual Report including inspection data and a combined list of flags targeted by the Paris MoU, Tokyo MoU and USCG in 2021 were submitted to the 8th meeting of the IMO III Sub-Committee.

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 Authorities and observer/associate status for other PSC regions.

Specific criteria must be met, including completion of a self-evaluation questionnaire, before co-operating status can be granted.

The Paris MoU currently has 8 members with dual or even triple membership: Canada is member of the Tokyo MoU. With Bulgaria and Romania there are further ties with the Black Sea MoU. Malta and Cyprus are also members of the Mediterranean MoU. France and the Netherlands are members of the Caribbean MoU, whilst France is also a member of the Indian Ocean MoU. ■



Facts & Figures 2022

The facts and figures for 2022 are listed on the following pages. Compared to the previous years 2020 and 2021 the port State control effort have normalised. The statistics in this section are therefore compared to the facts and figures of 2019, being a pre-COVID-19 year, in order to compare the figures in similar circumstances. The statistics in the annex do, however, state the 3-year rolling period in specific cases.

The number of inspections in 2022 was with 17,289 similar to 2019; 17,908. The detention percentage of 4.18% has increased substantially (2.98% in 2019). The highest percentage in ten year's time. This percentage has gradually increased in recent years (2.92 in 2020 and 3.49% in 2021). The number of ships that received a refusal of access (banning) order dropped from 25 in 2019 to 10 this year.

INSPECTIONS

As mentioned, the total number of inspections carried out in 2022 is 17,289. A similar number compared to 2019: 17,908. The inspections in 2020 (13,168) and 2021 (15,401) show that the situation has normalised.

DEFICIENCIES

The number of deficiencies this year was 47,167. 2019 shows 39,821.

DETAINABLE DEFICIENCIES

The recorded detainable deficiencies have increased from 3,015 in 2019 to 4,873 in 2022.

DETENTIONS

Some deficiencies are clearly a threat to the safe and environment-friendly operation of ships or to working and living conditions on board in which case the ship will be detained until rectified. Detention rates are expressed as a percentage of the number of inspections, rather than the number of individual ships inspected to account for the fact that some ships are detained more than once a year.

Compared to 2019, the number of detentions has increased significantly from 534 to 723 detentions. This increase results in an also significant increase in the detention percentage to 4.18%. The highest percentage in ten years' time.

"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 during a 3-year rolling period for flags with at least 30 inspections in that period.

The "White List" represents quality flags with a consistently low detention record. Flags with an average performance are shown on the "Grey List". Their appearance on this list may serve 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.

Regarding the "White, Grey and Black List" for 2022, a total number of 66 flags are listed: 39 on the "White List", 18 on the "Grey List" and 9 on the "Black List". In 2019 the total number of flag States on the list was 70 of which 41 on the "White List", 16 on the "Grey List" and 13 on the "Black List".

A graph of the distribution of listed and non-listed flags indicates that only 1.1% of the ships inspected are from flags not listed on the "WGB List" because the number of inspections of ships under those flags is too low to be taken into account statistically.

SHIP TYPE

In 2022 the top 3 detention rates in terms of ship types were: livestock carrier 7.9%; general cargo/multipurpose ships at 6.8% and tugs 6.5%.

The category of tankers carrying noxious liquid substances (NLS tankers) shows 12.5% which is the result of merely 1 detention on 8 inspections. The general category "other" shows a percentage of 7.1%, the result of merely 1 detention on 14 inspections.

PERFORMANCE OF RECOGNIZED ORGANIZATIONS

For several years the Committee has closely monitored the performance of ROs acting on behalf of flag States. To calculate the performance of ROs, the same formula to calculate the excess factor of the flags is used. A minimum number of 60 inspections per RO is needed before the performance is taken into account for the list. In 2022 32 ROs were recorded on the performance list.



Compared to last year's performance level, the RO performance level has a similar level as last year.

Details of the responsibility of ROs for detainable deficiencies have been published since 1999. When one or more detainable deficiencies are attributed to an RO in accordance with the Paris MoU criteria, it is recorded "RO responsible" and the RO is informed.

REFUSAL OF ACCESS OF SHIPS

A total of 10 ships were refused access (banned) from the Paris MoU region in 2022. 7 for multiple detentions and 3 failed to call at the indicated repair yard. Over a period from 2020 to 2022, 4 ships have been banned for the second time after multiple detentions, resulting in a minimum banning period of 12 months. The total number of bannings from 2019 on were 25 (2019), 8 (2020), 11 (2021) and 10 in 2022.

DEFICIENCIES PER CONVENTION

The deficiencies are recorded in relation to conventions. As such, some (parts of) these conventions show a relative larger recording then other (parts of) conventions. The 5 highest recording percentages are mentioned. The full details can be found in the statistical annex. Because of a renewed setup of the respective table, these particular figures are compared with 2020 and 2021. In general the numbers of recorded deficiencies are much higher than in the previous years.

SOLAS Chapter II-2 (Construction – Fire protection, fire detection and fire extinction)

The relative percentage of fire safety deficiencies recorded has remained fairly stable over the years and is the highest of all conventions. 15.5% in 2022, compared to 14.8% in 2021 and 14.3% in 2020. In numbers, the recorded deficiencies in 2022 increased substantially to 7,310. Looking at comparable historical records, an average of around 5,200 was common.

SOLAS Chapter II-1 (Construction – Structure, subdivision and stability, machinery and electrical installations)

The relative percentage on these deficiencies remained stable as well; 11.6% (2022), 12% (2021) and 11.3% (2020). In numbers; 5,455 (2022), 4,364 (2021) and 3,194 (2020).

MLC, 2006 Title 4 (Health protection, medical care, welfare and social security protection)

Again, the relative percentage of recordings remained stable at 10.3%. Compared to 2019, this is an increase of 2.2%, in numbers 1,604 additional deficiencies on a total of 4,847 in 2022.

SOLAS Chapter III (Life-saving appliances and arrangements)

The percentages of life-saving appliances and arrangements vary slightly. In 2022 a percentage of 9.5%, 8.7% in 2021 and 9.1% in 2020. Related to 2019, a comparable figure shows a percentage of 8% and 3,197 recordings against a total of 4,504 in 2022.

SOLAS Chapter V (Safety of navigation)

Although the number of recorded deficiencies increased from 2020 to 2022 (2,673; 3,213; 3,925) the relative percentage dropped from 9.4% in 2020 to 8.9% in 2021 and 8.3% in 2022. Compared to the figures in 2019 it decreased substantially from 11% (2019). The total deficiencies in numbers decreased as well from 4,367 to 3,925. ■





STATISTICAL ANNEXES

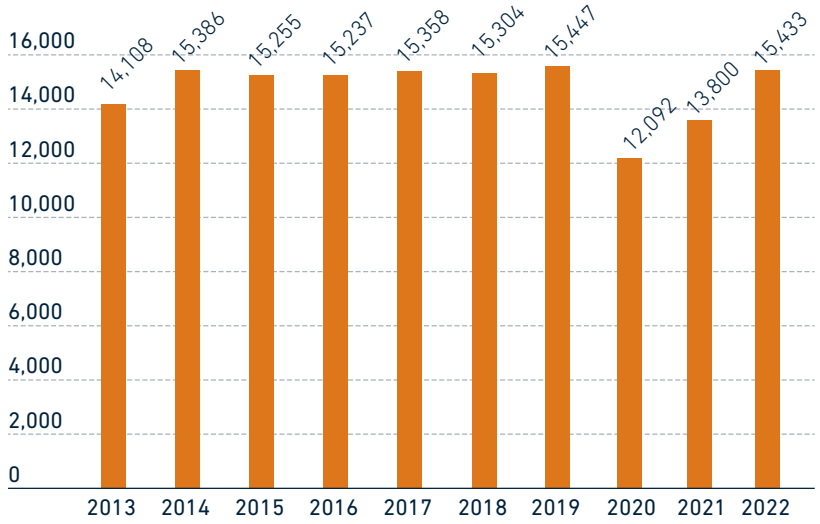


THE PARIS MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL

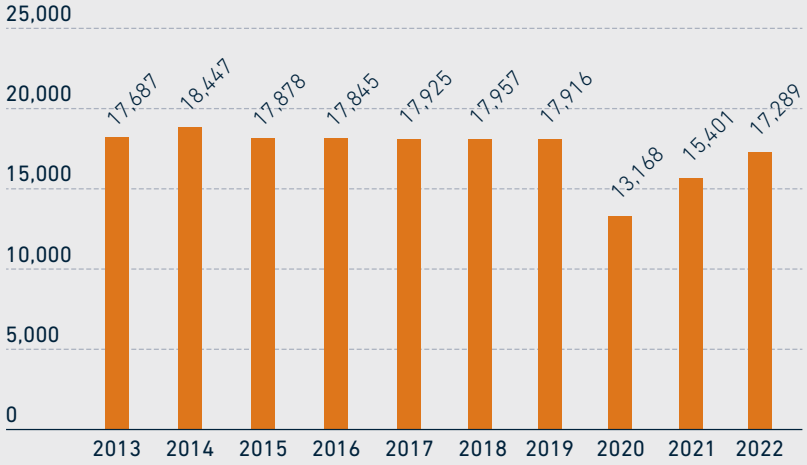
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BASIS PORT STATE CONTROL FIGURES 2022

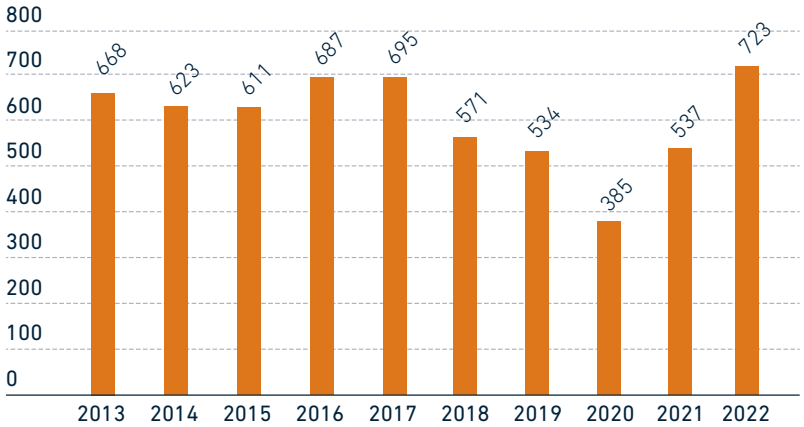
NUMBER OF INDIVIDUAL SHIPS INSPECTED



NUMBER OF INSPECTIONS

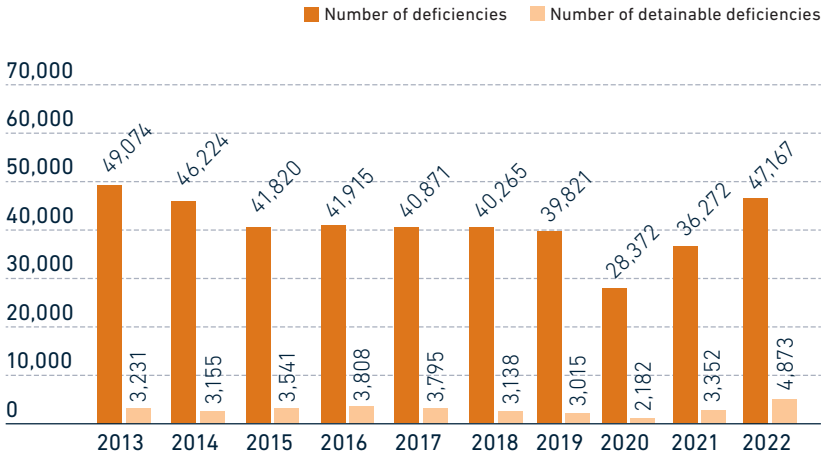


NUMBER OF DETENTIONS

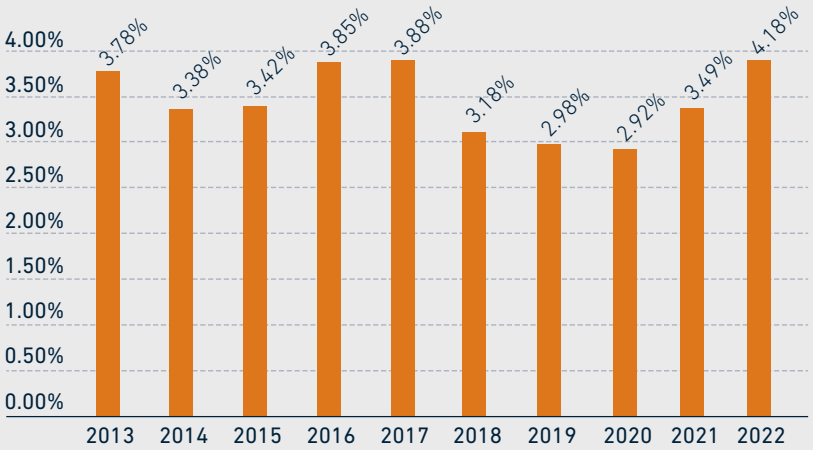


Note: The cut-off date for inspection data to be included in the Annual Report 2022 was 15-02-2023. Changes to inspection data after this date have as a rule not been taken into account. Due to PSCC50 decision the Annual Report data will, from now on, include the current annual year and all amended data in previous years back to 3 calender years.

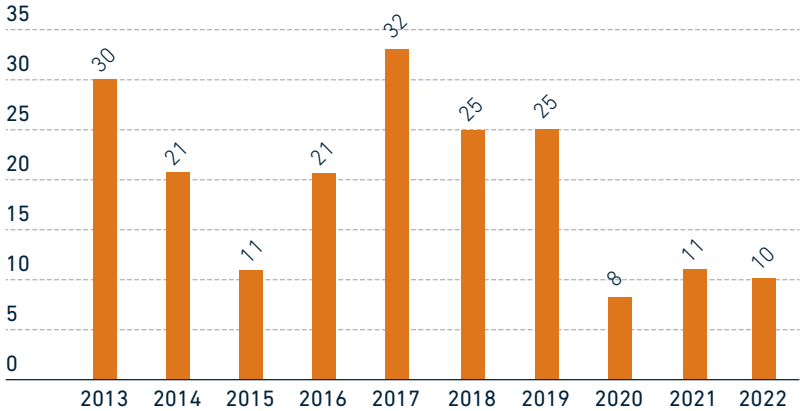
NUMBER OF DEFICIENCIES AND DETAINABLE DEFICIENCIES



DETENTIONS IN % OF INSPECTIONS



NUMBER OF REFUSAL OF ACCESS





WHITE LIST

RANK	FLAG	INSPECTIONS 2020-2022	DETENTIONS 2020-2022	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
WHITE LIST						
1	Denmark	1,121	9	93	64	-1.87
2	Italy	802	7	69	44	-1.79
3	Greece	617	5	54	32	-1.77
4	Netherlands	2,536	39	199	156	-1.67
5	Norway	1,572	23	127	93	-1.65
6	Singapore	1,601	27	129	95	-1.57
7	Finland	338	4	32	15	-1.43
8	Cyprus	2,023	43	161	122	-1.43
9	Belgium	179	1	19	6	-1.41
10	United Kingdom	659	12	57	35	-1.36
11	Bahamas	1,646	37	133	98	-1.36
12	Turkey	580	11	51	30	-1.29
13	Sweden	287	4	28	12	-1.26
14	Hong Kong (China)	1,583	40	128	94	-1.24
15	Japan	153	1	16	5	-1.24
16	Cayman Islands (UK)	320	5	30	14	-1.23
17	France	227	3	23	9	-1.16
18	Marshall Islands	4,703	145	358	300	-1.16
19	Gibraltar (UK)	409	8	38	20	-1.15
20	Malta	3,710	114	286	234	-1.14
21	Luxembourg	222	3	22	9	-1.13
22	Lithuania	93	0	11	2	-1.09
23	Bermuda (UK)	135	1	15	4	-1.07
24	Ireland	132	1	15	4	-1.04
25	Liberia	4,569	156	349	291	-1.04
26	Portugal	1,473	45	120	87	-1.03
27	United States	128	1	14	4	-0.99
28	China	200	3	20	8	-0.99
29	Russian Federation	832	24	71	46	-0.98
30	Faroe Islands	219	4	22	9	-0.90
31	Antigua and Barbuda	1,712	61	138	102	-0.87
32	Barbados	538	16	48	27	-0.82
33	Isle of Man (UK)	340	9	32	16	-0.78
34	Germany	522	16	47	26	-0.78
35	Estonia	74	0	9	1	-0.77
36	Spain	142	4	15	4	-0.14
37	Latvia	120	3	13	3	-0.12
38	Poland	36	0	6	0	0.08
39	Thailand	33	0	5	0	0.10

GREY LIST

RANK	FLAG	INSPECTIONS 2020-2022	DETENTIONS 2020-2022	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
GREY LIST						
40	Croatia	64	1	8	1	0.05
41	Saudi Arabia	61	1	8	0	0.07
42	Korea, Republic of	89	3	11	2	0.14
43	Morocco	46	1	7	0	0.17
44	Saint Vincent and the Grenadines	266	14	26	11	0.19
45	India	41	1	6	0	0.21
46	Panama	5,472	366	415	351	0.23
47	Iran, Islamic Republic of	47	2	7	0	0.31
48	Lebanon	40	2	6	0	0.37
49	Switzerland	35	2	5	0	0.42
50	Philippines	126	9	14	4	0.52
51	Belize	195	16	20	7	0.68
52	Egypt	40	4	6	0	0.69
53	Cook Islands	122	11	14	3	0.74
54	Palau	216	19	22	8	0.79
55	Azerbaijan	41	5	6	0	0.83
56	Saint Kitts and Nevis	140	14	15	4	0.88
57	Ukraine	57	7	8	0	0.91

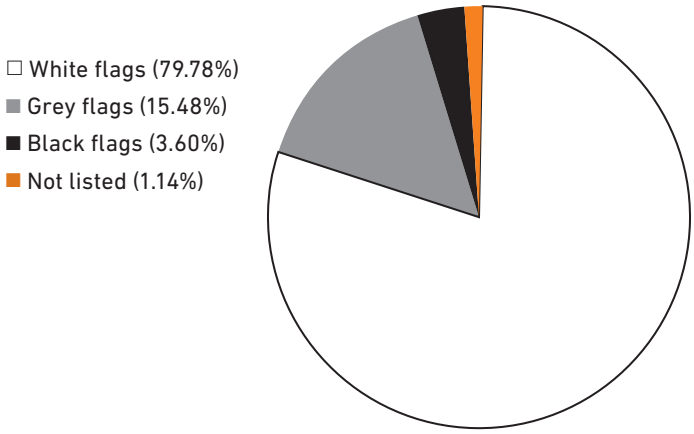




BLACK LIST

RANK	FLAG	INSPECTIONS 2020-2022	DETENTIONS 2020-2022	BLACK TO GREY LIMIT	RISK	EXCESS FACTOR
BLACK LIST						
58	Tanzania, United Republic of	125	14	14	Medium	1.01
59	Comoros	282	28	27		1.07
60	Sierra Leone	186	20	19		1.11
61	Vanuatu	290	30	28		1.21
62	Albania	55	8	7		1.24
63	Togo	325	44	31	Medium to High	2.19
64	Algeria	68	13	9		2.64
65	Moldova, Republic of	229	38	23		2.92
66	Cameroon	93	22	11	Very High Risk	4.25

NUMBER OF INSPECTIONS PER PERFORMANCE LIST 2020-2022





FLAGS MEETING CRITERIA FOR LOW RISK SHIPS 2022

Flags meeting criteria for Low Risk Ships (as per 1 July 2023)		
Antigua and Barbuda	Bahamas	Barbados
Belgium	Bermuda (UK)	Cayman Islands (UK)
China	Cyprus	Denmark
Estonia	Faroe Islands	Finland
France	Germany	Gibraltar (UK)
Greece	Hong Kong (China)	Ireland
Isle of Man (UK)	Italy	Japan
Latvia	Liberia	Lithuania
Luxembourg	Malta	Marshall Islands
Netherlands	Norway	Poland
Portugal	Russian Federation	Singapore
Spain	Sweden	Thailand
Turkey	United Kingdom	United States

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 (V)IMSAS Audit.

Non-listed flags having undergone IMO (V)IMSAS Audit			
Bahrain	Bangladesh	Bolivia	Brazil
Brunei Darussalam	Bulgaria	Canada	Cape Verde
Congo, the Democratic Republic of the	Curacao	Dominica	Equatorial Guinea
Ethiopia	Gabon	Gambia	Georgia
Guyana	Honduras	Iceland	Indonesia
Israel	Jamaica	Jordan	Kazakhstan
Kuwait	Malaysia	Mauritius	Mexico
Monaco	Mongolia	Montenegro	Nigeria
Pakistan	Qatar	Sao Tome and Principe	Seychelles
Slovenia	South Africa	Sri Lanka	Trinidad and Tobago
Tunisia	Turkmenistan	Tuvalu	United Arab Emirates
Viet Nam			

Flags whose total number of inspections over a 3-years rolling period do not meet the minimum of 30 are not included in the Paris MoU White list but with a minimum of 1 inspection. 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 2020-2022*		
Bahrain (1)	Indonesia (7)	South Africa (1)
Brazil (8)	Israel (20)	Sri Lanka (2)
Brunei Darussalam (1)	Jersey (UK) (20)	Taiwan, Province of China (11)
Canada (26)	Kuwait (14)	Timor-Leste (1)
Cape Verde (3)	Malaysia (12)	Trinidad and Tobago (1)
Congo, the Democratic Republic of the (1)	Mauritius (6)	Turkmenistan (1)
Falkland Islands (UK) (Malvinas) (3)	Mexico (1)	Virgin Islands British (UK) (8)
Gabon (5)	Pakistan (5)	Zambia (1)
Georgia (5)	Seychelles (16)	
Guinea-Bissau (1)	Slovenia (8)	

Flags whose total number of inspections over a 3-years rolling period do not meet the minimum of 30 are not included in the Paris MoU White, Grey and Black lists but with a minimum of 1 inspection. The flags in this table had too few inspections to be included in the lists, but had no detentions in the mentioned period. * Note: The flags are listed in alphabetical order. The number of inspections over the mentioned period taken into account is shown between brackets.

INSPECTIONS, DETENTIONS AND DEFICIENCIES 2022

Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of detainable deficiencies	% of Inspections with deficiencies	% of Inspections with detentions
Albania	23	23	3	32	100.0	13.0
Algeria	26	20	4	25	76.9	15.4
Antigua and Barbuda	565	364	32	178	64.4	5.7
Azerbaijan	9	6	3	27	66.7	33.3
Bahamas	666	316	21	119	47.4	3.2
Bahrain	1	-	-	-	-	-
Bangladesh	11	10	2	8	90.9	18.2
Barbados	232	138	8	55	59.5	3.4
Belgium	59	27	1	2	45.8	1.7
Belize	52	45	5	38	86.5	9.6
Bermuda, UK	61	16	1	15	26.2	1.6
Bolivia	1	1	-	-	100.0	-
Bulgaria	4	4	1	3	100.0	25.0
Cameroon	41	37	11	126	90.2	26.8
Canada	8	2	-	-	25.0	-
Cape Verde	1	1	-	-	100.0	-
Cayman Islands, UK	115	49	3	11	42.6	2.6
China	85	45	1	3	52.9	1.2
Comoros	93	87	10	93	93.5	10.8
Cook Islands	34	25	2	12	73.5	5.9
Croatia	23	14	1	16	60.9	4.3
Curacao	8	5	1	3	62.5	12.5
Cyprus	751	416	21	136	55.4	2.8
Denmark	447	189	5	21	42.3	1.1
Dominica	4	2	-	-	50.0	-
Egypt	12	7	-	-	58.3	-
Equatorial Guinea	11	11	4	45	100.0	36.4
Estonia	26	7	-	-	26.9	-
Ethiopia	2	1	1	4	50.0	50.0
Falkland Islands, UK (Malvinas)	1	-	-	-	-	-
Faroe Islands	70	39	2	7	55.7	2.9
Finland	131	77	1	2	58.8	0.8
France	91	33	-	-	36.3	-
Gabon	1	1	-	-	100.0	-
Gambia	7	7	5	67	100.0	71.4
Germany	169	96	3	39	56.8	1.8
Gibraltar, UK	117	63	2	26	53.8	1.7
Greece	223	93	3	11	41.7	1.3
Guinea-Bissau	1	1	-	-	100.0	-
Guyana	2	2	-	-	100.0	-

Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of detainable deficiencies	% of Inspections with deficiencies	% of Inspections with detentions
Honduras	8	8	-	-	100.0	-
Hong Kong (China)	608	282	18	113	46.4	3.0
India	20	11	-	-	55.0	-
Indonesia	3	2	-	-	66.7	-
Iran, Islamic Republic of	14	14	-	-	100.0	-
Ireland	44	12	-	-	27.3	-
Isle of Man, UK	120	54	5	38	45.0	4.2
Israel	7	3	-	-	42.9	-
Italy	300	127	1	2	42.3	0.3
Jamaica	3		-	-	-	-
Japan	69	30	1	1	43.5	1.4
Jersey, UK	8	4	-	-	50.0	-
Jordan	5	5	2	10	100.0	40.0
Kazakhstan	1	1	1	6	100.0	100.0
Korea, Republic of	38	21	1	10	55.3	2.6
Kuwait	5	2	-	-	40.0	-
Latvia	48	24	1	15	50.0	2.1
Lebanon	13	13	1	6	100.0	7.7
Liberia	1,938	1,079	86	574	55.7	4.4
Libya	8	4	1	53	50.0	12.5
Lithuania	30	12	-	-	40.0	-
Luxembourg	88	35	1	9	39.8	1.1
Malaysia	5	2	-	-	40.0	-
Malta	1,335	601	45	245	45.0	3.4
Marshall Islands	1,959	951	67	340	48.5	3.4
Mauritius	3	2	-	-	66.7	-
Mexico	1	1	-	-	100.0	-
Moldova, Republic of	32	32	10	92	100.0	31.3
Monaco	2	2	1	3	100.0	50.0
Mongolia	2	2	1	2	100.0	50.0
Montenegro	5	1	1	11	20.0	20.0
Morocco	16	6	1	15	37.5	6.3
Netherlands	912	426	13	55	46.7	1.4
Niue	2	2	-	-	100.0	-
Norway	630	315	10	42	50.0	1.6
Pakistan	2	2	-	-	100.0	-
Palau	117	112	15	115	95.7	12.8
Panama	2,010	1,271	151	1,156	63.2	7.5
Philippines	44	26	3	19	59.1	6.8
Poland	15	8	-	-	53.3	-

Flag	Nr of Inspections	Inspections with deficiencies	Inspections with detentions	Nr of detainable deficiencies	% of Inspections with deficiencies	% of Inspections with detentions
Portugal	621	341	24	94	54.9	3.9
Qatar	1	1	1	10	100.0	100.0
Register Withdrawn	1	1	1	4	100.0	100.0
Russian Federation	186	118	9	36	63.4	4.8
Saint Kitts and Nevis	61	49	10	93	80.3	16.4
Saint Vincent and the Grenadines	75	52	5	36	69.3	6.7
Sao Tome and Principe	1	1	-	-	100.0	-
Saudi Arabia	23	11	1	6	47.8	4.3
Seychelles	5	2	-	-	40.0	-
Sierra Leone	60	56	7	74	93.3	11.7
Singapore	589	254	10	58	43.1	1.7
Slovenia	3	1	-	-	33.3	-
Spain	51	26	1	5	51.0	2.0
Sweden	113	53	3	12	46.9	2.7
Switzerland	13	8	1	11	61.5	7.7
Syrian Arab Republic	1	1	-	-	100.0	-
Taiwan, Province of China	5	2	-	-	40.0	-
Tanzania, United Republic of	28	28	5	37	100.0	17.9
Thailand	14	6	-	-	42.9	-
Togo	116	108	14	109	93.1	12.1
Tunisia	8	7	-	-	87.5	-
Turkey	211	127	7	52	60.2	3.3
Tuvalu	7	6	2	10	85.7	28.6
Ukraine	17	15	3	16	88.2	17.6
United Arab Emirates	1	1	1	5	100.0	100.0
United Kingdom	241	129	3	9	53.5	1.2
United States	43	27	-	-	62.8	-
Vanuatu	126	111	16	114	88.1	12.7
Viet Nam	12	12	5	26	100.0	41.7
Virgin Islands British, UK	2	1	-	-	50.0	-

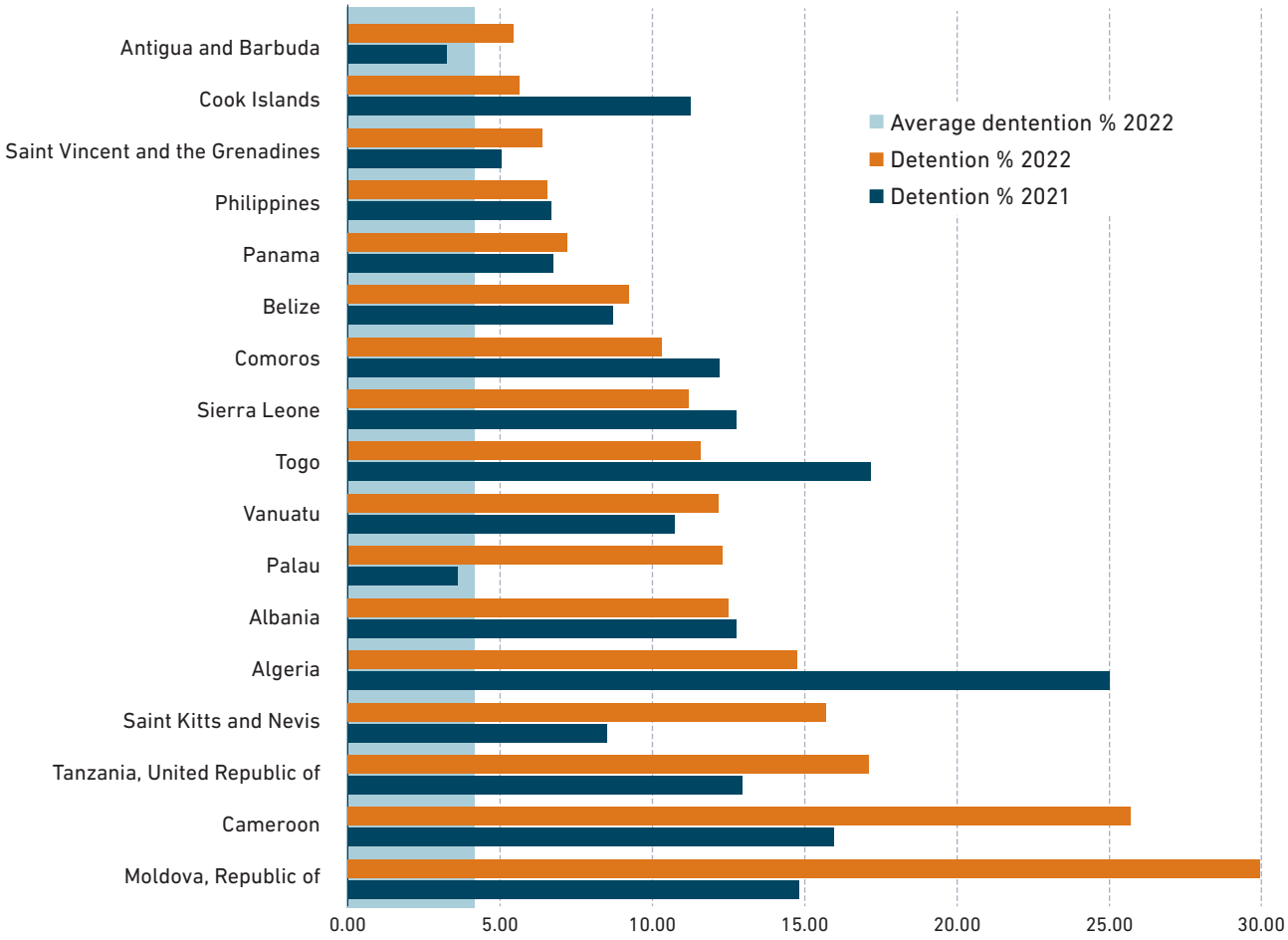


2022 DETENTIONS PER FLAG, EXCEEDING AVERAGE PERCENTAGE

Flag	Nr of Inspections	Inspections with detentions	% of Inspections with detentions	Excess of average 2022	Detentions % 2021	Excess of average 2021
Moldova, Republic of	32	10	31.3	27.1	15.5	12.0
Cameroon	41	11	26.8	22.6	16.7	13.2
Tanzania, United Republic of	28	5	17.9	13.7	13.5	10.0
Saint Kitts and Nevis	61	10	16.4	12.2	8.9	5.4
Algeria	26	4	15.4	11.2	26.1	22.6
Albania	23	3	13.0	8.9	13.3	9.8
Palau	117	15	12.8	8.6	3.8	0.3
Vanuatu	126	16	12.7	8.5	11.2	7.7
Togo	116	14	12.1	7.9	17.9	14.4
Sierra Leone	60	7	11.7	7.5	13.3	9.8
Comoros	93	10	10.8	6.6	12.7	9.2
Belize	52	5	9.6	5.4	9.1	5.6
Panama	2,010	151	7.5	3.3	7.0	3.6
Philippines	44	3	6.8	2.6	7.0	3.5
Saint Vincent and the Grenadines	75	5	6.7	2.5	5.3	1.8
Cook Islands	34	2	5.9	1.7	11.8	8.3
Antigua and Barbuda	565	32	5.7	1.5	3.4	-0.1
Russian Federation	186	9	4.8	0.7	3.3	-0.2
Liberia	1,938	86	4.4	0.3	3.0	-0.5
Croatia	23	1	4.3	0.2	-	-3.5
Saudi Arabia	23	1	4.3	0.2	-	-3.5

Only flags with 20 and more port State control inspections and with a detention percentage exceeding the average percentage of 4.18% are recorded in this graph (in 2021 the average was 3.49%).

2022 DETENTIONS PER FLAG, EXCEEDING AVERAGE PERCENTAGE

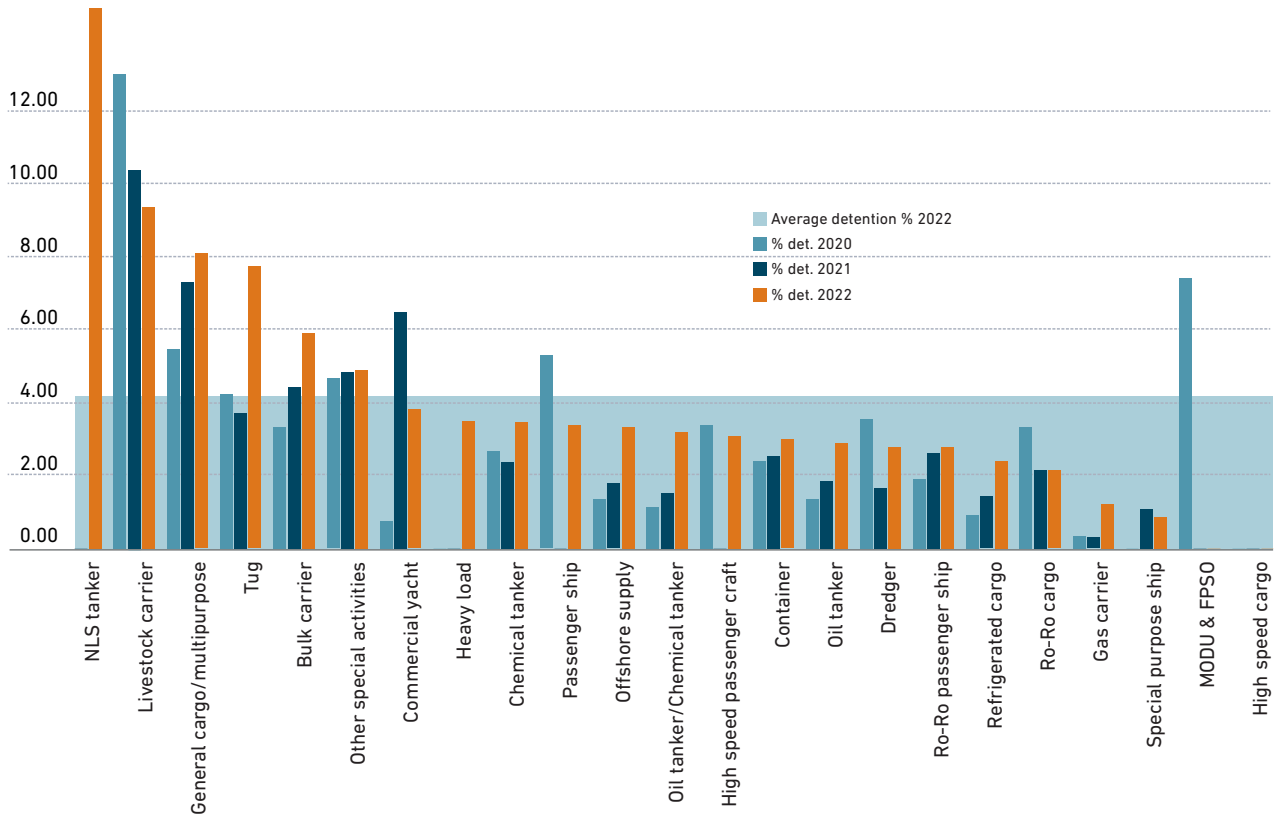


- Only flags with 20 and more port State control inspections in 2022 and with a detention percentage exceeding the average percentage of 4.18% are recorded in this graph. In 2021 the average detentions percentage was 3.49%.
- The light blue column represents the 2022 average detention percentage (4.18%).

INSPECTIONS AND DETENTIONS 2022 PER SHIP TYPE

Ship type	Nr of Inspections	Inspections with deficiencies	Percentage of inspections with deficiencies	Nr of Individual ships inspected	Inspections with detentions	Percentage of detentions to inspections 2022	Percentage of detentions to inspections 2021	Percentage of detentions to inspections 2020	+/- average detention % 2022
Bulk carrier	4,107	2,426	59.1	3,793	205	5.0	3.7	2.8	0.8
Chemical tanker	786	383	48.7	721	23	2.9	2.0	2.3	-1.3
Other	14	10	71.4	14	1	7.1	7.1	11.1	3.0
Commercial yacht	187	63	33.7	185	6	3.2	5.5	0.6	-1.0
Container	1,864	935	50.2	1,697	47	2.5	2.1	2.0	-1.7
Gas carrier	587	191	32.5	567	6	1.0	0.3	0.3	-3.2
General cargo/multipurpose	4,079	2,646	64.9	3,373	278	6.8	6.2	4.6	2.6
Heavy load	34	14	41.2	32	1	2.9	0.0	0.0	-1.2
High speed passenger craft	77	45	58.4	51	2	2.6	0.0	2.9	-1.6
NLS tanker	8	5	62.5	7	1	12.5	0.0	0.0	8.3
Offshore supply	391	217	55.5	376	11	2.8	1.5	1.1	-1.4
Oil tanker	1,318	512	38.8	1,263	32	2.4	1.6	1.1	-1.8
Dredger	85	36	42.4	84	2	2.4	1.4	3.0	-1.8
High speed cargo	22	10	45.5	22	-	0.0	0.0	0.0	-4.2
Livestock carrier	76	68	89.5	63	6	7.9	8.8	11.0	3.7
MODU & FPSO	23	14	60.9	23	-	0.0	0.0	6.3	-4.2
Oil tanker/Chemical tanker	1,110	489	44.1	1,013	30	2.7	1.3	1.0	-1.5
Other special activities	461	240	52.1	436	19	4.1	4.1	3.9	-0.1
Passenger ship	350	156	44.6	300	10	2.9	0.0	4.5	-1.3
Refrigerated cargo	148	86	58.1	142	3	2.0	1.2	0.8	-2.2
Ro-Ro cargo	723	311	43.0	670	13	1.8	1.8	2.8	-2.4
Ro-Ro passenger ship	470	304	64.7	275	11	2.3	2.2	1.6	-1.8
Special purpose ship	139	56	40.3	135	1	0.7	0.9	0.0	-3.5
Tug	230	123	53.5	224	15	6.5	3.1	3.6	2.3




12.00
10.00
8.00
6.00
4.00
2.00
0.00
Average detention % 2022
% det. 2020
% det. 2021
% det. 2022
NLS tanker
Livestock carrier
General cargo/multipurpose
Tug
Bulk carrier
Other special activities
Commercial yacht
Heavy load
Chemical tanker
Passenger ship
Offshore supply
Oil tanker/Chemical tanker
High speed passenger craft
Container
Oil tanker
Dredger
Ro-Ro passenger ship
Refrigerated cargo
Ro-Ro cargo
Gas carrier
Special purpose ship
MODU & FPSO
High speed cargo

MAJOR CATEGORIES OF DEFICIENCIES 2020-2022

		2020		2021		2022	
Deficiencies Main Group		**Def**	**Def %**	**Def**	**Def %**	**Def**	**Def %**
Ballast Water Management		528	1.9	706	1.9	892	1.9
COLREG		279	1.0	354	1.0	441	0.9
Load Lines		1,649	5.8	2,080	5.7	2,728	5.8
MARPOL	MARPOL Annex I	963	3.4	1,246	3.4	1,517	3.2
	MARPOL Annex IV	276	1.0	313	0.9	414	0.9
	MARPOL Annex V	601	2.1	679	1.9	816	1.7
	MARPOL Annex VI	440	1.6	496	1.4	611	1.3
	MARPOL Other	19	0.1	33	0.1	47	0.1
MLC	MLC 2006 Title 2	1,076	3.8	1,311	3.6	1,443	3.1
	MLC 2006 Title 3	1,619	5.7	2,179	6.0	3,165	6.7
	MLC 2006 Title 4	2,834	10.0	3,754	10.3	4,847	10.3
	MLC 2006 Title 5	213	0.8	230	0.6	315	0.7
	MLC Other	92	0.3	111	0.3	167	0.4
SOLAS	SOLAS ch.I	274	1.0	328	0.9	494	1.0
	SOLAS ch.II-1	3,194	11.3	4,364	12.0	5,455	11.6
	SOLAS ch.II-2	4,059	14.3	5,375	14.8	7,310	15.5
	SOLAS ch.III	2,571	9.1	3,152	8.7	4,504	9.5
	SOLAS ch.IV	542	1.9	699	1.9	839	1.8
	SOLAS ch.V	2,673	9.4	3,213	8.9	3,925	8.3
	SOLAS ch.VI	211	0.7	296	0.8	284	0.6
	SOLAS ch.XI-1	312	1.1	385	1.1	489	1.0
	SOLAS ISM Code	1,325	4.7	1,809	5.0	2,272	4.8
	SOLAS ISPS Code	240	0.8	366	1.0	431	0.9
	SOLAS LSA Code	340	1.2	353	1.0	319	0.7
	SOLAS Other	658	2.3	825	2.3	942	2.0
STCW	STCW Code Part A ch.I	309	1.1	434	1.2	742	1.6
	STCW Code Part A ch.VIII	489	1.7	573	1.6	1,031	2.2
	STCW Other	167	0.6	174	0.5	243	0.5
Other		**419**	**1.5**	**434**	**1.2**	**484**	**1.0**

TOP 5 CATEGORIES OF DEFICIENCIES 2022

	2021		2022	
Deficiencies	**Deficiencies**	**% Total deficiencies**	**Deficiencies**	**% Total deficiencies**
SOLAS Chapter II-2 (Construction – Fire protection, fire detection and fire extinction)	5,375	14.8	7,310	15.5
SOLAS Chapter II-1 (Construction – Structure, subdivision and stability, machinery and electrical installations)	4,364	12.0	5,455	11.6
MLC, 2006 Title 4 (Health protection, medical care, welfare and social security protection)	3,754	10.3	4,847	10.3
SOLAS Chapter III (Life-saving appliances and arrangements)	3,152	8.7	4,504	9.5
SOLAS Chapter V (Safety of navigation)	3,213	8.9	3,925	8.3

TOP 5 DEFICIENCIES 2022

	2021		2022	
Deficiencies	**Deficiencies**	**% Total deficiencies**	**Deficiencies**	**% Total deficiencies**
ISM	1,785	4.9	2,248	4.8
Fire doors/openings in fire-resisting divisions	1,054	2.9	1,373	2.9
Seafarers' employment agreement (SEA)	603	1.7	765	1.6
Cleanliness of engine room	475	1.3	707	1.5
Auxiliary engine	506	1.4	600	1.3

DETENTIONS OF SHIPS WITH RO RELATED DETAINABLE DEFICIENCIES PER RECOGNIZED ORGANIZATION 2022 (CASES IN WHICH 10 OR MORE INSPECTIONS ARE INVOLVED)

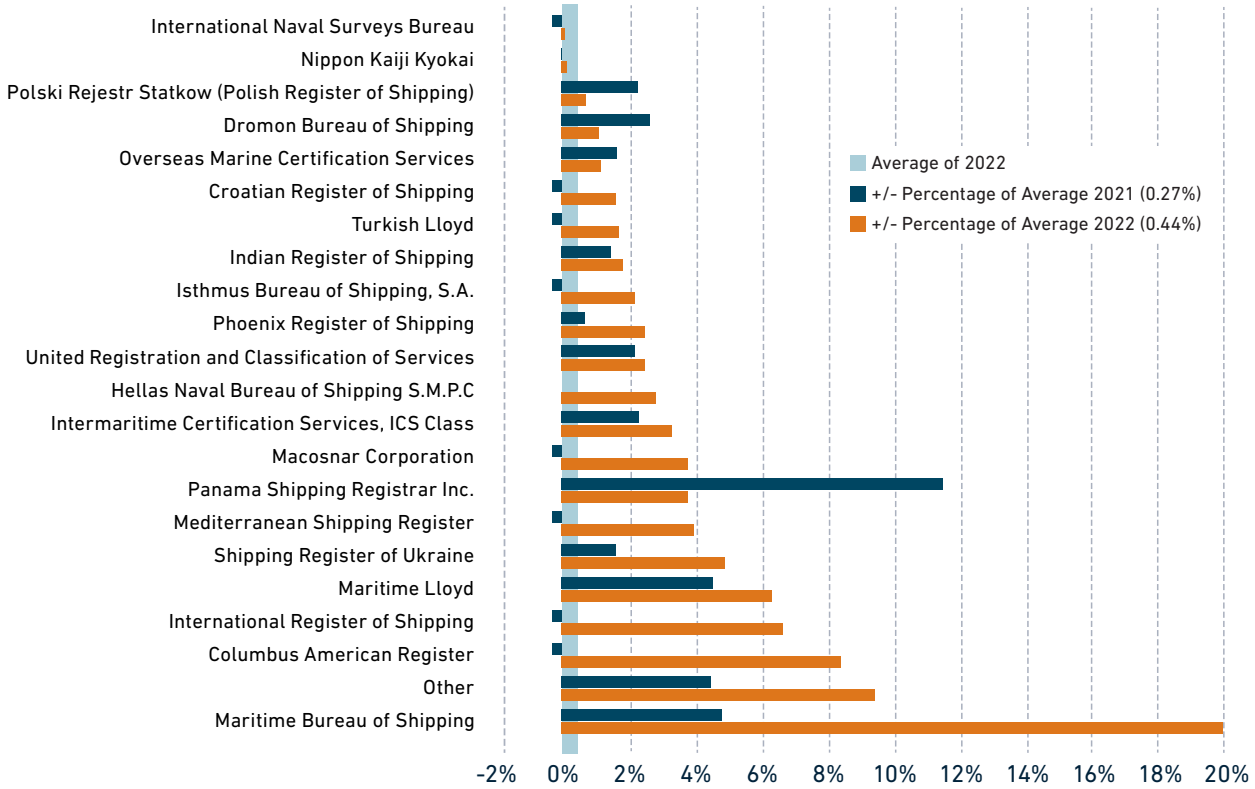
Recognized Organization	Abbr.	Total number of inspections	Number of individual ships inspected*	Total number of detentions**	Detention % of total number of Inspections	+/- Percentage of Average2022. (0.44)	Detention % of individual ships	+/- Percentage of Average Indiv, 2022. (0.48)
American Bureau of Shipping	ABS	2,275	2,153	-	-	-0.26	-	-0.48
Bulgarian Register of Shipping	BRS	119	100	-	-	-0.26	-	-0.48
Bureau Veritas	BV	4,015	3,537	16	0.40	0.13	0.45	-0.03
China Classification Society	CCS	413	395	1	0.24	-0.02	0.25	-0.23
Columbus American Register	COLAMREG	23	16	2	8.70	8.43	12.50	12.02
Croatian Register of Shipping	CRS	49	44	1	2.04	1.78	2.27	1.79
DNV AS	DNV	8,558	7,878	17	0.20	-0.07	0.22	-0.27
Dromon Bureau of Shipping	DBS	194	164	3	1.55	1.28	1.83	1.35
Hellas Naval Bureau of Shipping S.M.P.C	HNBS	31	25	1	3.23	2.96	4.00	3.52
Indian Register of Shipping	IRS	89	80	2	2.25	1.98	2.50	2.02
Intermaritime Certification Services, ICS Class	ICS	27	25	1	3.70	3.44	4.00	3.52
International Naval Surveys Bureau	INSB	186	154	1	0.54	0.27	0.65	0.17
International Register of Shipping	IS	100	84	7	7.00	6.74	8.33	7.85
Iranian Classification Society	IRCS	12	12	-	-	-0.26	-	-0.48
Isthmus Bureau of Shipping, S.A.	IBS	77	68	2	2.60	2.33	2.94	2.46
KOREAN REGISTER	KR	674	631	-	-	-0.26	-	-0.48
Lloyd's Register	LR	4,183	3,812	9	0.22	-0.05	0.24	-0.25
Macosnar Corporation	MC	24	20	1	4.17	3.90	5.00	4.52
Maritime Bureau of Shipping	MBS	15	11	3	20.00	19.74	27.27	26.79
Maritime Lloyd	ML	15	11	1	6.67	6.40	9.09	8.61
Mediterranean Shipping Register	MSR	23	18	1	4.35	4.08	5.56	5.07
National Shipping Adjuster Inc.	NASHA	31	24	-	-	-0.26	-	-0.48
Nippon Kaiji Kyokai	NKK	3,034	2,839	18	0.59	0.33	0.63	0.15
Other	OTHER	103	81	10	9.71	9.44	12.35	11.86
Overseas Marine Certification Services	OMCS	62	59	1	1.61	1.35	1.69	1.21
Panama Maritime Documentation Services	PMDS	51	49	-	-	-0.26	-	-0.48
Panama Shipping Registrar Inc.	PSR	24	17	1	4.17	3.90	5.88	5.40
Phoenix Register of Shipping	PHRS	207	174	6	2.90	2.63	3.45	2.97
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	172	128	2	1.16	0.90	1.56	1.08
Qualitas Register of Shipping S.A.	QRS	46	39	-	-	-0.26	-	-0.48
RINA Services S.p.A.	RINA	2,024	1,678	6	0.30	0.03	0.36	-0.13

Recognized Organization	Abbr.	Total number of inspections	Number of individual ships inspected*	Total number of detentions**	Detention % of total number of Inspections	+/- Percentage of Average2022. (0.44)	Detention % of individual ships	+/- Percentage of Average Indiv, 2022. (0.48)
Russian Maritime Register of Shipping	RMRS	341	318	1	0.29	0.03	0.31	-0.17
Shipping Register of Ukraine	SRU	38	30	2	5.26	5.00	6.67	6.18
Turkish Lloyd	TL	93	81	2	2.15	1.89	2.47	1.99
United Registration and Classification of Services	URACOS	69	57	2	2.90	2.63	3.51	3.03
Veritas Register of Shipping Ltd	VRS	36	26	-	-	-0.26	-	-0.48
Vietnam Register	VR	11	9	-	-	-0.26	-	-0.48

* 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.
(Recognized Organizations with more than 10 inspections are taken into account).

% OF DETENTIONS OF SHIPS WITH RO RELATED DETAINABLE DEFICIENCIES PER RECOGNIZED ORGANIZATION 2020-2022 (CASES IN WHICH MORE THAN 10 INSPECTIONS ARE INVOLVED)



* Only ROs with 10 and more port State control inspections in 2022 and with a detention percentage exceeding the average percentage of 0.44 are recorded in this graph. In 2021 the average detention percentage was 0.27. The light blue column represents the 2022 average detention percentage (0.44).





RECOGNIZED ORGANIZATION PERFORMANCE TABLE 2020-2022

Recognized Organization	RO Abbrev.	Inspections	Detentions	Low / medium limit	Medium / high limit	Excess Factor	Performance level
American Bureau of Shipping	ABS	5,764	1	133	97	-1.97	
DNV AS	DNV	22,014	24	475	406	-1.87	
Lloyd's Register	LR	10,740	19	239	190	-1.78	
Korean Register	KR	1,602	2	42	22	-1.74	
RINA Services S.p.A.	RINA	5,048	12	118	84	-1.68	
China Classification Society	CCS	971	1	27	12	-1.67	High
Bureau Veritas	BV	10,481	33	234	186	-1.62	
Nippon Kaiji Kyokai	NKK	7,886	27	179	137	-1.57	
Russian Maritime Register of Shipping	RMRS	1,566	5	41	22	-1.40	
International Naval Surveys Bureau	INSB	485	2	15	4	-0.63	
Bulgarian Register of Shipping	BRS	317	1	11	2	-0.37	
Panama Maritime Documentation Services	PMDS	131	0	6	0	0.08	
Turkish Lloyd	TL	265	2	10	1	0.11	
Qualitas Register of Shipping S.A.	QRS	112	0	5	0	0.12	
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	476	6	15	4	0.18	
Croatian Register of Shipping	CRS	124	1	6	0	0.26	
Phoenix Register of Shipping	PHRS	592	9	18	6	0.27	
Overseas Marine Certification Services	OMCS	153	2	6	0	0.34	
Indian Register of Shipping	IRS	198	3	8	0	0.37	
Macosnar Corporation	MC	72	1	4	0	0.41	
Intermaritime Certification Services, ICS Class	ICS	117	2	5	0	0.44	Medium
National Shipping Adjuster Inc.	NASHA	117	2	5	0	0.44	
Shipping Register of Ukraine	SRU	159	3	7	0	0.47	
Veritas Register of Shipping Ltd	VRS	97	2	5	0	0.51	
United Registration and Classification of Services	URACOS	129	3	6	0	0.57	
Dromon Bureau of Shipping	DBS	571	13	17	5	0.63	
Isthmus Bureau of Shipping, S.A.	IBS	191	5	8	0	0.66	
Mediterranean Shipping Register	MSR	90	3	4	0	0.72	
Maritime Lloyd - Georgia	ML	79	3	4	0	0.78	
International Register of Shipping	IS	228	7	9	1	0.81	
Panama Shipping Registrar Inc.	PSR	70	4	4	0	1.15	Low
Other	OTHER	262	16	9	1	2.94	Very Low

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. Performance of Recognized Organizations is measured over a 3-year rolling period.

NUMBER OF CERTIFICATES COVERING RO RESPONSIBLE DETAINABLE DEFICIENCIES 2022

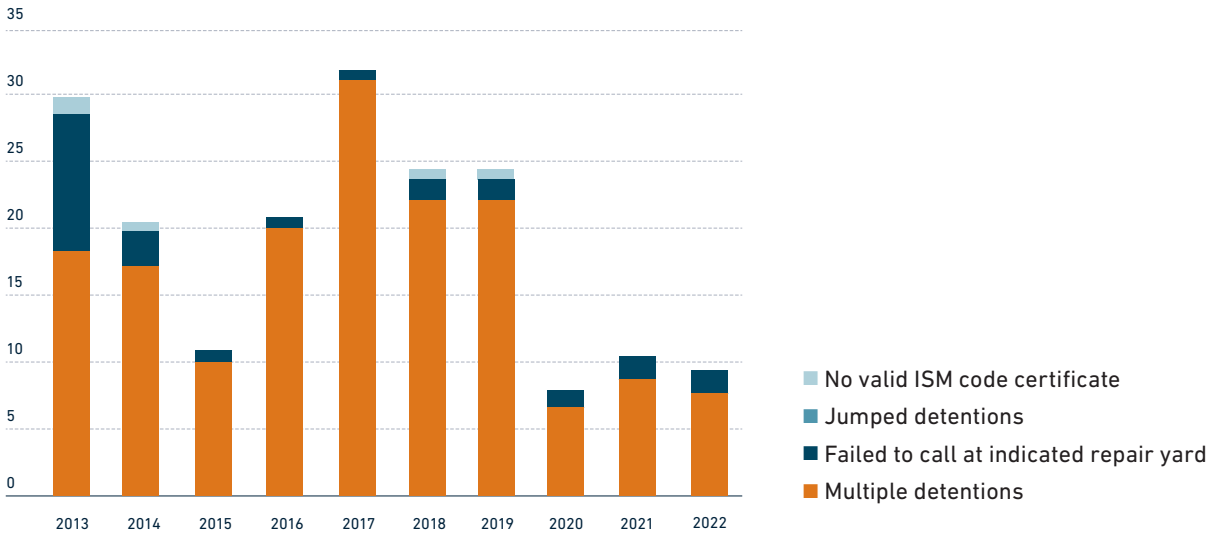
Recognized Organization	RO Abbrev.	Certificates	Total number of RO detainable deficiencies	% deficiencies / certificates
American Bureau of Shipping	ABS	22,842	0	0.00
Bulgarian Register of Shipping	BRS	949	0	0.00
Bureau Veritas	BV	37,232	37	0.10
China Classification Society	CCS	4,982	1	0.02
Croatian Register of Shipping	CRS	520	1	0.19
DNV AS	DNV	59,058	54	0.09
Dromon Bureau of Shipping	DBS	2,178	7	0.32
Hellas Naval Bureau of Shipping S.M.P.C	HNBS	305	6	1.97
Indian Register of Shipping	IRS	800	8	1.00
International Naval Surveys Bureau	INSB	1,429	5	0.35
International Register of Shipping	IS	1,084	22	2.03
Isthmus Bureau of Shipping, S.A.	IBS	837	4	0.48
KOREAN REGISTER	KR	5,576	0	0.00
Lloyd's Register	LR	33,929	28	0.08
National Shipping Adjuster Inc.	NASHA	204	0	0.00
Nippon Kaiji Kyokai	NKK	32,714	51	0.16
Other	OTHER	785	41	5.22
Overseas Marine Certification Services	OMCS	400	4	1.00
Panama Maritime Documentation Services	PMDS	247	0	0.00
Phoenix Register of Shipping	PHRS	1,888	21	1.11
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	1,616	4	0.25
Qualitas Register of Shipping S.A.	QRS	227	0	0.00
RINA Services S.p.A.	RINA	18,930	35	0.18
Russian Maritime Register of Shipping	RMRS	3,611	4	0.11
Shipping Register of Ukraine	SRU	387	6	1.55
Turkish Lloyd	TL	654	4	0.61
United Registration and Classification of Services	URACOS	631	3	0.48
Veritas Register of Shipping Ltd	VRS	321	0	0.00

(Recognized Organizations with more than 30 inspections).

REFUSAL OF ACCESS (BANNING) PER FLAG 2020-2022

Flag	Failed to call at indicated repair yard	Jumped detention	Total Banned	Multiple detentions		
				1st ban	2nd ban	3rd ban
Albania	-	3	3	2	1	-
Algeria	-	1	1	1	-	-
Cameroon	2	2	4	4	-	-
Comoros	1	5	6	4	2	-
Moldova, Republic of	2	4	6	5	1	-
Palau	1	1	2	2	-	-
Panama	1	-	1	1	-	-
Sierra Leone	-	1	1	1	-	-
Tanzania, United Republic of	1	-	1	1	-	-
Togo	-	3	3	3	-	-
Ukraine	-	1	1	1	-	-
Total	**8**	**21**	**29**	**25**	**4**	**-**

REFUSAL OF ACCESS 2013-2022



CIC 2022 ON STCW (INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS)

Number of ships inspected during CIC	Inspections with a CIC questionnaire	Inspections without a CIC questionnaire
Inspections	4,112	67
Inspections with detentions	173	3
Detentions with CIC-topic related deficiencies	40	2

CIC-topic related deficiencies	Nr. CIC related deficiencies		Nr. CIC related deficiencies recorded as ground for detention		Nr. CIC related deficiencies recorded as RO related	
Ship type	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**
Bulk carrier	67	132	7	4	-	-
Chemical tanker	5	13	0	0	-	-
Commercial yacht	4	4	2	0	-	-
Container	11	41	0	2	-	-
Gas carrier	2	3	0	0	-	-
General cargo/multipurpose	62	211	4	32	-	-
Heavy load	0	2	0	1	-	-
High speed passenger craft	2	0	0	0	-	-
Offshore supply	9	23	1	0	-	-
Oil tanker	6	13	1	2	-	-
Other	11	37	0	4	-	-
Other special activities	9	21	3	5	-	-
Passenger ship	1	4	0	0	-	-
Refrigerated cargo	1	11	0	0	-	-
Ro-Ro cargo	8	21	1	3	-	-
Ro-Ro passenger ship	0	10	0	0	-	-
Special purpose ship	0	4	0	1	-	-
Tug	2	21	1	3	-	-
Grand Total	**200**	**571**	**20**	**57**	**-**	**-**


NO SMOKING
SAFETY FIRST – PREVENT POLLUTION



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:

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

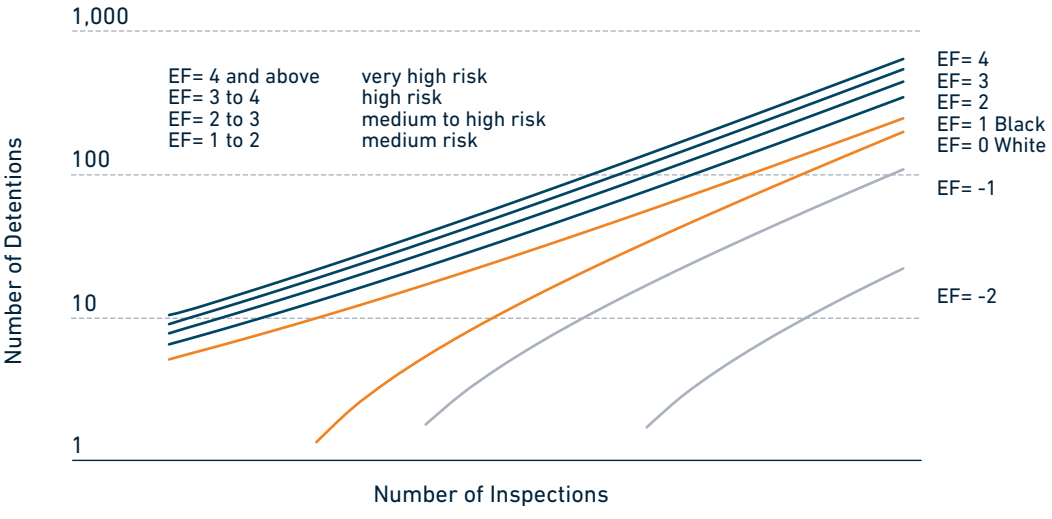
$$u_{white_to_grey} = N \cdot p - 0.5 - z\sqrt{(N \cdot p \cdot (1-p)}$$

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.



* Explanatory notes can be found on www.parismou.org/publications

Secretariat Paris Memorandum OF UNDERSTANDING ON PORT STATE CONTROL



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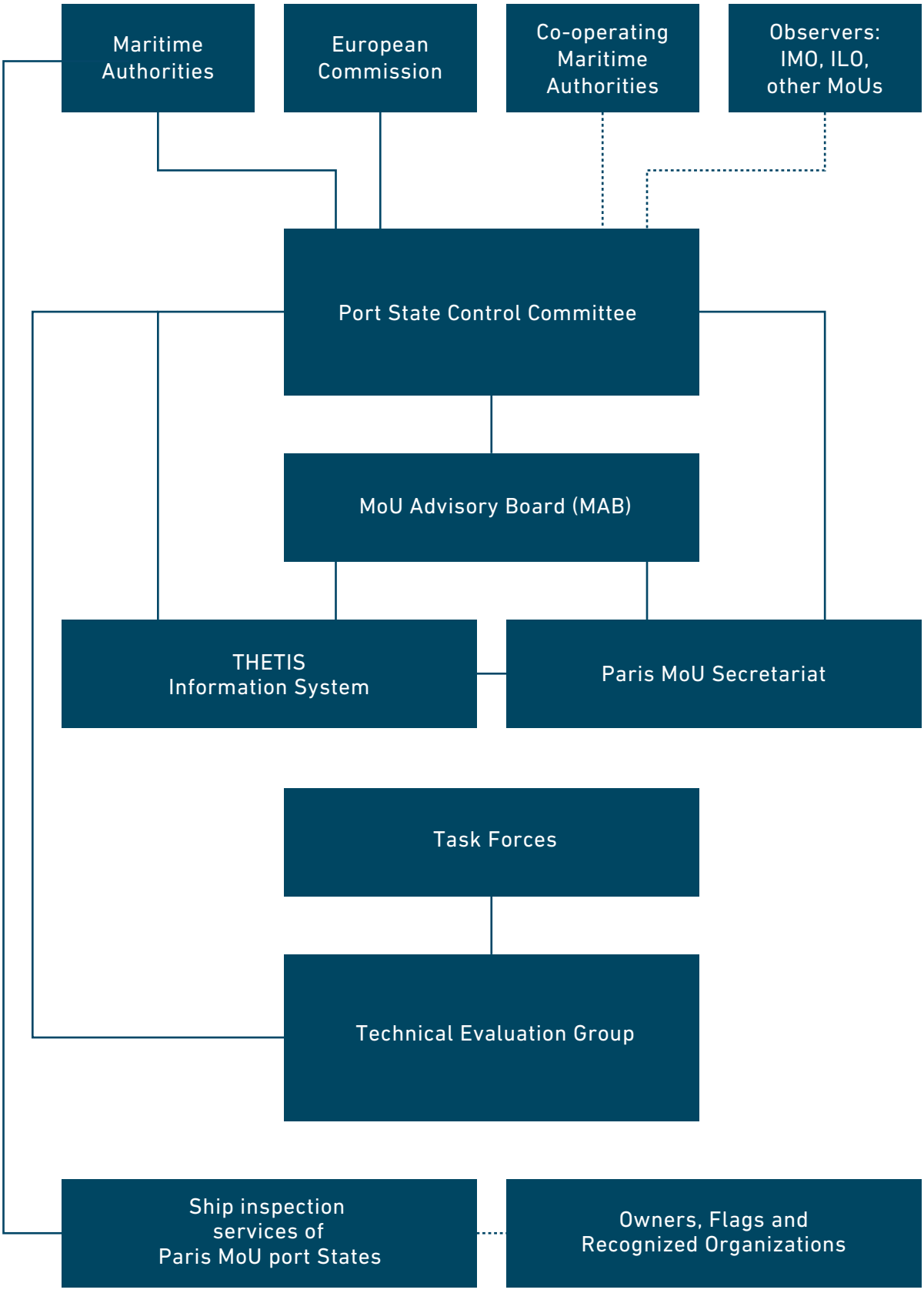
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Paris MoU fact sheet - **ORGANISATIONAL STRUCTURE**



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