Report of the 2018 Concentrated Inspection Campaign (CIC) on MARPOL Annex VI

Paris MoU
on Port State Control

Executive Summary

The Paris Memorandum of Understanding (Paris MoU) on Port State Control (PSC) carried out a Concentrated Inspection Campaign (CIC) on MARPOL Annex VI jointly with the Tokyo MOU between September 1, 2018 and November 30, 2018. During the CIC, member States focussed on compliance with areas specified by the CIC during PSC inspections. This report documents the results of the campaign for the Maritime Authorities of the Paris MoU.

The objective of the CIC was to check the level of compliance and create awareness with the requirements of MARPOL Annex VI. Equipment and compliance under MARPOL Annex VI has always been considered an inspection item for PSC inspections. A new set of requirements stipulated in Annex VI of MARPOL (2008), with a strict limit on the sulphur content of marine fuels, entered into force on 1 January 2015 in SECAs. The requirement reduced the maximum sulphur content by 90 per cent in the area. The price of cleaner fuel is currently significantly higher than that of conventional fuel, which means that non-compliance would give ship owners a considerable competitive advantage and consequently reduce the environmental impact of the regulation.

During the CIC, a total of 4,021 inspections were carried out. The CIC-topic detention rate was 0.2% (7 ships were detained).

Ships from 86 flag states were inspected during the CIC. 80 flag states (93%) did not have any CIC-topic related detentions. Of those that did, the highest number of ships detained were Antigua & Barbuda (2), followed by Malta (1), Panama (1), Republic of Moldova (1), Saint Vincent and the Grenadines (1), and Cyprus (1). The highest percentage of ships detained however was The Republic of Moldova (3.6%), Saint Vincent and the Grenadines (2.4%), Antigua & Barbuda (1.2%), Cyprus (0.8%), Malta (0.3%), and Panama (0.2%).

Of the Paris MoU member States, the Russian Federation conducted the most inspections (346). Italy detained the highest percentage of ships for CIC-related deficiencies (1%).

The Report concludes that the CIC indicates that the industry has achieved a good level of compliance with the specific provisions inspected during the CIC of MARPOL Annex VI requirements. However, it should be noted that only in 7 cases out of 230 answers with a “NO” where a detention could be considered, the deficiency was considered serious enough to detain the ship.

In light of these results, it is recommended that the Paris MoU member States continue their inspection of all requirements when performing PSC inspections, particularly attention should be brought to the requirements that raised the most concern in the CIC (namely Fuel change-over procedure). Inspectors should also put emphasis on the ship types and ages that reported the least favourable results.

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1 Introduction

1.1 Purpose of this Report

The purpose of this report is to present the results of the CIC on MARPOL Annex VI to both member States of the Paris MoU and the general public.

1.2 Objective of the CIC

The CIC aims at checking the conformity of the regulations related to MARPOL Annex VI, especially regarding the sulphur content.

Objectives

The purpose of the campaign on MARPOL Annex VI is:

- to establish the level of compliance with the requirements of MARPOL Annex VI within the shipping industry;
- to create awareness amongst ship crews and ship owners with regards to the importance of compliance with the provisions of MARPOL Annex VI and the prevention of air pollution;
- to send a signal to the industry that prevention of air pollution and enforcement of compliance with applicable requirements is high on the agenda of the PMoU member States;
- to underline the responsibility of the Port State Control regime with regards to harmonised enforcement of compliance with the requirements of MARPOL Annex VI, thus improving the level of compliance and ensuring a level playing field.

1.3 Scope of the CIC

The CIC was undertaken on all ships targeted for inspection within the Paris MoU Region between 1 September 2018 and 30 November 2018.

The CIC was designed to examine specific areas and not intended to detract from the normal coverage of PSC inspections. It was conducted in conjunction with the regular PSC targeting and inspection activities.

The CIC targeted 10 aspects of compliance provisions that are considered critical to compliance to MARPOL Annex VI. Areas included, among others:

- Compliance to bunker delivery notes,
- Compliance to sulphur content of fuel,
- Alternative measures, and
- Correct data in log book on change over procedure, where applicable.

Paris MoU member States were provided with a standardised questionnaire format to record and report their results against the 10 targeted compliance provisions that comprised the CIC, and PSCOs were required to indicate if the ship was detained as a result of the CIC. For each “No” answer, PSCOs were directed to document the deficiency using the appropriate deficiency code on

Form B of the PSC inspection report. In some cases, a “No” answer could also be considered as grounds for a detention to be issued to the ship.

1.4 General Remarks

General remarks to be included in the report:

- For the purpose of this report, a detention is an inspection containing at least one deficiency that is considered a ground for detention.
- The tables do not take into account inspections where the CIC questionnaire was not recorded, with exception of table 2.
- For each “No” answer, PSCOs were directed to document the deficiency using the appropriate deficiency code on Form B of the PSC inspection report. In some cases, a “No” answer could also be considered as grounds for a detention to be issued to the ship

2 Summary, Conclusions and Recommendations

2.1 Summary

The following summarizes the results of the CIC:

- Responses to Question 10, which asked whether the ship keep on board a Ship Energy Efficiency Management Plan (SEEMP), reported the most favourable results – 99.5% responded yes. This was closely followed with Question 2, which asked whether the ships bunker delivery notes indicate that fuel oils delivered and used on board is not exceeding the maximum allowed sulphur content, – 99.3% responded yes.

- The least favourable results were reported for Question 4, which asked whether an alternative arrangement, (e.g. scrubber) was installed on board, according to regulation 4.1, was approved by the flag State – 62.2% responded no.

- This was followed by Question 6, which asked whether the ships which have rechargeable systems containing ozone-depleting substances (refer to the supplement to the IAPP Certificate, item 2.1), have the ozone-depleting substances record book maintained – 12.6% responded no.

- Question 4 which address the CIC focus on the approval of alternative arrangements(if any) hold the highest “n/a” response (92.8%).

- 4,217 individual ships and 4,304 inspections were conducted over the course of the CIC period.

- Of the 140 ships detained during the CIC, 7 were related to the CIC topic representing 5% of total detentions and 0.17% of all inspections.

- The overall detention rate as percentage of inspections was 3.3%.

- The overall CIC-topic detention rate as related to percentage of inspections was 0.2%.

- Deficiency code 14604 (related to Question 1), which pertains to the Bunker Delivery Notes, accounted for the most number of reported deficiencies at 32% of the total. Deficiency code (14609) associated with question 9 which pertains to an approved VOC management plan accounted for the least number of reported deficiencies with 4 reported deficiencies.

- By Ship Risk Profile categories, the results of the CIC were consistent with what would be expected in accordance with the risk profiling breakdown. For both general and CIC-topic related detentions, ships with a high risk profile comprised the largest percentage of ships detained per inspection, ships with a low risk profile comprised the smallest percentage, and ships with a standard or unknown profile fell in between.

- By ship type, Commercial yacht ships had the highest CIC-topic related detention rate (3.1%), followed by Ro-Ro cargo (0.6%), Oil tanker (0.3%) and Bulk carrier and general cargo/multipurpose (0.2%). A number of ship types had zero CIC-topic related detentions.

- By ship age, younger ships(<5 years) and ships between 26-35 years had the lowest detention rate for CIC-topic detentions (0%) while the highest rate peaked for ships aged 16-20 years (0.6%).

- Ships from 86 flag states were inspected during the CIC. 80 flag states (93%) did not have any CIC-topic related detentions. Of those that did, the highest number of ships detained were Antigua & Barbuda (2), followed by the Malta (1), Panama (1), Republic of Moldova (1), Saint Vincent and the Grenadines (1), and Cyprus (1). The highest percentage of ships detained was however followed by The Republic of Moldova (3.6%), Saint Vincent and the Grenadines (2.4%), Antigua & Barbuda (1.2%), Cyprus (0.8%), Malta (0.3%), and Panama (0.2%).

- The worst performance on CIC-topic detentions percentage vice aligns well in the case of The Republic of Moldova but not in the case of the others which hold a mix of white and grey list statuses.

- Ships from 38 Recognized Organizations (ROs) were inspected during the CIC. With respect to the CIC-topic related detentions, the RO with the highest number of ships detained was Bureau Veritas (1) and Nippon Kaiji Kyokai (1) – together these two ROs account for 2 of 7 (28.6%) of all RO CIC-topic related detentions.

2.2 Conclusions

MARPOL Annex VI has always been a part of the items for PSC inspections. The Tokyo MoU and the Paris MoU have conducted a joint CIC of the MARPOL Annex VI. However, the regulations in MARPOL Annex VI have undergone frequent updates and a series of application dates is incorporated. Especially the strict limit on the sulphur content of marine fuels, entered into force on 1 January 2015 in the SECAs.

According to the Key Performance Indicators (KPIs) from 2016 to 2017, a total of 801 deficiencies concerning MARPOL Annex VI were recorded, with 242 deficiencies regarding Sulphur oxides.

The objective of the CIC was to provide indications as to the industry's level of compliance with specific aspects of MARPOL Annex VI regardless of ship type.

The overall detention rate of 0.2% for CIC-topic deficiency rate (average number of deficiencies reported per inspection) is a satisfactory result. However, it should be noted that only in 7 cases out of 230 answers with a "NO" where a detention could be considered, the deficiency was considered serious enough to detain the ship.

2.3 Recommendations

- In relation to the deficiency "Bunker delivery notes" and the "fuel change-over procedure" which had the largest number of deficiencies, the industry should take note and care to ensure that the BDN is kept on board for minimum 3 years and has the minimum required information and that ships with two different marine-fuels regarding to sulphur content, that the fuel change-over procedure is on board and used within the scope of the convention.

- Industry should endeavour to have focus on the sulphur content of the used marine fuels in SECA´s and also in the light of the global requirement of 0.5% sulphur content of fuel used from 1 January 2020.

3 CIC Questionnaire Results

3.1 Analysis

The CIC on MARPOL Annex VI was executed from the 1 September to 30 November 2018.

The analysis is done on the results of the CIC questionnaire and on the data in the inspections database.

The results show a number of 4217 inspections. 283 of those inspections have been done without questionnaire due to earlier inspections and EU inspection requirements that exempt ROPAX type of ships from Paris MoU port State control inspection.
4021 inspections have been performed with the CIC questionnaire. In 9 cases (0.2%) it is mentioned the ship should be detained as a result of the CIC.

In general the percentage of detentions due to the CIC, did not lead to a higher percentage of the average detention percentage.

3.1.1 Response to CIC questionnaire

The following table shows the results on the CIC questionnaire.

The 4021 inspections using the questionnaire the results are divided in "Yes", "No", "N/A" and "Blank".

There are no specific results in "N/A" or "Blank" that need specific attention.

Table 1: Responses to CIC questionnaire

		nr Yes	"/Total Y+N"	nr No	"/Total Y+N"	nr N/A	"/Line lotal Insp"	Nr Blank	"/Line lotal Insp"	"Not detained/consider detained"
		Measured over only Yes and No answers				Measured over Total of CIC Inspections				
Nr.	**CIC MARPOL Annex VI**	'YES'(1)		'NO'(1)		N/A(2)		Blank(2)		% 'NO' adjusted Det.(3)
		#	%	#	%	#	%	#	%	
01	Are bunker delivery notes, with details of fuel oil for combustion purposes, kept available on board for the required period of 3 years?	3853	97.6%	94	2.4%	70	1.7%	0	0.0%	
02*	Do bunker delivery notes indicate that fuel oils delivered and used on board is not exceeding the maximum allowed sulphur content, as appropriate?	3959	99.3%	26	0.7%	32	0.8%	0	0.0%	73.1%
03	Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.1% m/m in fuel oil while operating in SOx emission control areas, have a written procedure showing how fuel oil change-over is to be done for achieving compliance with the above requirements when entering SOx emission control areas?	2882	97.9%	63	2.1%	1071	26.7%	1	0.0%	
04*	Are alternative arrangements, (e.g. scrubbers) installed on board according to regulation 4.1 approved by the flag State?	107	37.4%	179	62.6%	3729	92.8%	2	0.0%	95.0%
05	Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.10% m/m in fuel oil and entering or leaving SOx emission control areas, record detailed information showing that the ship has completed/initiated the change-over in the logbook prescribed by the Administration?	2720	98.4%	45	1.6%	1251	31.1%	1	0.0%	
06	Do ships which have rechargeable systems containing ozone-depleting substances (refer to the supplement to the IAPP Certificate, item 2.1), have the ozone-depleting substances record book maintained?	726	87.4%	105	12.6%	3185	79.3%	1	0.0%	

		nr Yes	"/Total Y+N"	nr No	"/Total Y+N"	nr N/A	"/Line lotal Insp"	Nr Blank	"/Line lotal Insp"	"Not detained/consider detained"
		Measured over only Yes and No answers				Measured over Total of CIC Inspections				
Nr.	**CIC MARPOL Annex VI**	'YES'(1)		'NO'(1)		N/A(2)		Blank(2)		% 'NO' adjusted Det.(3)
		#	%	#	%	#	%	#	%	
07	Where an Approved Method in accordance with Annex VI, regulations 13.7.1-13.7.5 (refer to the supplement to the IAPP Certificate, item 2.2.1) is installed, has such an installation been confirmed by a survey using the verification procedure specified in the Approved Method File, including appropriate notation on the ship's International Air Pollution Prevention Certificate of the presence of the Approved Method?	592	95.2%	30	4.8%	3395	84.5%	0	0.0%	
08	For ships equipped with a shipboard incinerator or thermal waste treatment device installed as an alternative arrangement, is the ship's crew responsible for the operation of the equipment familiar with, properly trained in, and capable of implementing the guidance provided in the manufacturer's operating manual?	2191	98.2%	41	1.8%	1784	44.4%	1	0.0%	
09*	Are the master and crew familiar with essential shipboard procedures in the approved VOC Management Plan relating to the prevention of air pollution from ships?	713	96.6%	25	3.4%	3277	81.6%	2	0.0%	84.0%
10	Does the ship keep on board a Ship Energy Efficiency Management Plan (SEEMP)?	3839	99.5%	21	0.5%	150	3.7%	7	0.2%	
11	Was the ship detained as a result of the Inspection Campaign?	9	0.2%	3980	99.8%	27	0.7%	1	0.0%	

Note:

- Questions 1 to 10 answered with a "NO" MUST be accompanied by a relevant deficiency on the Report of Inspection.
- If the box "NO" is ticked off for questions marked with an "*", the ship may be considered for detention.

Remark: the last column of the table in the questionnaire is part of the template once developed. At this moment the percentages as such do not add any value. Advice is to delete the column in the table.

3.1.2. Analysis of answers to questionnaire in relation to detention

The CIC instrument is set up to generate attention on subjects or investigate a particular problem on subjects that have been the result of inspections. In the PSCOs inspection report it was determined the area with the most detentions was related to the Fuel change-over procedure inspections with 80 deficiencies and 4 detentions. The question investigated the aspects of the Fuel Change-over procedure and the information to be recorded as mentioned in the guidelines and as such a total analysis to determine what the exact problem is would entail a manual check in each inspection report analysing the description of the deficiency.

3.1.3. Analysis of CIC-topic related deficiencies

The tables 2 and 3 show the results on the CIC topic related deficiencies.

Based on those figures it shows that the Fuel change-over procedure was the most recorded as ground for detention (4) followed by Ship Energy Efficiency Management Plan, Bunker delivery notes, Incinerator, Ozone-depleting substances and sulphur content of fuel (1).

Looking at the number of inspections with deficiencies, the Bunker delivery notes (112) followed by Fuel Change-over Procedure (80) are recorded most by numbers. It should however be noted, that the number of inspections with deficiencies on ozone-depleting substances record book (Q6) shows a relative high number of deficiencies.

3.1.4. Number of inspections and number of ships in CIC

The following table shows the total number of the CIC. Be aware of the number of 4217 “individual ships inspected during CIC”. This is different from the next columns that refer to “inspections”. 283 out of 4217 inspections (7%) have been done without CIC.

Table 2 Number of inspections and number of ships in CIC

	# of individual ships inspected during CIC	# of inspections performed with a CIC questionnaire	# of inspections without a CIC questionnaire
Total # of inspections	**4217**	**4021**	**283**
# of inspections with detentions	**140**	**131**	**9**
# of detentions with *CIC-topic* related deficiencies	**7**	**7**	**0**

3.1.5 Specification of CIC-topic related deficiencies

Deficiency code 14604 (related to Question 1), which pertains to Bunker delivery notes, accounted for the most number of reported deficiencies at 32% of the total. None of the reported CIC-topic deficiency codes were with zero reported deficiencies.

Table 3 Specification of CIC-topic related deficiencies

CIC-topic related deficiencies		**Inspections**	**Detentions CIC-topic related**	**Detentions CIC-topic related with RO responsibility**
		(# of inspections with this deficiency) One inspection can have multiple deficiencies	(# of inspections with this deficiency recorded as ground for detention)	(# of inspections with this deficiency recorded as ground for detention and RO related)
1328	Ship Energy Efficiency Management plan	27	1	
14604	Bunker delivery notes	112	1	
14608	Incinerator incl.operations and operating manual	28	1	1
14609	Volatile organic compounds in tankers	4		
14611	Ozone-depleting substances	48	1	
14612	SOx records	25		
14613	Approved method	9		
14615	Fuel change-over procedure	80	4	1
14617	Sulphur content of fuel used	7	1	
14699	Other MARPOL Annex VI	10		
Total		**350**	**9**	**2**

3.1.6. Number of ships to number of inspections during CIC campaign

Table 4 reveals that 23 ships (0.6% of the total) were inspected twice during the course of the CIC campaign.

(Table 4)

# of inspections performed per ship	# of ships	% of total
1	3975	99,4%
2	23	0,6%
3	0	0,0%
Total	3998	100,0%

3.1.7 Number of inspected ships per Ship Risk Profile

Table 5 illustrates that for both general and CIC-topic related detentions, ships with a high risk profile comprised the largest percentage of ships detained per inspection, ships with a low risk profile comprised the smallest percentage, and ships with a standard or unknown profile fell in between.

(Table 5)

Ship Risk Profile	# of inspections	# of detentions	detention as % of inspections	detentions CIC-topic related	detentions CIC-topic related as % of inspections
High Risk Ship (HRS)	330	42	12,7%	1	0,3%
Standard Risk Ship (SRS)	3345	87	2,6%	5	0,1%
Low Risk Ship (LRS)	168	0	0,0%	0	0,0%
Unknown	178	2	1,1%	1	0,6%
Total	4021	131	3,3%	7	0,2%

3.1.8 Number of inspected ships and detentions per ship type

Table 6 reports the number of ship inspections and the number and percentage of ships detained during the CIC by ship type. With respect to CIC-topic related detentions, Commercial yacht ships had the highest CIC-topic related detention rate as per inspection (3.1%), followed by Ro-Ro Cargo (0.6%), Oil tanker (0.3%) and general cargo/multipurpose and Bulk carrier (2.2%). A number of ship types had zero CIC-topic related detentions.

(Table 6)

Ship type	# of inspections	# of detentions	detention as % of inspections	detentions CIC-topic related	detentions CIC-topic related as % of inspections
Bulk carrier	887	29	3,3%	2	0,2%
Chemical tanker	426	4	0,9%	0	0,0%
Commercial yacht	32	1	3,1%	1	3,1%
Container	402	3	0,7%	0	0,0%
Gas carrier	100	1	1,0%	0	0,0%
General cargo/multipurpose	1172	77	6,6%	2	0,2%
Heavy load	11	0	0,0%	0	0,0%
High speed passenger craft	3	1	33,3%	0	0,0%
NLS tanker	5	0	0,0%	0	0,0%
Offshore supply	100	0	0,0%	0	0,0%
Oil tanker	355	7	2,0%	1	0,3%
Other	55	1	1,8%	0	0,0%
Other special activities	112	2	1,8%	0	0,0%
Passenger ship	38	0	0,0%	0	0,0%
Refrigerated cargo	54	2	3,7%	0	0,0%
Ro-Ro cargo	163	1	0,6%	1	0,6%
Ro-Ro passenger ship	21	0	0,0%	0	0,0%
Special purpose ship	22	0	0,0%	0	0,0%
Tug	63	2	3,2%	0	0,0%
Total	4021	131	3,3%	7	0,2%

3.1.9 Inspections and detentions per Flag State

(see Annex 1.2)

Ships from 86 flag states were inspected during the CIC. 80 flag states (93%) did not have any CIC-topic related detentions. Of those that did, the highest number of ships detained were Antigua & Barbuda (2), followed by the Malta (1), Panama (1), Republic of Moldova (1), Saint Vincent and the Grenadines (1), and Cyprus (1). The highest percentage of ships detained was however followed by The Republic of Moldova (3.6%), Saint Vincent and the Grenadines (2.4%), Antigua & Barbuda (1.2%), Cyprus (0.8%), Malta (0.3%), and Panama (0.2%)

The worst performance on CIC-topic detentions percentage vice aligns well in the case of The Republic of Moldova but not in the case of the others which hold a mix of white and grey list statuses.

3.1.10 Inspections and detentions per Recognized Organization

(see Annex 1.3)

Ships from 38 Recognized Organizations (ROs) were inspected during the CIC. With respect to the CIC-topic related detentions, the RO with the highest number of ships detained was Bureau Veritas (1) and Nippon Kaiji Kyokai (1) – together these two ROs account for 2 of 7 (28.6%) of all RO CIC-topic related detentions.

3.1.11 Ship age overview

Table 7 shows the results per the different age categories and shows that younger ships had the lowest detention rate for CIC-topic detentions as per inspection (0%) while the highest rate peaked for ships aged 16-20 years (0.6%) followed by ship aged 21-25 years and those over 35 years (0.3%).

(Table 7)

Ship age*	# of inspections	# of detentions	Detention as a % of inspections	Detentions CIC-topic related	Detentions CIC-topic related as a % of inspections
≤ 5 years	612	1	0,2%	0	0,0%
6-10 years	1014	13	1,3%	1	0,1%
11-15 years	878	27	3,1%	1	0,1%
16-20 years	505	17	3,4%	3	0,6%
21-25 years	329	16	4,9%	1	0,3%
26-30 years	234	11	4,7%	0	0,0%
31-35 years	147	16	10,9%	0	0,0%
> 35 years	302	30	9,9%	1	0,3%
Total	4021	131	3,3%	7	0,2%

3.2 Results other CIC participants (if applicable)

3.2.1. Analysis

PMOU performed this CIC jointly with the TMOU and analysis of the comparison of the two MOUs will be completed at a later date.

3.2.2. Comparison of CIC-results with other participants

(Table 8)

	PMOU	TMOU	OTHER PARTICIPANT Y
INSPECTIONS	4021		
DETENTIONS	131		
DETENTIONS AS A % OF INSPECTIONS	3.3		
DETENTIONS WITH CIC-TOPIC RELATED DEFICIENCIES	7		
DETENTIONS WITH CIC-TOPIC RELATED DEFICIENCIES AS A % OF INSPECTIONS	0.2		
DETENTIONS WITH CIC-TOPIC RELATED DEFICIENCIES AS A % OF DETENTIONS	5		

Annex 1

Annex 1.1 Inspection form of the CIC

Questionnaire for the Inspection Campaign on MARPOL ANNEX VI

Ship's name	
IMO No.	
Date of inspection	

N°	QUESTIONS	YES	NO	N/A
1	**Are bunker delivery notes, with details of fuel oil for combustion purposes, kept available on board for the required period of 3 years?** **Annex VI, regulation 18.5 and 18.6**			
2*	**Do bunker delivery notes indicate that fuel oils delivered and used on board is not exceeding the maximum allowed sulphur content, as appropriate?** **Annex VI, regulation 14.1.2 and 14.4.3**			
3	**Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.1% m/m in fuel oil while operating in SOx emission control areas, have a written procedure showing how fuel oil change-over is to be done for achieving compliance with the above requirements when entering SOx emission control areas?** **Annex VI, regulation 14.6**			
4*	**Are alternative arrangements, (e.g. scrubbers) installed on board according to regulation 4.1 approved by the flag State?** **Annex VI, regulation 4.1**			
5	**Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.10% m/m in fuel oil and entering or leaving SOx emission control areas, record detailed information showing that the ship has completed/initiated the change-over in the logbook prescribed by the Administration?** **Annex VI, regulation 14.6**			

6	**Do ships which have rechargeable systems containing ozone- depleting substances (refer to the supplement to the IAPP Certificate, item 2.1), have the ozone-depleting substances record book maintained?** **Annex VI, regulation 12.6**			
7	**Where an Approved Method in accordance with Annex VI, regulations 13.7.1-13.7.5 (refer to the supplement to the IAPP Certificate, item 2.2.1) is installed, has such an installation been confirmed by a survey using the verification procedure specified in the Approved Method File, including appropriate notation on the ship's International Air Pollution Prevention Certificate of the presence of the Approved Method?** **Annex VI, regulation 13.7.1.1**			
8	**For ships equipped with a shipboard incinerator or thermal waste treatment device installed as an alternative arrangement, is the ship's crew responsible for the operation of the equipment familiar with, properly trained in, and capable of implementing the guidance provided in the manufacturer's operating manual?** **Annex VI, regulation 16.8**			
9*	**Are the master and crew familiar with essential shipboard procedures in the approved VOC Management Plan relating to the prevention of air pollution from ships?** **Annex VI, regulation 15. 6**			
10	**Does the ship keep on board a Ship Energy Efficiency Management Plan (SEEMP)?** **Annex VI, regulation 22 paragraph 1**			
11	**Was the ship detained as a result of the Inspection Campaign?**			

Note:
Questions 1 to 10 answered with a "NO" MUST be accompanied by a relevant deficiency on the Report of Inspection.
If the box "NO" is ticked off for questions marked with an "", the ship may be considered for detention.*

Guidelines for PSCOs on the Inspection Campaign on MARPOL ANNEX VI

Introduction

General

- Air pollution from ships contributes to overall air quality problems in many areas and affects the natural environment. Pollution by sulphur and nitrogen oxides in fuel contributes to acid rain, increased eutrophication and reduced air quality.
- Following international cooperation in the combat against acid rain and ozone-depleting substances, the IMO, through the MEPC, included the issue of air pollution in its work programme. As a result of the work, through the Protocol of 1997, Annex VI has been included in the MARPOL Convention.
- MARPOL Annex VI sets limits on sulphur- and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone-depleting substances and volatile organic compounds.
- Furthermore, a new set of requirements stipulated in Annex VI of MARPOL (2008), with a strict limit on the sulphur content of marine fuels, entered into force on 1 January 2015 in SECAs. The requirement reduced the maximum sulphur content by 90 per cent in the area. The price of cleaner fuel is currently significantly higher than that of conventional fuel, which means that non-compliance would give ship owners a considerable competitive advantage and consequently reduce the environmental impact of the regulation.
- Effective and uniform enforcement is a prerequisite for ensuring cleaner air and the full environmental impact of the regulation. In practice, this requires a high priority on enforcement and strong and effective cooperation between national port State control authorities.

Purpose

The purpose of the campaign on MARPOL Annex VI is:

- to establish the level of compliance with the requirements of MARPOL Annex VI within the shipping industry;
- to create awareness amongst ship crews and ship owners with regards to the importance of compliance with the provisions of MARPOL Annex VI and the prevention of air pollution;
- to send a signal to the industry that prevention of air pollution and enforcement of compliance with applicable requirements is high on the agenda of the PMoU member States;
- to underline the responsibility of the Port State Control regime with regards to harmonised enforcement of compliance with the requirements of MARPOL Annex VI, thus improving the level of compliance and ensuring a level playing field.

References

- MARPOL Annex VI, as amended.
- Paris MoU PSCC Instruction – Guidelines for Port State Control Inspections for Compliance with Annex VI of MARPOL Regulations for the Prevention of Air Pollution from Ships.

Inspection

The inspection must be performed in accordance with the PMoU procedures. The campaign does not affect the type of inspection to be conducted in accordance with the procedures. The campaign consists of a list of questions to be answered in addition to the regular inspection. The CiC does not limit the PSCO in the course of the regular inspection to check further compliance with MARPOL. Where additional information is to be sought or consulted, the PSCO is guided by the following guidance.

In arriving at a “YES” or “NO” answer to each of the questions of the questionnaire, the following should be considered:

- Should a question be answered “NO”, a deficiency using the appropriate deficiency code listed in the guidance to the question must be used on the report of inspection Form ”B”.
- A “NO” answer in the questionnaire should not automatically lead to detention of the ship. In this case, the PSCO should use his/her professional judgment to determine whether the vessel should be considered for detention.
- The column “N/A” is to be used only if the question is not applicable to the vessel and consequently the question cannot be answered.

Questionnaire guidance

Q 1 – Are bunker delivery notes, with details of fuel oil for combustion purposes, kept available on board for the required period of 3 years?

On ships of 400 gross tonnage and above, and on fixed or floating drilling rigs and other platforms, bunker delivery notes for fuel used for combustion purposes shall be kept on board.

The PSCO should check:

- That a representative selection of bunker delivery notes from the past three years has been correctly filled in and is below the limit (MARPOL Annex VI, regulation 18.7.1).
- In case the bunker delivery note as required by regulation VI/18 presented to the ship is not in compliance with the relevant requirements regarding the Sulphur content and the declaration of fuel conformity, the master or officer in charge of the bunker operation should have documented this through a notification to the ship's flag Administration with copies to the port authority under whose jurisdiction the ship did not receive the required documentation pursuant to the bunkering operation and to the bunker deliverer. A copy should be retained on board the ship, together with any available commercial documentation, for subsequent scrutiny in connection with port State control (MARPOL Annex VI, regulation 18.2.4).

Requirements:
The sulphur content of any fuel oil used on board ships must not exceed 3.50% m/m. For ships operating within an emission control area, the sulphur content of fuel oil used on board ships must not exceed 0.10% m/m.

A ship must notify its Administration and the competent authority of the relevant port of destination when it cannot purchase compliant fuel oil. The ship must be able to provide evidence that it attempted to purchase compliant fuel oil in accordance with its voyage plan and, if it was not made available where planned, that attempts were made to locate alternative sources for fuel oil and that, despite best efforts to obtain compliant fuel oil, no such fuel oil was made available for purchase.

Details of fuel oil for combustion purposes delivered to and used on board must be recorded by means of a bunker delivery note that must include the following:

- Name and IMO number of receiving ship.
- Port.
- Date of commencement of delivery.
- Name, address and telephone number of marine fuel oil supplier.
- Product name(s).
- Quantity in metric tonnes.
- Density at 15°C, kg/m3
- Sulphur content (% m/m).
- A declaration signed and certified by the fuel oil supplier's representative that the fuel oil supplied is in conformity with the applicable paragraph of regulation 14.1 or 14.4 and regulation 18.3 of MARPOL Annex VI.

The bunker delivery note must be kept on board the ship for a period of three years after the fuel oil has been delivered on board.

The PSCO may make a copy of bunker delivery notes and may require the master to certify that each copy is a true copy of such bunker delivery note. The PSCO may also verify the content of each note through consultations with the port where the note was issued.

If inspecting ships not using fuel oil for combustion purposes e.g. LNG or battery powered ships the question should be answered with N/A.

Convention reference: Annex VI, regulation 18.5/18.6.
Deficiency code: 14604 – Bunker delivery notes.
Nature of defect: Missing, Not as required, Not familiar.
Suggested action taken: 17.

Q 2 – Do bunker delivery notes indicate that fuel oils delivered and used on board is not exceeding the maximum allowed sulphur content, as appropriate?

The PSCO should check:

- Whether the quality of fuel oil used on board the ship has a sulphur content of or below 3.50% m/m (MARPOL Annex VI, regulation 14.1.2) or 0.10 % depending on the sailing area.
- Correspondence between the bunker delivery notes and the ship's Oil Record Book in accordance with MARPOL Annex I (MARPOL Annex I, regulations 17.2.5 and 17.4).

Requirements:
The sulphur content of any fuel oil used on board ships must not exceed 3.50% m/m. For ships operating within an emission control area, the sulphur content of fuel oil used on board ships must not exceed 0.10% m/m.

Bunkering of fuel oil must be recorded in the Oil Record Book Part I. Each completed operation must be signed by the officer(s) in charge of the operations concerned and each completed page must be signed by the master of the ship.

The PSCO may make a copy of any entry in the Oil Record Book Part I and may require the master to certify that the copy is a true copy of such entry.

Convention reference: Annex VI, regulations 14.1.2 and 14.4.3.
Deficiency code: 14617 – Sulphur content of fuel used.
Nature of defect: Not as required.
Suggested action taken: 17, Ground for detention (tick box).

Q 3 – Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.10% m/m in fuel oil while operating in SOx emission control areas, have a written procedure showing how fuel oil change-over is to be done for achieving compliance with the above requirements when entering SOx emission control areas?

In case the ship never enters an ECA use the N/A tick box. The PSCO should check:

- That a written procedure is readily available on board.

Requirements:
All ships when entering or leaving in an Emission Control Area, and using separate fuel oils to comply with the sulphur limits of fuel oil in an ECA, must have a written procedure showing how the fuel change-over is to be done.

Regulation 14.6 of the MARPOL Annex VI does not require that the written procedure must be in English. Thus, the shown procedure might be in a language that the PSCO cannot read. However, it is not the purpose of the question to assess the written procedure. The intention with the question is to assure that a written procedure is on board.

Convention reference: Annex VI, regulation 14.6.
Deficiency code: 14615 – Fuel change-over procedure.
Nature of defect: missing.
Suggested action taken: If the vessel is in the ECA or will enter the ECA within 14 days – 17, 16. If the vessel is outside the ECA and will not enter the ECA within 14 days – 16

Q 4 – Are alternative arrangements, (e.g. scrubbers) installed on board according to regulation approved by the flag State?

The PSCO should check:

- If the ship's Administration has allowed an alternative arrangement that may be equivalent to the standards in MARPOL Annex VI, regulations 13 and 14 (MARPOL Annex VI, regulation 4.1).
- If such an alternative arrangement has been communicated to the Organization/IMO (MARPOL Annex VI, regulation 4.2).

Requirements:
The Administration of a Party may allow any fitting, material, appliance or apparatus to be fitted in a ship, or other procedures, alternative fuel oils, or compliance methods used as an alternative to that required by MARPOL

Annex VI if such fitting, material, appliance or apparatus, or other procedures, alternative fuel oils, or compliance methods are at least as effective in terms of emission reductions as that required by MARPOL Annex VI, including any of the standards set forth in regulations 13 and 14.

The Administration that allows a fitting, material, appliance or apparatus or other procedures, alternative fuel oils, or compliance methods used as an alternative to that required by MARPOL Annex VI must communicate this to the Organization for circulation to the Parties for their information.

An equivalent arrangement approved by the Administration must be recorded in 2.3.1.2 and/or 2.3.2.2 of the *Record of construction and equipment* to the *International Air Pollution Prevention Certificate (*IAPP Certificate).

Any fitting, material, appliance or apparatus to be fitted in a ship or other procedures, alternative fuel oils, or compliance methods used as an alternative to that required by MARPOL Annex VI must be recorded in 2.6 of the *Record of construction and equipment* to the *International Air Pollution Prevention Certificate* (IAPP Certificate).

Convention reference: Annex VI, regulation 4.1.
Deficiency code: 14699 – Other (MARPOL Annex VI).
Nature of defect: Other.
Suggested action taken: 17, 16, Ground for detention (tick box).

Q 5 – Do ships which are using separate fuel oils to comply with the maximum sulphur content of 0.1% m/m in fuel oil and entering or leaving SOx emission control areas, record detailed information showing that the ship has completed/initiated the change-over in the logbook prescribed by the Administration?

In case the ship never enters an ECA use the N/A tick box. The PSCO should check:

- that the recorded information related to the change-over of fuel is complete;
- that the recorded dates, times and ship's positions match the information to be found in the deck- and/or engine room logbooks;
- that the volumes of low sulphur fuel oils recorded at entering and exiting the ECA match the consumption figures of fuel oil as recorded in the engine room logbooks or other relevant documents (i.e. does the recorded amount of fuel in the tanks at exit of the ECA or at arrival at the port minus the recorded amount of fuel in the tanks at entry of the ECA match the (estimated) fuel consumption of the vessel).

Requirements:
Ships using separate fuel oils to comply with the sulphur limits in an ECA must have fully changed over to ECA compliant fuel before entering the ECA, and must not change over from ECA compliant fuel until after exiting the ECA.

When entering or exiting an ECA, the following information must be recorded in a logbook as prescribed by the ship's flag Administration or, in the absence of specific requirements from the flag State, in an appropriate logbook (e.g. in the oil record book or the engine room logbook):

- Date
- Time
- Position of the ship
- Volume of low sulphur fuel oils in each tank

The information must be recorded at the time of completion of the change-over when entering an ECA and at the time of commencement of the change-over when exiting an ECA.

When the vessel makes use of an alternative arrangement instead of separate fuel oils to comply with the sulphur limits in ECAs, the question should be answered with N/A.

Convention reference: Annex VI, regulation 14.6.
Deficiency code: 14612 – SOx records recording.
Nature of defect: not as required, entries missing.
Suggested action taken: 99 - Master instructed to assure compliance from date of inspection.

Q 6 – Do ships which have rechargeable systems containing ozone-depleting substances (refer to the supplement to the IAPP Certificate, item 2.1), have the ozone-depleting substances record book maintained?

The PSCO should check that:

- the ship has an ozone-depleting substances record book (MARPOL Annex VI, regulation VI/12.6);
- there are effectively implemented maintenance procedures for the equipment containing ozone-depleting substances;
- the master or crew is familiar with the procedures to prevent emissions of ozone-depleting substances; and
- there are no deliberate emissions of ozone-depleting substances.

Requirements:
Installations containing ozone-depleting substances, other than hydro-chlorofluorocarbons, have been prohibited since 19 May 2005. All ships fitted with rechargeable systems containing ozone- depleting substances are required to maintain an ozone-depleting substances record book.

Each ship subject to regulation 6.1 which has rechargeable systems containing ozone-depleting substances must maintain an ozone-depleting substances record book. This record book may form part of an existing log-book or electronic recording system as approved by the Administration.

Entries in the ozone-depleting substances record book are to be recorded in terms of mass (kg) of substance and must be completed without delay on each occasion, in respect of the following:

.1 recharge, full or partial, of equipment containing ozone-depleting substances;
.2 repair or maintenance of equipment containing ozone-depleting substances;
.3 discharge of ozone-depleting substances to the atmosphere:
  3.1 deliberate; and
  3.2 non-deliberate;
.4 discharge of ozone-depleting substances to land-based reception facilities; and
.5 supply of ozone-depleting substances to the ship.

Convention reference: Annex VI, regulation 12.6.
Deficiency code: 14611.
Nature of defect: Not as required; Documentation missing; Not familiar; Not properly maintained; Damaged; Inoperative.
Suggested action taken: 17, 99.

Q 7 – Where an Approved Method in accordance with Annex VI, regulations 13.7.1-13.7.5 (refer to the supplement to the IAPP Certificate, item 2.2.1) is installed, has such an installation been confirmed by a survey using the verification procedure specified in the Approved Method File, including appropriate notation on the ship's International Air Pollution Prevention Certificate of the presence of the Approved Method?

The PSCO should check that:

- examination if diesel engines, with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres are installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000 and an Approved Method for that engine has been certified by an Administration and was commercially available,
- a diesel engine, with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres, which is installed on board a ship constructed on or after 1 January 1990 but prior to 1 January 2000, and an Approved Method for that engine has been certified by an Administration and was commercially available, for which an Approved Method is not installed after the first renewal survey specified in regulation VI/13.7.2,
- the Approved Method File (regulation VI/13.7),
- the master or crew is familiar with the proper operation and maintenance of the diesel engines, in accordance with their T Approved Method file, as applicable, with due regard being paid to NOx Emission Control Areas.

Requirement:
Marine diesel engines installed on a ship constructed prior to 1 January 2000.
A marine diesel engine with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000 must comply with the emission limits set forth in MARPOL Annex VI, regulation 13, subparagraph 7.4, provided that an Approved Method for that engine has been certified by an Administration of a Party and notification of such certification has been submitted to the Organization by the certifying Administration. Compliance with this paragraph must be demonstrated through one of the following:

.1 installation of the certified Approved Method, as confirmed by a survey using the verification procedure specified in the Approved Method File, including appropriate notation on the ship's International Air Pollution Prevention Certificate of the presence of the Approved Method; or

.2 certification of the engine confirming that it operates within the limits set forth in MARPOL Annex VI, regulation 13, paragraph 3, 4, or 5.1.1 and an appropriate notation of the engine certification on the ship's International Air Pollution Prevention Certificate.

Convention reference: Annex VI, regulation 13.7.1.1.
Deficiency code: 14613.
Nature of defect: Not as required, Missing.
Suggested action taken: 17, 16

Q 8 – For ships equipped with a shipboard incinerator or thermal waste treatment device installed as an alternative arrangement, is the ship's crew responsible for the operation of the equipment familiar with, properly trained in, and capable of implementing the guidance provided in the manufacturer's operating manual?

The PSCO should check:

- if the crew responsible for the operation of the incinerator is familiar with the guidance and instructions given by the manufacturer.

Requirements:
Personnel responsible for the operation of a shipboard incinerator installed on or after 1 January 2000 must be trained to implement the guidance provided in the manufacturer's operating manual.

The PSCO should identify the responsible crew and determine how the crew is trained. The PSCO should inquire the identified responsible crew about the process of operating the equipment, the operational requirements outlined in the operation manual, the parameters to be controlled during operation and verify familiarity with the limitations on the substances allowed to be incinerated.
The PSCO should use his professional judgment when assessing the information received from the crew against the information found in the manual to determine whether the crew is trained, familiar and capable.

If a manufacturer´s operating manual is not available the answer to question 8 should be NO.

Care should be taken to not have an incinerator in operation where this is prohibited by local regulations.

Convention reference: Annex VI, regulations 16.8.
Deficiency code: 14608 – Incinerator incl. operations and operating manual.
Nature of defect: not familiar.
Suggested action taken: 17.

Q 9 – Are the master and crew familiar with essential shipboard procedures in the approved VOC Management Plan relating to the prevention of air pollution from ships?

The PSCO should check:

- If the master and the crew are familiar with essential shipboard procedures in the approved VOC Management Plan.

Requirements:
A tanker carrying crude oil is required to have implemented a VOC Management Plan.

The VOC Management Plan should contain ship specific procedures, which are optimized to minimise the release of VOC emissions. These procedures are related to the loading, carriage and discharge of cargo and crude oil washing. The plan should also identify, and describe the use of, VOC reduction devices or equipment, if applicable.

Procedures should be available for the operation of the ship during loading of the cargo, during transit, during discharge of the cargo and during COW operations. The person responsible for the VOC management onboard, and the implementation of the plan, should be fully conversant with the content of the plan. Other crewmembers responsible for cargo operations or COW operations should be familiar with the procedures in the plan.

If no approved VOC Management Plan available, the answer to question 9 should be NO.

Convention reference: Annex VI, regulation 15.6.
Deficiency code: 14609 – Volatile Organic Compounds in tankers.
Nature of defect: not as required, missing.
Suggested action taken: 17, Ground for detention (tick box).

Q 10 – Does the ship keep on board a Ship Energy Efficiency Management Plan (SEEMP)?

Regulation 22 requires that each ship of 400 gross tonnage and above shall keep on board a ship specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS).

The PSCO should control the general availability of the SEEMP.

Within the scope of the CiC the PSCO is not supposed to check the content of the plan. The SEEMP might be in a language not understood by the PSCO.

Convention Reference: Annex VI, regulation 22 paragraph 1,
Deficiency code: 01328 - Ship Energy Efficiency Management plan
Nature of defect: Missing.
Suggested action taken: 17.

Q 11 – Has the ship been detained as a result of the Inspection Campaign?

Regarding the questionnaire, if the box “No” is ticked off for questions marked with an “*”, the deficiency found should be considered a serious breach of the MARPOL Annex VI requirements and the ship may be considered for detention.

If a ship is detained as a result of deficiencies found among the items listed in the questionnaire, PSCOs should answer “Yes” to question 11.

Annex 1.2 Inspections and Detentions per Flag State

Table Annex 1.2 Inspections and detentions per Flag State

Flag	# of inspections	# of detentions	Detention as a % of inspections	# of detentions CIC-topic related	Detentions CIC-topic related as a % of inspections	WGB-list* 2017
Albania	4	2	50,0%	0	0,0%	Grey
Algeria	10	0	0,0%	0	0,0%	Grey
Antigua and Barbuda	172	10	5,8%	2	1,2%	White
Azerbaijan	7	1	14,3%	0	0,0%	Grey
Bahamas	159	3	1,9%	0	0,0%	White
Barbados	24	0	0,0%	0	0,0%	White
Belgium	5	1	20,0%	0	0,0%	White
Belize	34	5	14,7%	0	0,0%	Black
Bermuda (UK)	9	0	0,0%	0	0,0%	White
Brazil	2	0	0,0%	0	0,0%	Not listed
Bulgaria	2	0	0,0%	0	0,0%	Grey
Canada	1	0	0,0%	0	0,0%	Not listed
Cayman Islands (UK)	29	0	0,0%	0	0,0%	White
China	9	0	0,0%	0	0,0%	White
Comoros	29	7	24,1%	0	0,0%	Black
Cook Islands	37	5	13,5%	0	0,0%	Black
Croatia	9	0	0,0%	0	0,0%	White
Curacao	6	0	0,0%	0	0,0%	Grey
Cyprus	133	4	3,0%	1	0,8%	White
Denmark	89	0	0,0%	0	0,0%	White
Dominica	2	0	0,0%	0	0,0%	Not listed
Egypt	1	0	0,0%	0	0,0%	Grey
Estonia	3	0	0,0%	0	0,0%	White
Faroe Islands	23	1	4,3%	0	0,0%	White
Finland	29	0	0,0%	0	0,0%	White
France	18	0	0,0%	0	0,0%	White
Georgia	1	0	0,0%	0	0,0%	Not listed
Germany	38	0	0,0%	0	0,0%	White
Gibraltar (UK)	50	1	2,0%	0	0,0%	White
Greece	61	1	1,6%	0	0,0%	White
Honduras	1	0	0,0%	0	0,0%	Not listed
Hong Kong, China	150	2	1,3%	0	0,0%	White

Flag	# of inspections	# of detentions	Detention as a % of inspections	# of detentions CIC-topic related	Detentions CIC-topic related as a % of inspections	WGB-list* 2017
India	4	0	0,0%	0	0,0%	Grey
Iran, Islamic Republic of	12	1	8,3%	0	0,0%	Grey
Ireland	13	0	0,0%	0	0,0%	White
Isle of Man (UK)	37	0	0,0%	0	0,0%	White
Israel	2	0	0,0%	0	0,0%	Not listed
Italy	52	0	0,0%	0	0,0%	White
Japan	10	0	0,0%	0	0,0%	White
Jersey (UK)	1	0	0,0%	0	0,0%	Not listed
Jordan	1	1	100,0%	0	0,0%	Not listed
Kazakhstan	2	1	50,0%	0	0,0%	Grey
Korea, Republic of	5	0	0,0%	0	0,0%	White
Latvia	4	0	0,0%	0	0,0%	White
Lebanon	3	0	0,0%	0	0,0%	Grey
Liberia	336	7	2,1%	0	0,0%	White
Libya	1	0	0,0%	0	0,0%	Grey
Lithuania	6	0	0,0%	0	0,0%	Grey
Luxembourg	14	0	0,0%	0	0,0%	White
Malaysia	3	0	0,0%	0	0,0%	Not listed
Malta	339	4	1,2%	1	0,3%	White
Marshall Islands	370	4	1,1%	0	0,0%	White
Moldova, Republic of	28	3	10,7%	1	3,6%	Black
Mongolia	6	1	16,7%	0	0,0%	Not listed
Montenegro	1	0	0,0%	0	0,0%	Not listed
Morocco	3	0	0,0%	0	0,0%	Grey
Netherlands	218	2	0,9%	0	0,0%	White
Norway	110	0	0,0%	0	0,0%	White
Palau	14	3	21,4%	0	0,0%	Black
Panama	529	26	4,9%	1	0,2%	White
Philippines	9	1	11,1%	0	0,0%	White
Poland	5	0	0,0%	0	0,0%	White
Portugal	83	0	0,0%	0	0,0%	White
Qatar	1	0	0,0%	0	0,0%	Not listed
Russian Federation	95	3	3,2%	0	0,0%	Grey
Saint Kitts and Nevis	12	0	0,0%	0	0,0%	Black
Saint Vincent and the Grenadines	42	5	11,9%	1	2,4%	Grey

Flag	# of inspections	# of detentions	Detention as a % of inspections	# of detentions CIC-topic related	Detentions CIC-topic related as a % of inspections	WGB-list* 2017
Saudi Arabia	6	1	16,7%	0	0,0%	White
Seychelles	2	0	0,0%	0	0,0%	Not listed
Sierra Leone	29	7	24,1%	0	0,0%	Black
Singapore	156	3	1,9%	0	0,0%	White
Slovenia	2	0	0,0%	0	0,0%	Not listed
Spain	13	0	0,0%	0	0,0%	White
Sri Lanka	2	0	0,0%	0	0,0%	Not listed
Sweden	13	0	0,0%	0	0,0%	White
Switzerland	5	0	0,0%	0	0,0%	Grey
Syrian Arab Republic	1	0	0,0%	0	0,0%	Not listed
Tanzania, United Republic of	26	1	3,8%	0	0,0%	Black
Togo	43	7	16,3%	0	0,0%	Black
Turkey	78	2	2,6%	0	0,0%	White
Turkmenistan	2	0	0,0%	0	0,0%	Not listed
Tuvalu	5	0	0,0%	0	0,0%	Grey
Ukraine	6	2	33,3%	0	0,0%	Black
United Kingdom	87	0	0,0%	0	0,0%	White
United States	13	0	0,0%	0	0,0%	Grey
Vanuatu	14	3	21,4%	0	0,0%	Black

* The official WGB-list of the Paris MoU is published in the Annual Report. The scope of this table is only the CIC.

Annex 1.3 Inspections and detentions per Recognized Organization

Table Annex 1.3 Inspections and detentions per Recognized Organization

Issuing authority	Inspection*		Detentions CIC-topic related with RO responsibility**
	506	532	
American Bureau of Shipping	345	307	
Bulgarian Register of Shipping	6	5	
Bureau Veritas	580	542	1
China Classification Society	71	67	
Croatian Register of Shipping	11	11	
Det Norske Veritas	10	37	
DNV GL AS	870	755	
Germanischer Lloyd	6	23	
Intermaritime Certification Services, ICS Class	9	6	
International Naval Surveys Bureau	24	24	
International Register of Shipping	11	8	
Korean Register of Shipping	82	78	
Lloyd's Register	488	432	
Macosnar Corporation	8	9	
National Shipping Adjuster Inc.	8	5	
Nippon Kaiji Kyokai	527	462	1
Phoenix Register of Shipping	28	23	
RINA Services S.p.A.	222	199	
Russian Maritime Register of Shipping	147	130	
Shipping Register of Ukraine	18	14	
Isthmus Bureau of Shipping, S.A.	3	5	
Dromon Bureau of Shipping	42	38	
Mediterranean Shipping Register	12	5	
Polski Rejestr Statkow (Polish Register of Shipping)	23	24	
Turkish Lloyd	18	18	
United Registration and Classification of Services	6	5	
ASIA Classification Society	2	3	
Indian Register of Shipping	8	6	
Other	8	7	
Overseas Marine Certification Services	1	2	
Panama Shipping Registrar Inc.	8	7	
Aegean Register of Shipping	3	2	
Iranian Classification Society	4	3	
Columbus American Register		1	
Maritime Lloyd	1		

Issuing authority	Inspection*		Detentions CIC-topic related with RO responsibility**
	506	532	
Novel Classification Society S.A.	2	1	
Panama Maritime Documentation Services	1	2	
Venezuelan Register of Shipping	1	1	

* Number of inspections where the certificate is recorded as issued by the RO
** Number of inspections where the RO issued the certificate and a deficiency covered by that certificate was recorded as detainable and RO related