

**Report of the 2016 Concentrated Inspection Campaign (CIC)
on Cargo Securing Arrangements**

Executive Summary

From 1st September 2016 to 30th November 2016, the BS MOU carried out a Concentrated Inspection Campaign (CIC) on Cargo Securing Arrangements throughout the region. This campaign involved all member States of the BS MOU and was conducted in conjunction with the Tokyo MOU, IO MOU and the Viña del Mar Agreement. The Tokyo MOU Guidelines and Questionnaire were utilized.

During the campaign, a total of 931 inspections were carried out with the CIC questionnaire involving 931 individual ships. 849 of those inspections (91.12%) were on ships that were carrying, or required to carry, a cargo securing manual. 82 individual vessels were carrying bulk cargoes that do not have and are not required to have a cargo securing manual which were not subject CIC inspections and were answered N/A

Thereby the goal of this report to analyse 849 individual vessels eligible for CIC inspection results. Of this quantity 44 ships were detained (5.18%). All of them were not being within the CIC scope. Vast majority 845 (99.53%) of those vessels were having approved cargo securing manual, only 4 (0.47%) of them not having approved cargo securing manual. 478 (56.6%) vessels had a cargo securing manual that met the guidelines outlined in MSC.1/Circ. 1353/Rev.1.

156 (18.5%) vessels had a cargo securing manual that met a standard at least equivalent to the MSC guidelines. This showed that only 75.0% of the vessels used the MSC guidelines in the development of their cargo securing manuals.

During 52 CIC inspections CIC topic related deficiencies were recorded resulting 6.12 per cent of CIC inspections with CIC topic related deficiencies.

A total of 321 non-compliances have been recorded as a direct result of this campaign. Of this quantity 215 (67%) were related to the questions from 1 to 2; and 106 (33%) were related to questions from 3 to 8. The overall number of CIC-topic related non-compliances per inspection was 0.59.

The most unfavourable results are questions 2, 8, 4 and 6, which asked whether approved cargo securing manual meet the guidelines outlined in MSC MSC.1/Cir. 1353/Rev.1, if during the CIC, the PSCO is to observe is the vessel following the Cargo Safe Access Plan (CSAP) (7.4%); whether the lashings/fittings as per the cargo securing manual (5.0%) and whether appropriate securing points or fittings being used for cargo securing devices on board (3.8%).

By ship type, container and bulk carrier ships reported the most favourable results with lower deficiency rates 0.06 and 0.4 non-compliances per CIC inspection.

Most of the 849 of the CIC inspected vessels were general cargo/multi-purpose ships 435 (51.2%) followed by bulk carriers with 345 (40.6%) inspections, container ships with 31 (3.6%) inspections and Ro-Ro cargo ships with 17 (2.0%) inspections.

Concerning cargo securing manual containers ships followed by Ro-Ro cargo ships reported the most favourable results having 96.8 and 94.1 per cents of their cargo securing manuals meeting the guidelines outlined in MSC.1/Cir. 1353/Rev.1 or equivalent standards.

By ship age, older ships above 30 years and older have higher deficiency rate and higher share of the total non-compliances e.g. 0.31 non-compliance per inspection.

REPORT OF THE 2016 CONCENTRATED INSPECTION CAMPAIGN (CIC) ON CARGO SECURING ARRANGMENTS

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1. INTRODUCTION

1.1 Purpose of the report

This report documents the results of the Concentrated Inspection Campaign (CIC) on Cargo Securing Arrangements, which was carried out by 6 Member Authorities between September 1st and November 30th 2016.

The objective of this report is to analyse the results of this CIC on Cargo Securing Arrangements. Results of the inspections without questionnaire are not included in the statistical analysis.

1.2 Objective of the CIC

The objective of the Campaign on the Cargo Securing Arrangements were :

- to measure compliance with the requirements of the applicable international conventions;
- to ensure that the Master, Officers, and Crew are familiar with procedures for cargo stowing arrangements; and,
- to raise awareness of the hazards associated with cargo stowage and with safe practices for cargo stowage.

1.3 Scope of the CIC

The campaign targeted to verify compliance of ships with applicable Cargo Securing arrangements and the overall safety of ships and seafarers engaged in cargo securing operations.

The Campaign questionnaire contains questions that cover the following selected areas:

- Cargo Securing Manual
- Familiarization with the Cargo Securing manual
- Lashing / Fittings
- Sufficient availability of cargo securing devices on-board
- Compliance with the Cargo Safe Access Plan

A guidance is being provided to assist PSCOs in the performance of their duties in relation to carrying out this CIC In addition to that guidance, PSCOs instructed to refer to the following documents:

- SOLAS 74 as amended, regulation VI/5 and VII/5.
- The Code of Safe Practice for Cargo Stowage and Securing (CSS Code) (Res. A 714(17) as amended by MSC.Circ.664, 691, 740, 812, 1026 and MSC.1 Circ.1352/Rev.1)
- MSC.1 Circular 1353, Rev.1 dated 15 December 2014 , and
- The Code of Safe Practice for Ships Carrying Timber Deck Cargoes (Res. A.1048(27))

1.4 General remarks

This report presents analysis of the responses to the CIC Questionnaire submitted during the campaign period. Thereby for the purpose of this report:

- **Inspection** is an inspection with a CIC Questionnaire with applicable response;
- **Deficiency** indicates a non-compliance which is represented by an un-satisfactory “NO” response to the questions 1-8 and does not necessarily represents recorded deficiencies in the inspection reports, but compliance to the requirements as set out in the questionnaire;
- **Inspection with deficiency** is a CIC-topic related deficiency recorded which is indicated by a “YES” response to the Question 9.
- **Detention** is a CIC-topic related detention which is indicated by a “YES” response to the Question 10.

2 SUMMARY ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS

2.1 Summary analysis

During the campaign, a total of 931 inspections were carried out with the CIC questionnaire involving 931 individual ships. Only one CIC inspection has been carried out on board of an individual vessel.

Noting that 82 (8.8%) “N/A” response to Question 1 indicates that 849 (91.2%) of the CIC inspected vessels were required to have cargo securing manual. Thereby the goal of this report to analyse 849 individual vessels eligible for CIC inspection results

Analysis of the results of the 849 eligible vessels for CIC inspection revealed the followings:

- .1 Vast majority 845 (99.53%) of those vessels were having approved cargo securing manual, only 4 (0.47%) of them not having approved cargo securing Manual.
- .2 During 52 CIC inspections CIC topic related deficiencies recorded resulting 6.12 per cent of CIC inspections with CIC topic related deficiencies.
- .3 A total of 321 non-compliances have been recorded as a direct result of this campaign. The overall number of CIC-topic related non-compliances per inspection was 5.9 per cent.
- .4 215 (69%) of the total non-compliances related to Cargo Securing Manual questions 1 to 2. 106 (31%) of the total non-compliances were related to questions 3 to 8.
- .5 The requirements that reported the most favourable results to questions 3 to 8 are related to the condition of the lashings/fittings considered satisfactory for their intended use Q2 (0.60%), whether there are sufficient quantity of reserve cargo securing devices on board Q7 (1.21%) and familiarity of the master and person in charge of cargo operations Q3 (1.71%)
- .6 The most un-favourable results to questions from 3 to 8 are question 8, 4 and 6, which asked if during the CIC, the PSCO is to observe if the vessel following the Cargo Safe Access Plan (CSAP) (7.4%); whether the lashings/fittings as per the cargo securing manual (5.0%) and whether appropriate securing points or fittings being used for cargo securing (3.8%)

- .7 Most of the 849 of the CIC inspected vessels were general cargo/multi-purpose ships 435 (52.2%), followed by bulk carriers with 345 (40.6%) inspections, container ships with 31 (3.6%) inspections and Ro-Ro cargo ships with 17 (2.0%) inspections.
- .8 Concerning cargo securing manual, container ships followed by Ro-Ro cargo ships reported the most favourable results having 96.8 and 94.12 per cents of their cargo securing manuals meeting the guidelines outlined in MSC.1/Cir. 1353/Rev.1 or equivalent standards.

2.2 Conclusions

The total sample size of the CIC campaign comprises of 931 inspections of which 82 (8.8%) vessels were carrying bulk cargoes that do not have and are not required to have a cargo securing manual which were not subject CIC inspections and all questions were answered N/A. 849 of those inspections (91.12%) were on ships that were carrying, or required to carry, a cargo securing manual, none of the vessels were detained as a result of CIC topic related deficiencies found during this CIC.

Only 4(0.5%) vessels that were required to carry an approved cargo securing manual, did not have the manual on board. 478 (56.6%) vessels had a cargo securing manual that met the guidelines outlined in MSC.1/Circ. 1353/Rev.1. 156 (18.5%) vessels had a cargo securing manual that met a standard at least equivalent to the MSC guidelines. This showed that **only 75.0%** of the vessels used the MSC guidelines in the development of their cargo securing manuals.

The most un-favourable results are related to whether approved cargo securing manual meet the guidelines outlined in MSC MSC.1/Cir. 1353/Rev.1 Q2 (25.0%), Major non-compliances e.g. unsatisfactory responses to questions 3 to 8 were:

Q8 Is the vessel following the Cargo Safe Access Plan 7.4%

Q4: Are the lashings/fittings as per the cargo securing manual 5.0%

Q6: Are appropriate securing points or fittings being used for cargo securing 3.8%

2.3 Recommendations

- .1 Industry to put emphasis on the vital requirements of SOLAS requirements covered by the scope of the CIC:
 - a. to have cargo securing manuals in compliance with the requirements as set out in the guidelines outlined in MSC.1/Cir. 1353/Rev.1 or at a standard at least equivalent to the guidelines,
 - b. attention to be give given to ensure safety of cargo securing operation further training of master and person in charge of cargo operations familiar with the cargo securing manual, and
 - c. to ensure that lashings/fittings as per the cargo securing manual, to have sufficient cargo securing device on board.
- .2 The deficiencies related to cargo securing manual, cargo securing operations, lashing and fittings, lack of sufficient cargo securing device on board also give cause for concern. These deficiencies appear to indicate that could be weaknesses in the transport chain associated with the cargo securing arrangements for the cargos intended to be transported by sea.
- .3 Breakdown of major non-compliant requirements as set out Questions 2, 8, 4 and 6 by ship flag, ship type and ship age are presented in **Section 3.5** of the report. Concerned flag Authorities might be invited to take note of the observations and take appropriate actions. Older ships pose a risk in the area of cargo securing arrangements.

3 ANALYSIS

3.1 General

The total number of ships inspected and the total number of inspections performed during the CIC are presented in Table 1.

Table 1 Summary of inspections during the CIC

	Nr. of individual ships with CIC Questionnaire	Nr. of inspections with a CIC questionnaire	Nr. of initial inspections without CIC questionnaire
Total	931	931	382
Total number of detentions	46	46	10
Detentions with CIC-topic deficiencies	0	0	N/A

Looking at the number of inspections performed with a CIC questionnaire (Column 2 & 3 of Table 1), there are 46 detentions during CIC inspections and none of these detentions were CIC topic related although questionnaire submission rate was 71% which is around seven out of ten initial inspections were accompanied with a CIC questionnaire. Noting that 82 N/A responses to Q1 total number of questionnaire analysed was 849 which are referred as CIC inspections resulted 44 detentions all not within the scope of the CIC topic.

Table 1 also illustrates that all individual ships that were involved with this CIC underwent only one CIC inspection. Thereby number of individual ship inspected for CIC are not incorporated in the CIC data presented in this report.

3.2 Analysis of the response to the CIC questionnaire

3.2.1 General

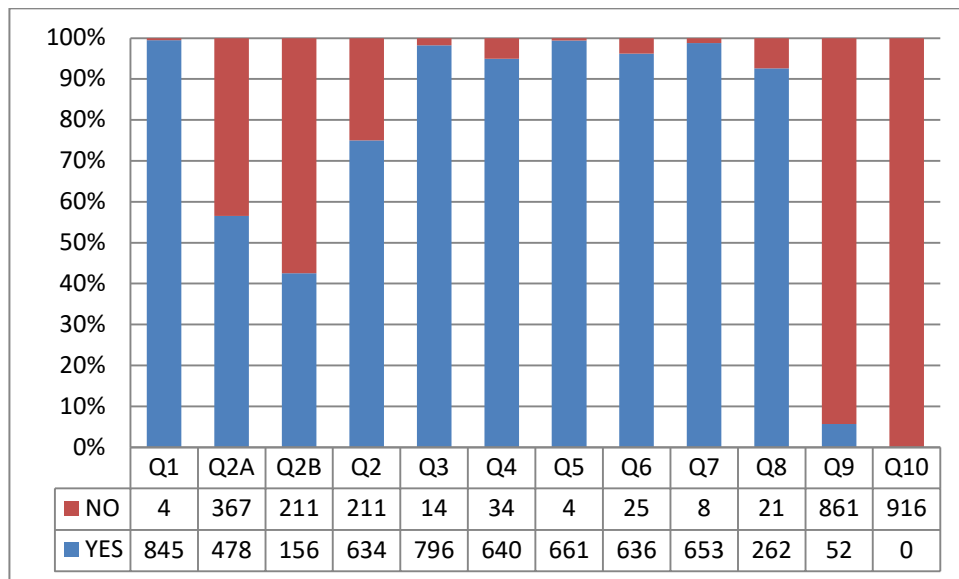
The CIC questionnaire on cargo securing arrangements was divided into three sections which grouped questions on the same or similar subjects. Questions 1 to 2 are related to cargo securing manual (CSM). Questions 3 to 8 related with crew familiarization with the Cargo Securing manual, lashing / fittings, sufficient availability of cargo securing devices on board and compliance with the Cargo Safe Access Plan (CAP). Questions 9 to 10 were related whether deficiencies recorded and vessel detained as a result of this CIC.

Questionnaire results are given in the **Table 2**. N/A responses filtered out responses presented in **Figure 1**.

Table 2 Questionnaire results

	YES	NO	N/A	Totals
Q1	845	4	82	931
Q2A	478	367	86	931
Q2B	156	4	771	931
Q3	796	14	121	931
Q4	640	34	257	931
Q5	661	4	266	931
Q6	636	25	270	931
Q7	653	8	270	931
Q8	262	21	648	931
Q9	52	861	18	931
Q10	0	916	15	931

Figure 1 Response to the questionnaire “N/A” responses filtered¹



¹ Responses to Q2 derived from the responses to Q2A and Q2B

Out of 52 CIC inspections which deficiencies recorded as a result of this CIC resulting 6.12 per-cent of CIC inspections with deficiencies within the scope of CIC not resulted detentions.

3.2.2 Analysis of the response to the CIC questionnaire

Most of the 849 of the CIC inspected vessels that were carrying, or required to carry, a cargo securing manual were general cargo/multi-purpose ships 435 (52.2%) followed by bulk carriers with 345 (40.6%) inspections, container ships with 31 (3.6%) inspections and Ro-Ro cargo ships with 17 (2.0%) inspections (**Table 4a**)

The total number of non-compliances found during the CIC is 321 of which 215 (70%) are related to cargo securing manual: questions 1 to 2; and 106 (30%) are related to crew familiarization, lashing fittings, CSAP; questions from 3 to 8.

On an individual question basis the most non-compliances were found in the area of cargo securing manual (Q2). This is followed by the area dealing with the Cargo Safe Access Plan (CSAP) (7.4%); whether the lashings/fittings as per the cargo securing manual (5.0%) and whether appropriate securing points or fittings being used for cargo securing (3.8%).

Table 3 presents responses to the CIC questionnaire. In order to analyse results on an individual question basis all Not Applicable (N/A) responses are filtered and total relevant/applicable responses and compliance to the requirement presented in the last three columns of the **Table 3** together with per cent of non-compliance and non-compliance as a per cent of total non-compliances.

It reveals that majority of the vessels (99.53%) has approved cargo securing manual out of which 478 (56.57%) vessels have approved cargo securing manual meet the guidelines outlined in MSC.1/circular 1353/Rev.1. 156 (18.46%) vessels have approved manual meet a standard at least equivalent standard, resulting 75.03% of the approved manual being in line with guidelines outlined in MSC.1/Cir. 1353/Rev.1 or equivalent standards. 211 (24.97%) vessels having approved cargo securing manual are un-satisfactory.

Further analysis of the responses to the questions 1&2 are presented in **Section 3.3**.

Table 3 Responses CIC Questions on CIC Questionnaire ¹⁾

Nr.	Questions	YES Nr.	NO Nr	Nr. of app. responses	% of non-compliance	% total non-compliances
1	Is an approved cargo securing manual on-board?	845	4	849	0.47	1.25
2A	Does the cargo securing manual meet the guidelines outlined in MSC.1/Cir. 1353/Rev.1?	478	367	845	56.57	
2B	If the answer to question 2A is "No", does the cargo securing manual meet a standard at least equivalent to the above guidelines?	156	4			
2²⁾	Does Cargo securing manual meet the guidelines outlined in MSC.1/Cir. 1353/Rev.1 or at a standard at least equivalent to the guidelines ⁽²⁾	634	211	845	24.97	75.03
3	Are the Master and Person in Charge of cargo operations familiar with the cargo securing manual?*	796	14	810	1.73	4.36
4	Are the lashings/fittings as per the cargo securing manual?*	640	34	674	5.04	10.59
5	Is the condition of the lashings/fittings considered satisfactory for their intended use?	661	4	665	0.60	1.25
6	Are appropriate securing points or fittings being used for cargo securing?*	636	25	661	3.78	7.79
7	Is there a sufficient quantity of reserve cargo securing devices on board?	653	8	661	1.21	2.49
8	Is the vessel following the Cargo Safe Access Plan (CSAP) ?*	262	21	283	7.42	6.54
	Totals Q1-Q8	3,648	321	5,448	5.89	
	Total Nr. of non-compliances related to: Cargo Securing Manual (Q1-Q2)		215		1.95	3.95
	Crew familiarization, lashing fittings, CSAP (Q3-Q8)		106		5.89	1.95
9	Were deficiencies recorded as a result of this CIC?	52	715	767	93.2	
10	Was the vessel detained as a result of deficiencies found during this CIC?	0	916	916		

⁽¹⁾ Russian Federation and Turkey data includes only Black Sea ports

⁽²⁾ Derived from Question 2A and Question 2B data

Breakdown of the major non-compliances by ship flag, ship type and ship age are presented in Section 3.5 which are Questions 2, 8, 6 and 4.

The CIC questionnaire indicates that "unsatisfactory" answer was given to a question Q1-Q8 on 5.89 % occasions to (Q3-Q8) on 3.83% of occasions. Number of yes responses to the Question 10 coincides with the CIC topic related detentions as a result of a "NO" answer to any of the questions set out in the questionnaire.

Analysis of the responses to the CIC questionnaire by ship type, ship flag and ship age are presented in the following sections

Noting that 82 (8.8%) "N/A" response to Question 1 indicates that 849 (91.2%) of the CIC inspected vessels were required to have cargo securing manual. Thereby the goal of this report to analyse 849 individual vessels eligible for CIC inspection results.

3.3 Analyses of questions Q1 and Q2 on Cargo Securing Manual (CSM)

Responses to the questions on the cargo securing manual (CSM) are presented in this section by ship flag, ship type and ship age for questions from 1 to 2 presented below

When considering 849 applicable responses, breakdown of ships inspected by ship type largest group of the ship inspected during campaign period were general cargo ships with 435 (52.2%) followed by bulk carriers with 345 (40.6%), container ships with 31 (3.6%) inspections and Ro-Ro cargo ships with 17 (2.0%) inspections (**Table 4a**). Vast majority 845 (99.53 %) of those vessels were having approved cargo securing manual, and only 4 (0.47%) of them not having approved cargo securing Manual.

3 (0.9%) of the bulk carriers and 1 (0.2%) general/cargo vessels do not have approved cargo securing manual, 30 (96.8%) container ships, followed by 16 (94.1%), ro-ro cargo ships have approved cargo securing manual meet the guidelines outlined in MSC.1/Cir. 1353/Rev.1 or equivalent.

When considering ships inspected by ship flag (**Table 4b**) most of the 849 inspections were carried out on board ships flying the flags of Panama with 146 (17.2%) inspections, Malta and Turkey with 81 (8.5%) inspections and Liberia with 62 (7.3%) inspections.

Table 4 Responses to the questions 1&2 by a) ship type, b) ship flag

a)Ship type	Nr.of appl. Resp.	Nr of YES Q1	% NO Q1	Nr of YES Q2A	% YES Q2A	Nr. of YES 2B	% YES Q2B	Total YES Q2	% Total YES	Nr. of NO Q2	% of non-compl. Q2	% of total non-compl. Q2
Bulk carrier	345	342	0.9	176	51.5	48	14.0	224	65.5	118	34.5	55.9
Container	31	31		28	90.3	2	6.5	30	96.8	1	3.2	0.5
General cargo/multipurpose	435	434	0.2	260	59.9	94	21.7	354	81.6	80	18.4	37.9
Ro-Ro cargo	17	17		7	41.2	9	52.9	16	94.1	1	5.9	0.5
Other type of ships	21	21		7	33.3	3	14.3	10	47.6	11	52.4	5.2
All types	849	845	0.47	478	56.57	156	18.46	634	75.03	211	24.97	100.0

b)Ship Flag	Nr.of appl. Resp.	Nr of YES Q1	% NO Q1	Nr of YES Q2A	% YES Q2A	Nr. of YES 2B	% YES Q2B	Total YES Q2	% Total YES	Nr. Of NO Q2	% of non-compl. Q2	% of total non-compl. Q2
Antigua and Barbuda	29	29		19	65.5	2	6.9	21	72.4	8	27.6	3.8
Cook Islands	31	31		17	54.8	6	19.4	23	74.2	8	25.8	3.8
Hong Kong, China	27	27		15	55.6	2	7.4	17	63.0	10	37.0	4.7
Liberia	62	61	1.6	34	55.7	7	11.5	41	67.2	20	32.8	9.5
Malta	81	81		45	55.6	15	18.5	60	74.1	21	25.9	10.0
Marshall Islands	57	57		37	64.9	2	3.5	39	68.4	18	31.6	8.5
Moldova, Republic of	34	34		20	58.8	9	26.5	29	85.3	5	14.7	2.4
Panama	146	144	1.4	75	52.1	32	22.2	107	74.3	37	25.7	17.5
Russian Federation	32	32		16	50.0	10	31.3	26	81.3	6	18.8	2.8
Sierra Leone	22	22		11	50.0	6	27.3	17	77.3	5	22.7	2.4
Togo	22	22		10	45.5	7	31.8	17	77.3	5	22.7	2.4
Turkey	81	81		57	70.4	13	16.0	70	86.4	11	13.6	5.2
Others	225	224	0.4	122	54.5	45	20.1	167	74.6	57	25.4	27.0
Total	849	845	0.5	478	56.57	156	18.46	634	75.03	211	24.97	100.0

Table 5 Responses to the questions 1&2 by a) ship age and b) ship risk profile

a) Ship Age	Nr. of appl. Resp.	Nr of YES Q1	% NO Q1	Nr of YES Q2A	% YES Q2A	Nr.of YES 2B	% YES Q2B	Total YES Q2	% Total YES	Nr. of NO Q2	% of non-compl. Q2	% of total non-compl. Q2
0-5	111	111		64	57.7	8	7.2	72	64.9	39	35.1	18.5
6-10	200	198	1.0	125	63.1	29	14.6	154	77.8	44	22.2	20.9
11-15	93	92	1.1	49	53.3	15	16.3	64	69.6	28	30.4	13.3
16-20	99	99		57	57.6	15	15.2	72	72.7	27	27.3	12.8
21-24	63	62	1.6	36	58.1	11	17.7	47	75.8	15	24.2	7.1
25-29	61	61		27	44.3	17	27.9	44	72.1	17	27.9	8.1
30-34	102	102		53	52.0	26	25.5	79	77.5	23	22.5	10.9
35+	120	120		67	55.8	35	29.2	102	85.0	18	15.0	8.5
Total	849	845	0.47	478	56.57	156	18.46	634	75.03	211	24.97	100.0

b) Ship Risk profile	Nr.of appl. Resp.	Nr of YES Q1	% NO Q1	Nr of YES Q2A	% YES Q2A	Nr.of YES 2B	% YES Q2B	Total YES Q2	% Total YES	Nr. Of NO Q2	% of non-compl. Q2	% of total non-compl. Q2
HRS	170	170	0.0	97	57.1	47	27.6	144	84.7	26	15.3	12.3
SRS	674	670	0.6	378	56.4	109	16.3	487	72.7	183	27.3	86.7
LRS	5	5	0.0	3	60.0	0	0.0	3	60.0	2	40.0	0.9
Total	849	845	0.47	478	56.57	156	18.46	634	75.03	211	24.97	100.0

3.4 Analyses of the CIC questions from 1 to 9¹

A breakdown of the results by type of ship subject to the CIC including the number of inspections, deficiencies presented in **Table 6** below.

Table 6 Results by ship type

Ship Type	Inspections	Inspections with deficiencies	Number of deficiencies	% of total	% of inspections with deficiencies	Deficiency ratex100
Bulk carrier	345	7	138	43.0	40.0	4.9
Container	31	1	2	0.6	6.5	3.2
General cargo/multipurpose	435	42	166	51.7	38.2	19.5
Ro-Ro cargo	17	2	4	1.2	23.5	17.6
Other types of ships	21	0	11	3.4	52.4	0.0
Total	849	52	321	100.0	37.81	12.49

Majority of deficiencies observed were general cargo/multi-purpose ships with 137 (54.15%), bulk carriers 51 (20.16%), and oil tankers 24 (9.48%). No CIC topic related deficiency recorded.

The following **Table 7** presents the results of the CIC by ship age. It indicates that the older ship, particularly those which are 30 years and older raise most concern in regard to their level of compliance with the SOLAS requirements related to the cargo securing arrangements. Ships 30-35 years of age had the highest deficiency rate and share of inspections with CIC topic related deficiencies recorded.

¹ For definitions of inspection, inspection with deficiencies, number of deficiencies see Section 1.4

Older ships, particularly those 30 years and older reported the least favourable results. Ships older than 24 years have majority of the deficiencies 146 (57.7%) having only 25.7 per cent of the inspections.

Table 7 Results by ship age

Ship Age	Inspections	Inspections with deficiencies	Number of deficiencies	% of total	% of inspections with deficiencies	Deficiency ratex100
0-5	111	2	53	16.5	1.8	47.7
6-10	200	5	57	17.8	2.5	28.5
11-15	93	4	36	11.2	4.3	38.7
16-20	99	4	36	11.2	4.0	36.4
21-24	63	4	19	5.9	6.3	30.2
25-29	61	3	21	6.5	4.9	34.4
30-34	102	12	58	18.1	11.8	56.9
35+	120	18	41	12.8	15.0	34.2
Total	849	52	321	100.0	6.12	37.81

The following **Table 8** presents the results of the CIC by ship flag. It shows the number of inspections and deficiencies by ship flag.

Table 8 Results by ship Flag

Ship Flag	Inspections	Inspections with deficiencies	Number of deficiencies	% of total	% of inspections with deficiencies	Deficiency ratex100
Antigua and Barbuda	29	1	14	4.4	3.4	48.3
Cook Islands	31	0	16	5.0	0.0	51.6
Hong Kong. China	27	0	10	3.1	0.0	37.0
Liberia	62	2	22	6.9	3.2	35.5
Malta	81	5	28	8.7	6.2	34.6
Marshall Islands	57	2	23	7.2	3.5	40.4
Moldova. Republic of	34	4	14	4.4	11.8	41.2
Panama	146	7	52	16.2	4.8	35.6
Russian Federation	32	4	13	4.0	12.5	40.6
Sierra Leone	22	4	13	4.0	18.2	59.1
Togo	22	3	8	2.5	13.6	36.4
Turkey	81	1	15	4.7	1.2	18.5
Others	225	19	93	29.0	8.4	41.3
Total	849	52	321	100.0	6.12	37.81

The following **Table 9** presents the results of the CIC by ship risk profile. It shows the number of inspections, inspections with deficiencies and number of deficiencies by ship risk profile.

Majority of the ships subjected for CIC inspection were SRS 674 (79.4%). Per cent of inspections with deficiencies increases as ship risk group increases.

Table 9 Result by ship risk profile (SRP)

Ship Risk Profile	Inspections	Inspections with deficiencies	Number of deficiencies	% of total	% of inspections with deficiencies	Deficiency rate x100
HRS	170	22	53	16.5	12.9	31.2
SRS	674	30	263	81.9	4.5	39.0
LRS	5	0	5	1.6	0.0	100.0
Total	849	52	321	100.00	6.12	37.81

3.5 Analyses of the major non-compliances

Major non compliances are Question 2 with 24.97%; Question 8 with 7.42% and Question 4 with 5.04% and Question 6 with 3.78% of total non-compliances.

In this part of the report breakdown of the major non-compliances by ship flag, ship type and ship age are presented for Question 2, 8, 4 and 6.

Question 2 which asked whether approved cargo securing manual meet the guidelines outlined in MSC MSC.1/Cir. 1353/Rev.1 or equivalent standards, recorded first non-compliant percentage of the responses. Of the 849 responses 211 (24.7%) responses were unsatisfactory.

Breakdown of the compliance to the **Question 2** by a) ship flag, b) ship type and c) ship age are presented below.

Table 10 Breakdown of responses to the **Question 2** by a) ship flag b) ship type and c) ship age

a) Ship Flag	Inspections	Deficiencies	% of total	Deficiency rate x100
Antigua and Barbuda	29	8	3.8	27.6
Cook Islands	31	8	3.8	25.8
Hong Kong, China	27	10	4.7	37.0
Liberia	61	20	9.5	32.8
Malta	81	21	10.0	25.9
Marshall Islands	57	18	8.5	31.6
Moldova, Republic of	34	5	2.4	14.7
Panama	144	37	17.5	25.7
Russian Federation	32	6	2.8	18.8
Sierra Leone	22	5	2.4	22.7
Togo	22	5	2.4	22.7
Turkey	81	11	5.2	13.6
Others	224	57	27.0	25.4
Totals	845	211	100.0	24.97

b) Ship Type	Inspections	Deficiencies	% of total	Deficiency rate x100
Bulk carrier	342	118	55.9	34.5
Container	31	1	0.5	3.2
General cargo/multipurpose	434	80	37.9	18.4
Ro-Ro cargo	17	1	0.5	5.9
Other type of ships	21	11	5.2	52.4
All Ship types	845	211	100.0	24.97

a) Ship Age	Inspections	Deficiencies	% of total	Deficiency ratex100
0-5	111	39	18.5	35.1
6-10	198	44	20.9	22.2
11-15	92	28	13.3	30.4
16-20	99	27	12.8	27.3
21-24	62	15	7.1	24.2
25-29	61	17	8.1	27.9
30-34	102	23	10.9	22.5
35+	120	18	8.5	15.0
Totals	845	211	100.0	24.97

Question 8 seeks to check whether the vessel following Cargo Safe Access Plan (CSAP) by asking if during the CIC, the PSCO is to observe is the vessel following the Cargo Safe Access Plan recorded second non-compliant percentage of the responses. Of the 283 applicable responses 21 (7.42%) were un-satisfactory.

Breakdown of the compliance to the **Question 8** by a) ship flag, b) ship type and c) ship age are presented below.

Table 11 Breakdown of responses to the Question 8 by a) ship flag b) ship type and c) ship age

a) Ship Flag	Inspections	Deficiencies	% of total	Deficiency ratex100
Antigua and Barbuda	11	2	9.5	18.2
Cook Islands	11	2	9.5	18.2
Malta	36	2	9.5	5.6
Marshall Islands	19	1	4.8	5.3
Panama	53	2	9.5	3.8
Turkey	28	1	4.8	3.6
Others	125	11	52.4	8.8
Totals	283	21	100.0	7.42

b) Ship Type	Inspections	Deficiencies	% of total	Deficiency ratex100
Bulk carrier	123	4	19.0	3.3
General cargo/multipurpose	126	17	81.0	13.5
Others	34	0	0.0	0.0
Totals	283	21	100.0	7.42

c) Ship Age	Inspections	Deficiencies	% of total	Deficiency ratex100
0-5	41	3	14.3	7.3
6-10	69	4	19.0	5.8
11-15	35	2	9.5	5.7
16-20	37	1	4.8	2.7
21-24	20	0	0.0	0.0
25-29	20	1	4.8	5.0
30-34	32	8	38.1	25.0
35+	29	2	9.5	6.9
Total	283	21	100.0	7.42

Question 4 was asked for the lashings/fittings as per the cargo securing manual recorded second non-compliant percentage of the responses. Of the 495 responses 34 (6.87%) responses were unsatisfactory. Breakdown of the compliance to the **Question 4** by a) ship flag, b) ship type and c) ship age are presented below.

Table 12 Breakdown of un-satisfactory responses to the Question 4 by a) ship flag, b) ship type and c) ship age

a) Ship Flag	Inspections	Deficiencies	% of total	Deficiency ratex100
Antigua and Barbuda	25	2	5.9	8.0
Cook Islands	27	3	8.8	11.1
Malta	68	1	2.9	1.5
Marshall Islands	45	2	5.9	4.4
Moldova, Republic of	25	2	5.9	8.0
Panama	110	5	14.7	4.5
Russian Federation	27	3	8.8	11.1
Turkey	66	1	2.9	1.5
Others	102	15	44.1	14.7
Totals	495	34	100.0	6.87

b) Ship Type	Inspections	Deficiencies	% of total	Deficiency ratex100
Bulk carrier	247	6	17.6	2.4
Container	30	1	2.9	3.3
General cargo/multipurpose	362	26	76.5	7.2
Ro-Ro cargo	16	1	2.9	6.3
Others	19	0	0.0	0.0
Totals	674	34	100.0	5.04

c) Ship age	Inspections	Deficiencies	% of total	Deficiency ratex100
0-5	85	4	11.8	4.7
6-10	155	4	11.8	2.6
11-15	78	3	8.8	3.8
16-20	85	2	5.9	2.4
21-24	43	1	2.9	2.3
25-29	49	1	2.9	2.0
30-34	85	13	38.2	15.3
35+	94	6	17.6	6.4
Totals	674	34	100.0	5.04

Question 6 was asked is there sufficient quantity of reserve cargo securing devices on board recorded third non-compliant percentage of the responses. Of the 636 responses 25 (3.78%) responses were unsatisfactory. Breakdown of the compliance to the **Question 6** by a) ship flag, b) ship type and c) ship age are presented below.

Table 13 Breakdown of un-satisfactory responses to the **Question 6** by a) ship flag b) ship type and c) ship age

a) Ship Flag	Inspections	Deficiencies	% of total	Deficiency ratex100
Antigua and Barbuda	26	2	8.0	7.7
Belize	16	1	4.0	6.3
Cook Islands	26	3	12.0	11.5
Malta	67	2	8.0	3.0
Marshall Islands	44	2	8.0	4.5
Moldova. Republic of	25	2	8.0	8.0
Netherlands	13	3	12.0	23.1
Panama	111	3	12.0	2.7
Russian Federation	27	1	4.0	3.7
Sierra Leone	17	1	4.0	5.9
Tanzania. United Republic of	13	1	4.0	7.7
Turkey	66	1	4.0	1.5
Others	210	3	12.0	1.4
Totals	661	25	100.0	3.78

b) Ship Type	Inspections	Deficiencies	% of total	Deficiency ratex100
Bulk carrier	242	5	20.0	2.1
Container	351	20	80.0	5.7
Others	68	0	0.0	0.0
Totals	661	25	100.0	3.78

c) Ship Age	Inspections	Deficiencies	% of total	Deficiency ratex100
0-5	81	6	24.0	7.4
6-10	153	2	8.0	1.3
11-15	80	2	8.0	2.5
16-20	86	3	12.0	3.5
21-24	43	0	0.0	0.0
25-29	48	1	4.0	2.1
30-34	80	9	36.0	11.3
35+	90	2	8.0	2.2
Totals	661	25	100.0	3.78