

**Report of the 2019 Concentrated Inspection Campaign (CIC)
on Emergency System and Procedures**

REPORT OF THE CONCENTRATED INSPECTION CAMPAIGN (CIC) ON EMERGENCY SYSTEMS AND PROCEDURES

EXECUTIVE SUMMARY	3
1 INTRODUCTION	4
1.1 PURPOSE OF THE REPORT	4
1.2 OBJECTIVE OF THE CIC	4
1.4 GENERAL REMARKS	4
2 SUMMARY ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS	5
2.1 SUMMARY ANALYSIS	5
2.2 CONCLUSIONS	5
2.3 RECOMMENDATIONS	6
3 ANALYSIS	6
3.1 GENERAL	6
3.2 ANALYSIS OF THE RESPONSE TO THE CIC QUESTIONNAIRE	6
3.3 ANALYSES BY SHIP TYPES	8
3.4 ANALYSES BY SHIP AGE	8
3.5 ANALYSES BY SHIP FLAG	9
3.6 ANALYSES BY SHIP RISK GROUP	10
4.1 COMPARISON OF THE RECORDED DEFICIENCIES	10
LIST OF TABLES	
Table 1 Summary of inspections during the CIC	6
Table 2 Responses CIC Questionnaire on CIC on Emergency Systems and Procedures ⁽¹⁾	7
Table 3 Results by ship types	8
Table 4 Results by ship age	9
Table 5 Results by ship flag	9
Table 6 CIC inspection data by ship risk groups	10
Table 7 Questions non-compliant responses and recorded deficiencies.....	10
LIST OF FIGURES	
Figure 1 The responses to the question	7

EXECUTIVE SUMMARY

From 1st September 2019 to 30th November 2019, the BS MOU carried out a Concentrated Inspection Campaign (CIC) on Emergency System and Procedures throughout the region. This campaign involved all member States of the BS MOU and was conducted in conjunction with the Tokyo MOU and Paris MOU and other MOUs. The campaign was conducted under the campaign coordination of the Bulgarian Maritime Administration. Paris and Tokyo MOUs guidelines and questionnaire were used.

During the campaign, a total of 1175 inspections were carried out with the CIC questionnaire involving 1175 individual ships. Of this quantity 48 ships were detained with 17 (35.42%) detentions were being within the CIC scope. This means that in 17 cases the emergency systems and procedures which were serious enough to detain the ship, resulting a CIC-topic related detention rate of 1.62 per cent.

A total of 128 questionnaires had at least a non-compliance to a requirement, resulting 10.9 per cent of CIC inspections. The overall average per cent of non-conformities was 1.62.

The most notable non-conformities observed was lack of exhibition capo in accordance with the requirements of emergency Q2 (4.2%) by lack of passage plan covering the whole voyage (2.73%) and whether ship's record data fully Q5 (2.31%).

427 (36.34%) CIC inspections concerned bulk carriers, followed by general cargo/multi-purpose ships with 425 (36.17%) inspections, oil tankers with 148 (12.60%) inspections and chemical tankers with 89 (7.57%) inspections, which comprises 1089 (92.61 %) total CIC inspections.

Fourteen of the seventeen ships detained for CIC-related deficiencies were general cargo/multipurpose ships and bulk carriers. Both has 7 (19.05%) detentions.

Most inspections were carried out on board ships flying the flags of Panama with 181 (15.40%) inspections, Liberia with 132 (11.23%), Marshall Islands with 121 (10.30%) inspections and Malta with 113 (9.62%) inspections.

1 INTRODUCTION

1.1 Purpose of the report

This report documents the results of the Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures, which was carried out by BS MOU Member Authorities between September 1st and November 30th, 2019. This campaign was conducted in conjunction with the Paris and Tokyo MOUs as well as other MOUs shows results presented in this report.

1.2 Objective of the CIC

The objective of the Campaign on the Emergency Systems and Procedures aimed at checking the level of compliance with the requirements of Emergency Systems and Procedures within the shipping industry create awareness amongst ships' crew and ship owners with regard to the importance of compliance with the provisions of was conducted to verify:

The Concentrated Inspection Campaign in on emergency systems ensures:

- .1 that ships are capable of responding appropriately and promptly to emergency situations so that it prevents casualties and ship damage that are caused by marine accidents in the oceans, and maintains a clean marine environment.
- .2 the necessary precautions are taken by responsible individuals such as shipping companies and ship managers who have a direct influence on the safety of ships and by reminding them of the importance of ship emergency systems, a solid foundation on which the emergency management systems of ships are maintained would be laid.
- .3 that the emergency systems installed on board to be operated properly and managed efficiently in any emergency situations.
- .4 the masters and all seafarers of the ship understand their assigned roles and duties in case of emergency and raise their familiarity with the situations so that they can act immediately when circumstances arise.

The campaign targeted 10 aspects to verify compliance provisions of to assure that:

- .1 Ship operate in isolation and engaged in long sea voyages
- .2 The preparation of Emergency equipment in response to emergency situations are critical factors in saving crew and minimizing damage to ships
- .3 The emergency equipment should be maintained to ensure immediate use in emergency and hazardous situations
- .4 Familiarization of seafarers with emergency systems and procedures is also essential.

1.4 General remarks

This report presents analysis of the responses to the CIC Questionnaire submitted during the campaign period which is 76.8 percent of total 1,530

Thereby for the purpose of this report:

- *Inspection*: An inspection with a completed CIC Questionnaire with applicable response (Except Table 1);
- *Non-compliant response*: a "NO" response to any of the questions 1-10 which indicates non-compliance to a requirement in the questionnaire;

- *CIC inspection with non-compliant response*: Questionnaire with at least one “NO” response to any question 1-10;
- *Non-compliant response*: “NO” response to a question, indication non-compliance of a requirement;
- *CIC Detention*: a CIC-topic related detention which is indicated by a “YES” response to Question 11, which also coincides with recorded detentions; and
- *Total applicable responses*: Total number of “YES-Compliant” plus “NO-Non compliant” answers to the questions. i.e. “N/A” responses filtered out from the result.

2 SUMMARY ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS

2.1 Summary analysis

During the campaign, a total of inspections were carried out with the CIC questionnaire involving 1,175 individual ships. Only one CIC inspection has been carried out on board of an individual vessel.

Analysis of the results of the CIC revealed the following:

- .1 A total 128 questionnaires had at least one non-compliant response, which resulted 10.9 per cent of CIC inspections not conforming with the requirements set out in questionnaire. The overall average per cent of non-conformities was.
- .2 CIC inspected ships 17 detained for CIC-related deficiencies which comprises no CIC topic related detentions.
- .3 A total of 427 (36.34%) CIC inspections concerned bulk carriers, followed by general cargo/multi-purpose with 425 (36.17%) inspections, oil tankers with 148 (10.38%) inspections and chemical tankers with 89 (7.57%) inspections, which comprises 1089 (92.68%) total CIC inspections.
- .4 Most inspections were carried out on board ships flying the flags of Panama with 181 (15.40%) inspections, Liberia with 132 (11.23%), Marshall Islands with 121 (10.30%) inspections and Malta with 113 (9.62%) inspections.

2.2 Conclusions

2.2.1 The requirements that reported the most favorable results related to the ship’s Automatic Identification System transmitting correct particulars Q8 (99.83%); demonstration of the watch keeping officers familiarization with Q10 (99.49%); and whether the second and/or third stage remote audible alarm alar Q9 (99.46%).

2.2.2 The most un-favourable results:

- .1 Is the public address system capable of broadcasting emergency announcements? Q2 (4.19%)
- .2 Where the emergency source of electrical power is a generator. is it in correct operational condition? Q7a (2.73%)
- .3 Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment Chapter III. Regulation 37? Q5 (2.31%)

2.3 Recommendations

Non-compliance of the exhibition of navigation/signal lights in accordance with the requirements of is a significant potential danger to the environment.

Thereby it is recommended:

1. Basic findings of the report in general, analysis of the responses to the questionnaire and breakdown of major non-conformities by ship flag, ship type and age, to be submitted IMO III 7th session.
2. PSC Officers should be instructed to submit CIC Questionnaire for each initial PSC inspection during the campaign, and;
3. Continue to put emphasis on the vital requirements of the when performing PSC inspections, particularly the requirements that raised the most concern in the CIC Emergency Systems and Procedures.

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

	No. of individual ships with CIC Questionnaire	No. of inspections with a CIC questionnaire	No. of inspections without CIC questionnaire
Total	1,175	1,175	355
Total number of detentions	48	48	17
Detentions with CIC-topic deficiencies	17	17	N/A

Looking at the number of inspections performed with a CIC questionnaire (Column 2&3 of Table 1), there is 17 detentions during CIC inspections were CIC topic related Questionnaire submission rate was 76.8% which around eight out of ten initial inspections were accompanied with a CIC questionnaire.

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

3.2 Analysis of the response to the CIC questionnaire

The responses to the questionnaire presented in Figure 1. The number of responses for each of the 10 CIC questions broken down by type of answer indicating compliance to the requirements and applicability of the requirements. Due to the data validity and recording procedures no blank responses exist.

Figure 1 The responses to the question

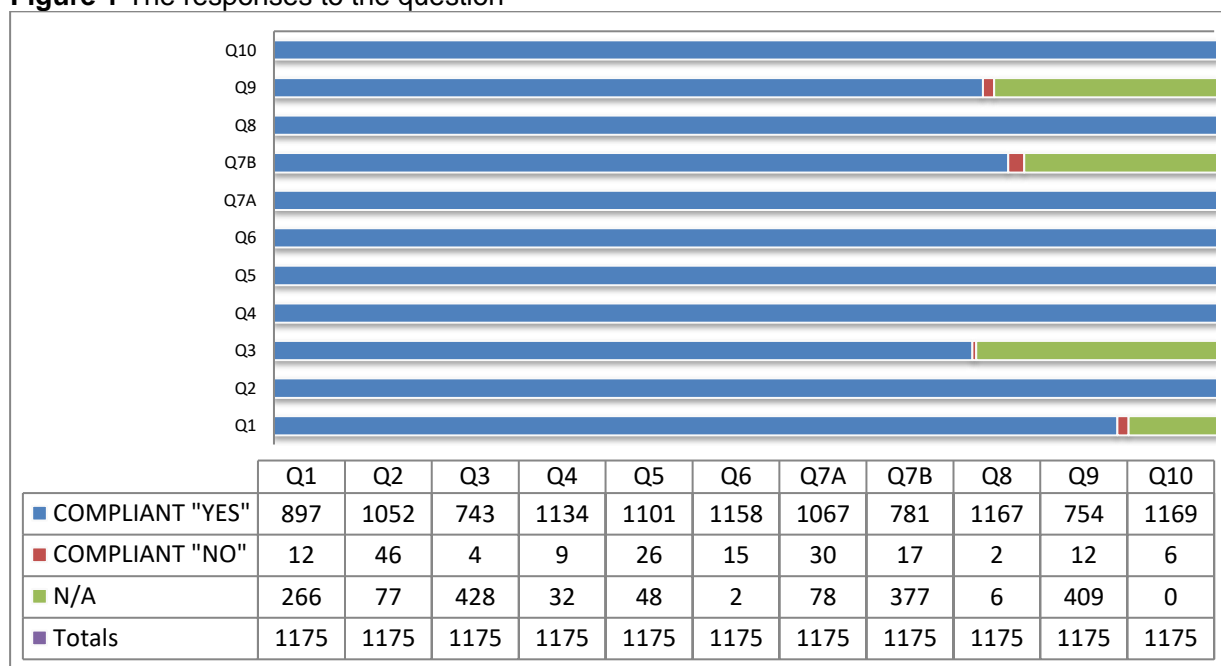


Table 2 presents response to the questionnaire. In order to analyse results on an individual question basis all Not Applicable (N/A) responses are filtered and total relevant/applicable responses compliances to the requirement presented in the last column of the **Table 2**.

Table 2 Responses CIC Questionnaire on CIC on Emergency Systems and Procedures⁽¹⁾

Nr.	Questions	YES Nr.	NO Nr.	Total Nr. of applicable responses	Compliance	
					YES %	NO %
1	Is the damage control plan ready available on board?	897	12	909	98.68	1.32
2*	Is the public address system capable of broadcasting emergency announcements?	1052	46	1098	95.81	4.19
3*	For ships with water level detectors installed is the system and alarm arrangements operational?	743	4	747	99.46	0.54
4*	Is the steering gear system and its related emergency alarms operational?	1134	9	1143	99.21	0.79
5	Does the muster list specify details in accordance with the requirements of SOLAS 1996-1998 Amendment Chapter III. Regulation 37?	1101	26	1127	97.69	2.31
6*	Does the emergency source of electrical power supply its power correctly to essential equipment for safety in an emergency?	1158	15	1173	98.72	1.28
7a	Where the emergency source of electrical power is a generator is it in correct operational condition?	1067	30	1097	97.27	2.73
7b	Where the emergency source of electrical power is an accumulator battery are the batteries and its switchboard in good condition?	781	17	798	97.87	2.13
8*	Is the emergency fire pump in full operational condition?	1167	2	1169	99.83	0.17
9*	Where a fire drill and/or abandon ship drill was witnessed was it found to be satisfactory?	754	12	766	98.43	1.57
10*	For the above checked emergency equipment are the relevant crews familiar with the operation?	1169	6	1175	99.49	0.51
	TOTAL	11023	179	11202	98.40	1.60
11	Was the ship detained as a result of the Inspection Campaign?	17	1175			

⁽¹⁾ Includes Bulgaria and Romania data which are submitted also to the Paris MOU. Russian Federation and Turkey data includes only Black Sea ports

The CIC questionnaire indicate that “unsatisfactory” answer was given to a question on 1.60% of occasions. It is average per cent of unsatisfactory responses indicating overall compliance of the requirements. Number of “NO” responses to the Question 11 coincides with the recorded CIC topic related detentions as a result of an observed non-conformity (“NO” response) to any of the questions (1-10) in the questionnaire.

Breakdown CIC inspections, inspections with non-conformities to the requirements set out in the questionnaire questions 1-10 average per-cent of non-conformities, number of unfavourable responses/non conformities and CIC topic related detentions by ship type, ship age, ship flag and ship risk profiles presented in **Section 3.3 - Section 3.6**. Breakdown of the major non-conformities by ship flag, ship type and ship age are presented in **Section 3.7**.

3.3 Analyses by Ship types

A total of 427 (36.34%) CIC inspections concerned bulk carriers ships followed by general cargo with 425 (36.17%) inspections and oil tankers with 148 (12.60%) inspections which comprises 1,000 (85.10%) total CIC inspections.

Majority of inspection with non-conformities observed were general cargo/multi-purpose ship with 64 (50.00%) and bulk carriers with 37 (28.91%) inspections. Hence, they constituted 78.91% of all inspections of related non-conformities.

Table 3 Results by ship types

Ship Type	Nr. of CIC inspections	Nr. of CIC inspection with non-compliant responses	% non-compliant CIC inspections	Total Nr. of applicable responses	Nr. of non-compliances	% of non-compliance	% total non-compliances	CIC topic related detentions
Bulk carrier	427	37	8.67	4362	50	1.15	27.93	7
General cargo/multipurpose	425	64	15.06	832	94	11.30	52.51	7
Oil tanker	148	5	3.38	382	7	1.83	3.91	0
Chemical tanker	89	4	4.49	100	7	7.00	3.91	1
Container	40	8	20.00	3658	9	0.25	5.03	0
Ro-Ro cargo	15	7	46.67	8	9	112.50	5.03	0
Others	14	2	14.29	153	2	1.31	1.12	2
Gas carrier	10	0	0.00	8	0	0.00	0.00	0
Livestock carrier	7	1	14.29	8	1	12.50	0.56	0
TOTAL	1175	128	10.89	11,202	179	1.60	100.00	17

3.4 Analyses by ship age

By ship age, ships under 15 years reported the most favourable results but the situation worsened as the age of ships increased. Percentage of total non-compliances younger 6-10 age ships was the lowest with 5.70% and older ships 30-34 ages were the highest with 26.23% per cent of total non-compliances.

Table 4 Results by ship age

Ship Age	Nr. of CIC inspections	Nr. of non-compliant CIC inspections	% non-compliant CIC inspections	Total Nr. of applicable responses	Nr. of non-compliances	Non-compliance %	% total non-compliances	CIC topic related detentions
0-5	162	10	6.17	1,636	11	0.67	6.15	1
6-10	263	15	5.70	2,676	21	0.78	11.73	4
11-15	242	21	8.68	2,331	30	1.29	16.76	2
16-20	112	15	13.39	1,092	21	1.92	11.73	1
21-24	93	16	17.20	909	26	2.86	14.53	2
25-29	88	13	14.77	812	20	2.46	11.17	2
30-34	61	16	26.23	529	22	4.16	12.29	0
35+	154	22	14.29	1,217	28	2.30	15.64	5
Totals	1,175	128	10.89	11,202	179	1.60	100.00	17

3.5 Analyses by ship flag

The following Table 5 presents the results of the CIC in accordance by ship flag. A total of 1,175 individual ships from 65 flag administration subjected CIC inspection during the campaign.

Most inspections were carried out on board ships flying the flags of Panama with 181 (15.40%) inspections, Liberia with 132 (11.23%) and Marshall Islands 121 (10.30%), Malta with 113 (9.62%) inspections.

Table 5 Results by ship flag

Ship Flag	Nr. of CIC inspections	Nr. of CIC inspection with non-compliant responses	% non-compliant CIC inspections	Total Nr. of applicable responses	Nr. of non-compliances	% of non-compliance	% total non-compliances	CIC topic related detentions
Comoros	25	5	18.52	205	9	3.44	5.03	1
Cook Islands	27	7	20.00	232	12	4.21	5.03	1
Liberia	132	13	25.93	1290	19	4.92	6.70	1
Malta	113	7	3.33	1100	9	0.33	0.56	1
Marshall Islands	121	8	9.85	1204	12	1.45	10.61	1
Montenegro	1	1	6.19	8	1	0.81	5.03	1
Palau	12	1	6.61	93	1	0.99	6.70	1
Panama	181	29	20.00	1702	36	3.79	4.47	4
Russian Federation	76	4	16.02	641	6	2.07	20.11	1
Singapore	38	4	5.26	380	6	0.93	3.35	1
Tanzania, United Republic of	14	3	19.35	111	4	2.20	3.35	1
Togo	23	8	10.53	172	12	1.55	3.35	2
Tuvalu	5	1	3.17	45	2	0.51	1.68	1
Others	407	37	11.11	3840	50	0.51	24.02	0
TOTAL	1,175	128	10.89	11,023	179	1.60		17

3.6 Analyses by ship risk group

Table 6 presents CIC data by ship risk group indicates that higher risk ships have consistently attracted more non-compliant responses per inspection than lower risk ships is considered to be validation of the BS MOU ship risk profile system to identify sub-standard vessels for inspection.

HRS and SRS comprised the total number of detentions 17 (100.0%) and majority of non-compliances 59 (3.64%) and 112 (1.39%), and high per cent of average non-compliance per applicable question 3.64% and 1.39% respectively.

Table 6 CIC inspection data by ship risk groups

SHIP RISK PROFILE	Nr. of CIC inspections	Nr. of CIC inspection with non-compliant responses	Nr. of non-compliances	Total Nr. of applicable responses	% of non-compliance	% of non-compliance	% total non-compliances	CIC topic related detentions
HRS	189	41	59	1620	3.64	21.69	32.96	6
SRS	831	82	112	8035	1.39	9.87	62.57	11
LRS	152	5	8	1517	0.53	3.29	4.47	0
UNKOWN	3	0	0	30	0.00	0.00	0.00	0
Totals	1,175	128	179	11,202	1.60	10.89	100.00	17

INTERNAL

4.1 COMPARISON OF THE RECORDED DEFICIENCIES

Difference between the non-compliant responses to the CIC topic requirement with the recorded deficiencies indicated in the CIC Guidelines presented below has been studied.

Table 7 Questions non-compliant responses and recorded deficiencies

Question	Code	Nature of Deficiency	Number of inspection with deficiency	Number of Deficiency	Number of Detainable Deficiency
Q1	02102	Damage Control	13	13	0
Q2	04101	Public address system	51	55	5
Q3	02132	Water level detectors in single hold cargo ships	1	1	0
	04113	Water level indicator	5	5	2
Q4	02105	Steering gear	24	25	2
Q5	04108	Muster List	33	33	0
Q6	04103	Emergency, lighting, batteries and switches	43	48	6
Q7a	04103	Emergency, lighting, batteries and switches	15	18	0
	04114	Emergency source of power	44	52	2
Q7b	04103	Emergency, lighting, batteries and switches	24	25	4
Q8	04102	Emergency fire pump and its pipes	7	7	2
Q9	04109	Fire drills	12	12	3
	04110	Abandon ship drills	8	8	0
Q10	04121	Crew familiarization with emergency systems	6	6	5