

PORT STATE CONTROL IN THE BLACK SEA REGION

Annual Report 2019



BLACK SEA PORT STATE CONTROL SECRETARIAT ISTANBUL / TURKEY

This work may be reproduced in whole or part subject to the inclusion of an acknowledgement of the source but not for commercial usage or sale.

Further information may be obtained from:

Black Sea Port State Control Secretariat

Beylerbeyi Mahallesi, Abdullahağa Caddesi, Kıyı Emniyeti Genel Müdürlüğü

No: 16A Kat: 3 Oda: 326 Üsküdar 34676 Istanbul / Turkey

Tel : +90 (216) 342 58 87 Fax : +90 (216) 334 34 83 e-mail : secretariat@bsmou.org

web-site: www.bsmou.org

This report will be available at www.bsmou.org

DISCLAIMER

The inspection and detention data in this publication are derived from data input by the member Authorities. The BS MOU (its member Authorities, the Secretariat and BSIS Manager) will not be held liable for any loss, damage or harm resulting from the use of information contained in this publication, or any reliance on the data accuracy, completeness or timeliness.

Foreword

We are pleased to present the nineteenth issue of the Annual Report on Port State Control in the Black Sea region which is published under the auspices of the Port State Control Committee of the Black Sea MOU.

Port State Control is of particular importance to the BS MOU member Authorities due to the role of shipping in region's trade, the sensitivity of the Black Sea basin and its coastline to environmental damage. PSC inspections are conducted to ensure that foreign ships visiting the Black Sea ports are seaworthy, do not pose a pollution risk, provide a healthy and safe environment and comply with relevant international regulations and within the scope of the member Authorities' national governing laws and regulations.

This PSC Annual report covers the period between 1st January and 31st December 2019. During this period the BS MOU member Authorities conducted a total of 6,036 inspections, representing slight 15.6 per cent increase as compared with 5,214 initial inspections in 2018. The regional inspection rate is 75.31% which is 7.26 per cent decease as compared with 2018. A total of 212 detentions were warranted to ships found with serious deficiencies. This represents a detention percentage of 3.51% which is 0.25 per cent decrease as compared with 283 detentions in 2018.

During 2019 a total of 19,422 deficiencies were recorded. The average number of deficiencies per inspection was 3 22

The most significant number of operational deficiencies found in 2019 was in the area of safety of navigation, life saving appliances followed by health protection, medical care, social security followed by fire safety measures and structural conditions which constitutes 56.3% of the total deficiencies found.

International Safety Management (ISM) related issues accounted for 6.86 per cent of all detainable deficiencies in the 2019 reporting period which is 0.73 per cent decrease compared with 2018. Thereby this area remains a significant concern and the BS MOU continues to scrutinize vessels coming into region for weaknesses in their Safety Management Systems.

In further promoting safety and environment protection, Concentrated Inspection Campaign(CIC)s are conducted in conjunction with the Paris and Tokyo Memorandas. Between 1st September 2019 and 30th November 2019, a CIC was carried out with respect to the Emergency Systems and Procedures with the Paris MOU, Tokyo MOU, IO MOU and Vinã del Mar Agreement.

Through the launching new inspection scheme the BS MOU will further increase the pressure on the substandard ships to encourage them to improve their performance or to force them to leave the region.

Captain Alexander ILIEV Chairman BS MOU PSC Committee Hüseyin YÜCE Secretary BS MOU Secretariat

10 Year Summary of Inspections, Detentions and Deficiency Rates

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Inspections	4,929	4,657	4,607	5,080	5,092	4,997	5,066	5,112	5,214	6,036
Number of Detentions	286	249	215	184	151	218	229	283	278	212
Detention %	5.80	5.35	4.67	3.62	2.97	4.36	4.52	5.54	5.33	3,51

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Deficiencies	21,464	19,255	17,916	19,022	18,350	18,094	18,266	21,006	21,450	19,422
Deficencies / Inspection	4.35	4.13	3.89	3.74	3.60	3.62	3.61	4.11	4.11	3.22
Deficiencies / Inspection with Deficiencies	6.73	6.10	5.97	5.75	6.01	6.40	6.42	6.96	6.91	5.71

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Detainable Deficiencies	1,251	881	669	630	506	734	822	962	948	653
Detainable Deficiencies / Detention	4.37	3.54	3.11	3.42	3.35	3.37	3.59	3.39	3.41	3.08

Table of Contents

Foreword	1
Table of Contents	3
List of Tables	3
List of Figures	3
2019 Annual Report Overview Black Sea Information System (BSIS) Concentrated Inspection Campaign Training Interregional Cooperation	4 4 5 5 5
PSC Inspections 2019 Regional Inspection Data Inspection Data by Authority Inspection Data by Flag Inspection Data by Recognized Organization Inspection Data by Ship Type Inspection Data by Deficiency 2019 Maritime Labour Convention Results	6 7 8 10 11 12
Port State Inspection Data for 2019	14
Statistical Data 2017-2019	19
List of Tables Table 1- Summary of 2019 Inspection and Trends as Compared with the Previous Year Table 2- Inspection Data by Authority and Region Table 3- Inspections Data by Ship Risk Profile Table 4- Top 5 Inspections by Flag of the Ships Table 5- 2019 Detentions Per Flag, Exceeding Average Detention Percentage Table 6- 2019 MLC Results by Ship Flag, Ship Type and Ship Age Table 7- Port State Inspection Data for 2019 Table 8- Inspection Data by Recognized Organizations Table 9- Inspection Data by Type of Deficiencies	6 7 8 9 9 13 14 16 17
List of Figures Figure 1 Inspection and Detection Dates by Authority and Degion	7
Figure 1- Inspection and Detention Rates by Authority and Region Figure 2- Share of Inspections, Inspections with Deficiencies and Detentions of Members as	7 8
Percentage of Regional Total Figure 3- Ratio of the Share of Inspections to the Share of Detentions and Deficiencies by the Flags Figure 4- Share of Inspections to the Share of Detentions and Share of Deficiencies for Ship Types with Detentions	10 11

2019 Annual Report

Overview

The Governments of Black Sea States in the "Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (adopted at the Ministerial Conference held in Istanbul, 30-31 October, 1996) decided to launch a harmonised system of port State control through the adoption of a Memorandum of Understanding on port State control.

The Memorandum of Understanding on Port State Control in the Black Sea Region (BS MOU) was completed and signed in Istanbul, Turkey on 7 April 2000 by representatives of the Maritime Authorities of Bulgaria, Georgia, Romania, the Russian Federation, Turkey and Ukraine.

On December 19, 2000 the Memorandum entered into force in the Black Sea region for three maritime States accepted the BS MOU. By December 12, 2002 the BS MOU entered into effect for all maritime States in the Black Sea, namely: Bulgaria, Georgia, Romania, the Russian Federation, Turkey and Ukraine.

The Port State Control Committee established under the Memorandum monitors and controls implementation and on-going operation of the Memorandum. The Committee consists of representatives of the maritime Authorities of the six member States and observers representatives from the International Maritime Organization (IMO), the International Labour Organization (ILO). The Committee granted observer status to the USCG, Paris MOU, MED MOU, West and Central Africa MOU, Riyadh MOU, the State Maritime Administration of the Republic of Azerbaijan and Commission on the Protection of the Black Sea Against Pollution.

To coordinate daily activity of the organization, on the kind proposal by the Maritime Administration of Turkey, the MOU Authorities decided to establish Headquarter and the Secretariat in Istanbul.

The Russian Federation has developed and launched the Black Sea Information System (BSIS), PSC computerized information system for the Black Sea MOU, basing on the technique used for the Asia Pacific Computerized Information System (APCIS), PSC information system for the Tokyo MOU, which was also developed by the Russian Federation. The BSIS provides necessary tools to assist PSC Officers to conduct inspections. PSC Officers use a comprehensive database which contains data received from a variety of sources on a large number of vessels. This information includes the general particulars of a vessel, and its PSC inspection history.

To provide industry with the MOU news, procedures and inspection results the Black Sea MOU launched the internet web-site at www.bsmou.org containing general information on MOU, regularly updated detention list. Taking into account of successful operation of the BSIS, it was decided to start open publication of PSC inspection results in internet through a direct link to the MOU database providing on-the-fly inspection results.

This annual report outlines recent activities on port State control in the Black Sea region, as well as international perspectives on port State control and includes the statistical port State inspection data conducted by the member Authorities of the BS MOU during the year 2019.

Black Sea Information System (BSIS)

The Black Sea Information System has been established in the Russian Federation, for the purpose of exchanging information on port State inspections, in order to make available to Authorities information on inspection of ships in other regional ports to assist them in their selection of foreign flag ships to be inspected and in the exercise of port State control on selected ships; and provide effective information exchange facilities regarding port State control in the region.

As the further step for providing more transparent and timely information on the BS MOU PSC activities, the Committee gave its approvals to on-line publication of the ship risk profile, PSC inspection and detention data on the Memorandum web-site.

Concentrated Inspection Campaign

From 1st September 2019 to 30th November 2019, the BS MOU carried out a Concentrated Inspection Campaign (CIC) on Emergency Systems and Procedures. This campaign involved all member States of the BS MOU and was conducted in conjunction with the Paris MOU, Tokyo MOU, IO MOU and Vinã Del mar Agreement. The Paris MOU Guidelines and Questionnaire were utilized.

During the campaign, a total of 1,175 inspections were carried out with the CIC questionnaire involving 1,175 individual ships. Of this quantity 48 ships were detained with 17 (35.42%) detentions were being within the CIC scope.

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.

Most inspections were carried out on board ships flying the flags of Panama with 181 (20.11%) inspections, Liberia with 132 (10.61%) inspections, Marshall Islands with 121 (6.70%) inspections and Malta with 113 (5.03%) inspections.

Concentrated Inspection Campaign in 2020

The Committee agreed to participate into the CIC on Stability in general during the period of 1st September to 30th November 2020 and to request the Secretariat to report progress and developments on the 2021 CIC.

Training

One PSCO from (Ukraine) 9th General Training Course for PSCOs, Yokohama, Japan, 19 August - 13 September 2019.

PSCO Exchange Programme

Within the scope of the regional and interregional PSCO Exchange Programmes four PSC officer exchanges were conducted in 2019, one PSCO from Georgia visited Turkey, one PSCO from Georgia visited Romania, one from the Russian Federation visited Turkey.

Interregional Cooperation

The BS MOU currently has 6 members, some with dual or even triple membership: Bulgaria, Romania and the Russian Federation with the Paris MOU, while the Russian Federation is also a member of the Tokyo MOU, with Turkey there is further tie with the MED MOU.

In order to further strengthen co-operation with IMO, an agreement for co-operation was concluded with IMO, as an Intergovernmental Organization, which allows the BS MOU (and other MOUs) to submit papers and attend IMO meetings in its own rights. The BS MOU is represented by Secretariat at the IMO III sub-committe meetings and submitting its reports.

The BS MOU is accepted as an observer to several regional PSC agreements, that is, Paris MOU, Tokyo MOU, Mediterranean MOU, Viňa del Mar Agreement, and Indian Ocean MOU.

The BS MOU was represented by the Russian Federation at the Paris MOU PSCC52 meeting which was held in St. Petersburg, the Russian Federation, from 13 to 17 May 2019.

The BS MOU was represented by the Russian Federation at the PSCC30 meeting of the Tokyo MOU which was held in Majuro, Marshall Islands from 14 to 17 October 2019.

The BS MOU was represented by the Republic of Turkey at the MED MOU PSCC21 meeting which was held in Casablanca, Morocco, from 29 to 31 October 2019.

PSC Inspections 2019

Regional Inspection Data

During the 2019 calendar year 5,637 individual ships visited inspection ports in the Black Sea region in which 4,245 (69.84%) individual ships inspected and 193 (6.31%) individual ships detained. The number of individual ships inspected in 2019 (4,245) increased 3.0 per cent compared with the number of individual ships inspected in 2018 (3,819) despite to 3.0 per cent decrease of the individual ship visits in 2019 as compared with 5,468 individual ship visits in 2018.

6,036 inspections carried out onboard 5,637 individual ships registered by 78 flag Administration. The number of inspections in 2019 (6,036) increased compared with 2018 (5,214).

The overall detention percentage in the region was 5.33% in 2018; in 2019 it decreased up to 3.51% as a per cent of inspections, rather than the number of individual ships inspected to take into account that many ships are detained more than once during any one year. Regional detention rate (percentage of number of individual ships inspected) 4.55% is which is lower than 6.31% in 2018.

The number of ships detained in 2019 for deficiencies clearly hazardous to safety, health or environmental amounted to 193. It compares with the number of detained 278 in 2018, 212 in 2019. Number of inspections increased 822 (2.98%), total number of detentions decreased 66 (1.76%) which resulted 0.21 per cent decease in detention percentage in 2019. **Table 1** displays summary of the 2019 inspection data and observed changes compared with the previous year.

Table 1- Summary of 2019 Inspection and Trends as Compared with the Previous Year

		2018	2019	Change Compare 2018
Ships Visits	Individual Ships	5,468	5,637	169
Inspections	Total PSC Inspections	5,214	6,036	822
	Inspection with Deficiencies	3,103	3,401	298
	Individual Ships	3,819	4,245	426
	Inspection Rate	72.33%	75.31%	2.98%
Detentions	Individual Ships	241	193	-48
	Total Detentions	278	212	-66
	Detentions Rate	6.31%	4.55%	-1.76
	% of Total Inspections	5.33%	3.51%	-1.82
	% Inspections with Deficiencies	59.51%	56.35%	-3.16
Deficiencies	Total Deficiencies	21,450	19,422	-2,028
	Detainable Deficiencies	948	653	-295
	Deficiency Rate	4.11	3.22	-0.89
	Detainable Deficiency / Detention	3.41	3.08	-0.33
	RO Related Detainable Deficency	18	11	-7

Inspection Data by Authority

The BS MOU member Authorities contributions into the regional inspection efforts displayed with **Table 2**. Member Authorities inspection rates (percent of number of individual ships inspected) varied between 22.3% and 69.69%. **Figure 1** displays inspection and detention rates for 2019 by member Authorities and in the region. Detention percentage of the member Authorities are varied from 0.7 to 6.85 per cent. Per cent of inspections with deficiencies varies from 42.37 per cent up to 76.06 per cent in the region. As a result of shipping activity the greatest number of PSC inspections were undertaken in the Russian Federation and Ukraine ports in 2019.

DETENTIONS WITH RO RELATED DETAINABLE DEFICIENCIES AVERAGE NO. OF DEFICIENCIES PER INSPECTION **DETENTION PERCENTAGE** (4) **NUMBER OF DEFICIENCIES** NUMBER OF INSPECTIONS BER OF INSPECTIONS **NUMBER OF DETENTIONS INSPECTIONS WITH** NUMBER OF INDIVIDUAL SHIP VISITS NUMBER OF INDIVIDUAL SHIPS INSPECTED **NUMBER OF INDIVIDUAL NSPECTION RATE (3)** WITH DEFICIENCIES **DETENTION RATE (5)** % OF MOU TOTAL DEFICIENCIES 딤 **AUTHORITY** Bulgaria (2) 22.30 1,426 1,426 342 214 1,068 12 12 3.77 3.51 62.57 3.12 5.67 Georgia 607 607 264 184 1,466 9 8 40.53 3.25 3.41 69.70 5.55 4.37 Romania (2) 1,681 1,681 489 372 1,926 25 25 26.95 5.52 5.11 76.07 3.94 8.10 Russia (1) 2,217 2,217 1,927 1,287 9,363 132 69.69 7.77 6.85 66.79 4.86 31.93 2 Turkey (1) 1,292 1,292 446 256 1,187 17 17 30.26 4.35 3.81 57.40 2.66 7.39 Ukraine 3,206 2,318 2,568 1,088 4,412 17 17 66.28 0.80 0.66 42.37 1.72 42.54 1 Regional 5,637 5,637 6,036 3,401 19,422 212 193 75.31 4.55 3.51 56.35 3.22 11

Table 2- Inspection Data by Authority and Region

⁽⁴⁾ Individual ships detained as per cent of individual ships inspected, (5) Detentions as per cent of inspections.

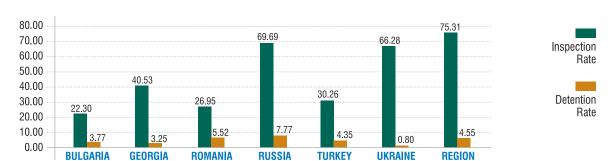


Figure 1- Inspection and Detention Rates by Authority and Region

⁽¹⁾ Data only Black Sea Ports, (2) Inspection data reported to the Paris MOU, (3) Individual ships inspected as per cent of individual ships visited,

In order to determine level of contributions of the member Authorities into the regional inspections, share of inspections, share of inspections with deficiencies and share of detentions presented in Figure 2.

Breakdown of inspections by ship risk profile presented in **Table 3**. Majority of the inspected ships are standard risk ship (SRP)s 4,093 (67.8%), followed by high risk ship (HRS)s 1,083 (17.9%).

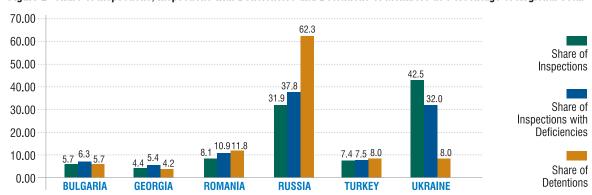


Figure 2- Share of Inspections, Inspections with Deficiencies and Detentions of Members as Percentage of Regional Total

Table 3- Inspection Data by Ship Risk Profile

			SI	HIP RISK P	ROFILE (SR	P)			TOTAL
	HE	RS	SI	SRS		RS	SRP UN	KNOWN	NUMBER OF
AUTHORITY	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	INSPECTIONS
Bulgaria	82	24.0	218	63.7	36	10.5	6	1.8	342
Georgia	52	19.7	193	73.1	19	7.2	0	0.0	264
Romania	126	25.8	321	65.6	42	8.6	0	0.0	489
Russian Federation	238	12.4	1,322	68.6	366	19.0	1	0.1	1,927
Turkey	120	26.9	300	67.3	26	5.8	0	0.0	446
Ukraine	465	18.1	1,739	67.7	364	14.2	0	0.0	2,568
REGION	1,083	17.9	4,093	67.8	853	14.1	7	0.1	6,036

Inspection Data by Flag

2019 Inspections were carried out on ships registered under 78 flags. The flag State with largest number of ships inspected in the region was Panama with 926 (15.34%) inspection followed by Malta with 631 (10.45%) and Marshall Islands with 631 (10.45%) which constitute 2,188 (36.24%) of total inspections. **Table 4** presents top 5 PSC inspections by flags in 2018 and in 2019.

Table 4- Top 5 Inspections by Flag of the Ships

	20	18	20	119	DIFFE	2017-2019	
FLAG	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
Panama	835	16.01%	926	15.34%	91	10.9%	15.40%
Malta	533	10.22%	631	10.45%	98	18.4%	10.55%
Marshall Islands	496	9.51%	631	10.45%	135	27.2%	9.61%
Liberia	474	9.09%	594	9.84%	120	25.3%	9.14%
Turkey	349	6.69%	331	5.48%	-18	-5.2%	6.37%

In 2019, ships registered under 39 foreign flags were observed to have deficiencies sufficiently serious to impair the seaworthiness and warrant detention. High detention percentage observed Ukraine (12.90%), followed by Comoros (11.03%) and Tanzania (10.26%) flagged vessels. **Table 5** illustrates inspections data by flags exceeding average detention percentage (with inspections more than 20).

Table 5- 2019 Detentions Per Flag, Exceeding Average Detention Percentage (Number of Inspections > 20, with a Detention Percentage Exceeding 3.51%)

FLAG	NUMBER OF INSPECTIONS	NO. OF INSPECTIONS WITH DEFICIENCIES	NUMBER OF Deficiencies	NUMBER OF Detentions	% OF INSPECTIONS WITH DEFICIENCIES	DETENTION % 2019	EXCESS OF AVERAGE 2019	DETENTION % 2018	EXCESS OF AVERAGE 2018
Antigua and Barbuda	107	62	456	6	57.9	5.61	2.10	8.51	3.18
Bahamas	113	42	227	5	37.2	4.42	0.91	2.08	-3.25
Barbados	36	21	189	3	58.3	8.33	4.82	0.00	-5.33
Comoros	136	128	880	15	94.1	11.03	7.52	18.18	12.85
Cook Islands	118	101	598	6	85.6	5.08	1.57	6.78	1.45
Italy	62	36	166	3	58.1	4.84	1.33	13.33	8.00
Moldova, Republic of	144	132	774	11	91.7	7.64	4.13	12.50	7.17
Palau	72	61	353	4	84.7	5.56	2.04	12.70	7.37
Panama	926	563	3396	45	60.8	4.86	1.35	7.90	2.57
Saint Kitts and Nevis	26	19	108	1	73.1	3.85	0.33	4.35	-0.98
Saint Vincent and the Grenadines	41	27	156	2	65.9	4.88	1.37	7.50	2.17
Sierra Leone	139	123	768	10	88.5	7.19	3.68	9.48	4.15
Tanzania, United Republic of	117	111	972	12	94.9	10.26	6.74	15.65	10.32
Togo	144	140	983	14	97.2	9.72	6.21	15.33	10.00
Ukraine	31	31	211	4	100.0	12.90	9.39	13.64	8.31
Vanuatu	73	63	308	4	86.3	5.48	1.97	14.93	9.60

Figure 3 presents ratio of the share of inspections to the share of detentions and deficiencies which indicates relative level of the detention and deficiencies. Malta, followed by the Russian Federation, Liberia and Marshall Islands, performing well concerning detentions. Marshall Island, Bahamas, Malta followed by Russian Federation and Italy performing well concerning deficiencies.

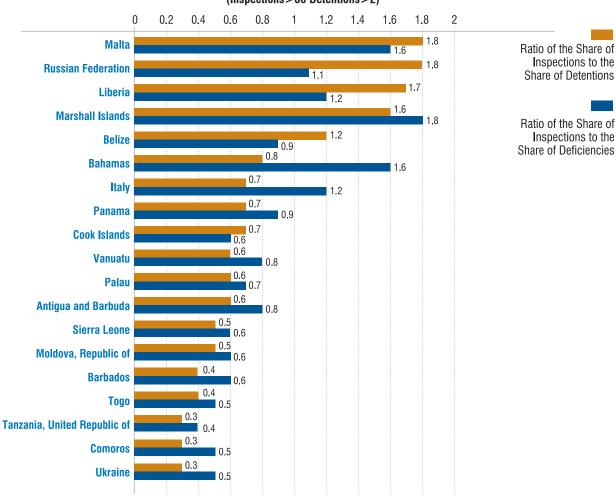


Figure 3- Ratio of the Share of Inspections to the Share of Detentions and Deficiencies by the Flags (Inspections>30 Detentions>2)

Inspection Data by Recognized Organization

The majority of ships inspected are in class with the Nippon Kaiji Kyokai 1,301 (15.1%), DNV GL AS 1,291 (15.0%), Bureau Veritas 1,061 (12.3%), Lloyd's Register 970 (11.3%), and followed by American Bureau of Shipping 633 (7.3%) and Russian Maritime Register of Shipping 570 (6.6%).

Inspection Data by Ship Type

When considering the breakdown of ships inspected by ship type, largest group of the ship inspected during 2019 were general cargo/multi purpose ships with 2,210 (36.6%) inspections; bulk carrier 2,144 (35.5%) and oil tanker 719 (11.9%) were also inspected which represent 84 per cent of inspections. 2018 top 5 inspection by ship type presented below.

	20	2018		19	DIFFE	2017-2019	
SHIP TYPES	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
General Cargo / Multipurpose	1,890	36.25%	2,210	36.61%	320	16.93%	36.70%
Bulk Carrier	1,850	35.48%	2,144	35.52%	294	15.89%	35.22%
Oil Tanker	619	11.87%	719	11.91%	100	16.16%	12.09%
Chemical Tanker	386	7.40%	459	7.60%	73	18.91%	7.30%
Container	175	3.36%	212	3.51%	37	21.14%	3.25%

Majority of detained ships were type of general cargo/multi purpose ships with 112 (5.2%) detentions, bulk carriers with 50 (2.7%) detentions and Ro-Ro cargo with 19 (23.5%) detentions followed by oil tanker with 10 (1.5%) detentions, which were accounted for 32.88 per cent of the total detentions.

Figure 4 shows how the ship types inspected performed with regards to detentions and deficiencies. Higher share of detentions and deficiencies compared with share of inspections indicated that type of ship underperforming with respect to detentions and deficiencies.

0.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 1.0 Ratio of the Share of **Gas Carrier** Inspections to the Share of Detentions 1.8 **Chemical Tanker Oil Tanker** Ratio of the Share of **Bulk Carrier** Inspections to the Share of Deficiencies Tugboat 0.7 **Container** 0.7 General Cargo / Multipurpose **Livestock Carrier** Ro-Ro Cargo

Figure 4- Share of Inspections to the Share of Detentions and Share of Deficiencies for Ship Types with Detentions

Inspection Data by Deficiency

A total of 19,422 deficiencies were recorded during the port State control inspections in 2019. Majority of the deficiencies found upon inspection in 2019 were related to safety of navigation (15.1%), life saving appliances (13.8%), health protection, medical care, social security (9.7%) and fire safety measures (9.7%). These four categories make up 48.3% of the total deficiencies found 2018. Top 5 category of deficiencies presented below.

	20	2018		19	DIFFE	2017-2019	
CATEGORY OF DEFICIENCIES	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
Safety of Navigation	3,394	15.8%	2,930	15.1%	-464	-0.7%	15.79%
Life Saving Appliances	3,199	14.9%	2,686	13.8%	-513	-1.1%	14.04%
Health Protection/Medical Care/Social Security	2,133	9.9%	1,886	9.7%	-247	-0.2%	7.98%
Fire Safety	1,912	8.9%	1,887	9.7%	-25	0.8%	9.66%
Structural Conditions	1,748	8.1%	1,337	6.9%	-411	-1.3%	7.42%

Number of ISM related detainable deficiencies were 544 which accounted for 2.54 per cent of the deficiencies, 256 marine pollution MARPOL Annex I related deficiencies observed accounting 1.19 per cent of the total deficiencies.

A total 948 detainable deficiencies and 46 RO related detainable deficiencies were recorded during the port State control inspections. 4.4 per cent of total deficiencies in 2019 were detainable deficiencies, 4.8 per cent of detainable deficiencies in 2019 were RO related.

Majority of the detainable deficiencies found upon inspections in 2019 were related to emergency systems (15,8%), fire safety (15.8%), safety of navigation (14.9%), lifesaving appliances (12.6%), and ISM (8,7%). These five categories make up 67.8% of the total detainable deficiencies found in 2019. Top 5 category of detainable deficiencies presented below.

	2018		20	19	DIFFE	2017-2019	
DETAINABLE DEFICIENCIES	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
Emergency Systems	133	14.5%	103	15.8%	-30	1.3%	14.4%
Fire Safety	137	14.3%	103	15.8%	-34	1.4%	14.0%
Safety of Navigation	113	14.0%	97	14.9%	-16	0.8%	13.5%
Life Saving Appliances	136	11.9%	82	12.6%	-54	0.6%	13.4%
ISM	65	9.9%	57	8.7%	-8	-1.2%	7.6%

Majority of the RO related detainable deficiencies found upon inspection in 2019 were related to structural condition (33.3%), fire safety (15.2%), structural condition (23.9%), life saving appliance (12.1%), emergency systems (9.1%) and followed by ship certificates (3.0%). These five categories make up 72,7% of the total RO related detainable deficiencies found.

2019 Maritime Labour Convention Results

MLC, 2006 compliance is verified during 2,758 PSC inspections carried out in 2019 by Bulgaria, Romania and the Russian Federation and the results are presented in **Table 6**. This table identifies the number of MLC 2006-related deficiencies, detainable deficiencies and detentions by ship flag, ship type and ship age.

PSCOs from Bulgaria, Romania and the Russian Federation identified 12,357 deficiencies related to MLC 2006 issues. This represented 36.7 per cent of the total deficiencies issued and equated to 1.0 deficiency per inspection.

Of the 515 detainable deficiencies 47 were related to MLC detainable deficiencies. This represented 22.3 per cent of the total detainable deficiencies. Of the 169 detentions 36 (21.3%) were due to the MLC, 2006 related detainable deficiencies which resulted 1.46 detention percentage.

Table 6- 2019 MLC Results by Ship Flag, Ship Type and Ship Age

SHIP FLAG	Number of Inspections	Total Deficiencies	MLC Deficiencies	Total Detainable Deficiencies	MLC Detainable Deficiencies	Total Detentions	MLC Detentions
Panama	399	2,305	440	116	18	40	14
Marshall Islands	305	908	157	18	2	13	2
Liberia	304	1,199	233	10	0	7	0
Malta	283	875	154	26	2	10	2
Turkey	153	518	113	0	0	0	0
Russian Federation	122	319	37	24	1	5	1
Singapore	112	300	55	1	0	1	0
Greece	95	103	13	0	0	0	0
Sierra Leone	74	513	96	34	0	9	0
Togo	71	606	116	43	4	8	3
Hong Kong, China	67	215	47	0	0	0	0
Tanzania, United Republic of	60	578	138	44	6	10	2
Bahamas	59	195	39	11	1	5	1
Antigua and Barbuda	51	306	44	12	0	6	0
Moldova, Republic of	51	392	71	20	6	9	6
Cook Islands	46	289	69	7	0	3	0
Belize	45	273	57	16	3	3	3
Italy	45	162	25	6	0	3	0
Others	416	2301	397	127	4	37	2
TOTALS	2,758	12,357	2,301	515	47	169	36

SHIP TYPE	Number of Inspections	Total Deficiencies	MLC Deficiencies	Total Detainable Deficiencies	MLC Detainable Deficiencies	Total Detentions	MLC Detentions
General Cargo / Multipurpose	841	5,286	997	325	24	85	17
Bulk Carrier	780	3,734	723	86	6	41	6
Oil Tanker	608	1,145	186	14	2	9	2
Chemical Tanker	250	635	101	20	1	10	1
Container	122	595	126	3	0	3	0
Ro-Ro Cargo	51	549	87	51	13	17	9
Other Types	106	413	81	16	1	4	1
TOTALS	2,758	12,357	2,301	515	47	169	36

SHIP AGE	Number of Inspections	Total Deficiencies	MLC Deficiencies	Total Detainable Deficiencies	MLC Detainable Deficiencies	Total Detentions	MLC Detentions
0 - 5	325	593	85	16	1	6	1
6 - 10	521	1,535	260	23	0	11	0
11 - 15	715	2,661	506	56	2	27	2
16 - 20	294	1,155	217	27	4	16	4
21 - 24	254	1,634	339	78	7	26	7
25 - 29	214	1,381	244	63	4	21	4
30 - 34	122	919	163	73	5	16	4
35 +	313	2,479	487	179	24	46	14
TOTALS	2,758	12,357	2,301	515	47	169	36

Port State Inspection Data for 2019

Table 7- Inspection Data by Flag

FLAG	NUMBER OF INSPECTIONS	INSPECTIONS WITH DEFICIENCIES	NUMBER OF Deficiencies	NUMBER OF INSPECTIONS WITH DETENTIONS	NUMBER OF INDIVIDUAL SHIPS INSPECTED	DETENTION PERCENTAGE	% OF INSPECTIONS WITH DEFICIENCIES
Algeria	2	1	13	0	2	0.00	50.00
Antigua and Barbuda	107	62	456	6	82	5.61	57.94
Azerbaijan	17	16	99	1	13	5.88	94.12
Bahamas	113	42	227	5	94	4.42	37.17
Bangladesh	5	3	49	2	4	40.00	60.00
Barbados	36	21	189	3	25	8.33	58.33
Belgium	9	3	20	0	8	0.00	33.33
Belize	132	103	457	4	60	3.03	78.03
Bermuda (GB)	3	1	5	0	3	0.00	33.33
Bolivia	2	2	26	1	1	50.00	100.00
Bulgaria	22	19	94	0	9	0.00	86.36
Cameroon	8	8	39	0	7	0.00	100.00
Cayman Islands (GB)	27	7	33	0	24	0.00	25.93
China	10	2	7	0	10	0.00	20.00
Comoros	136	128	880	15	60	11.03	94.12
Cook Islands	118	101	598	6	63	5.08	85.59
Croatia	10	5	8	0	10	0.00	50.00
Cyprus	59	22	102	0	54	0.00	37.29
Denmark	38	28	149	1	32	2.63	73.68
Egypt	30	25	145	0	11	0.00	83.33
Ethiopia	9	3	25	0	6	0.00	33.33
France	3	3	16	0	3	0.00	100.00
Georgia	4	3	21	0	2	0.00	75.00
Germany	7	5	34	0	4	0.00	71.43
Gibraltar (GB)	10	6	47	0	9	0.00	60.00
Greece	118	28	109	0	96	0.00	23.73
Honduras	1	1	3	0	1	0.00	100.00
Hong Kong, China	191	53	334	1	172	0.52	27.75
India	6	2	15	0	6	0.00	33.33
Iran, Islamic Republic of	3	1	3	0	2	0.00	33.33
Isle of Man (GB)	30	13	42	0	29	0.00	43.33
Israel	3	3	3	0	3	0.00	100.00
Italy	62	36	166	3	50	4.84	58.06
Jamaica	1	1	7	0	1	0.00	100.00
Jordan	1	0	0	0	1	0.00	0.00
Kazakhstan	2	0	0	0	1	0.00	0.00
Korea, Republic of	4	3	21	0	4	0.00	75.00
Kuwait	1	1	4	0	1	0.00	100.00

Table 7- Inspection Data by Flag (Continue)

	1	ı	ı	ı			ı
FLAG	NUMBER OF Inspections	INSPECTIONS WITH DEFICIENCIES	NUMBER OF Deficiencies	NUMBER OF INSPECTIONS WITH DETENTIONS	NUMBER OF INDIVIDUAL SHIPS INSPECTED	DETENTION Percentage	% OF INSPECTIONS WITH DEFICIENCIES
Latvia	1	0	0	0	1	0.00	0.00
Lebanon	10	9	34	0	7	0.00	90.00
Liberia	594	249	1565	12	481	2.02	41.92
Libyan Arab Jamahiriya	3	1	1	0	3	0.00	33.33
Lithuania	2	2	32	0	1	0.00	100.00
Luxembourg	6	3	13	0	5	0.00	50.00
Malaysia	5	1	3	0	4	0.00	20.00
Malta	631	262	1,296	12	497	1.90	41.52
Marshall Islands	631	221	1,156	14	533	2.22	35.02
Moldova, Republic of	144	132	774	11	65	7.64	91.67
Mongolia	5	4	32	1	5	20.00	80.00
Montenegro	6	3	22	1	3	16.67	50.00
Netherlands	72	31	156	1	68	1.39	43.06
Niue	2	2	32	1	2	50.00	100.00
Norway	38	11	38	0	33	0.00	28.95
Palau	72	61	353	4	32	5.56	84.72
Panama	926	563	3,396	45	616	4.86	60.80
Philippines	15	3	14	0	15	0.00	20.00
Portugal	62	30	150	1	48	1.61	48.39
Russian Federation	301	209	879	6	224	1.99	69.44
Saint Kitts and Nevis	26	19	108	1	15	3.85	73.08
Saint Vincent and the Grenadines	41	27	156	2	28	4.88	65.85
Saudi Arabia	1	0	0	0	1	0.00	0.00
Seychelles	2	1	2	0	1	0.00	50.00
Sierra Leone	139	123	768	10	58	7.19	88.49
Singapore	193	83	428	2	173	1.04	43.01
Sri Lanka	2	0	0	0	2	0.00	0.00
Switzerland	12	6	36	1	10	8.33	50.00
Syrian Arab Republic	9	9	100	3	7	33.33	100.00
Tanzania, United Republic of	117	111	972	12	55	10.26	94.87
Thailand	8	1	4	0	7	0.00	12.50
Togo	144	140	983	14	62	9.72	97.22
Tunisia	1	0	0	0	1	0.00	0.00
Turkey	331	210	814	0	176	0.00	63.44
Tuvalu	19	10	95	2	10	10.53	52.63
Ukraine	31	31	211	4	18	12.90	100.00
United Kingdom	16	5	26	0	16	0.00	31.25
United States	3	3	14	0	3	0.00	100.00
Vanuatu	73	63	308	4	37	5.48	86.30
Vietnam	2	1	5	0	1	0.00	50.00
TOTAL	6,036	3,401	19,422	212	4,245	3.51	56.35

Table 8- Inspection Data by Recognized Organizations (Number of Inspections>10)

RECOGNIZED ORGANIZATION	NUMBER OF Inspections	NUMBER OF INSPECTIONS WITH DEFICIENCIES	NUMBER OF Deficiencies	NUMBER OF RO Related Deficiencies	NUMBER OF Detentions	DETENTIONS WITH RO RELATED DETAINABLE DEFICENCIES
American Bureau of Shipping	633	237	1,165	0	8	0
American Register of Shipping	20	12	62	0	1	0
Bulgarian Register of Shipping	110	96	547	0	8	0
Bureau Veritas	1,061	489	2,790	1	31	1
China Classification Society	118	25	128	0	0	0
Columbus American Register	14	14	76	0	1	0
Croatian Register of Shipping	20	9	46	0	2	0
Det Norske Veritas	50	17	56	0	0	0
DNV GL AS	1,291	500	2,570	0	18	0
Dromon Bureau of Shipping	260	235	1,606	21	25	3
Germanischer Lloyd	28	9	38	0	0	0
Indian Register of Shipping	56	47	321	0	5	0
Intermaritime Certification Services, ICS Class	28	23	128	0	4	0
International Naval Surveys Bureau	204	165	977	1	10	1
International Register of Shipping	43	38	193	0	1	0
Isthmus Bureau of Shipping, S.A.	69	57	397	0	5	0
Korean Register of Shipping	115	56	363	0	1	0
Lloyd's Register	970	402	2,065	0	19	0
Macosnar Corporation	42	32	187	0	6	0
Maritime Bureau of Shipping	18	17	115	0	2	0
Maritime Lloyd (ML)	80	77	634	2	10	2
Mediterranean Shipping Register (MSR)	59	56	282	0	1	0
National Shipping Adjuster Inc.	63	56	395	0	8	0
Nippon Kaiji Kyokai (NK/Class NK)	1,301	606	3,349	0	29	0
Other	198	164	1,083	0	15	0
Overseas Marine Certification Services	26	21	99	0	0	0
Panama Maritime Documentation Services	21	13	55	0	0	0
Panama Shipping Registrar Inc.	13	11	43	0	0	0
Phoenix Register of Shipping	219	182	1,049	6	14	3
Polski Rejestr Statkow (Polish Register of Shipping)	66	38	256	2	3	1
Qualitas Register of Shipping S.A	18	12	107	0	2	0
RINA Services S.p.A.	420	192	993	0	16	0
Russian Maritime Register of Shipping	570	399	1,901	0	12	0
Shipping Register of Ukraine (SRU)	117	105	694	0	8	0
Turkish Lloyd	176	128	455	0	0	0
Veritas Register of Shipping	52	45	301	0	4	0

Note: Number of inspections and detentions are calculated corresponding to each recognized organization (RO) that issued certificate(s) for a ship In case that ship's certificates were issued more than one ROs, the inspection and detention would be counted to each of them.

Table 9- Inspection Data by Ship Type

TYPE OF SHIP	NUMBER OF Inspections	INSPECTIONS WITH Deficiencies	NUMBER OF Deficiencies	NUMBER OF Inspections with Detentions	NUMBER OF Individual Ships Inspected	DETENTION Percentage	% OF INSPECTIONS WITH DEFICIENCIES
Bulk Carrier	2,210	887	5,149	50	1,712	2.26	40.14
Chemical Tanker	459	194	836	10	376	2.18	42.27
Combination Carrier	6	5	19	0	5	0.00	83.33
Commercial Yacht	1	0	0	0	1	0.00	0.00
Container	212	153	917	4	131	1.89	72.17
Gas Carrier	47	17	58	0	34	0.00	36.17
General Cargo / Multipurpose	2,144	1,639	9,723	112	1,273	5.22	76.45
Heavy Load	7	4	34	1	6	14.29	57.14
High Speed Passenger Craft	3	1	7	0	1	0.00	33.33
Livestock Carrier	54	54	401	2	28	3.70	100.00
MODU and FPSO	0	0	0	0	0	0.00	0.00
NLS Tanker	5	0	0	0	4	0.00	0.00
Offshore Supply	3	2	9	0	3	0.00	66.67
Oil Tanker	719	317	1,327	10	601	1.39	44.09
Other Special Activities	20	15	72	1	16	5.00	75.00
Passenger Ship	0	0	0	0	0	0.00	0.00
Refrigerated Cargo	11	7	50	1	10	9.09	63.64
Ro-Ro Cargo	81	70	676	19	35	23.46	86.42
Ro-Ro Passenger Ship	20	18	51	0	7	0.00	90.00
Special Purpose Ship	2	2	7	0	2	0.00	100.00
Tugboat	23	14	73	1	20	4.35	60.87
Vehicle Carrier	5	2	13	1	3	20.00	40.00
Woodchip Carrier	4	0	0	0	2	0.00	0.00
ALL TYPES OF SHIPS	6,036	3,401	19,422	212	4,245	3.51	56.35

Table 10- Inspection Data by Type of Deficiencies

CATEGORY OF DEFI	CIENCIES	NUMBER OF Deficiencies	NO. OF DETAINABLE DEFICIENCIES	NO. OF RO RELATED DETAINABLE DEFICIENCIES	% OF TOTAL Deficiencies	% OF TOTAL Detainable deficiencies	% OF TOTAL RO RELATED DETAINABLE DEFICIENCIES
Certificates	Crew Certificates	218	23	0	1.12	3.52	0.00
and	Documents	1,262	4	0	6.50	0.61	0.00
Documents	Ship Certificates	394	20	1	2.03	3.06	3.03
	Structural Conditions	1,337	46	11	6.88	7.04	33.33
	Emerceny Systems	1,300	103	3	6.69	15.77	9.09
	Alarm Signals	0	0	0	0.00	0.00	0.00
	Radio Communications	886	16	1	4.56	2.45	3.03
	Cargo Operations Including Equipment	125	3	0	0.64	0.46	0.00
SOLAS	Fire Safety	1,887	103	5	9.72	15.77	15.15
	Alarms	88	5	0	0.45	0.77	0.00
	Safety of Navigation	2,930	97	0	15.09	14.85	0.00
	Dangerous Goods	47	0	0	0.24	0.00	0.00
	Life-saving Appliances	2,686	82	4	13.83	12.56	12.12
	Propulsion and Auxiliary Machinery	1,368	22	1	7.04	3.37	3.03
	BWM	62	0	0	0.32	0.00	0.00
	MARPOL Annex I	236	13	0	1.22	1.99	0.00
	Annex II	0	0	0	0.00	0.00	0.00
	Annex III	9	0	0	0.05	0.00	0.00
Pollution	Annex IV	56	0	0	0.29	0.00	0.00
Prevention	Annex V	233	1	0	1.20	0.15	0.00
	Annex VI	43	0	0	0.22	0.00	0.00
	Anti Fouling	2	0	0	0.01	0.00	0.00
	Living Conditions	191	0	0	0.98	0.00	0.00
	Working Conditions	1,253	14	1	6.45	2.14	3.03
ILO/MLC	Minimum Requirements for Seafarers	8	0	0	0.04	0.00	0.00
	Conditions of Employment	33	18	0	0.17	2.76	0.00
	Accommodation, Recreational	281	3	1	1.45	0.46	3.03
	Health Protection, Medical Care, Social Security	1,886	23	1	9.71	3.52	3.03
ISM		487	57	4	2,51	8.73	12.12
Other		114	0	0	0.59	0.00	0.00
TOTAL		19,422	653	33			

Statistical Data 2017-2019

Summary

	2017	2018	2019
Number of Inspections	5,112	5,214	6,036
Number of Inspections with Deficiencies	3,018	3,103	3,401
Number of Deficiencies Observed	21,006	21,450	19,422
Number of Detentions	283	278	212
% of Inspections with Deficiencies	59.04	59.51	56.35
Detention Percentage	5.54	5.33	3,51
Average Number of Deficiencies per Inspection	4.11	4.11	3,22

Inspection Data by Authority 2017-2019

MARITIME AUTHORITY		F INDIV			F INDIV	IDUAL CTED		MBER (CTIONS Incies			
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
BULGARIA	1,263	1,321	1,426	279	314	318	288	331	342	192	228	214	9	13	12
GEORGIA	577	533	607	270	250	246	283	272	264	207	208	184	23	24	9
ROMANIA	1,679	1,724	1,681	460	496	453	508	534	489	402	394	372	57	29	25
RUSSIAN FEDERATION (1)	2,200	2,196	2,217	1,554	1,534	1,545	1,866	1,879	1,927	1,306	1,386	1,287	102	166	132
TURKEY (1)	1,212	1,225	1,292	348	356	391	401	403	446	263	238	256	19	18	17
UKRAINE	2,140	2,234	2,318	1,429	1,544	2,125	1,766	1,795	2,568	648	649	1,088	73	28	17

MARITIME AUTHORITY			ECTIONS DETENTION DETENTION INSPECTION CIENCIES PERCENTAGE RATE (2) RATE (3)									
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
BULGARIA	66.67	68.88	62.57	3.13	3.93	3.51	3.23	4.14	3.77	22.09	23.77	22.30
GEORGIA	73.14	76.47	69.70	8.13	8.82	3.41	8.52	9.60	3.25	46.79	46.90	40.53
ROMANIA	79.13	73.78	76.07	11.22	5.43	5.11	11.96	5.85	5.52	27.40	28.77	26.95
RUSSIAN FEDERATION (1)	69.99	73.76	66.79	5.47	8.83	6.85	6.24	9.32	7.77	70.64	69.85	69.69
TURKEY (1)	65.59	59.06	57.40	4.74	4.47	3.81	5.17	4.49	4.35	28.71	29.06	30.26
UKRAINE	36.69	36.16	42.37	4.13	1.56	0.66	5.11	1.81	0.80	66.78	69.11	91.67

 $[\]ensuremath{^{(1)}}$ Data only for the Black Sea Ports

 $^{^{\}mbox{\scriptsize (2)}}$ Individual ships detained as per cent of individual ships inspected

 $^{^{(3)}}$ Individual ships inspected as per cent of number of individual ships visited

Inspection by Ship Types (in the order of 2019 top 10 inspections)

	2017	2017	2018	2018	2019	2019	2017-2019
SHIP TYPES		SHARE		SHARE		SHARE	SHARE
General Cargo / Multipurpose	1,915	37.5%	1,890	36.2%	2,210	36.6%	36.8%
Bulk Carrier	1,779	34.8%	1,850	35.5%	2,144	35.5%	35.3%
Oil Tanker	644	12.6%	619	11.9%	719	11.9%	12.1%
Chemical Tanker	352	6.9%	386	7.4%	459	7.6%	7.3%
Container	145	2.8%	175	3.4%	212	3.5%	3.3%
Ro-Ro Cargo	86	1.7%	97	1.9%	81	1.3%	1.6%
Gas Carrier	38	0.7%	24	0.5%	23	0.4%	0.5%
Livestock Carrier	54	1.1%	50	1.0%	47	0.8%	0.9%
Tugboat	19	0.4%	22	0.4%	20	0.3%	0.4%
Ro-Ro Passenger Ship	44	0.9%	38	0.7%	54	0.9%	0.8%
Others	63	1.2%	63	1.2%	67	1.1%	1.2%
TOTALS	5,112		5,214		6,036		

Inspection by Ship Flag (in the order of 2019 top 10 inspections)

	2017	2017	2018	2018	2019	2019	2017-2019
SHIP FLAGS		SHARE		SHARE		SHARE	SHARE
Panama	758	14.8%	835	16.0%	926	15.3%	15.4%
Malta	563	11.0%	533	10.2%	631	10.5%	10.6%
Marshall Islands	446	8.7%	496	9.5%	631	10.5%	9.6%
Liberia	428	8.4%	474	9.1%	594	9.8%	9.1%
Turkey	362	7.1%	349	6.7%	331	5.5%	6.4%
Russian Federation	224	4.4%	249	4.8%	301	5.0%	4.7%
Singapore	140	2.7%	148	2.8%	193	3.2%	2.9%
Hong Kong, China	159	3.1%	169	3.2%	191	3.2%	3.2%
Moldova, Republic of	123	2.4%	112	2.2%	144	2.4%	2.3%
Togo	147	2.9%	137	2.6%	144	2.4%	2.6%
Others	1,762	34.5%	1,712	32.8%	1,950	32.3%	4.0%
TOTALS	5,112		5,214		6,036		

Detentions by Ship Types (in the order of 2019 top 10 inspections)

	2017	2017	2018	2018	2019	2019	2017-2019
SHIP TYPES		SHARE		SHARE		SHARE	SHARE
General Cargo / Multipurpose	58	20.5%	66	23.7%	112	52.8%	30.5%
Bulk Carrier	9	3.2%	8	2.9%	50	23.6%	8.7%
Oil Tanker	9	3.2%	7	2.5%	10	4.7%	3.4%
Chemical Tanker	8	2.8%	12	4.3%	10	4.7%	3.9%
Container	11	3.9%	2	0.7%	4	1.9%	2.2%
Ro-Ro Cargo	13	4.6%	3	1.1%	19	9.0%	4.5%
Gas Carrier	2	0.7%	23	8.3%	1	0.5%	5.7%
Livestock Carrier	3	1.1%	3	1.1%	0	0.0%	0.6%
Tugboat	20	7.1%	21	7.6%	0	0.0%	5.7%
Ro-Ro Passenger Ship	23	8.1%	1	0.4%	2	0.9%	0.8%
Others	127	44.9%	132	47.5%	4	1.9%	34.0%
TOTALS	283		278		212		

Detentions by Ship Flag (more than 1 detentions in 2019)

SHIP FLAG	2017	2017 Share	2018	2018 Share	2019	2019 Share	2017-2019 SHARE
Antigua and Barbuda	4	1.4%	8	2.9%	6	2.8%	2.3%
Bahamas	1	0.4%	2	0.7%	5	2.4%	1.0%
Bangladesh	0	0.0%	0	0.0%	2	0.9%	0.3%
Barbados	0	0.0%	0	0.0%	3	1.4%	0.4%
Belize	13	4.6%	7	2.5%	4	1.9%	3.1%
Comoros	17	6.0%	22	7.9%	15	7.1%	7.0%
Cook Islands	16	5.7%	8	2.9%	6	2.8%	3.9%
Italy	1	0.4%	8	2.9%	3	1.4%	1.6%
Liberia	8	2.8%	12	4.3%	12	5.7%	4.1%
Malta	9	3.2%	8	2.9%	12	5.7%	3.8%
Marshall Islands	9	3.2%	7	2.5%	14	6.6%	3.9%
Moldova, Republic of	15	5.3%	14	5.0%	11	5.2%	5.2%
Palau	8	2.8%	8	2.9%	4	1.9%	2.6%
Panama	58	20.5%	66	23.7%	45	21.2%	21.9%
Russian Federation	13	4.6%	3	1.1%	6	2.8%	2.8%
Saint Vincent and the Grenadines	3	1.1%	3	1.1%	2	0.9%	1.0%
Sierra Leone	21	7.4%	11	4.0%	10	4.7%	5.4%
Singapore	3	1.1%	1	0.4%	2	0.9%	0.8%
Syrian Arab Republic	0	0.0%	0	0.0%	3	1.4%	0.4%
Tanzania, United Republic of	20	7.1%	23	8.3%	12	5.7%	7.1%
Togo	23	8.1%	21	7.6%	14	6.6%	7.5%
Tuvalu	3	1.1%	0	0.0%	2	0.9%	0.6%
Ukraine	4	1.4%	3	1.1%	4	1.9%	1.4%
Vanuatu	2	0.7%	10	3.6%	4	1.9%	2.1%
Other	32	11.3%	33	11.9%	11	5.2%	9.8%
TOTALS	283		278		212		

Major Category of Deficiencies 2017-2019

CATEGORY OF	CATEGORY OF DEFICIENCIES			20	18	20	19
ONIEGOIII OI	BEI IOIENOIEO	Number	%	Number	%	Number	%
Certificates	Crew Certificates	421	2.00	326	1.52	218	1.12
and	Documents	1,292	6.15	1,454	6.78	1,262	6.50
Documents	Ship Certificates	652	3.10	590	2.75	394	2.03
	Structural Conditions	1,504	7.16	1,422	6.63	1,337	6.88
	Emerceny Systems	1,145	5.45	1,279	5.96	1,300	6.69
	Alarm Signals	0	0.00	0	0.00	0	0.00
	Radio Communications	846	4.03	1,045	4.87	886	4.56
	Cargo Operations Including Equipment	82	0.39	107	0.50	125	0.64
SOLAS	Fire Safety	1,910	9.09	1,912	8.91	1,887	9.72
	Alarms	70	0.33	89	0.41	88	0.45
	Safety of Navigation	3,446	16.40	3,394	15.82	2,930	15.09
	Dangerous Goods	52	0.25	71	0.33	47	0.24
	Life-saving Appliances	2,800	13.33	3,199	14.91	2,686	13.83
	Propulsion and Auxiliary Machinery	1,436	6.84	1,357	6.33	1,368	7.04
	BWM	2	0.01	61	0.22	62	0.35
	Anti Fouling	2	0.01	1	0.0	2	0.01
	MARPOL Annex I	359	1.71	256	1.19	236	1.22
	Annex II	1	0.00	4	0.02	0	0.00
Pollution	Annex III	8	0.04	13	0.06	9	0.05
Prevention	Annex IV	67	0.32	55	0.25	56	0.29
	Annex V	279	1.33	312	1.45	233	1.20
	Annex VI	22	0.10	83	0.39	43	0.22
	Operational Deficiencies	0	0.00	0	0.0	0	0.00
	Living Conditions	181	0.86	181	0.84	191	0.98
	Working Conditions	1,150	5.47	1,005	4.69	1,253	6.45
ILO/MLC	Minimum Requirements for Seafarers	18	0.08	16	0,07	8	0.04
	Conditions of Employment	22	0.10	29	0,13	33	0.17
	Accommodation, Recreational	381	1.81	336	1.57	281	1.45
	Health Protection, Medical Care, Social Security	2,176	10.36	2,133	9.94	1,886	9.71
ISM	·	535	2.55	544	2.54	487	2.51
Other		147	0.70	172	0.80	114	0.59
TOTAL		21,006		21,450		19,422	

Major Deficiencies by Category (in the order 2019 top 10)

DEFICIENCIES BY CATEGORY	2017	2017 Share	2018	2018 Share	2019	2019 Share	2017-2019 Share
Safety of Navigation	3,446	16.4%	3,394	15.8%	2,930	15.09%	9,770
Life Saving Appliances	2,800	13.3%	3,199	14.9%	2,686	13.83%	8,685
Health Protection, Medical Care,	1,910	9.1%	2,133	9.9%	1,886	9.71%	4,936
Social Security							
Fire Safety	2,176	10.4%	1,912	8.9%	1,887	9.72%	5,975
Propulsion and Auxiliary Machinery	1,436	6.8%	1,357	6.3%	1,368	7.04%	4,161
Structural Conditions	1,504	7.2%	1,748	8.1%	1,337	6.88%	4,589
Emergency Systems	1,145	5.5%	1,279	6.0%	1,300	6.69%	3,724
Documents	1,292	6.2%	1,454	6.8%	1,262	6.50%	4,008
Working Conditions	1,150	5.5%	1,005	4.7%	1,253	6.45%	3,408
Radio Communications	846	4.0%	1,045	4.9%	886	4.56%	2,777
Others	3,301	15.7%	2,598	12.1%	2,627	13.53%	8,526
TOTALS	21,006		21,450		19,422		61,878

Top 5 Deficiencies 2017-2019

2017	2018	2019
Lifeboats 689 (3.28%)	Lights, Shapes, Sound-Signals 874 (4.07%)	Lights, Shapes, Sound-Signals 735 (3.78%)
Lights, Shapes, Sound-Signals 681 (3.34%)	Lifeboats 782 (3.65%)	Lifeboats 573 (2.95%)
Nautical Publications 580 (2.76%)	Emergency, Lighting, Batteries and Switches 644 (3.00%)	Emergency, Lighting, Batteries and Switches 540 (2.78%)
Emergency, Lighting, Batteries and Switches 494 (2.35%)	Auxiliary Engine 542 (2.53%)	Auxiliary Engine 519 (2.67%)
Access / Structural Features (Ship) 473 (2.25%)	Lifebuoys Incl. Provision and Disposition 477 (2.22%)	ISM 487 (2.51%)

Major Detainable Deficiencies by Category 2017-2019 (in the order 2019 top 10)

DETAINABLE DEFICIENCIES By Category	2017	2017 Share	2018	2018 Share	2019	2019 Share	2017-2019 Share
Emergency Systems	132	12.5%	133	14.5%	103	15.8%	14.4%
Fire Safety	120	13.0%	137	14.3%	103	15.8%	14.0%
Safety of Navigation	135	13.7%	113	14.0%	97	14.9%	13.5%
Life Saving Appliances	125	14.0%	136	11.9%	82	12.6%	13.4%
ISM	73	8.3%	65	9.9%	57	8.7%	7.6%
Structural Conditions	80	7.6%	94	6.9%	46	7.0%	8.6%
Crew Certificates	48	3.1%	37	5.2%	23	3.5%	4.2%
Health Protection, Medical Care, Social Security	0	5.0%	0	3.9%	23	3.5%	0.9%
Propulsion and Auxiliary Machinery	35	3.2%	31	3.8%	22	3.4%	3.4%
Ship Certificates	7	3.6%	2	3.3%	20	3.1%	1.1%
Others	207	15.9%	200	12.3%	77	11.8%	18.9%
TOTALS	962		948		653		

Top 5 Detainable Deficiencies 2017-2019

2017	2018	2019
Other (ISM) 50 (5.20%)	Lifeboats 62 (6.54%)	ISM 57 (8.73%)
Lifeboats 44 (4.57%)	Emergency, Lighting, Batteries and Switches 55 (5.80%)	Emergency, Lighting, Batteries and Switches 43 (6.58%)
Cleanliness of Engine Room 35 (3.64%)	Fire Detection and Alarm System 44 (4.64%)	Fire Detection and Alarm System 37 (5.67%)
Emergency, Lighting, Batteries and Switches 34 (3.53%)	Lights, Shapes, Sound-Signals 34 (3.59%)	Lifeboats 33 (5.05%)
Lights, Shapes and Sound-Signals 32 (3.3%)	Emergency Fire Pump and Its Pipes 23 (2.43%)	Charts 28 (4.29%)

Major RO Related Detainable Deficiencies by Category 2017-2019 (in the order 2019 top 5)

RO RELATED DETAINABLE DEFICIENCIES BY CATEGORY	2017	2017 Share	2018	2018 Share	2019	2019 Share	2017-2019 Share
Structural Conditions	18	20.2%	11	23.9%	11	33.3%	23.8%
Fire Safety	11	12.4%	12	26.1%	5	15.2%	16.7%
Life-saving Appliances	18	20.2%	2	4.3%	4	12.1%	14.3%
All Other Deficiencies	26	29.2%	14	30.4%	9	27.3%	29.2%
Emerceny Systems	9	10.1%	5	10.9%	3	9.1%	10.1%
Ship Certificates	7	7.9%	2	4.3%	1	3.0%	6.0%
TOTALS	89		46		33		

RO Related Detainable Deficiencies 2017-2019

2017	2018	2019
Ballast Fuel and Other Tanks 3 (6.38%)	Fire Pumps and Its Pipes 3 (1.08%)	ISM 4 (12.12%)
Ventilators Air Pipes Casings 3 (6.38%)	Fire-Dampers 3 (1.08%)	Stability / Strength / Loading Information and Instruments 2 (6.06%)
Rescue Boats 3 (3.68%)	Closing Devices / Watertight Doors 2 (0,72%)	Cargo & Other Hatchways 2 (6.06%)
Pumping Piping and Discharge Arrangements 3 (6.38%)	Ballast, Fuel and Other Tanks 2 (0.72%)	Covers (Hatchway-, Portable-, Tarpaulins, etc.) 2 (6.06%)
Safety Management Certificate (SMC/ISM Code) 2 (4.26%)	Openings to Cargo Area, Doors, Scuttles 2 (0.72%)	Bulwarks & Freeing Ports 2 (6.06%)
	Emergency, Lighting, Batteries and Switches 2 (0.72%)	
	Emergency Source of Power - Emergency Generator 2 (0.72%)	
	Fire Detection and Alarm System 2 (0.72%)	
	Lights, Shapes, Sound-Signals 2 (0.72%)	
	Lifeboats 2 (0.72%)	

Top 5 MLC Deficiencies 2017-2019

2017	2018	2019
Access / Structural Features (Ship) 473 (16.24%)	Lighting (Working Spaces) 417 (15.25%)	Lighting (Working Spaces) 323 (24.90%)
Lighting (Working Spaces) 432 (14.84%)	Access / Structural Features (Ship) 362 (13.24%)	Access / Structural Features (Ship) 314 (24.21%)
Ropes and Wires 283 (9.72%)	Ropes and Wires 287 (10.50%)	Ropes and Wires 311 (23.98%)
Electrical 212 (7.28%)	Electrical 260 (9.51%)	Electrical 230 (17.73%)
Steam Pipes, Pressure Pipes, Wires (Insulation) 133 (4.57%)	Steam Pipes, Pressure Pipes, Wires (Insulation) 149 (5.45%)	Steam Pipes, Pressure Pipes, Wires (Insulation) 119 (9.18%)

Top 5 MLC Detainable Deficiencies 2017-2019

2017	2018	2019
Ropes and Wires 6 (10.71%)	Wages 8 (15.69%)	Wages 14 (43.75%)
Cleanliness of Engine Room 6 (10.71%)	Cleanliness of Engine Room 6 (11.76%)	Cleanliness of Engine Room 6 (18.75%)
Winches & Capstans 5 (8.93%)	Seafarers' Employment Agreement (SEA) 4 (7.84%)	Winches & Capstans 5 (15.63%)
Anchoring Devices 5 (8.93%)	Steam Pipes, Pressure Pipes, Wires (Insulation) 4 (7.84%)	Anchoring Devices 4 (12.50%)
Wages 5 (8.93%)	Anchoring Devices 3 (5.88%)	Other (Conditions of Employment) 3 (9.38%)

Inspection, Deficiency and Detention Data by Ship Flag 2017-2019

SHIP FLAG	NUMBER OF INSPECTIONS	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF INSPECTIONS WITH DEFICIENCIES
Algeria	15	76	1	4	5
Antigua and Barbuda	276	1,224	18	38	165
Argentina	1	0	0	0	0
Azerbaijan	45	197	2	7	30
Bahamas	325	786	8	14	133
Bangladesh	8	52	2	4	4
Barbados	64	331	3	5	42
Belgium	13	31	0	0	5
Belize	362	1,727	23	85	270
Bermuda (GB)	9	28	0	0	5
Bolivia	2	26	1	8	2
Bulgaria	56	249	2	7	44
Cambodia	7	43	1	3	6
Cameroon	9	42	0	0	9
Canada	2	4	0	0	1
Cayman Islands (GB)	46	79	0	0	15
Chile	2	5	0	0	2
China	35	63	0	0	14
Comoros	359	2,668	54	232	313
Congo	3	26	1	1	3
Congo, the Democratic Republic of the	10	69	2	14	8
Cook Islands	370	1,817	30	92	281
Croatia	21	28	0	0	9
Cyprus	161	496	5	8	72
Denmark	87	361	3	4	70
Dominica	1	2	0	0	1
Egypt	75	436	0	0	62
Ethiopia	14	34	0	0	4
Faroe Islands	1	0	0	0	0
France	6	26	0	0	5
Georgia	8	37	1	3	6
Germany	16	97	1	1	12
Gibraltar (GB)	39	124	2	3	22
Greece	344	442	5	11	91
Honduras	3	19	1	3	3
Hong Kong, China	519	1,023	6	10	180
India	21	47	0	0	9
Iran, Islamic Republic of	19	35	0	0	6
Ireland	3	8	0	0	1
Isle of Man (GB)	92	181	1	1	39
Israel	11	34	1	1	9
Italy	182	503	12	18	96
Jamaica	1	7	0	0	1
Jordan	2	20	1	3	1
Kazakhstan	5	14	1	3	1
Korea, Republic of	6	32	0	0	5
Kuwait	3	5	0	0	2

Inspection, Deficiency and Detention Data by Ship Flag 2017-2019 (Continue)

SHIP FLAG	NUMBER OF	NUMBER OF Deficiencies	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE Deficiencies	NUMBER OF INSPECTIONS WITH DEFICIENCIES	
Latvia	1	0	0	0	0	
Lebanon	23	77	2	2	19	
Liberia	1,496	3,939	32	63	671	
	1,490	17	0	00	6	
Libyan Arab Jamahiriya Lithuania	6	38	-	-	-	
Luxembourg	12	18	0	0	5	
Malaysia	5	3	0	0	1	
Malta	1,728	3,974	29	71	785	
Marshall Islands	1,720	3,494	30	50	624	
Micronesia, Federated States of	1,373	0,494	0	0	024	
Moldova, Republic of	379	2,444	40	152	333	
	26	2,444	40	132	24	
Mongolia	13	36	1	2		
Montenegro	202	452		16	4 80	
Netherlands	202	32	6			
Niue	108	270	0	2	2 46	
Norway			=		40	
Pakistan	2 207	9	0	0	169	
Palau		1,229	20	72		
Panama	2,520	11,735	170	563	1,562	
Philippines	47	139	0	0	18	
Poland	1	8	0	0	1	
Portugal	131	450	2	1	76	
Qatar	2	5	0	0	2	
Romania	1	7	0	0	1	
Russian Federation	774	2,490	22	93	520	
Saint Kitts and Nevis	81	338	2	5	63	
Saint Vincent and the Grenadines	121	501	8	25	79	
Samoa	4	49	2	12	4	
Saudi Arabia	8	17	0	0	3	
Seychelles	6	19	1	1	5	
Sierra Leone	387	2,467	42	165	331	
Singapore	481	1,212	6	8	225	
Sri Lanka	4	9	0	0	1	
Switzerland	27	77	1	2	13	
Syrian Arab Republic	20	182	3	19	17	
Tanzania, United Republic of	427	3,581	55	241	380	
Thailand	18	48	1	1	7	
Togo	428	3,281	58	239	393	
Tunisia	8	51	1	4	6	
Turkey	1,042	3,447	13	32	687	
Tuvalu	54	237	5	11	31	
Ukraine	80	607	11	64	79	
United Kingdom	48	121	1	1	23	
United States	5	27	0	0	5	
Vanuatu	178	981	16	52	152	
Vietnam	2	5	0	0	1	
TOTAL	16,363	61,904	773	2,572	9,523	

RO Inspection Deficiency and Detention Data 2017-2019

RECOGNIZED ORGANIZATION	NUMBER OF Inspections	NUMBER OF RO RELATED DETAINABLE DEFICIENCIES	NUMBER OF RO RELATED DETENTIONS	NUMBER OF Deficiencies	NUMBER OF DETENTIONS	NUMBER OF Detainable Deficiencies	NUMBER OF INSPECTIONS WITH DEFICIENCIES
Aegean Register of Shipping	1	0	0	10	0	0	1
American Bureau of Shipping	1,702	1	1	3,422	22	37	686
American Register of Shipping	56	0	0	120	1	4	24
ASIA Classification Society	11	0	0	32	0	0	5
Bulgarian Register of Shipping	264	3	1	1,474	23	77	225
Bureau Veritas	2,793	5	3	8,333	85	191	1,364
C.T.M. Inspection and Classification	2	0	0	7	0	0	1
Company, S. de R.L.							
Caspian Register of Shipping	2	0	0	8	0	0	1
China Classification Society	283	0	0	440	1	1	78
Columbus American Register	43	7	2	394	8	45	40
Cosmos Marine Bureau Inc.	33	0	0	287	8	38	30
CR Classification Society (CCRS)	6	0	0	65	1	2	6
Croatian Register of Shipping	38	0	0	93	2	6	18
Cyprus Bureau of Shipping	1	0	0	0	0	0	0
Det Norske Veritas	460	0	0	736	2	3	160
DNV GL AS	3,313	0	0	7,847	54	105	1,438
Dromon Bureau of Shipping	640	27	4	4,217	72	289	554
Ferriby Marine	2	0	0	6	0	0	1
Germanischer Lloyd	314	0	0	751	6	12	149
Global Marine Bureau Inc.	5	0	0	23	0	0	3
Global Shipping Bureau Inc	1	0	0	6	0	0	1
Guardian Bureau of Shipping (GBS)	13	13	2	196	3	33	12
Hellenic Register of Shipping	10	0	0	80	1	1	8
Honduras International Surveying and	1	0	0	3	0	0	1
Inspection Bureau							
Indian Register of Shipping	97	0	0	478	7	17	77
Intermaritime Certification Services, ICS Class	115	0	0	618	10	35	85
International Maritime Register	5	0	0	42	0	0	5
International Naval Surveys Bureau	572	8	6	3,555	56	191	465
International Register of Shipping	140	10	3	975	17	85	123
International Ship Classification	24	0	0	84	2	4	13
Iranian Classification Society	8	0	0	12	0	0	2
Isthmus Bureau of Shipping, S.A.	168	0	0	1,331	22	54	146
Korea Classification Society	16	0	0	49	0	0	6
Korean Register of Shipping	288	0	0	883	8	15	135
Libyan Surveyor Mr. Sif Ennasar	2	0	0	5	0	0	2
Abdulhamid Giahmi							

RO Inspection Deficiency and Detention Data 2017-2019 (Continue)

RECOGNIZED ORGANIZATION	NUMBER OF Inspections	NUMBER OF RO RELATED DETAINABLE DEFICIENCIES	NUMBER OF RO RELATED DETENTIONS	NUMBER OF Deficiencies	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF Inspections With Deficiencies
Lloyd's Register	2,674	1	1	6,858	47	96	1,232
Macosnar Corporation	162	2	2	1,048	19	69	128
Maritime Bureau of Shipping	53	3	1	365	6	23	50
Maritime Lloyd (ML)	264	6	5	2,311	41	129	245
Mediterranean Shipping Register (MSR)	123	5	1	647	6	23	111
National Shipping Adjuster Inc.	202	5	2	1,439	30	79	168
New United International Marine	3	0	0	0	0	0	0
Services Ltd.							
Nippon Kaiji Kyokai (NK/Class NK)	3,490	0	0	10,832	113	264	1,749
No Class	6	0	0	18	0	0	3
Other	545	37	9	3,961	71	319	457
Overseas Marine Certification Services	61	0	0	404	3	10	52
Panama Marine Survey and	17	0	0	100	3	11	12
Certification Services Inc.							
Panama Maritime Documentation	46	0	0	281	5	17	31
Services							
Panama Maritime Surveyor Bureau Inc.	2	0	0	0	0	0	0
Panama Register Corporation	16	0	0	77	2	6	9
Panama Shipping Registrar Inc.	44	4	1	291	3	15	34
Phoenix Register of Shipping	523	15	7	3,061	56	215	423
Polski Rejestr Statkow	187	4	3	872	13	41	109
(Polish Register of Shipping)							
Qualitas Register of Shipping S.A	18	0	0	107	2	7	12
R.J. Del Pan	2	0	0	0	0	0	0
RINA Services S.p.A.	1,021	1	1	2,890	42	97	500
Russian Maritime Register of Shipping	1,590	3	1	5,783	55	190	1,065
Russian River Register	3	0	0	4	0	0	2
Ship Classification Of Malaysia	4	0	0	20	0	0	4
Shipping Register of Ukraine (SRU)	363	7	2	2,327	35	162	312
Turkish Lloyd	518	0	0	1,982	9	24	391
Union Bureau of Shipping	3	0	0	8	0	0	2
Universal Maritime Bureau Ltd	3	0	0	21	1	5	3
Universal Shipping Bureau Inc.	2	0	0	14	1	3	1
Vega Register Inc.	3	0	0	20	0	0	3
Veritas Register of Shipping	165	1	1	1,190	27	105	141
Vietnam Register	4	0	0	13	0	0	3
TOTAL	23,546	168	59	83,526	1,001	3,155	13,117

Note: Number of inspections and detentions are calculated corresponding to each recognized organization (RO) that issued certificate(s) for a ship. In case that ship's certificates were issued more than one ROs, the inspection and detention would be counted to each of them.



Bulgaria

Bulgarian Maritime Administration
Ministry of Transport and Communication
9, Dyakon Ignatiy St., 1000 Sofia / Bulgaria
Tel: +359 700 10 145 • Fax: +359 2 930 0920
e-mail: bma@marad.bg

Georgia

Maritime Transport Agency
Ministry of Economy and Sustainable Development of Georgia
50 Bako Street, Batumi 6000 Georgia
Tel: +995 422 274 925 • Fax: +995 422 273 929
e-mail: info@mta.gov.ge

Romania

Romanian Naval Authority
Incinta Port Constanta No.1 Cladirea ANR Constanta / Romania
Tel: +40 241 61 6124 • Fax: +40 241 61 6229
e-mail: RNA@RNA.ro

Russian Federation

Department of the State Policy for Maritime & River Transport,

Ministry of Transport

1, bldg 1, Rozhdestvenska st., Moscow 109012 Russia
Tel: +7 499 495 0000 • Fax: +7 499 495 0010

e-mail: info@mintrans.ru

Turkey

Republic of Turkey
Ministry of Transport Infrastructure
Directorate General of Maritime and Inland Waters Regulation
Hakkı Turayliç Cad. No: 5 Emek 06338 Ankara / Turkey
Tel: + 90 312 203 10 00, +90 312 203 22 20 • Fax: +90 312 231 33 06
e-mail: psc@uab.gov.tr

Ukraine

State Service for Maritime and River Transport of Ukraine 25 Preobrazhenskaya str., Kyiv, 03110, Ukraine Tel: +380 44 294 6000 e-mail: office@marad.gov.ua