



# PORT STATE CONTROL IN THE BLACK SEA REGION

## **Annual Report 2021**



BLACK SEA PORT STATE CONTROL SECRETARIAT  
ISTANBUL / TURKEY

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# Foreword

We are pleased to present the twenty-first 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 the 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 1<sup>st</sup> January and 31<sup>st</sup> December 2021, a year the Covid-19, Pandemic continued to affect countries around the world. However, over the past year, maritime transport defied the Covid-19 disruption.

It is our regret that the year 2021 started with bad news for the BS MoU family.

We have learnt with deep sadness that Captain Hüseyin YÜCE, Secretary of the BS MoU, passed away on 7 January 2021. Capt. YÜCE served successfully as the Secretary of the BS MoU since the establishment of the Secretariat in 2000. He was truly a great Secretary; whose actions and initiatives had a great and lasting impact on the work of the BS MoU. His wise leadership helped the Secretariat reach its goals and objectives.

Sincere condolences to the Maritime community and his family.

During the year 2021, the BS MoU member Authorities continued to implement a number of national measures affecting the port State control regime due to the ongoing Pandemic.



**Captain Alexander ILIEV**  
Chairman  
BS MoU PSC Committee

In 2021, the BS MoU member Authorities conducted a total of 5,624 inspections, higher than the pre-Covid five-year average (5,285) and representing a slight 1.70 per cent decrease as compared with 5,721 initial inspections in 2020. The regional inspection rate also decreased from 74.69% in 2020 to 73.08% this year.

A total of 178 detentions were warranted to ships found with serious deficiencies. The number of detentions in 2021 is nearly three-fourths of 241 detentions in 2020. The detention percentage in 2021 is 3.17% which is also lower than 2020 (4.21%).

During 2021, a total of 15,321 deficiencies were recorded. The average number of deficiencies per inspection in 2021 (2.72) is stable as compared with 2020 (2.70).

The most significant number of operational deficiencies found in 2021 was in the area of safety of navigation, followed by life saving appliances, health protection, medical care, social security, fire safety measures and structural conditions which constitutes 56.3% of the total deficiencies found.

International Safety Management (ISM) related issues accounted for 8.39 per cent of all detainable deficiencies in the 2021 reporting period which is a 1.49 per cent decrease compared with 2020. This area remains a significant concern and the BS MoU continues to scrutinize vessels coming into the 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 1<sup>st</sup> September and 30<sup>th</sup> November 2021, the CIC was carried out with respect to the Stability in General.

Through the launching new inspection scheme, the BS MoU has further increased the pressure on the substandard ships to encourage them to improve their performance or to force them to leave the region.



**Onur TURHAN**  
Secretary  
BS MoU Secretariat

## 10 Year Summary of Inspections, Detentions and Deficiency Rates

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of Inspections	4,607	5,080	5,092	4,997	5,066	5,112	5,214	6,036	5,721	5,624
Number of Detentions	215	184	151	218	229	283	278	212	241	178
Detention %	4.67	3.62	2.97	4.36	4.52	5.54	5.33	3.51	4.21	3.17

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of Deficiencies	17,916	19,022	18,350	18,094	18,266	21,006	21,450	19,422	15,442	15,321
Deficiencies / Inspection	3.89	3.74	3.60	3.62	3.61	4.11	4.11	3.22	2.70	2.72
Deficiencies / Inspection with Deficiencies	5.97	5.75	6.01	6.40	6.42	6.96	6.91	5.71	5.45	5.10

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of Detainable Deficiencies	669	630	506	734	822	962	948	653	678	644
Detainable Deficiencies / Detention	3.11	3.42	3.35	3.37	3.59	3.39	3.41	3.08	2.81	3.62



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# 2021 Annual Report

## Overview

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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 the implementation and ongoing 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 Republic of Azerbaijan, the Republic of Kazakhstan, the Republic of Moldova and the Commission on the Protection of the Black Sea Against Pollution.

To coordinate the 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 the industry with the MoU news, procedures and inspection results the Black Sea MoU launched the internet website at [www.bsmou.org](http://www.bsmou.org) containing general information on MoU and a regularly updated detention list. Taking into account of successful operation of the BSIS, it was decided to start the open publication of PSC inspection results on the 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 2021.

## Black Sea Information System (BSIS)

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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 online publication of the ship risk profile, PSC inspection and detention data on the Memorandum website.

# Captain Hüseyin Yüce



We have learnt with deep sadness that Captain Hüseyin YÜCE, Secretary of the BS MoU, passed away on 7 January 2021. Capt. YÜCE served successfully as the Secretary of the BS MoU since the establishment of the Secretariat in 2000.

Dr. YÜCE was born in 1949 in Ankara. He graduated from the Turkish Naval Academy in 1968. He served in various appointments in the fleet between 1970 and 1974. He attended the USA Naval Postgraduate School between 1974 and 1976 and he obtained a M.S. Degree in Physical Oceanography. He served as an instructor at the Turkish Naval Academy between 1976 and 1978. He joined the Turkish Navy Department of Navigation, Hydrography and Oceanography in 1979 as chief of the Oceanography ASW Section (1979-1983) (LCDR). Later, he assumed the post of Chief of the Oceanographic Division in the Department (1983-1992).

During this period, he assumed the post of Secretary of the National Oceanographic Coordination Board and represented Turkey at the Intergovernmental Oceanographic Commission (IOC) and its subsidiary bodies; the Technical Committee on International Oceanographic Data and Information Exchange (IODE) and the Integrated Global Ocean Service System (IGOSS). As Secretary of the National Oceanographic Coordination Board, he actively worked on the National Marine Research and Monitoring Programme.

At the rank of Eng. Capt., he assumed the post of the Head of Department of Navigation, Hydrography and Oceanography of the Turkish Navy on 24 July 1992. Represented Turkey at the International Hydrographic Conferences, Intergovernmental Oceanographic Commission, Commission on Co-operative Investigation of the Mediterranean (CIESM), Mediterranean and Black Seas Hydrographic Commission as head of the delegation. He served as Turkish Representative at the Scientific Committee National Representative (SCNR) of the NATO SACLANT Undersea Research Centre. He chaired the Mediterranean and Black Sea Hydrographic Conference which he was chairman of the Commission and the Working Group on the Black Sea Safety of Navigation during 1997-1999. He was Vice Chairman of the IOC Black Sea Oceanography Commission.

Throughout his career Dr. YÜCE involved in several national, NATO and international working groups relating to oceanographic, hydrographic matters, including boundary delimitation he also published many scientific papers.

Meanwhile, he completed a Ph.D. program at the University of Istanbul (Institute of Marine Science and Geography) in physical and chemical oceanography. He retired in 1999 and joined the Istanbul University Institute of Marine Science and Management as a lecturer on Physical Oceanography until 2015.

For the time being, he served as Secretary of the Black Sea Memorandum of Understanding on Port State Control based in Istanbul since May 2000.

He made a tremendous contribution to Port State Control and to all elements of the Memorandum and he will be greatly missed. He was truly a great Secretary; whose actions and initiatives had a great and lasting impact on the work of the BS MoU. His wise leadership helped the Secretariat reach its goals and objectives.

His invaluable contributions to Port State Control and the maritime community will forever live on.

**Sincere condolences to the Maritime community and his family.**



## Port State Control Committee

### The Extraordinary Meeting

Due to the untimely death of Captain Hüseyin YÜCE, to resume the work of the BS MoU Secretariat without any interruption, the Black Sea Port State Control Committee Extraordinary Meeting was held virtually on 5 February 2021. The PSCC, at its extraordinary meeting, appointed Mr. Onur TURHAN as the new Secretary of the BS MoU.

Mr. Turhan stated: "I have learnt with deep sadness that Capt. YÜCE, passed away. I remember Capt. YÜCE with respect. He left behind a Secretariat that has a great structure and quality. With the kind cooperation and support of the Black Sea MoU family, I will do my very best to improve the capacity and capabilities of the Black Sea MoU to reach the "Safe, Secure and Efficient Shipping on Clean Oceans" slogan of IMO."

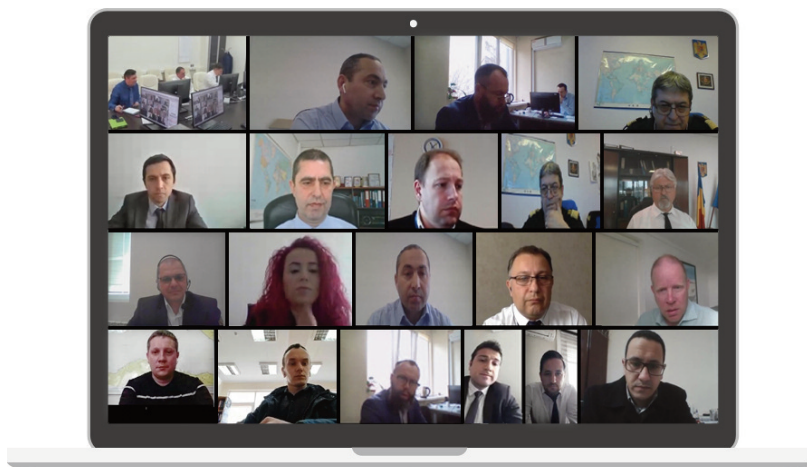
Captain Alexandar ILIEV, as Chairman of the Port State Control Committee, and the member States expressed the gratitude and deep appreciation of the Committee for the many years of dedicated service of Capt. YÜCE and heartfelt condolences to his family.

Captain Iliev concluded by welcoming Mr. TURHAN as the incoming Secretary and looking forward to working with him in developing the Black Sea MoU in its work going forward.

### The Twenty-first Session

The Twenty-first Meeting of the Black Sea Port State Control Committee which was originally scheduled to take place in Constanta, Romania from 17 to 19 March 2020, was postponed in response to the situation with regard to the Covid-19, Pandemic. The Committee meeting was held remotely via virtual means from 13 to 15 April 2021 and was chaired by Captain Alexandar ILIEV, Republic of Bulgaria.

The meeting was attended by the member Authorities of Bulgaria, Georgia, Romania, the Russian Federation, Turkey and Ukraine. Representatives of the IMO, Paris MoU, MED MoU, Abuja MoU, Republic of Azerbaijan attended the meeting as observers.



One of the priority elements discussed was the Covid-19, Pandemic and its impact on port State control. The Committee discussed the impact of the Covid-19 situation and agreed to establish an interim extraordinary intersessional working group on the impact of the Covid-19 crisis for preparing a guideline relating to the Covid-19 circumstances. During the intersessional period, the Notice to PSCOs No. 13 "Interim Guideline Relating to the Covid-19 Circumstances" that consists of preventive measures to halt the spread of Covid-19; Ship Certification Issues and the Covid-19 especially with Interval of surveys and audits required by Conventions, Duration of statutory certificates, Installation of Ballast Water Management System and MARPOL Annex VI aspects; Crew related issues and Covid-19 especially with MLC, 2006, STCW Certification and Medical Certificates were issued.



The Committee noted the information provided by the Secretariat on the unchanged status of ratification or accession to the relevant instruments by the member Authorities in the Black Sea Region. The Committee also urged those member Authorities who have not acceded to the relevant instruments to do as soon as possible.

The Committee considered amendments to the PSC Manual and either adoption new Guidelines for PSCOs on checking compliance with MARPOL Annex IV, MARPOL Annex V, Procedures for Operational Controls and IMO Polar Code or revisions to the Guidelines for ISM Code, MLC, 2006 and type of inspections. The Committee also adopted a number of revisions/updates for PSC Manual in accordance with IMO/ILO amendments. The Committee also considered the revision of the Rules of Procedure of the Committee and agreed on the amendment.

The Committee agreed to conduct a Concentrated Inspection Campaign (CIC) on Stability in General for the year 2021 and CIC on STCW for the year 2022 in conjunction with the Paris and the Tokyo Memorandas.

The Committee reviewed the achievements and status of the action plan 2016-2020 and agreed to prepare strategic directions and the action plan for 2021-2025.

In response to the situation with regard to the ongoing Covid-19, Pandemic, the Committee agreed to the cancellation of all training courses and PSCO Exchange Programmes until the Pandemic would have ended.

The Committee considered the proposal of the Russian Federation on the possible Banning Procedures in the Region and decided to establish a working group under the leadership of the Russian Federation to make full analysis and propose possible solutions for implementing Banning Procedures. The Committee also decided to establish a correspondence group to consider cases to be clear grounds for re-qualification of the Initial inspection and inspection priorities.

The Committee considered and noted the development of the “BS MoU and BSIS websites and” BSIS Mobile Application and further agreed to continue working and testing the functionality of the BSIS Mobile Application.

## Concentrated Inspection Campaign

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From 1<sup>st</sup> September 2021 to 30<sup>th</sup> November 2021, the BS MoU carried out a Concentrated Inspection Campaign (CIC) on Stability in General. 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 983 inspections were carried out with the CIC questionnaire involving 983 individual ships. During the CIC, 43 ships were detained totally. Of this quantity, 10 of the detentions are the result of inspections without CIC Questionnaires and none of these 33 ships were detained under the CIC scope.

A total of 61 questionnaires had at least one non-compliance to any of the requirements, resulting in 6.2 per cent of CIC inspections. The overall average per cent of non-conformities was 0.83 which means that the “unsatisfactory” answer was given to a question on 0.83% of occasions.

Most inspections were carried out onboard ships flying the flags of Panama with 165 inspections (16.79%), the Marshall Islands with 126 inspections (12.82%), Liberia with 121 inspections (12.31%) and Malta with 85 inspections (8.65%). A total of 41 flags covering 47.8% of the total CIC inspections had no non-conformities.

### Concentrated Inspection Campaign in 2022

For the year 2022, it is agreed that the participation into the CIC on STCW during the period of 1<sup>st</sup> September to 30<sup>th</sup> November and requested the Secretariat to report progress and developments on the 2022 CIC.

## Training

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One PSCO from Georgia and one PSCO from Turkey, on behalf of the BS MoU, participated in the Tokyo MoU's 28<sup>th</sup> PSC Seminar, Virtually, 6-8 July 2021,

On behalf of the BS MoU, one PSCO from Ukraine participated in the Paris MoU's Online Expert Training on Human Element, 25-29 September 2021, and

One PSCO from Georgia, participated in the Paris MoU's Online Training on Bulk Carriers, 4-8 October 2021.

### PSCO Exchange Programme

In response to the situation with regard to the Covid-19, Pandemic, all PSCO Exchange Programmes were cancelled by member States.

## Interregional Cooperation

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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 the Secretariat at the IMO III Sub-Committee meetings and submitting its reports. The seventh session of the IMO III Sub-Committee which was originally scheduled to be held from 20 to 24 July 2020 was postponed due to the Covid-19, Pandemic and was eventually held remotely from 12 to 16 July 2021. The 2019 and the 2020 Annual Reports including inspection data, the results of the 2019 CIC on Emergency Systems and Procedures, and the Recent Developments on the PSC activities in the Black Sea Region were submitted to III-7.

The BS MoU is accepted as an observer to several regional PSC agreements, that is, Paris MoU, Tokyo MoU, Mediterranean MoU, Viña del Mar Agreement, Indian Ocean MoU, West & Central African Region MoU, and Riyadh MoU.

The 54<sup>th</sup> meeting of the Paris MoU Port State Control Committee was held by virtual means from 17 to 21 May 2021 on account of the global Covid-19, Pandemic. The Secretary attended the meeting and represented the BS MoU.

The 31<sup>st</sup> meeting of the Tokyo MoU Port State Control Committee was held by virtually from 21 to 22 January 2021 under Covid-19 circumstances. The BSIS Manager attended the meeting and represented the BS MoU.

The 32<sup>nd</sup> meeting of the Tokyo MoU Port State Control Committee met remotely again via virtual means from 7 to 10 December 2021. The Secretary attended the meeting and represented the BS MoU.

The BS MoU was represented by Mr. Secretary at the 23<sup>rd</sup> meeting of the Mediterranean MoU which was held online from 9 to 10 November 2021 on account of the global Covid-19, Pandemic.

The BS MoU was represented by Mr. Secretary at the 24<sup>th</sup> meeting of the Indian Ocean MoU Port State Control Committee held by virtual means from 25 to 26 October 2021.

The BS MoU was represented by Mr. Secretary at the 2<sup>nd</sup> Extraordinary Meeting of the Latin American Agreement on Port State Control of Vessels (VMA) Committee from 18 to 27 October.

The BS MoU was represented by Mr. Secretary at the 26<sup>th</sup> meeting of the Caribbean MoU Port State Control Committee held by virtually from 5 to 6 October 2021.

The Secretary followed the developments in the Paris MoU and the BS MoU was represented by Mr. Secretary at the 35<sup>th</sup> meeting of the Technical Evaluation Group of the Paris MoU held in Malta from 30 November to 3 December 2021.

The BS MoU Secretariat is honoured to welcome European Maritime Safety Agency (EMSA) Executive Director Maja Markovčić Kostelac to its headquarters in Istanbul for a meeting to discuss ongoing cooperation and explore opportunities for further support in the context of the BCSEA Black and Caspian Sea project of EMSA on 8 October 2021.

# PSC Inspections 2021

## Regional Inspection Data

During the 2021 calendar year, 5,624 inspections, involving 4,064 individual ships, were carried out on ships registered by 80 Flag Administrations in the Black Sea region. Although the number of inspections in 2021 decreased compared with 2020 (5,721), it is still higher than the pre-Covid five-year average (5,285).

Since the total number of individual ships operating in the region was estimated at 5,561\*, the inspection rate in the region was approximately 73.08% in 2021. Regarding the number of individual ships inspected in 2021 (4,064) is nearly stable as compared with the number of individual ships inspected in 2020 (4,147).

Out of 5,624 inspections in 2021, there were 3,003 inspections in which ships were found with deficiencies. The percentage of the inspection with deficiencies in 2021 (53.40%) increased 3.92 compared with 2020 (49.48%).

In 2021, the number of ships detained for deficiencies clearly hazardous to safety, health or environmental amounted to 178 registered by 33 different Flag Administrations. The overall detention percentage in the region was 4.21 in 2020; in 2021, it radically decreased to 3.17 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. The regional detention rate (percentage of the number of individual ships detained to the number of individual ships inspected) in 2021 is 3.96% which is significantly less than 5.43% in 2020.

Table 1 displays a summary of the 2021 inspection data and observed changes compared with the previous year.

**Table 1- Summary of 2021 Inspection and Trends as Compared with the Previous Year**

		2020	2021	Change Compare 2020
<b>Ships Visits</b>	Individual Ships	5,552*	5,561*	9
<b>Inspections</b>	Total PSC Inspections	5,721	5,624	-97
	Inspection with Deficiencies	2,831	3,003	172
	Individual Ships	4,147	4,064	-83
	Inspection Rate	74.69%	73.08%	-1.61%
<b>Detentions</b>	Individual Ships	225	161	-64
	Total Detentions	241	178	-63
	Detentions Rate	5.43%	3.96%	-1.47
	% of Total Inspections	4.21%	3.17%	-1.04
	% Inspections with Deficiencies	49.48%	53.40%	3.92
<b>Deficiencies</b>	Total Deficiencies	15,442	15,321	-121
	Detainable Deficiencies	678	644	-34
	Deficiency Rate	2.70	2.72	0.03
	Detainable Deficiency / Detention	2.81	3.62	0.80
	RO Related Detainable Deficiency	25	6	-19

\* Estimated number of individual ships which visited the ports of the region during the year showing in the above table and the table of Inspection data by Authority.

## Inspection Data by Authority

The BS MoU member Authorities' contributions to the regional inspection efforts are displayed in **Table 2**. Member Authorities inspection rates (percent of the number of individual ships inspected) varied between 23.55% and 71.46%. **Figure 1** displays inspection and detention rates for 2021 by member Authorities and in the region. The detention percentage of the member Authorities are varied from 0.6 to 6.24 per cent. The percentage of inspections with deficiencies varies from 33.41 per cent up to 68.93 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 2021.

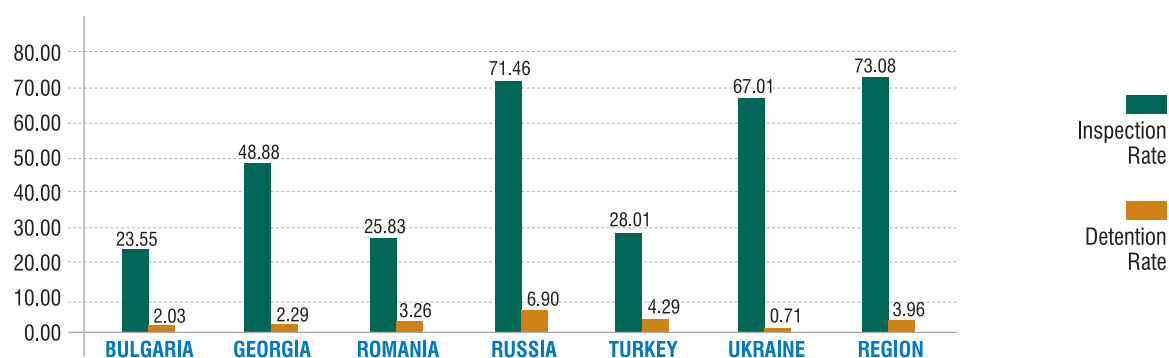
**Table 2- Inspection Data by Authority and Region**

AUTHORITY	NUMBER OF INDIVIDUAL SHIP VISITS	NUMBER OF INDIVIDUAL SHIPS INSPECTED	NUMBER OF INSPECTIONS	NUMBER OF INSPECTIONS WITH DEFICIENCIES	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF INDIVIDUAL SHIPS DETAINED	NUMBER OF DETAINABLE DEFICIENCIES	INSPECTION RATE <sup>(3)</sup>	DETENTION RATE <sup>(5)</sup>	DETENTION PERCENTAGE <sup>(4)</sup>	% OF INSPECTIONS WITH DEFICIENCIES	AVERAGE NO. OF DEFICIENCIES PER INSPECTION	% OF MoU TOTAL	DETENTIONS WITH RO RELATED DETAINABLE DEFICIENCIES
Bulgaria <sup>(2)</sup>	1,257	296	304	187	842	6	6	68	23.55	2.03	1.97	61.51	2.77	5.41	0
Georgia	626	306	348	223	1,383	7	7	19	48.88	2.29	2.01	64.08	3.97	6.19	1
Romania <sup>(2)</sup>	1,665	430	441	304	1,683	14	14	76	25.83	3.26	3.17	68.93	3.82	7.84	2
Russia <sup>(1)</sup>	2,190	1,565	1,938	1,296	7,889	121	108	392	71.46	6.90	6.24	66.87	4.07	34.46	1
Turkey <sup>(1)</sup>	1,414	396	423	268	1,179	17	17	64	28.01	4.29	4.02	63.36	2.79	7.52	1
Ukraine	2,725*	1,826	2,170	725	2,345	13	13	25	67.01	0.71	0.60	33.41	1.08	38.58	1
Regional	5,561*	4,147	5,624	3,003	15,321	178	161	644	73.08	3.88	3.17	53.40	2.72		6

<sup>(1)</sup> Data only for the Black Sea Ports, <sup>(2)</sup> Inspection data reported to the Paris MoU, <sup>(3)</sup> Individual ships inspected as per cent of individual ships visited,

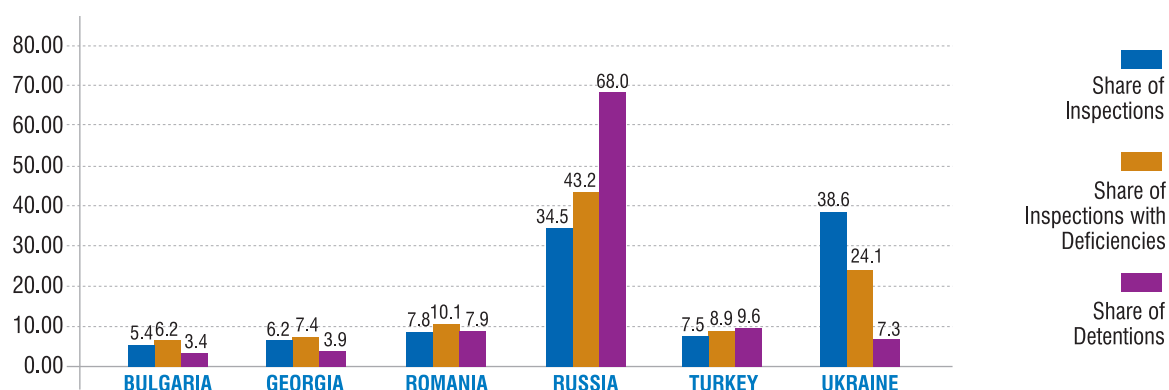
<sup>(4)</sup> Individual ships detained as per cent of individual ships inspected, <sup>(5)</sup> Detentions as per cent of inspections.

**Figure 1- Inspection and Detention Rates by Authority and Region**



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

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

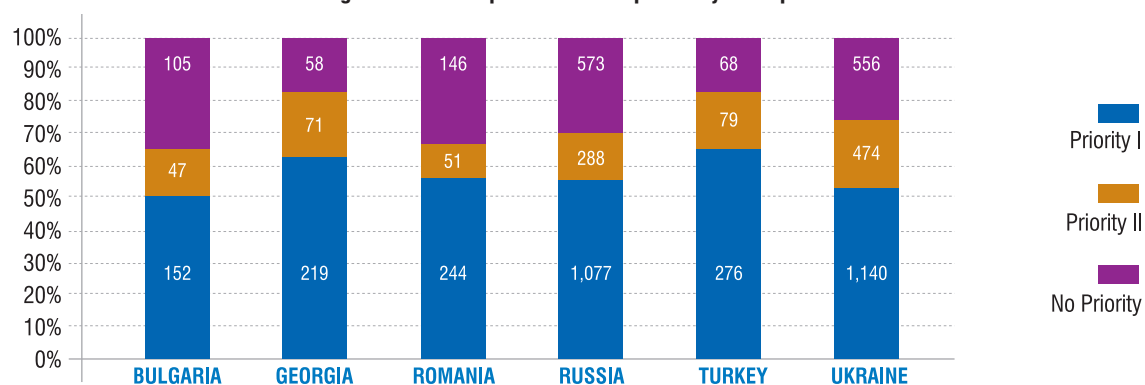


Breakdown of inspections by ship risk profile and by ship priorities of inspection are presented respectively in Table 3 and in Figure 3. The majority of the inspected ships are standard risk ship (SRP)s 4,075 (72.5%), followed by high risk ship (HRS)s 798 (14.2%).

**Table 3- Inspection Data by Ship Risk Profile**

AUTHORITY	SHIP RISK PROFILE (SRP)								TOTAL NUMBER OF INSPECTIONS
	HRS		SRS		LRS		SRP UNKNOWN		
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	
Bulgaria	59	19.4	220	72.4	25	8.2	0	0.0	304
Georgia	66	19.0	265	76.1	17	4.9	0	0.0	348
Romania	76	17.2	310	70.3	54	12.2	1	0.2	441
Russian Federation	197	10.2	1,390	71.7	351	18.1	0	0.0	1,938
Turkey	55	13.0	341	80.6	27	6.4	0	0.0	423
Ukraine	345	15.9	1,549	71.4	276	12.7	0	0.0	2,170
REGION	798	14.2	4,075	72.5	750	13.3	1	0.0	5,624

**Figure 3- PSC Inspection Per Ship Priority of Inspection**





## Inspection Data by Flag

In 2021, 5,624 inspections were carried out on ships registered under 80 flags. The flag State with the largest number of ships inspected in the region was Panama with 986 (17.53%) inspections followed by the Marshall Islands with 682 (12.13%) and Liberia with 621 (11.04%) which constitute 2,289 (40.70%) of the total inspections. Table 4 presents the top 5 PSC inspections by flags in 2021.

**Table 4- Top 5 Inspections by Flag of the Ships**

FLAG	2020		2021		DIFFERENCE		2019-2021
	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
Panama	912	15.94%	986	17.53%	74	8.1%	16.25%
Marshall Islands	690	12.06%	682	12.13%	-8	-1.2%	11.52%
Liberia	580	10.14%	621	11.04%	41	7.1%	10.33%
Malta	575	10.05%	536	9.53%	-39	-6.8%	10.02%
Russian Federation	279	4.88%	318	5.65%	39	14.0%	5.17%

In 2021, ships registered under 33 foreign flags were observed to have deficiencies sufficiently serious to impair the seaworthiness and warrant detention. A high detention percentage was observed for Cameroon (13.38%), followed by Tanzania (12.68%) flagged vessels. Table 5 illustrates inspections data by flags exceeding average detention percentage (with inspections more than 10).

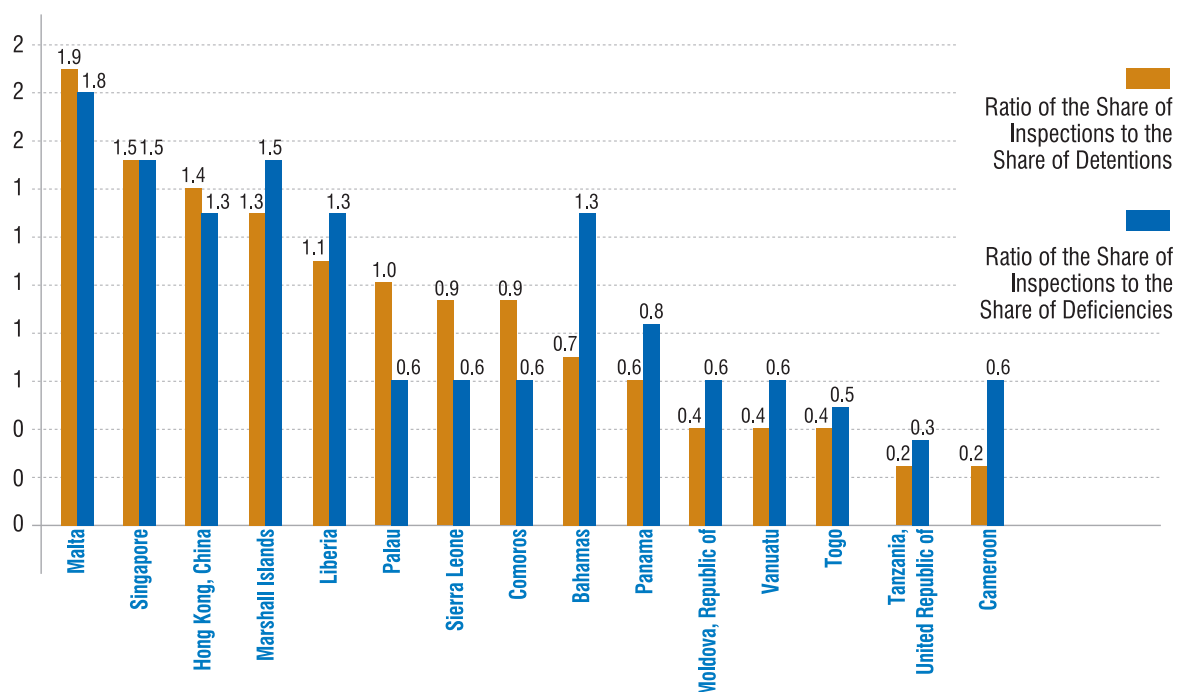
**Table 5- 2021 Detentions Per Flag, Exceeding Average Detention Percentage  
(Number of Inspections > 10, with a Detention Percentage Exceeding 3.17%)**

FLAG	NUMBER OF INSPECTIONS	NO. OF INDIVIDUAL SHIPS INSPECTED	NO. OF INSPECTIONS WITH DEFICIENCIES	NUMBER OF DEFICIENCIES	% OF INSPECTIONS WITH DEFICIENCIES	NUMBER OF DETENTIONS	DETENTION % 2021	EXCESS OF AVERAGE 2021	DETENTION % 2020	EXCESS OF AVERAGE 2020 (4.21)
Bahamas	92	78	37	200	40.22	4	4.35	1.18	3.54	-0.67
Cameroon	30	20	27	142	90.00	4	13.33	10.17	0	-4.21
Comoros	141	64	117	625	82.98	5	3.55	0.38	9.43	5.22
Egypt	28	14	25	108	89.29	1	3.57	0.41	0	-4.21
Honduras	16	9	14	57	87.50	1	6.25	3.08	12.5	8.29
India	13	10	7	50	53.85	1	7.69	4.53	0	-4.21
Moldova, Republic of	131	68	108	633	82.44	10	7.63	4.47	12.58	8.37
Panama	986	696	583	3,269	59.13	54	5.48	2.31	4.61	0.4
Saint Kitts and Nevis	45	27	36	173	80.00	2	4.44	1.28	5.41	1.2
Sierra Leone	116	51	106	538	91.38	4	3.45	0.28	2.63	-1.58
Tanzania	71	32	69	589	97.18	9	12.68	9.51	15.58	11.37
Togo	112	50	99	565	88.39	9	8.04	4.87	5.04	0.83
Ukraine	22	17	21	139	95.45	1	4.55	1.38	7.69	3.48
Vanuatu	88	52	80	418	90.91	7	7.95	4.79	8.93	4.72

Figure 4 presents the ratio of the share of inspections to the share of detentions and to the share of deficiencies which indicates the relative level of the detention and deficiencies. Malta, followed by Singapore, Hong Kong, China and the Marshall Islands performing well concerning detentions. Malta, Singapore, Marshall Islands followed by Bahamas, Hong Kong China, Liberia performing well concerning deficiencies.

Further information on Inspection Data by Flag is shown in Table 10 "Inspection Data by Flag".

**Figure 4- Ratio of the Share of Inspections to the Share of Detentions and to the Share of Deficiencies by the Flags (Inspections>30 and Detentions>3)**



## Inspection Data by Recognized Organization

The majority of ships inspected are in class with the DNV AS (before the name of class change DNV GL AS included) 1,324 (16.23%), Nippon Kaiji Kyokai 1,175 (14.41%), Bureau Veritas 1,003 (12.30%), Lloyd's Register 936 (11.48%), and followed by American Bureau of Shipping 629 (7.71%) and Russian Maritime Register of Shipping 555 (6.80%).

In 2021, there were 6 detentions with RO related detainable deficiencies, 2 of them are related to the Shipping Register of Ukraine, and the others are Bureau Veritas, Columbus American Register, Inter maritime Certification Services, ICS Class and Nippon Kaiji Kyokai. For the ratio of the share of inspections to the share of RO related detentions, it is observed that Nippon Kaiji Kyokai (0.86) and Bureau Veritas (0.74) performed well among the mentioned classes (the others, Shipping Register of Ukraine, ICS Class and Columbus American Register are respectively 0.03, 0.02 and 0.01).

Further information on Inspection Data by Recognized Organization is shown in Table 11 "Inspection Data by Recognized Organizations".

## Inspection Data by Ship Type

When considering the breakdown of ships inspected by ship type, the largest group of the ship inspected during 2021 were bulk carrier with 2,160 (38.41%) inspections, general cargo/multipurpose 1,833 (32.59%) and oil tanker 584 (10.38%), which represent 81.38 per cent of inspections. For the year 2021, the top 5 inspections by ship type is presented below.

**Table 6- 2021 Top 5 Inspections by Ship Type**

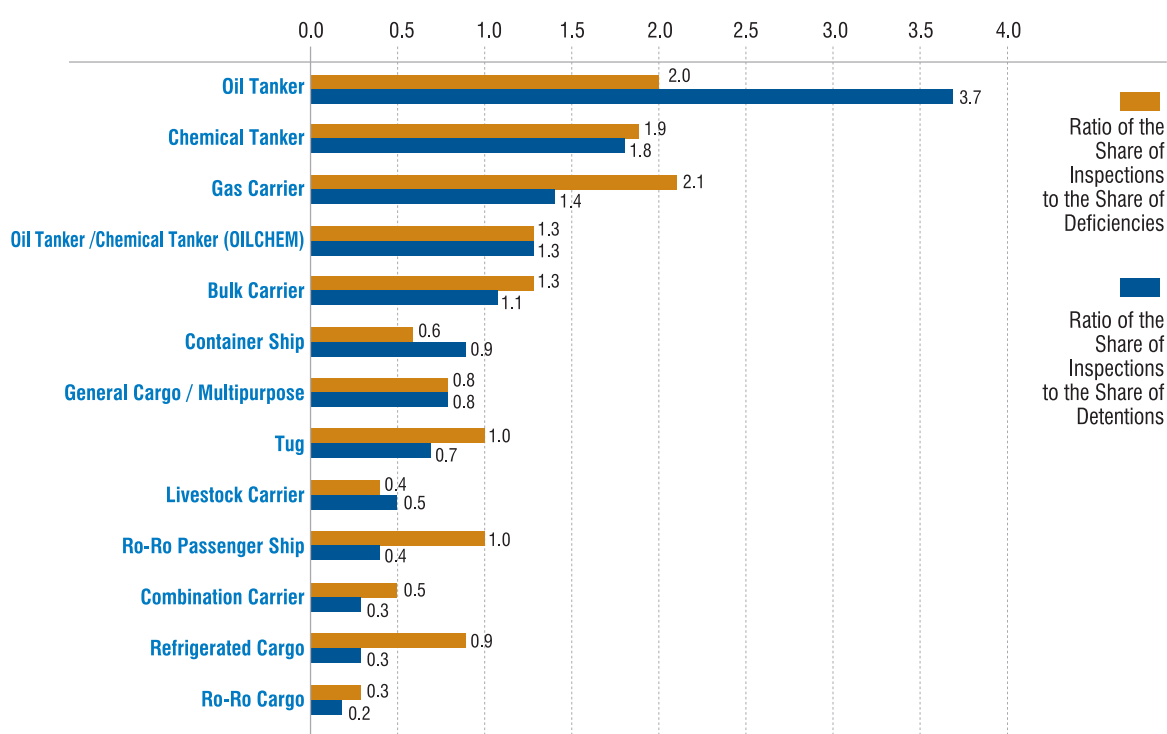
SHIP TYPES	2020		2021		DIFFERENCE		2019-2021
	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
Bulk Carrier	2,269	39.66%	2,160	38.41%	-109	-4.80%	<b>38.20%</b>
General Cargo / Multipurpose	1,859	32.49%	1,833	32.59%	-26	-1.40%	<b>33.58%</b>
Oil Tanker	654	11.43%	584	10.38%	-70	-10.70%	<b>11.26%</b>
Chemical Tanker	458	8.01%	346	6.15%	-112	-24.45%	<b>7.27%</b>
Container Ship	196	3.43%	246	4.37%	50	25.51%	<b>3.76%</b>

The majority of detained ships were type of general cargo/multi purpose ships with 70 (39.33%) detentions, bulk carriers with 60 (33.71%) detentions and followed by Livestock carrier with 15 (8.43%) detentions, which were accounted for 81.47 per cent of the total detentions.

Figure 5 shows how the ship types inspected performed with regards to detentions and deficiencies. A higher share of detentions and deficiencies compared with the share of inspections indicated that type of ship underperforming with respect to detentions and deficiencies.

Further information on Inspection Data by Ship Type is shown in Table 12 "Inspection Data by Ship Type".

**Figure 5- Share of Inspections to the Share of Detentions and to the Share of Deficiencies for Ship Types**



## Inspection Data by Deficiency

A total of 15,321 deficiencies were recorded during the port State control inspections in 2021. The majority of the deficiencies found upon inspection in 2021 were related to safety of navigation (13.1%), life saving appliances (13.1%), health protection, medical care, social security (11.9%), fire safety (9.4%) and structural conditions (8.5%). These five categories make up 56.2% of the total deficiencies found in 2021. The top 5 category of deficiencies is presented below.

**Table 7- 2021 Top 5 Category of Deficiencies**

CATEGORY OF DEFICIENCIES	2020		2021		DIFFERENCE		2019-2021
	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
<b>Safety of Navigation</b>	2,335	15.1%	2,043	13.3%	-292	-1.8%	<b>14.56%</b>
<b>Life Saving Appliances</b>	1,991	12.9%	2,007	13.1%	16	0.2%	<b>13.32%</b>
<b>Health Protection/Medical Care/Social Security</b>	1,851	12.0%	1,821	11.9%	-30	-0.1%	<b>9.84%</b>
<b>Fire Safety</b>	1,371	8.9%	1,447	9.4%	76	0.6%	<b>9.38%</b>
<b>Structural Conditions</b>	1,264	8.2%	1,309	8.5%	45	0.4%	<b>7.79%</b>

The number of ISM related deficiencies was 272 which accounted for 1.78 per cent of the deficiencies, while ISM related detainable deficiencies were 54 and 8.39% of the detainable deficiencies. A total of 472 MARPOL related deficiencies were observed in 2021, accounting for 3.08 per cent of the total deficiencies.

644 detainable deficiencies and 6 RO related detainable deficiencies were recorded during the port State control inspections. 4.20 per cent of total deficiencies in 2021 were detainable deficiencies, and 0.93 per cent of detainable deficiencies in 2021 were RO related.

The majority of the detainable deficiencies found upon inspections in 2021 were related to emergency systems (15.1%), fire safety (12.9%), life-saving appliance (12.6%) safety of navigation (12.1%), and structural conditions (8.5%). These five categories make up 61.2% of the total detainable deficiencies found in 2021. The top 5 category of detainable deficiencies is presented below.

**Table 8- 2021 Top 5 Category of Detainable Deficiencies**

DETAINABLE DEFICIENCIES	2020		2021		DIFFERENCE		2019-2021
	NUMBER	SHARE	NUMBER	SHARE	NUMBER	%	SHARE
<b>Emergency Systems</b>	85	12.5%	97	15.1%	12	2.5%	<b>14.4%</b>
<b>Fire Safety</b>	89	13.1%	83	12.9%	-6	-0.2%	<b>13.9%</b>
<b>Life Saving Appliances</b>	94	13.9%	81	12.6%	-13	-1.3%	<b>13.0%</b>
<b>Safety of Navigation</b>	81	11.9%	78	12.1%	-3	0.2%	<b>13.0%</b>
<b>Structural Conditions</b>	55	8.1%	55	8.5%	0	0.4%	<b>7.9%</b>

The majority of the RO related detainable deficiencies found upon inspection in 2021 were related to structural conditions (50.0%) and the others with the same percentage are ISM, radio communication and safety of navigation.

Further information on Inspection Data by Type of Deficiencies is shown in **Table 13** "Inspection Data by Type of Deficiencies".

## 2021 Maritime Labour Convention Results

MLC, 2006 compliance is verified during 2,683 PSC inspections carried out in 2021 by Bulgaria, Romania and the Russian Federation and the results are presented in **Table 9**. The 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 2,222 deficiencies related to MLC, 2006 issues. This represented 21.3 per cent of the total deficiencies issued and equated to 0.83 deficiency per inspection.

Of the 536 detainable deficiencies, 32 were related to MLC detainable deficiencies. This represented 5.97 per cent of the total detainable deficiencies. Of the 141 detentions, 25 (17.73%) were due to the MLC, 2006 related detainable deficiencies which resulted in 0.93 detention percentage.

**Table 9- 2021 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
Bahamas	50	183	37	9	0	4	0
Barbados	33	88	27	0	0	0	0
Comoros	40	312	67	14	0	4	0
Denmark	30	113	18	0	0	0	0
Greece	70	92	14	0	0	0	0
Hong Kong, China	84	318	76	6	0	4	0
Italy	36	51	10	1	0	1	0
Liberia	339	1,063	207	36	2	15	2
Malta	274	668	143	23	2	9	2
Marshall Islands	361	990	223	19	1	11	1
Moldova, Republic of	32	267	54	33	1	7	1
Palau	30	198	49	8	1	2	1
Panama	446	2,303	491	228	12	45	10
Portugal	34	149	27	3	0	1	0
Russian Federation	89	201	50	3	0	1	0
Sierra Leone	66	387	92	10	2	3	1
Singapore	88	205	41	8	0	2	0
Tanzania, United Republic of	36	390	75	36	3	7	2
Togo	52	351	70	42	6	6	3
Turkey	124	392	96	0	0	0	0
Vanuatu	35	221	55	17	0	5	0
<b>TOTALS</b>	<b>2,683</b>	<b>10,414</b>	<b>2,222</b>	<b>536</b>	<b>32</b>	<b>141</b>	<b>25</b>



Table 9- 2021 MLC Results by Ship Flag, Ship Type and Ship Age (Continue)

SHIP TYPE	Number of Inspections	Total Deficiencies	MLC Deficiencies	Total Detainable Deficiencies	MLC Detainable Deficiencies	Total Detentions	MLC Detentions
Bulk Carrier	985	3,649	855	162	5	50	5
Chemical Tanker	172	407	77	19	2	4	1
Container Ship	154	931	217	15	1	8	1
Gas Carrier	11	5	0	0	0	0	0
General Cargo / Multipurpose	635	3,220	721	227	12	49	9
Livestock Carrier	28	223	59	17	3	3	1
Oil Tanker	477	635	88	14	2	4	1
Oil Tanker / Chemical Tanker (OILCHEM)	109	279	50	7	2	4	2
Ro-Ro Cargo	67	876	126	64	5	15	5
Tug Boat	9	34	8	2	0	1	0
<b>TOTALS</b>	<b>2,674</b>	<b>10,414</b>	<b>2,222</b>	<b>536</b>	<b>32</b>	<b>141</b>	<b>25</b>

SHIP AGE	Number of Inspections	Total Deficiencies	MLC Deficiencies	Total Detainable Deficiencies	MLC Detainable Deficiencies	Total Detentions	MLC Detentions
0 - 5	155	167	26	1	0	1	0
6 - 10	518	1,168	267	38	0	16	0
11 - 15	756	2,332	488	48	1	19	1
16 - 20	456	1,735	393	76	7	26	7
21 - 24	180	846	198	69	4	17	3
25 - 29	221	1,247	274	68	3	18	2
30 - 34	113	645	131	81	3	10	2
35 +	284	2,274	445	155	14	34	10
<b>TOTALS</b>	<b>2,683</b>	<b>10,414</b>	<b>2,222</b>	<b>536</b>	<b>32</b>	<b>141</b>	<b>25</b>

# Port State Inspection Data for 2021

Table 10- Inspection Data by Flag

FLAG	NUMBER OF INSPECTIONS	INSPECTIONS WITH DEFICIENCIES	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF INDIVIDUAL SHIPS INSPECTED	DETENTION PERCENTAGE	% OF INSPECTIONS WITH DEFICIENCIES
Antigua and Barbuda	59	32	184	1	1	51	1.69	54.24
Azerbaijan	15	9	32	0	0	8	0.00	60.00
Bahamas	92	37	200	4	9	78	4.35	40.22
Bangladesh	5	3	29	1	5	5	20.00	60.00
Barbados	72	35	127	0	0	44	0.00	48.61
Belgium	6	3	28	1	2	6	16.67	50.00
Belize	62	40	133	0	0	42	0.00	64.52
Bermuda (GB)	2	1	3	0	0	2	0.00	50.00
Bulgaria	13	5	13	0	0	5	0.00	38.46
Cameroon	30	27	142	4	11	20	13.33	90.00
Cayman Islands (GB)	19	4	15	0	0	17	0.00	21.05
China	16	5	21	0	0	15	0.00	31.25
Comoros	141	117	625	5	17	64	3.55	82.98
Cook Islands	50	37	123	0	0	30	0.00	74.00
Croatia	9	2	6	0	0	9	0.00	22.22
Curacao	2	1	7	0	0	1	0.00	50.00
Cyprus	55	10	49	1	3	52	1.82	18.18
Denmark	37	27	119	0	0	33	0.00	72.97
Dominica	4	2	5	0	0	3	0.00	50.00
Egypt	28	25	108	1	1	14	3.57	89.29
Equatorial Guinea	2	2	9	1	1	2	50.00	100.00
Ethiopia	5	0	0	0	0	5	0.00	0.00
France	5	4	30	1	1	4	20.00	80.00
Gabon	5	5	26	0	0	2	0.00	100.00
Georgia	2	2	13	0	0	2	0.00	100.00
Germany	6	3	13	0	0	6	0.00	50.00
Gibraltar (GB)	6	2	12	0	0	6	0.00	33.33
Greece	107	27	98	0	0	96	0.00	25.23
Guyana	3	3	11	0	0	3	0.00	100.00
Honduras	16	14	57	1	1	9	6.25	87.50
Hong Kong, China	171	66	351	4	6	152	2.34	38.60
India	13	7	50	1	4	10	7.69	53.85
Indonesia	2	2	18	0	0	1	0.00	100.00
Iran, Islamic Republic of	3	3	14	0	0	2	0.00	100.00
Isle of Man (GB)	22	6	24	0	0	20	0.00	27.27
Israel	2	1	2	0	0	1	0.00	50.00
Italy	48	21	58	1	1	36	2.08	43.75
Jamaica	1	0	0	0	0	1	0.00	0.00
Korea, Republic of	3	1	4	0	0	3	0.00	33.33

Table 10- Inspection Data by Flag (Continue)

FLAG	NUMBER OF INSPECTIONS	INSPECTIONS WITH DEFICIENCIES	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF INDIVIDUAL SHIPS INSPECTED	DETENTION PERCENTAGE	% OF INSPECTIONS WITH DEFICIENCIES
Kuwait	1	0	0	0	0	1	0.00	0.00
Latvia	2	0	0	0	0	2	0.00	0.00
Lebanon	9	5	11	0	0	6	0.00	55.56
Liberia	621	265	1,342	18	46	504	2.90	42.67
Libyan Arab Jamahiriya	2	1	2	0	0	2	0.00	50.00
Luxembourg	6	3	8	0	0	5	0.00	50.00
Malta	536	177	810	9	23	423	1.68	33.02
Marshall Islands	682	234	1,235	16	28	566	2.35	34.31
Moldova, Republic of	131	108	633	10	51	68	7.63	82.44
Mongolia	5	5	108	1	5	1	20.00	100.00
Netherlands	38	19	97	0	0	36	0.00	50.00
Niue	1	0	0	0	0	1	0.00	0.00
Norway	37	9	37	1	1	30	2.70	24.32
Pakistan	1	1	30	0	0	1	0.00	100.00
Palau	96	80	415	3	12	54	3.13	83.33
Panama	986	583	3,269	54	249	696	5.48	59.13
Philippines	15	3	12	0	0	14	0.00	20.00
Portugal	56	29	165	1	3	49	1.79	51.79
Qatar	3	2	4	0	0	3	0.00	66.67
Russian Federation	318	207	747	1	3	242	0.31	65.09
Saint Kitts and Nevis	45	36	173	2	8	27	4.44	80.00
Saint Vincent and the Grenadines	33	25	90	1	1	23	3.03	75.76
Sao Tome and Principe	14	14	175	0	0	3	0.00	100.00
Saudi Arabia	4	1	2	0	0	4	0.00	25.00
Seychelles	2	2	6	0	0	1	0.00	100.00
Sierra Leone	116	106	538	4	15	51	3.45	91.38
Singapore	145	56	259	3	9	130	2.07	38.62
Sri Lanka	1	0	0	0	0	1	0.00	0.00
Switzerland	4	2	16	0	0	3	0.00	50.00
Syrian Arab Republic	5	4	30	0	0	3	0.00	80.00
Tanzania, United Republic of	71	69	589	9	44	32	12.68	97.18
Thailand	7	3	6	0	0	6	0.00	42.86
Togo	112	99	565	9	51	50	8.04	88.39
Turkey	251	156	604	0	0	142	0.00	62.15
Tuvalu	10	2	4	0	0	7	0.00	20.00
Ukraine	22	21	139	1	5	17	4.55	95.45
United Kingdom	6	3	16	0	0	6	0.00	50.00
United States	1	1	1	0	0	1	0.00	100.00
Vanuatu	88	80	418	7	26	52	7.95	90.91
Vietnam	1	0	0	0	0	1	0.00	0.00
Ship Registration Withdrawn	1	1	6	1	1	1	100.00	100.00
<b>TOTAL</b>	<b>5,624</b>	<b>3,003</b>	<b>15,321</b>	<b>178</b>	<b>644</b>	<b>4,064</b>	<b>3.17</b>	<b>53.40</b>

Table 11- Inspection Data by Recognized Organizations

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 DEFICIENCIES	DETENTION PERCENTAGE	% OF INSPECTIONS WITH DEFICIENCIES
Aegean Register of Shipping	6	6	120	0	1	0	16.67	100.00
American Bureau of Shipping	629	209	991	0	10	0	1.59	33.23
American Register of Shipping	22	8	44	0	2	0	9.09	36.36
ASIA Classification Society	1	0	0	0	0	0	0.00	0.00
Asia Shipping Certification Services	1	0	0	0	0	0	0.00	0.00
Bulgarian Register of Shipping	136	107	587	0	10	0	7.35	78.68
Bureau Veritas	1,003	438	2,300	1	25	1	2.49	43.67
China Classification Society	107	27	139	0	2	0	1.87	25.23
Classification Bureau of Indonesia	1	0	0	0	0	0	0.00	0.00
Columbus American Register	17	16	98	1	1	1	5.88	94.12
Cosmos Marine Bureau Inc.	3	3	22	0	0	0	0.00	100.00
CR Classification Society (CCRS)	5	4	14	0	0	0	0.00	80.00
Croatian Register of Shipping	13	6	17	0	0	0	0.00	46.15
Cyprus Bureau of Shipping	1	1	1	0	0	0	0.00	100.00
Danforth Marinesurvey and Certification Services	1	0	0	0	0	0	0.00	0.00
DNV AS (DNV)	345	155	818	0	9	0	2.61	44.93
DNV GL AS	959	349	1,778	0	28	0	2.92	36.39
Dromon Bureau of Shipping	247	216	1,147	0	13	0	5.26	87.45
Germanischer Lloyd	12	3	12	0	0	0	0.00	25.00
Guardian Bureau of Shipping (GBS)	8	8	80	0	2	0	25.00	100.00
Hellenic Register of Shipping	1	0	0	0	0	0	0.00	0.00
Indian Register of Shipping	66	46	230	0	2	0	3.03	69.70
Intermaritime Certification Services, ICS Class	26	16	114	1	3	1	11.54	61.54
International Maritime Register	4	4	20	0	0	0	0.00	100.00
International Naval Surveys Bureau	167	133	714	0	8	0	4.79	79.64
International Register of Shipping	76	65	375	0	5	0	6.58	85.53
International Ship Classification	3	1	1	0	0	0	0.00	33.33
Intertek Maritime Bureau	3	3	8	0	0	0	0.00	100.00

Table 11- Inspection Data by Recognized Organizations (Continue)

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 DEFICIENCIES	DETENTION PERCENTAGE	% OF INSPECTIONS WITH DEFICIENCIES
Iranian Classification Society	5	5	34	0	0	0	0.00	100.00
Isthmus Bureau of Shipping, S.A.	94	69	397	0	5	0	5.32	73.40
Isthmus Maritime Classification Society S.A.	3	1	3	0	0	0	0.00	33.33
Korea Classification Society	2	1	2	0	0	0	0.00	50.00
Korean Register	116	49	231	0	2	0	1.72	42.24
Lloyd's Register	936	378	1,840	0	21	0	2.24	40.38
Macosnar Corporation	28	20	146	0	3	0	10.71	71.43
Maritime Bureau of Shipping	25	23	222	0	0	0	0.00	92.00
Maritime Lloyd (ML)	44	41	377	0	5	0	11.36	93.18
Mediterranean Shipping Register (MSR)	56	51	216	0	2	0	3.57	91.07
National Shipping Adjuster Inc.	31	18	134	0	3	0	9.68	58.06
Nippon Kaiji Kyokai (NK/Class NK)	1,175	503	2,421	1	29	1	2.47	42.81
Overseas Marine Certification Services	32	23	99	0	1	0	3.13	71.88
Panama Maritime Documentation Services	13	5	23	0	1	0	7.69	38.46
Panama Maritime Surveyor Bureau Inc.	2	2	6	0	0	0	0.00	100.00
Panama Shipping Registrar Inc.	20	11	42	0	0	0	0.00	55.00
Phoenix Register of Shipping	241	191	1,084	0	20	0	8.30	79.25
Polski Rejestr Statkow (Polish Register of Shipping)	47	28	158	0	2	0	4.26	59.57
Qualitas Register of Shipping S.A	42	33	152	0	0	0	0.00	78.57
Register of Shipping (Albania)	1	0	0	0	0	0	0.00	0.00
RINA Services S.p.A.	397	176	791	0	10	0	2.52	44.33
Russian Maritime Register of Shipping	555	362	1,373	0	8	0	1.44	65.23
Shipping Register of Ukraine (SRU)	80	68	390	2	5	2	6.25	85.00
Turkish Lloyd	139	96	372	0	0	0	0.00	69.06
Vega Register Inc.	28	25	162	0	6	0	21.43	89.29
Veritas Register of Shipping	54	42	196	0	0	0	0.00	77.78
Vietnam Register	1	0	0	0	0	0	0.00	0.00
Other	106	93	540	0	4	0	3.77	87.74

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 12- 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	2,160	870	4,565	60	1,757	2.78	40.28
Chemical Tanker	346	116	498	6	291	1.73	33.53
Combination Carrier	11	9	59	1	7	9.09	81.82
Commercial Yacht	1	0	0	0	1	0.00	0.00
Container Ship	246	183	1,112	9	158	3.66	74.39
Gas Carrier	44	12	56	1	32	2.27	27.27
General Cargo / Multipurpose	1,833	1,340	6,330	70	1,145	3.82	73.10
Heavy Load	2	2	9	0	2	0.00	100.00
Livestock Carrier	52	51	378	3	29	5.77	98.08
NLS Tanker	4	2	7	0	3	0.00	50.00
Offshore Supply	1	1	7	0	1	0.00	100.00
Oil Tanker	584	209	779	5	482	0.86	35.79
Oil Tanker / Chemical Tanker (OILCHEM)	164	74	332	4	159	2.44	45.12
Other Special Activities	12	6	28	0	11	0.00	50.00
Passenger Ship	1	0	0	0	1	0.00	0.00
Refrigerated Cargo	11	6	32	1	8	9.09	54.55
Ro-Ro Cargo	90	78	953	15	31	16.67	86.67
Ro-Ro Passenger Ship	26	22	69	2	9	7.69	84.62
Special Purpose Ship	3	1	3	0	3	0.00	33.33
Tugboat	22	15	62	1	21	4.55	68.18
Vehicle Carrier	11	6	42	0	9	0.00	54.55
ALL TYPES OF SHIPS	5,624	3,003	15,321	178	4,064	3.17	53.40

Table 13- Inspection Data by Type of Deficiencies

CATEGORY OF DEFICIENCIES		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 and Documents	Crew Certificates	169	15	0	1.10	2.33	0.00
	Documents	993	10	0	6.48	1.55	0.00
	Ship Certificates	375	37	0	2.45	5.75	0.00
SOLAS	Structural Conditions	1,309	55	3	8.54	8.54	50.00
	Emergency Systems	1,040	97	0	6.79	15.06	0.00
	Alarm Signals	0	0	0	0.00	0.00	0.00
	Radio Communications	628	24	1	4.10	3.73	16.67
	Cargo Operations Including Equipment	136	3	0	0.89	0.47	0.00
	Fire Safety	1,447	83	0	9.44	12.89	0.00
	Alarms	155	13	0	1.01	2.02	0.00
	Safety of Navigation	2,043	78	1	13.33	12.11	16.67
	Dangerous Goods	43	1	0	0.28	0.16	0.00
	Life-saving Appliances	2,007	81	0	13.10	12.58	0.00
	Propulsion and Auxiliary Machinery	988	36	0	6.45	5.59	0.00
Pollution Prevention	BWM	74	4	0	0.48	0.62	0.00
	MARPOL Annex I	181	13	0	1.18	2.02	0.00
	Annex II	6	0	0	0.04	0.00	0.00
	Annex III	11	0	0	0.07	0.00	0.00
	Annex IV	26	2	0	0.17	0.31	0.00
	Annex V	228	0	0	1.49	0.00	0.00
	Annex VI	20	1	0	0.13	0.16	0.00
ILO/MLC	Anti Fouling	1	0	0	0.01	0.00	0.00
	Living Conditions	197	0	0	1.29	0.00	0.00
	Working Conditions	790	10	0	5.16	1.55	0.00
	Minimum Requirements for Seafarers	7	0	0	0.05	0.00	0.00
	Conditions of Employment	17	7	0	0.11	1.09	0.00
	Accommodation, Recreational	291	4	0	1.90	0.62	0.00
ISM	Health Protection, Medical Care, Social Security	1,821	16	0	11.89	2.48	0.00
		272	54	1	1.78	8.39	16.67
Other		46	0	0			
TOTAL		15,321	644	6			
ISPS		242	4	0	1.55	0.62	0.00
GRAND TOTAL		15,563	648	6			

Note: Security related data showing above table is not included in all other statistical tables and figures in this report.

# Statistical Data 2019-2021

## Summary

	2019	2020	2021
Number of Inspections	6,036	5,721	5,624
Number of Inspections with Deficiencies	3,401	2,831	3,003
Number of Deficiencies Observed	19,422	15,442	15,321
Number of Detentions	212	241	178
% of Inspections with Deficiencies	56.35	49.48	53.40
Detention Percentage	3.51	4.21	3.17
Average Number of Deficiencies per Inspection	3.22	2.70	2.72

## Inspection Data by Authority 2019-2021

MARITIME AUTHORITY	NO. OF INDIVIDUAL SHIP VISIT			NO. OF INDIVIDUAL SHIP INSPECTED			NUMBER OF INSPECTIONS			NO. OF INSPECTIONS WITH DEFICIENCIES			NUMBER OF DETENTIONS		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
BULGARIA	1,426	1,379	1,257	318	307	296	342	320	304	214	189	187	12	7	6
GEORGIA	607	607	626	246	248	306	264	265	348	184	184	223	9	6	7
ROMANIA	1,681	1,637	1,665	453	501	430	489	534	441	372	366	304	25	6	14
RUSSIAN FEDERATION <sup>(1)</sup>	2,217	2,197	2,190	1,545	1,545	1,565	1,927	1,962	1,938	1,287	1,221	1,296	132	120	121
TURKEY <sup>(1)</sup>	1,292	1,334	1,414	391	286	396	446	318	423	256	211	268	17	15	17
UKRAINE	2,318	2,415	2,725*	2,125	2,034	1,826	2,568	2,322	2,170	1,088	660	725	17	87	13

MARITIME AUTHORITY	% OF INSPECTIONS WITH DEFICIENCIES			DETENTION PERCENTAGE			DETENTION RATE <sup>(2)</sup>			INSPECTION RATE <sup>(3)</sup>		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
BULGARIA	62.57	59.06	61.51	3.51	2.19	1.97	3.77	2.28	2.03	22.30	22.26	23.55
GEORGIA	69.70	69.43	64.08	3.41	2.26	2.01	3.25	2.42	2.29	40.53	40.86	48.88
ROMANIA	76.07	68.54	68.93	5.11	1.12	3.17	5.52	1.20	3.26	26.95	30.60	25.83
RUSSIAN FEDERATION <sup>(1)</sup>	66.79	62.23	66.87	6.85	6.12	6.24	7.77	6.99	6.90	69.69	70.32	71.46
TURKEY <sup>(1)</sup>	57.40	66.35	63.36	3.81	4.72	4.02	4.35	5.24	4.29	30.26	21.44	28.01
UKRAINE	42.37	28.42	33.41	0.66	3.75	0.60	0.80	4.23	0.71	91.67	84.22	67.01

<sup>(1)</sup> Data only for the Black Sea Ports

<sup>(2)</sup> Individual ships detained as per cent of individual ships inspected

<sup>(3)</sup> Individual ships inspected as per cent of number of individual ships visited

## Inspection by Ship Types (in the order of 2021 top 10 inspections)

SHIP TYPES	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Bulk Carrier	2,210	36.6%	2,269	39.7%	2,160	38.4%	38.2%
General Cargo / Multipurpose	2,144	35.5%	1,859	32.5%	1,833	32.6%	33.6%
Oil Tanker	719	11.9%	654	11.4%	584	10.4%	11.3%
Chemical Tanker	459	7.6%	458	8.0%	346	6.2%	7.3%
Container Ship	212	3.5%	196	3.4%	246	4.4%	3.8%
Oil Tanker/Chemical Tanker (OILCHEM)	0	0.0%	73	1.3%	164	2.9%	1.4%
Ro-Ro Cargo	47	0.8%	47	0.8%	44	0.8%	0.8%
Livestock Carrier	81	1.3%	77	1.3%	90	1.6%	1.4%
Gas Carrier	20	0.3%	25	0.4%	26	0.5%	0.4%
Ro-Ro Passenger Ship	54	0.9%	62	1.1%	52	0.9%	1.0%
Other	90	1.5%	1	0.0%	79	1.4%	1.0%
<b>TOTALS</b>	<b>6,036</b>		<b>5,721</b>		<b>5,624</b>		

## Inspection by Ship Flag (in the order of 2021 top 10 inspections)

SHIP FLAGS	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Panama	926	15.3%	912	15.9%	986	17.5%	16.2%
Marshall Islands	631	10.5%	690	12.1%	682	12.1%	11.5%
Liberia	594	9.8%	580	10.1%	621	11.0%	10.3%
Malta	631	10.5%	575	10.1%	536	9.5%	10.0%
Russian Federation	301	5.0%	279	4.9%	318	5.7%	5.2%
Turkey	331	5.5%	269	4.7%	251	4.5%	4.9%
Hong Kong, China	191	3.2%	228	4.0%	171	3.0%	3.4%
Singapore	193	3.2%	182	3.2%	145	2.6%	3.0%
Comoros	136	2.3%	106	1.9%	141	2.5%	2.2%
Moldova, Republic of	144	2.4%	159	2.8%	131	2.3%	2.5%
Others	1,958	32.4%	1,741	30.4%	1,642	29.2%	3.8%
<b>TOTALS</b>	<b>6,036</b>		<b>5,721</b>		<b>5,624</b>		

## Detentions by Ship Types (in the order of 2021 top 10 inspections)

SHIP TYPES	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Bulk Carrier	50	23.6%	84	34.9%	60	33.7%	30.7%
General Cargo / Multipurpose	112	52.8%	91	37.8%	70	39.3%	43.3%
Oil Tanker	10	4.7%	10	4.1%	5	2.8%	4.0%
Chemical Tanker	10	4.7%	13	5.4%	6	3.4%	4.6%
Container Ship	4	1.9%	10	4.1%	9	5.1%	3.6%
Oil Tanker/Chemical Tanker (OILCHEM)	0	0.0%	0	0.0%	4	2.2%	0.6%
Ro-Ro Cargo	19	9.0%	2	0.8%	1	0.6%	0.5%
Livestock Carrier	2	0.9%	14	5.8%	15	8.4%	7.6%
Gas Carrier	0	0.0%	3	1.2%	2	1.1%	0.8%
Ro-Ro Passenger Ship	0	0.0%	1	0.4%	3	1.7%	1.0%
Other	5	2.4%	13	5.4%	3	1.7%	3.3%
<b>TOTALS</b>	<b>212</b>		<b>241</b>		<b>178</b>		

## Detentions by Ship Flag (more than 1 detentions in 2021)

SHIP FLAG	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Antigua and Barbuda	6	2.8%	4	1.7%	1	0.6%	1.7%
Bahamas	5	2.4%	4	1.7%	4	2.2%	2.1%
Bangladesh	2	0.9%	0	0.0%	1	0.6%	0.5%
Belgium	0	0.0%	0	0.0%	1	0.6%	0.2%
Cameroon	0	0.0%	0	0.0%	4	2.2%	0.6%
Comoros	15	7.1%	10	4.1%	5	2.8%	4.8%
Cyprus	0	0.0%	1	0.4%	1	0.6%	0.3%
Egypt	0	0.0%	0	0.0%	1	0.6%	0.2%
Equatorial Guinea	0	0.0%	0	0.0%	1	0.6%	0.2%
France	0	0.0%	0	0.0%	1	0.6%	0.2%
Honduras	0	0.0%	1	0.4%	1	0.6%	0.3%
Hong Kong, China	1	0.5%	9	3.7%	4	2.2%	2.2%
India	0	0.0%	0	0.0%	1	0.6%	0.2%
Italy	3	1.4%	0	0.0%	1	0.6%	0.6%
Liberia	12	5.7%	31	12.9%	18	10.1%	9.7%
Malta	12	5.7%	15	6.2%	9	5.1%	5.7%
Marshall Islands	14	6.6%	20	8.3%	16	9.0%	7.9%
Moldova, Republic of	11	5.2%	20	8.3%	10	5.6%	6.5%
Mongolia	1	0.5%	1	0.4%	1	0.6%	0.5%
Norway	0	0.0%	2	0.8%	1	0.6%	0.5%
Palau	4	1.9%	6	2.5%	3	1.7%	2.1%
Panama	45	21.2%	42	17.4%	54	30.3%	22.3%
Portugal	1	0.5%	1	0.4%	1	0.6%	0.5%
Russian Federation	6	2.8%	2	0.8%	1	0.6%	1.4%
Saint Kitts and Nevis	1	0.5%	2	0.8%	2	1.1%	0.8%
Saint Vincent and the Grenadines	2	0.9%	0	0.0%	1	0.6%	0.5%
Sierra Leone	10	4.7%	3	1.2%	4	2.2%	2.7%
Singapore	2	0.9%	7	2.9%	3	1.7%	1.9%
Tanzania, United Republic of	12	5.7%	12	5.0%	9	5.1%	5.2%
Togo	14	6.6%	6	2.5%	9	5.1%	4.6%
Ukraine	4	1.9%	2	0.8%	1	0.6%	1.1%
Vanuatu	4	1.9%	5	2.1%	7	3.9%	2.5%
Other	25	11.8%	35	14.5%	1	0.6%	9.7%
<b>TOTALS</b>	<b>212</b>		<b>241</b>		<b>178</b>		



## Major Category of Deficiencies 2019-2021

CATEGORY OF DEFICIENCIES		2019		2020		2021	
		Number	%	Number	%	Number	%
Certificates and Documents	Crew Certificates	218	1.12	220	1.42	169	1.10
	Documents	1,262	6.50	954	6.18	993	6.48
	Ship Certificates	394	2.03	417	2.70	375	2.45
SOLAS	Structural Conditions	1,337	6.88	1,264	8.19	1,309	8.54
	Emergency Systems	1,300	6.69	1,130	7.32	1,040	6.79
	Alarm Signals	0	0.00	0	0.00	0	0.00
	Radio Communications	886	4.56	611	3.96	628	4.10
	Cargo Operations Including Equipment	125	0.64	86	0.56	136	0.89
	Fire Safety	1,887	9.72	1,371	8.88	1,447	9.44
	Alarms	88	0.45	89	0.58	155	1.01
	Safety of Navigation	2,930	15.09	2,335	15.12	2,043	13.33
	Dangerous Goods	47	0.24	22	0.14	43	0.28
	Life-saving Appliances	2,686	13.83	1,991	12.89	2,007	13.10
	Propulsion and Auxiliary Machinery	1,368	7.04	976	6.32	988	6.45
	BWM	62	0.32	76	0.49	74	0.48
Pollution Prevention	Anti Fouling	2	0.01	0	0.00	1	0.01
	MARPOL Annex I	236	1.22	194	8.19	181	1.18
	Annex II	0	0.00	4	7.32	6	0.04
	Annex III	9	0.05	2	0.00	11	0.07
	Annex IV	56	0.29	45	3.96	26	0.17
	Annex V	233	1.20	165	0.56	228	1.49
	Annex VI	43	0.22	50	8.88	20	0.13
	Operational Deficiencies	0	0.00	0	0.0	0	0.00
ILO/MLC	Living Conditions	191	0.98	138	0.89	197	1.29
	Working Conditions	1,253	6.45	814	5.27	790	5.16
	Minimum Requirements for Seafarers	8	0.04	4	0.03	7	0.05
	Conditions of Employment	33	0.17	21	0.14	17	0.11
	Accommodation, Recreational	281	1.45	231	1.50	291	1.90
	Health Protection, Medical Care, Social Security	1,886	9.71	1,851	11.99	1,821	11.89
ISM		487	2.51	297	1.92	272	1.78
Other		114	0.59	84	0.54	46	0.30
TOTAL		19,422		15,442		15,321	

## Major Deficiencies by Category (in the order 2021 top 10)

DEFICIENCIES BY CATEGORY	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Safety of Navigation	2,930	15.1%	2,335	15.1%	2,043	13.33%	14.6%
Life Saving Appliances	2,686	13.8%	1,991	12.9%	2,007	13.10%	13.3%
Health Protection, Medical Care, Social Security	1,886	9.7%	1,851	12.0%	1,821	11.89%	9.8%
Fire Safety	1,887	9.7%	1,371	8.9%	1,447	9.44%	9.4%
Structural Conditions	1,337	6.9%	1,264	8.2%	1,309	8.54%	7.8%
Emergency Systems	1,300	6.7%	1,130	7.3%	1,040	6.79%	6.9%
Propulsion and Auxiliary Machinery	1,368	7.0%	976	6.3%	993	6.48%	6.6%
Documents	1,262	6.5%	954	6.2%	988	6.45%	6.4%
Working Conditions	1,253	6.5%	814	5.3%	790	5.16%	5.7%
Radio Communications	886	4.6%	611	4.0%	628	4.10%	4.2%
Others	2,627	13.5%	2,145	13.9%	2,255	14.72%	14.0%
<b>TOTALS</b>	<b>19,422</b>		<b>15,442</b>		<b>15,321</b>		

## Top 5 Deficiencies 2019-2021

2019	2020	2021
Lights, Shapes, Sound-Signals 735 (3.78%)	Emergency, Lighting, Batteries and Switches 530 (3.43%)	Lights, Shapes, Sound-Signals 491 (3.20%)
Lifeboats 573 (2.95%)	Lights, Shapes, Sound-Signals 529 (3.43%)	Lifeboats 459 (3.00%)
Emergency, Lighting, Batteries and Switches 540 (2.78%)	Lifeboats 409 (2.65%)	Auxiliary Engine 449 (2.93%)
Auxiliary Engine 519 (2.67%)	Auxiliary Engine 383 (2.48%)	Emergency, Lighting, Batteries and Switches 435 (2.84%)
ISM 487 (2.51%)	Lifebuoys Incl. Provision and Disposition 361 (2.34%)	Ropes and Wires 354 (2.31%)

## Major Detainable Deficiencies by Category 2019-2021 (in the order 2021 top 10)

DETAINABLE DEFICIENCIES BY CATEGORY	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Emergency Systems	103	15.8%	85	12.5%	97	15.1%	14.4%
Fire Safety	103	15.8%	89	13.1%	83	12.9%	13.9%
Life Saving Appliances	82	12.6%	94	13.9%	81	12.6%	13.0%
Safety of Navigation	97	14.9%	81	11.9%	78	12.1%	13.0%
Structural Conditions	46	7.0%	55	8.1%	55	8.5%	7.9%
ISM	57	8.7%	67	9.9%	54	8.4%	9.0%
Ship Certificates	20	3.1%	4	0.6%	37	5.7%	3.1%
Propulsion and Auxiliary Machinery	22	3.4%	18	2.7%	36	5.6%	3.8%
Radio Communications	16	2.5%	27	4.0%	24	3.7%	3.4%
Health Protection, Medical Care, Social Security	23	3.5%	23	3.4%	16	2.5%	3.1%
Others	84	12.9%	135	19.9%	83	12.9%	15.3%
<b>TOTALS</b>	<b>653</b>		<b>678</b>		<b>644</b>		

## Top 5 Detainable Deficiencies 2019-2021

2019	2020	2021
ISM 57 (8.73%)	ISM 67 (9.88%)	ISM 54 (8.39%)
Emergency, Lighting, Batteries and Switches 43 (6.58%)	Fire Detection and Alarm System 41 (6.05%)	Lifeboats 28 (4.35%)
Fire Detection and Alarm System 37 (5.67%)	Emergency Fire Pump and Its Pipes 29 (4.28%)	Emergency, Lighting, Batteries and Switches 25 (3.88%)
Lifeboats 33 (5.05%)	Lifeboats 27 (3.98%)	Rescue Boats 25 (3.88%)
Charts 28 (4.29%)	Rescue Boats 27 (3.98%)	Fire Detection and Alarm System 23 (3.57%)

## Major RO Related Detainable Deficiencies by Category 2019-2021 (in the order 2021 top 5)

RO RELATED DETAINABLE DEFICIENCIES BY CATEGORY	2019	2019 SHARE	2020	2020 SHARE	2021	2021 SHARE	2019-2021 SHARE
Structural Conditions	11	33.3%	6	8.1%	3	50.0%	17.7%
Radio Communications	1	3.0%	1	1.4%	1	16.7%	2.7%
Safety of Navigation	0	0.0%	10	13.5%	1	16.7%	9.7%
ISM	4	12.1%	7	9.5%	1	16.7%	10.6%
<b>TOTALS</b>	<b>33</b>		<b>74</b>		<b>6</b>		

## RO Related Detainable Deficiencies 2019-2021

2019	2020	2021
ISM 4 (12.12%)	Rescue Boats 8 (10.81%)	Beams, Frames, Floors-op. Damage 2 (33.33%)
Stability / Strength / Loading Information and Instruments 2 (6.06%)	ISM 7 (9.46%)	Doors 1 (16.67%)
Cargo & Other Hatchways 2 (6.06%)	Emergency Fire Pump and Its Pipes 4 (5.41%)	Facilities for Reception of Marine Safety Inform 1 (16.67%)
Covers (Hatchway-, Portable-, Tarpaulins, etc.) 2 (6.06%)	Fire Detection and Alarm System 4 (5.41%)	Gyro Compass 1 (16.67%)
Bulwarks & Freeing Ports 2 (6.06%)	Ventilation (Working Spaces) 4 (5.41%)	ISM 1 (16.67%)

## Top 5 MLC Deficiencies 2019-2021

2019	2020	2021
Lighting (Working Spaces) 323 (24.90%)	Ropes and Wires 341 (15.36%)	Ropes and Wires 354 (15.93%)
Access / Structural Features (Ship) 314 (24.21%)	Access / Structural Features (Ship) 308 (13.87%)	Access / Structural Features (Ship) 287 (12.92%)
Ropes and Wires 311 (23.98%)	Lighting (Working Spaces) 301 (13.56%)	Lighting (Working Spaces) 286 (12.87%)
Electrical 230 (17.73%)	Electrical 182 (8.20%)	Electrical 166 (7.47%)
Steam Pipes, Pressure Pipes, Wires (Insulation) 119 (9.18%)	Winches & Capstans 146 (6.58%)	Steam Pipes, Pressure Pipes, Wires (Insulation) 113 (5.09%)

## Top 5 MLC Detainable Deficiencies 2019-2021

2019	2020	2021
Wages 14 (43.75%)	Winches & Capstans 9 (28.13%)	Non-payment of Wages 4 (12.50%)
Cleanliness of Engine Room 6 (18.75%)	Cleanliness of Engine Room 4 (12.50%)	Winches & Capstans 4 (12.50%)
Winches & Capstans 5 (15.63%)	Wages 3 (9.38%)	Access / Structural Features (Ship) 4 (12.50%)
Anchoring Devices 4 (12.50%)	Non-payment of Wages 2 (6.25%)	Sanitary Facilities 3 (9.38%)
Other (Conditions of Employment) 3 (9.38%)	Heating, Air Conditioning and Ventilation 2 (6.25%) Ropes and Wires 2 (6.25%) Steam Pipes, Pressure Pipes, Wires (Insulation) 2 (6.25%) Access / Structural Features (Ship) 2 (6.25%)	Anchoring Devices 3 (9.38%)

## Inspection, Deficiency and Detention Data by Ship Flag 2019-2021

SHIP FLAG	NUMBER OF INSPECTIONS	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF INSPECTIONS WITH DEFICIENCIES
Algeria	2	13	0	0	1
Antigua and Barbuda	245	898	11	21	139
Azerbaijan	46	168	4	8	33
Bahamas	318	612	13	25	118
Bangladesh	15	95	3	9	9
Barbados	150	400	5	12	79
Belgium	22	48	1	2	6
Belize	293	947	11	38	207
Bermuda (GB)	6	8	0	0	2
Bolivia	2	26	1	8	2
Bulgaria	50	165	0	0	34
Cameroon	55	249	4	11	51
Canada	1	0	0	0	0
Cayman Islands (GB)	76	110	1	2	21
China	37	28	0	0	7
Comoros	383	2,148	30	123	345
Congo	1	4	0	0	1
Cook Islands	263	1,070	12	29	199
Croatia	25	23	0	0	9
Curacao	3	9	0	0	2
Cyprus	164	205	2	6	42
Denmark	113	394	1	1	81
Dominica	5	5	0	0	2
Egypt	81	349	1	1	66
Equatorial Guinea	2	9	1	1	2
Ethiopia	24	38	0	0	4
Faroe Islands	1	0	0	0	0
Finland	2	11	0	0	2
France	10	53	1	1	9
Gabon	7	42	0	0	7
Georgia	10	43	0	0	9
Germany	17	67	1	1	11
Gibraltar (GB)	29	87	0	0	14
Greece	341	270	1	2	69
Guyana	3	11	0	0	3
Honduras	25	122	2	3	22
Hong Kong, China	590	1,020	14	23	170
India	25	80	1	4	12
Indonesia	3	18	0	0	2
Iran, Islamic Republic of	8	23	0	0	5
Ireland	2	0	0	0	0
Isle of Man (GB)	77	119	0	0	32
Israel	6	7	0	0	5
Italy	171	286	4	7	82
Jamaica	3	12	0	0	2
Jordan	3	2	0	0	1
Kazakhstan	2	0	0	0	0
Korea, Republic of	16	28	0	0	6
Kuwait	2	4	0	0	1

## Inspection, Deficiency and Detention Data by Ship Flag 2019-2021 (Continue)

SHIP FLAG	NUMBER OF INSPECTIONS	NUMBER OF DEFICIENCIES	NUMBER OF DETENTIONS	NUMBER OF DETAINABLE DEFICIENCIES	NUMBER OF INSPECTIONS WITH DEFICIENCIES
Latvia	3	0	0	0	0
Lebanon	29	76	1	7	22
Liberia	1,795	4,072	61	136	718
Libyan Arab Jamahiriya	6	5	0	0	3
Lithuania	3	42	0	0	3
Luxembourg	21	30	0	0	7
Malaysia	5	3	0	0	1
Malta	1,742	3,052	36	79	646
Marshall Islands	2,003	3,613	50	99	651
Moldova, Republic of	434	2,263	41	151	382
Mongolia	13	155	3	7	11
Montenegro	9	27	1	2	4
Morocco	1	2	0	0	1
Netherlands	173	430	4	8	86
Niue	5	36	1	2	4
Norway	107	127	3	5	30
Pakistan	5	46	1	5	2
Palau	242	1,200	13	73	208
Panama	2,824	9,433	141	483	1,655
Philippines	47	39	1	3	8
Portugal	177	431	3	6	78
Qatar	6	4	0	0	2
Russian Federation	900	2,277	11	47	590
Saint Kitts and Nevis	108	407	5	16	85
Saint Vincent and the Grenadines	118	361	3	11	80
Sao Tome and Principe	16	197	0	0	16
Saudi Arabia	7	8	0	0	2
Seychelles	5	8	0	0	3
Ship registration withdrawn	1	6	1	1	1
Sierra Leone	369	1,756	17	59	326
Singapore	520	1,181	12	27	218
Spain	2	12	1	2	1
Sri Lanka	4	0	0	0	0
Switzerland	23	55	1	2	9
Syrian Arab Republic	19	201	5	37	17
Tanzania, United Republic of	265	2,259	33	161	251
Thailand	19	12	0	0	5
Togo	375	2,270	29	134	348
Tunisia	2	3	0	0	1
Turkey	851	2,058	1	1	525
Tuvalu	50	172	5	11	24
Ukraine	79	480	7	25	77
United Arab Emirates	1	4	0	0	1
United Kingdom	34	59	1	2	10
United States	7	27	0	0	6
Vanuatu	217	972	16	47	189
Vietnam	7	14	0	0	4
<b>TOTAL</b>	<b>17,384</b>	<b>50,211</b>	<b>633</b>	<b>1,987</b>	<b>9,237</b>



## RO Inspection Deficiency and Detention Data 2019-2021

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	10	0	0	145	2	6	9
American Bureau of Shipping	1,927	1	1	3,299	42	72	667
American Register of Shipping	55	0	0	155	5	10	26
ASIA Classification Society	3	0	0	0	0	0	0
Asia Shipping Certification Services	1	0	0	0	0	0	0
Bulgarian Register of Shipping	352	3	1	1,573	25	88	286
Bureau Veritas	3,082	2	2	7,380	102	279	1,353
China Classification Society	357	0	0	362	4	17	69
Classification Bureau of Indonesia	1	0	0	0	0	0	0
Columbus American Register	45	1	1	274	3	12	44
Cosmos Marine Bureau Inc.	16	0	0	130	2	13	15
CR Classification Society (CCRS)	8	0	0	28	0	0	6
Croatian Register of Shipping	48	0	0	115	4	10	23
Cyprus Bureau of Shipping	2	0	0	1	0	0	1
Danforth Marinesurvey and Certification Services	1	0	0	0	0	0	0
DNV AS (DNV)	416	0	0	907	10	22	179
DNV GL AS	3,456	1	1	6,515	87	168	1,246
Dromon Bureau of Shipping	727	28	5	3,769	45	194	638
Germanischer Lloyd	49	0	0	57	0	0	16
Guardian Bureau of Shipping (GBS)	15	0	0	220	5	30	14
Hellenic Register of Shipping	2	0	0	26	0	0	1
Indian Register of Shipping	183	0	0	829	10	27	138
Intermaritime Certification Services, ICS Class	76	1	1	329	10	44	55
International Maritime Register	6	0	0	36	0	0	6
International Naval Surveys Bureau	546	1	1	2,425	26	101	435
International Register of Shipping	175	0	0	856	9	79	153
International Ship Classification	13	0	0	18	0	0	8
Intertek Maritime Bureau	4	0	0	53	1	17	4
Iranian Classification Society	10	0	0	43	0	0	7
Isthmus Bureau of Shipping, S.A.	244	3	2	1,202	14	29	188
Isthmus Maritime Classification Society S.A.	3	0	0	3	0	0	1
Korea Classification Society	13	0	0	48	0	0	6
Korea Ship Safety Technology Authority	1	0	0	0	0	0	0
Korean Register	373	0	0	805	6	19	147
Libyan Surveyor Mr. Sif Ennasar Abdulhamid Giahmi	1	0	0	4	0	0	1

## RO Inspection Deficiency and Detention Data 2019-2021 (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	2,875	6	3	5,937	71	145	1,130
Macosnar Corporation	90	0	0	417	10	33	66
Maritime Bureau of Shipping	65	0	0	473	4	11	60
Maritime Lloyd (ML)	199	13	3	1,622	28	119	188
Mediterranean Shipping Register (MSR)	167	17	4	720	12	67	154
National Shipping Adjuster Inc.	132	0	0	720	14	63	105
Nippon Kaiji Kyokai (NK/Class NK)	3,741	9	6	8,304	105	246	1,582
No Class	1	0	0	0	0	0	0
Other	380	6	1	2,046	25	104	320
Overseas Marine Certification Services	81	0	0	296	4	16	60
Panama Marine Survey and Certification Services Inc.	2	0	0	8	0	0	1
Panama Maritime Documentation Services	50	0	0	99	1	3	23
Panama Maritime Surveyor Bureau Inc.	3	0	0	14	0	0	3
Panama Register Corporation	1	0	0	9	0	0	1
Panama Shipping Registrar Inc.	40	1	1	119	1	1	28
Phoenix Register of Shipping	673	12	4	3,199	51	182	542
Polski Rejestr Statkow (Polish Register of Shipping)	169	2	1	565	8	36	100
Qualitas Register of Shipping S.A	97	0	0	380	3	9	66
R.J. Del Pan	2	0	0	5	0	0	1
Register of Shipping (Albania)	1	0	0	0	0	0	0
RINA Services S.p.A.	1,255	0	0	2,630	36	89	550
Russian Maritime Register of Shipping	1,650	2	1	4,785	36	118	1,100
Russian River Register	2	0	0	4	0	0	2
Ship Classification of Malaysia	2	0	0	9	0	0	2
Shipping Register of Ukraine (SRU)	291	2	2	1,627	24	98	258
Turkish Lloyd	460	0	0	1,278	1	1	333
Union Bureau of Shipping	5	0	0	22	0	0	4
Universal Maritime Bureau Ltd	3	0	0	21	1	5	3
Vega Register Inc.	47	0	0	269	7	30	42
Veritas Register of Shipping	159	2	1	779	8	28	135
Vietnam Register	8	0	0	16	0	0	5
<b>TOTAL</b>	<b>24,864</b>	<b>113</b>	<b>42</b>	<b>67,964</b>	<b>862</b>	<b>2,641</b>	<b>12,601</b>

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.

NOTES

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NOTES

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