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TECHNICAL PUBLICATION

PSC Inspection Regime

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INTRODUCTION

Dromon Bureau of Shipping (DromonClass) establishes mandatory provisions to ensure vessels' compliance with the relevant International Regulations.

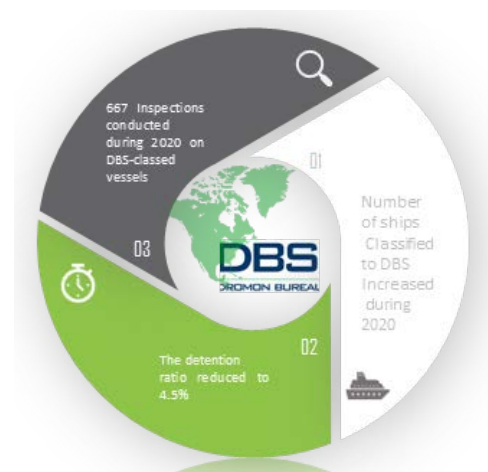
With a continues effort to comply with existing and forthcoming Regulatory updates, DromonClass ensures that necessary measures to improve vessels' safety and crew security are sited for all fleet. By using reliability, critical tools and methodologies. DromonClass identifies best practices for ship operations and operational efficiencies.

To assist each ISM Manager and Operator to improve vessel's operational efficiency, DromonClass provides a wide range of tools and services, including the preparation of the vessel for Port State Control Inspections. By raising awareness and increasing DromonClass standards for vessels, along with actions taken by the Marine Division, this resulted in an increase of DromonClass fleet and in a **decrease of detention ratio** over the last years.

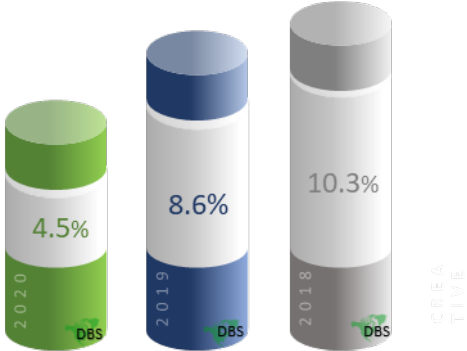
A more detailed research has been carried out this year, from both qualitative and quantitative perspectives. The Port State Control (PSC) reports have been assessed by analysing inspections in Paris, Black Sea, Mediterranean and Tokyo MoUs and statistics have been generated with collecting detainable remarks from the database to have following conclusions presented. By presenting these facts, we aim to eliminate vessels' detentions.

Significant accomplishments have been achieved, such as the collection of baseline data on substandard defective areas.

Regarding the number of vessels that DromonClass performed Class and Statutory surveys/ audits, it has been noticed that there is a steadily increase. The increase on the number of ships resulted the increase of inspections and simultaneously the number of deficiencies onboard DromonClass fleet.



The detention ratio in Paris, Mediterranean, Black Sea, Tokyo and MoUs has been reduced considerably to 4.50%, as shown in the below pie chart.



IMPACT FROM COVID-19

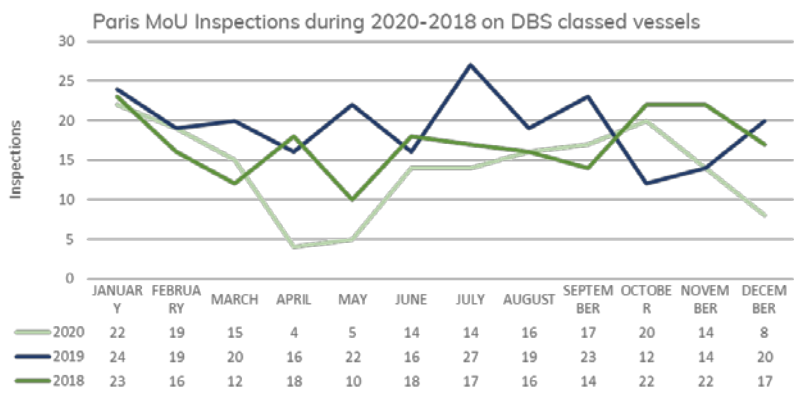
2020 has proven to be among the toughest years in the maritime industry. The global challenge spread around the world, called COVID-19 pandemic has resulted shipping industry to suffer but Europe endeavoured keeping ports open allowing vessels' to operated and delivery of essential goods.

Since the beginning of the pandemic actions taken by DromonClass ensured the trading continuity of the fleet, such as the issuance of e-certificates for the vessels from April 2020. Our e-certificates can be verified online, through verify.dromon.com. Having in mind that Ship Owners, flag Administrations and Port State Control Authorities will be needing a tool to verify any e-certificate issued during the COVID-19 crisis period, we have safeguarded our fleet from any dispute that could be raised.

DromonClass Marine Division, Surveyors, Auditors and Inspectors have been in service through the whole pandemic crisis and continue to provide high quality services in these bizarre circumstances.

The line graph shows Paris MoU inspections on DromonClass vessels for the periods of January 01 to December 31, 2020, 2019 and 2018.

The PSC inspections carried out during the period March 01 to May 31, 2020 had suddenly declined, meaning that difficulties affected the PSC Authorities in conducting inspections during that period. However, after the end of May the inspections had increased gradually.

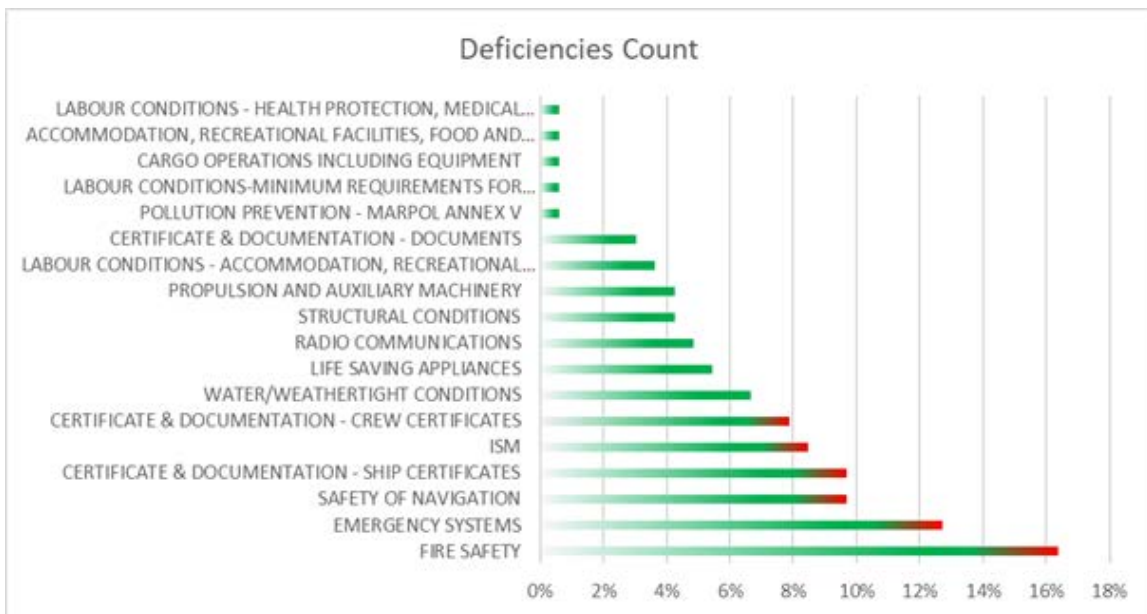


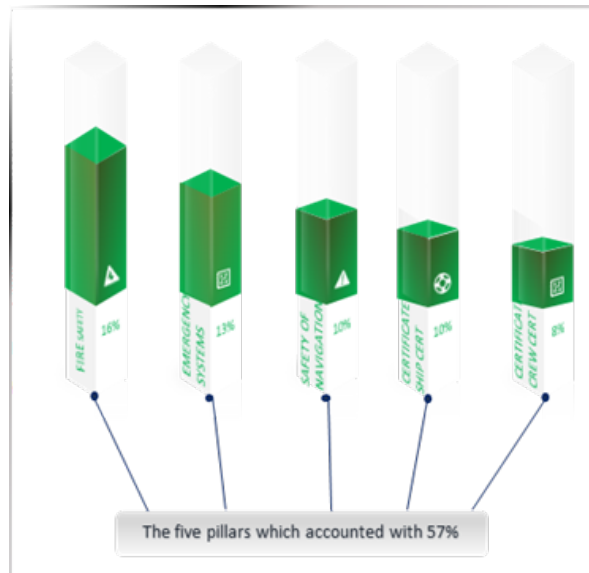
SUMMARY OF DETAINABLE DEFICIENCIES

Among other tasks, DromonClass wishes to eliminate sub-standard operation of the fleet and enhance vessels' condition and their equipment, improving full ship's safety.

By monitoring the PSC inspections, a systematic approach has been established for identifying critical grounds. The data collected during PSC inspections is being used as an input in the Marine Division's database. By analyzing the data, a reliable base for determining the most serious grounds to prevent a ship being detained are found.

The below graph is an illustration of the percentage of detainable deficiencies as per their area, imposed on board DromonClass fleet ranking significantly detectable whose occurrence is indistinguishable.





According to indicators evaluated this year, Fire Safety reached 16%, thus being the area with the most detainable deficiencies. In addition, Emergency systems is defined as frequent observation recorded over the last years. Both areas are observed as to have a detainable impact.

The pillars with most detainable deficiencies are related to:

- Fire Safety;
- Emergency Systems;
- Safety Of Navigation
- Certificate & Documentation - Ship Certificates; And
- Certificate & Documentation - Crew Certificates;

accounted up to 60%.

During the period from 2018 to 2020, there was a percentage drop on the detainable remarks. By this is shown that DromonClass has efficiently focused and handled defective items which have been identified through the previous years. Efforts and awareness raised for reducing LIFE SAVING APPLIANCES related remarks adopted during 2020, achieved a drop of about 4%.

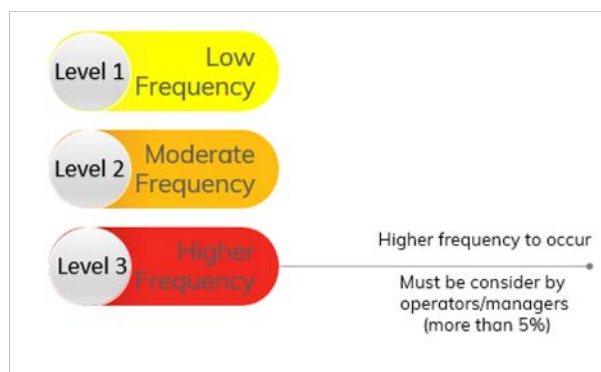
During 2020, the proportion of CERTIFICATE & DOCUMENTATION reached its peak on about 10%.

A matrix has been developed based on the deficiencies' frequency to define the significant detainable remarks as it is indicated on the below figure. The matrix concludes that the most likely detainable deficiencies are related to the five above-mentioned areas, which can be considered very critical to cause detention. Additionally, below table illustrates the areas of detainable

deficiencies that occurred on board with low and moderate frequency and are colored with yellow and orange, respectively.

DromonClass continuously provides services to Owners and ISM Managers and conducts deep inspection database analysis to achieve vessel's compliance with International Regulations and relevant standards.

Lessons learned from data gathering during the past years have minimized the risk of having detainable remarks by also targeting to a specific geographical area based on the frequency of detentions. The objective for of improving and increase of reliability can reward vessels by achieving less frequent inspections and detentions.

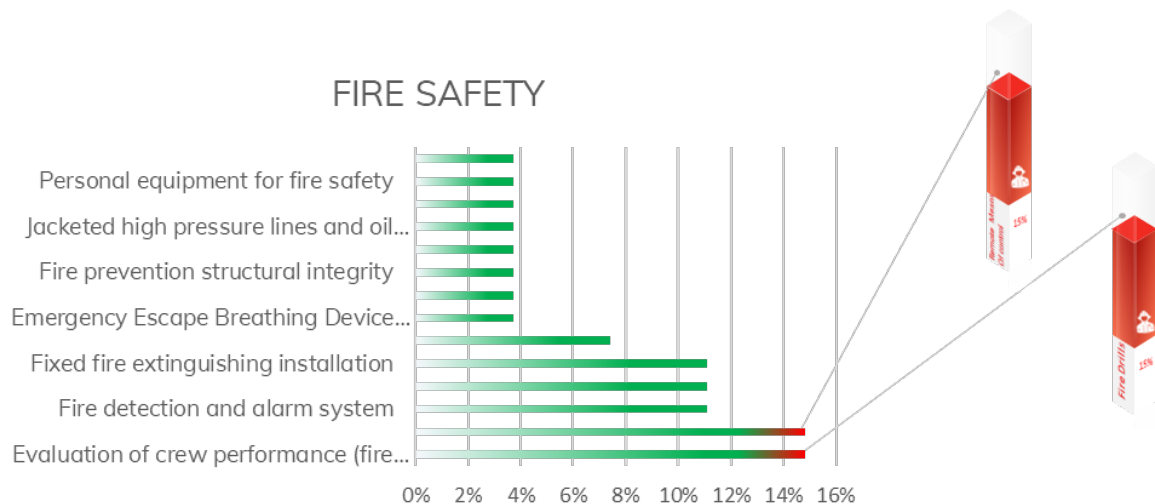


All detainable remarks have been sorted, while further analysis has been implemented to conclude on a general picture and overall ship detention remarks. The top categories for grounds during PSC inspections can be identified from the table below.

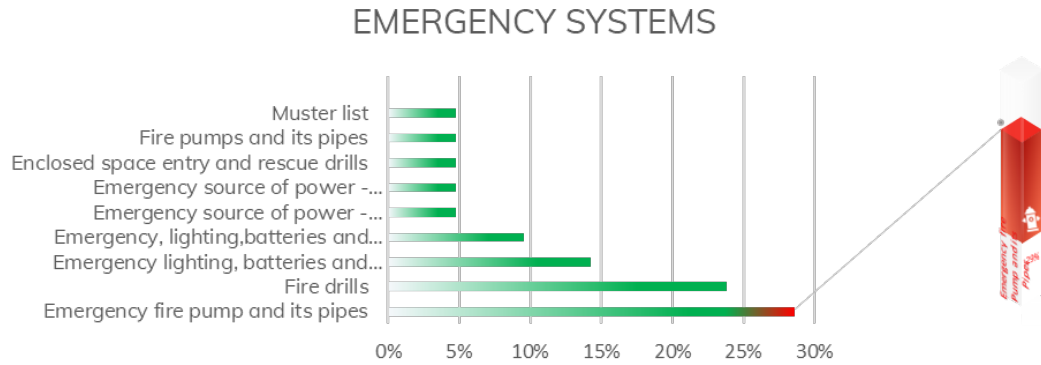
AREA	PROPORTIONATE
ISM	8%
Charts	5%
Emergency fire pump and its pipes	4%
Fire drills	3%
Ventilators, air pipes, casings	2%
Auxiliary engine	2%
MACHINERY SPACE OPENINGS	2%
Cargo Ship Safety Equipment (including exemption)	2%
Remote Means of control (opening,pumps,ventilation,etc.)	2%
Machinery spaces	2%
Evaluation of crew performance (fire drills)	2%
Endorsement by flagstate	2%
Fire detection and alarm system	2%
Cargo Ship Safety Construction (including exempt.)	2%
Fire doors/openings in fire-resisting divisions	2%
Fire pumps and its pipes	2%
Emergency lighting, batteries and switches	2%
Fixed fire extinguishing installation	2%
Manning specified by the minimum safe manning doc	1%
Cleanliness	1%
Nautical publications	1%

The below chart demonstrates the outmost imposed detainable sub-items in respect to the five pillars with the higher percentage among other areas.

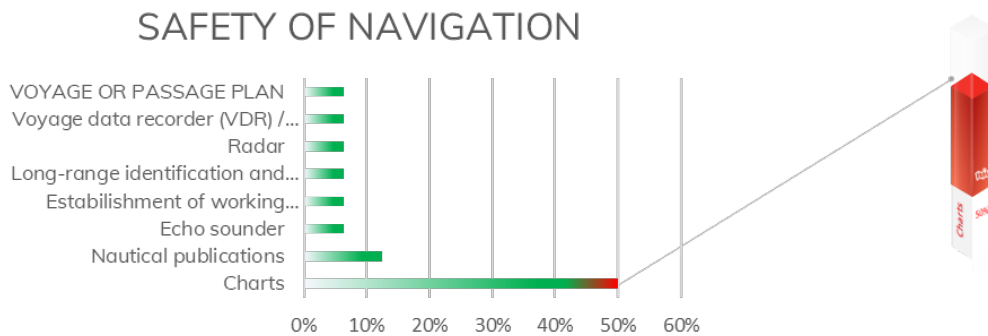
The evaluation of crew performance (fire drills) and Remote Means of control in Machinery spaces (opening, pumps, ventilation, etc.) are dominated by the defective items related to Fire Safety. A distinctive evenly contribution of the Fire doors/openings in fire-resisting divisions, Fire detection and Fixed fire extinguishing installation is evident with weight of 11%.



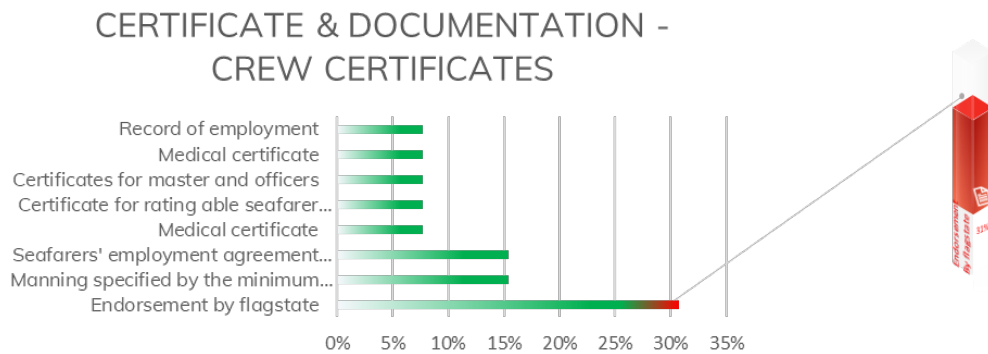
According to the EMERGENCY SYSTEMS chart, it can be observed that more focus must be given to the Emergency fire pump and its pipes and fire drills are prevailing for this area. Emergency fire pump gives the highest weighting for the detainable sub-items by 29% while Fire drills accounted for 24%.



Awareness must be raised to the Charts. As it can be observed that detainable remark related to Charts have significantly higher value than in other grounds. Based on this, it is concluded that PSC targets to Nautical Charts to ensure that the ships meet international safety.



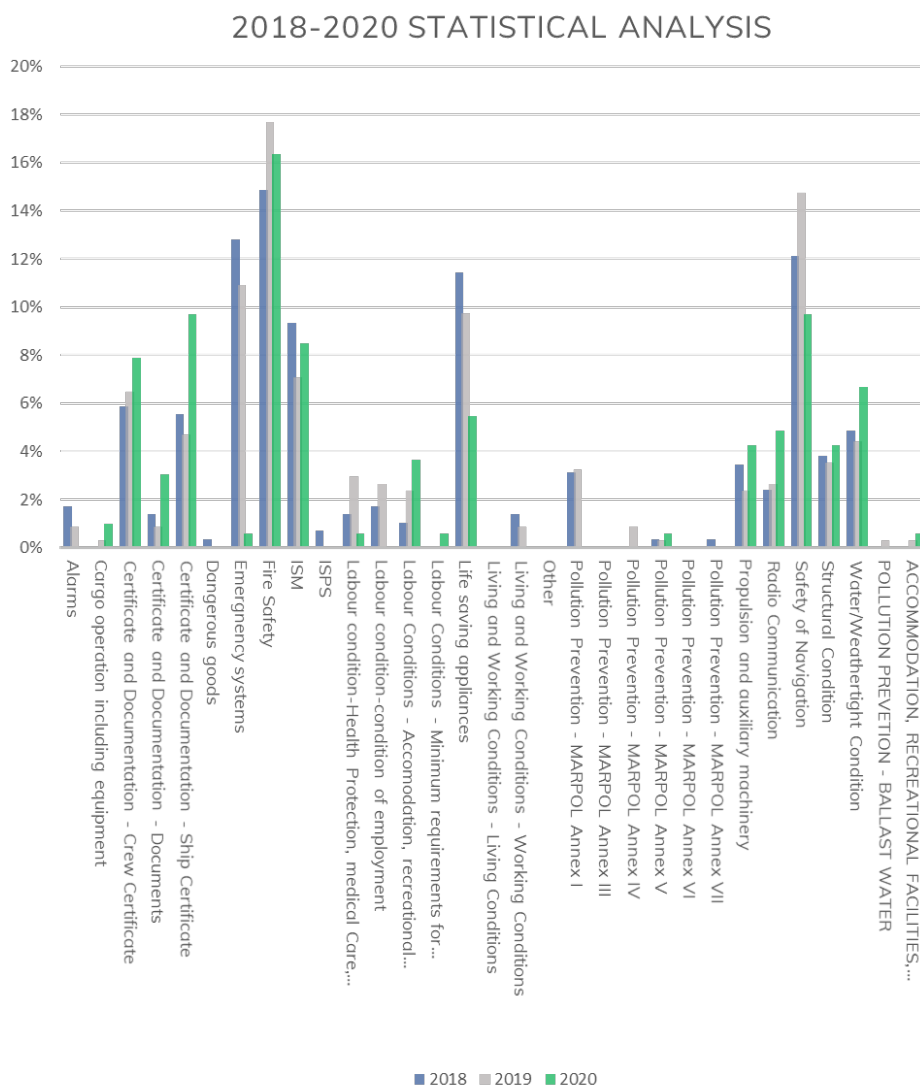
The CERTIFICATE & DOCUMENTATION - CREW CERTIFICATES related took high weight on detainable remarks during this year. Endorsement by flag state considered as remark with percentage higher than others, with a value under 35%.



COMPARISON OF PSC INSPECTION OUTCOMES

DromonClass optimizes the outcome of decisions that is based on the effort and focus on data analyze, since our Organization devotes significant time to minimize the occurrence of the detainable deficiencies and implement innovative solutions.

The below chart demonstrates the percentage of the detainable deficiencies recorded on onboard upon completion of the inspections by Paris, Black Sea, Mediterranean and Tokyo MOU from 2018 to 2020.



The chart concludes that the effort and focus on the most critical detainable remarks observed the previous year, resulted in a steady improvement over the last three years, having the detention ration at the lowest level. Therefore, a general downward trend for 2020 has been noticed.

In 2020 the Safety of Navigation and Life Saving appliances related detentions counted a percentage of 10% and 5 % respectively which seems that there is a substantial decrease compared to 2018 and 2019.

In addition, considering the awareness raised by the Marine Division for Fire Safety and ISM related detentions has successfully diminish the percentage values comparatively to the total detainable remarks.

Total deficiencies recorded in Life Saving Appliances were 9 out of total 165 defective items. Thus, a decrease is shown from 10% and 11% in 2019 and 2018 respectively, to 5% in 2020.

Overall, the proper planning and preparation for PSC Inspections, the organized inspections on board DromonClass fleet, and the use of data lead to a reduction on detainable deficiencies.

It is worth to mention, that the number of deficiencies in the following areas were declined:

Area	WEIGHT 2020 (-%)	
Alarms	0%	-1%
Fire Safety	16%	-1%
Labour condition-Health Protection, medical Care, Social security	1%	-2%
Labour condition-condition of employment	0%	-3%
Life saving appliances	5%	-4%
Living and Working Conditions - Working Conditions	0%	-1%
Pollution Prevention - MARPOL Annex I	0%	-3%
Pollution Prevention - MARPOL Annex IV	0%	-1%
Safety of Navigation	10%	-5%

DROMON CIC ON CREW CERTIFICATES

The detainable deficiencies set as critical based on the frequency and increase compared with 2019 are connected to the area of Certificate & Documentation – Crew Certificates.

This area is selected among the rest, with a weight of 16%, therefore actions will be taken and addressed within 2021. In line with this, DromonClass Marine Division shall issue a Circular with the Concentrated Inspection Campaign (CIC) that shall take place from April to June 2021.

2021 CIC OF PARIS AND TOKYO MOUS

The Annual Report of Paris MoU refers that a CIC on Stability (General) will be conducted within 2021. DromonClass will inform all parties concerned in due time on the requirements of this CIC and will provide further guidelines by releasing a Circular with a questionnaire.

For more information, please send an email to psc@dromon.com
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