



Providing the **best services**,
Creating a **better world**



Port State Control Annual Report 2018

Korean Register of shipping(KR)

Contents

03 Preface

04 KR's Activities on PSC

05 Overview of KR PSC Performance

10 KR's Preventive Measures against PSC Detention

10 PSC Hub on the KR e-Fleet V2 Program

11 PSC Seminar and Training

12 Additional Safety Measures

13 KR PSC Performance in Major PSC MOUs

14 Tokyo MOU

17 Paris MOU

20 Indian Ocean MOU

22 United States Coast Guard(USCG)

Note : Data and information provided in this report are for informational purpose only and are not intended for commercial purpose. Although every care has been taken to ensure the accuracy of the information provided herein, Korean Register of Shipping accepts no liability for any errors on data, or conclusions that may appear in this report.

It is with great pleasure that Korean Register of Shipping (KR) present the 2018 PSC Annual Report, which marks the 18th report published since 2008

With the continued concerns over the marine pollution protection and ship's safety, KR, as a world-leading, technical advisor to the maritime industry, dedicates itself promoting the safety of life at sea and protecting the environment as part of our core mission.

KR's priorities in 2018 have continued to implement a wide ranging of preventive safety measures, including Ship Route Tracking & PSC Pre-inspection Services, Fleet Monitoring Scheme, PSC Seminars and practical education for ship owners/operators, management companies and other marine industry personnel, working in close cooperation with major PSC MOUs and port authorities—the Australian Maritime Safety Authority (AMSA) and the United States Coast Guard (USCG).


With the effect of the safety initiatives, KR has been qualified on the 'High Performance Level' in the leading Port State Control jurisdictions—the Paris/Tokyo/Indian Ocean Memorandums of Understandings (MOU)—over the consecutive years, and in particular, no KR class-related detention has been reported in the US Coast Guard(USCG) since 2002.

This report highlights the KR's activities and key achievements in playing a pivot role to sustain ship's safety and marine pollution protection, and contains information on the descriptive and complemented regional statistics and figures of Tokyo MOU, Paris MOU, Indian Ocean MOU and USCG.

We hope this annual report will deliver valuable and collective insights to make risk-informed decisions on safety operations in PSC matters, and extend our sincere appreciation for the support and contributions to KR.

Survey Team
Korean Register of shipping

KR's Activities on PSC

- 
- 05 Overview of KR PSC Performance in major PSC MOUs**
 - 11 KR's Preventive Actions against PSC Detentions**
 - 10 PSC Hub on the KR e-Fleet V2 Program**
 - 11 PSC Seminar and Training**
 - 12 Additional Safety Measures**

Overview of KR PSC Performance

- No KR class-related detention was reported in the Tokyo MOU and the USCG during 2018, and KR had continued, in particular, on its zero detention records in USCG since 2002
- KR was renowned as one of the top-ranked classification societies, entitled with the 'High Performance Level' in each of the three leading PSC regimes—Tokyo MOU, Paris MOU and USCG, amongst the International Association of Classification Societies (IACS) members over the consecutive years

<KR PSC Performance for a 3-year average (2016-2018) in major PSC MOUs>

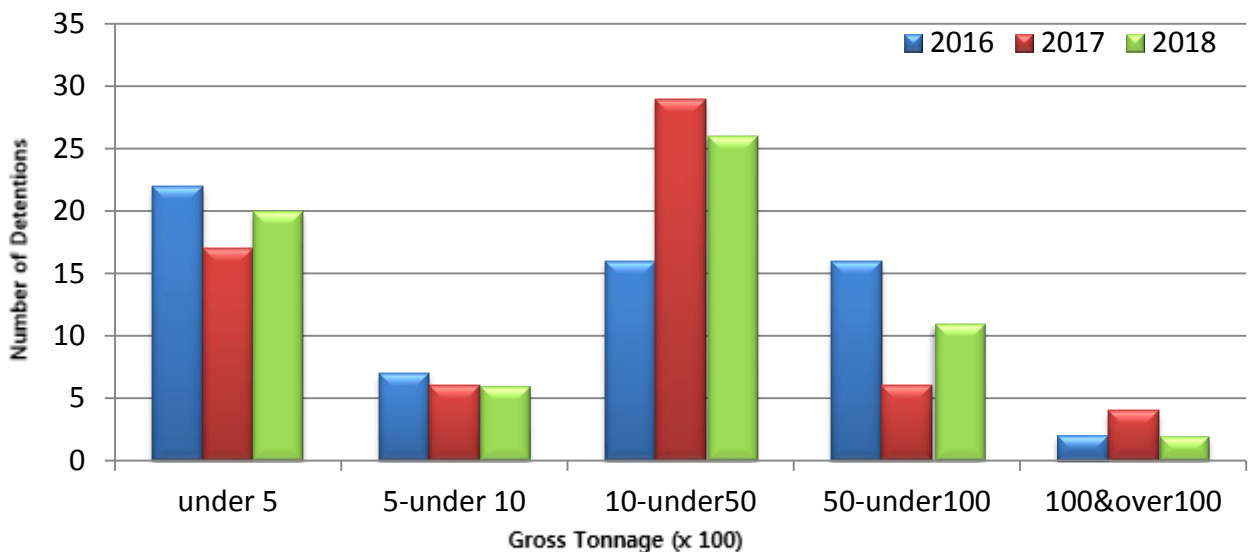
2016 -2018		Tokyo MOU	Paris MOU	USCG
No. of Ship Inspected	KR	9,545	1233	825
	IACS*	110,323	65,610	26,976
RO-related Detention	KR	2	2	0
	IACS	77	117	11
Detention Ratio	KR	<u>0.02%</u>	<u>0.16%</u>	<u>0%</u>
	IACS	<u>0.07%</u>	<u>0.17%</u>	<u>0.04%</u>

* IACS full members: American Bureau of Shipping (ABS); Bureau Veritas (BV); China Classification Society (CCS); Croatian Register of Shipping (CRS); DNV GL; Indian Register of Shipping (IRS); Korean Register of Shipping (KR); Lloyd's Register (LR); Nippon Kaiji Kyokai (Class NK); Polish Register of Shipping (PRS); Registro Italiano Navale (RINA); and Russian Maritime Register of Shipping (RS).

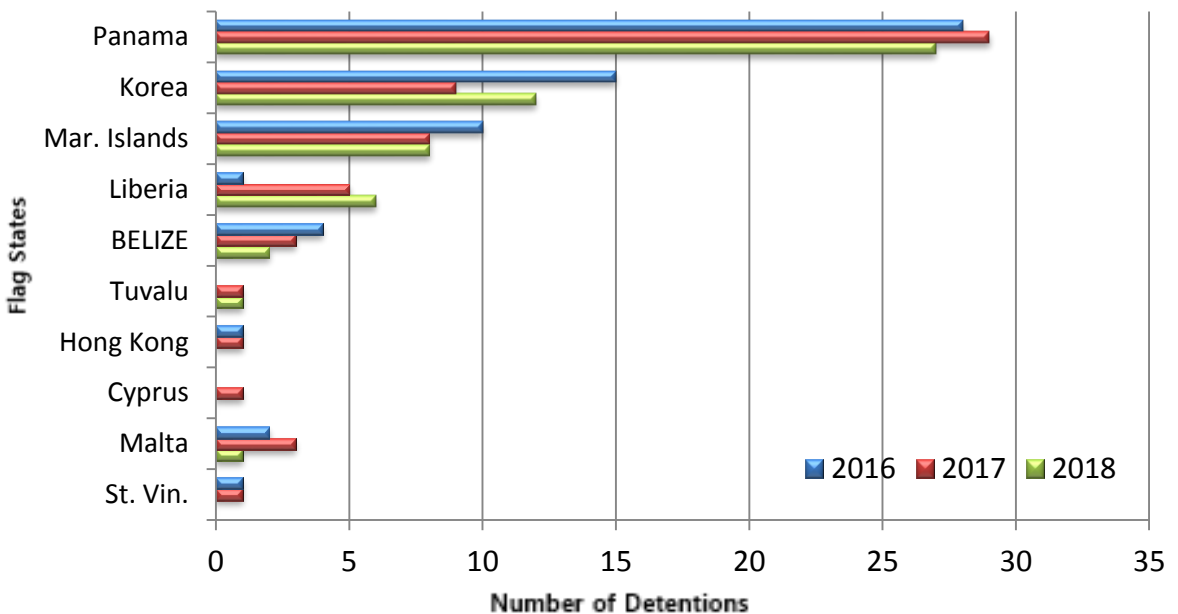
Detentions by Gross Tonnage and Flag State

- Detention of vessels, with a gross tonnage of 10,000 - 50,000 lead the PSC detention count in 2018, and the overall count was on a slight increase from 62 to 65 in comparison to the previous year
- Panama flagged vessels continued to lead the detention account with the rates of the accounted for 41.5%, followed by Rep. of Korea and Marshall Islands with 18.5% and 8.0% each in 2018

<PSC Detentions by Gross Tonnage>



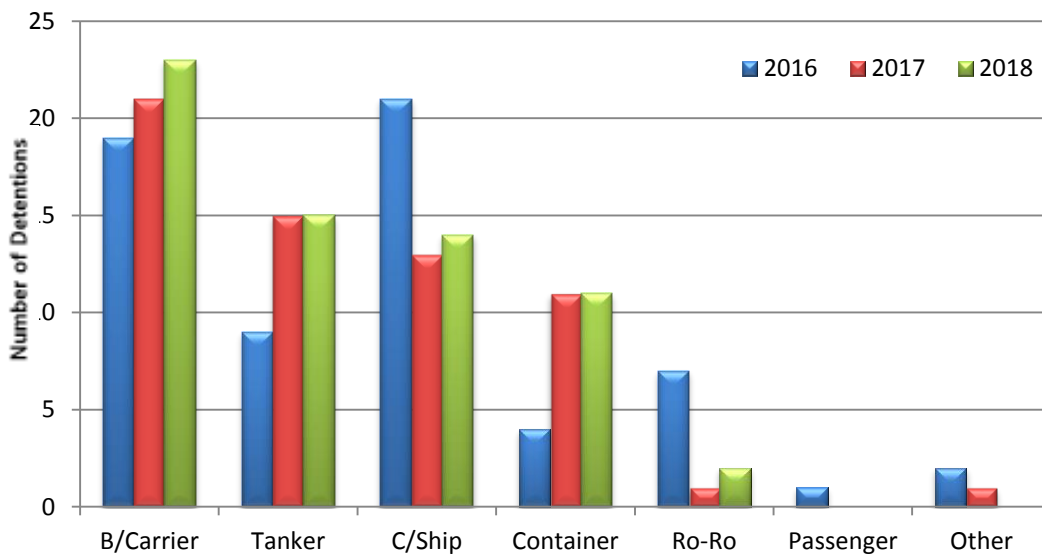
<Flag State PSC Performance>



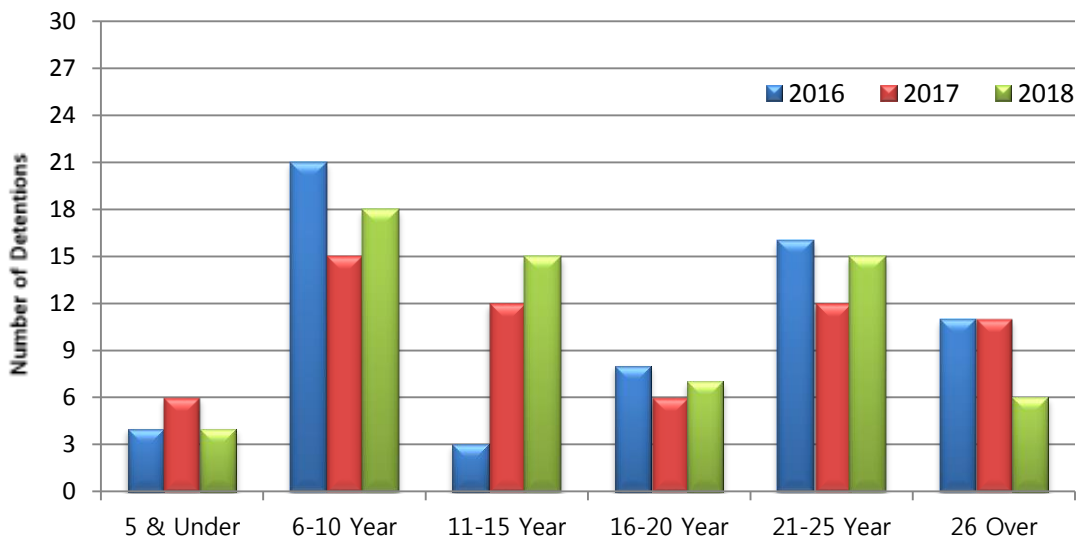
Detentions by Ship Type and Age

- Bulk carriers, leading the PSC detention count, accounted for 33.8% of the overall detentions during 2018, with detainable deficiencies – Fire Safety, Life-saving appliances and ISM related deficiencies
- Ships over the age of 6 to 10 years were the highest on the record with detainable deficiencies involving lack of crew's safety knowledge and training to conduct emergency response drills and competence in using safety equipment

<PSC Detentions by Ship Type>



< PSC Detentions by Ship Age>

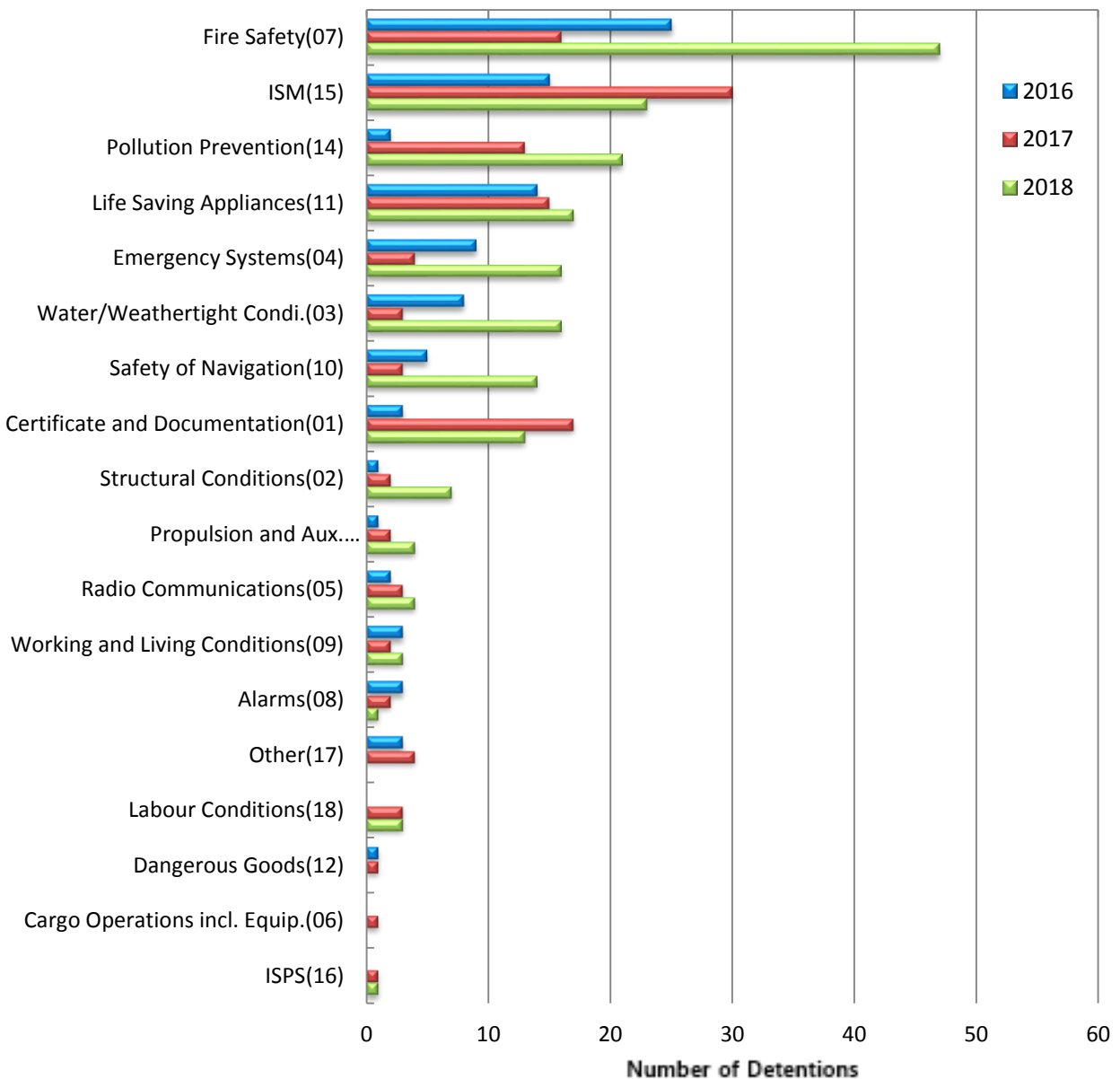


Categories of Detainable Deficiencies(Action Code 30)

- Major PSC detainable deficiencies were found in the areas of Fire Safety(22.1%), Pollution Prevention(11.4%) and ISM(16.1%)

“Detainable Deficiencies(Detentions)” means intervention action taken by the Port State when the condition of the ship or its crew does not correspond substantially with the applicable conventions to ensure that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment, whether or not such action will affect the scheduled departure of the ship

<Categories of PSC Detainable Deficiencies >

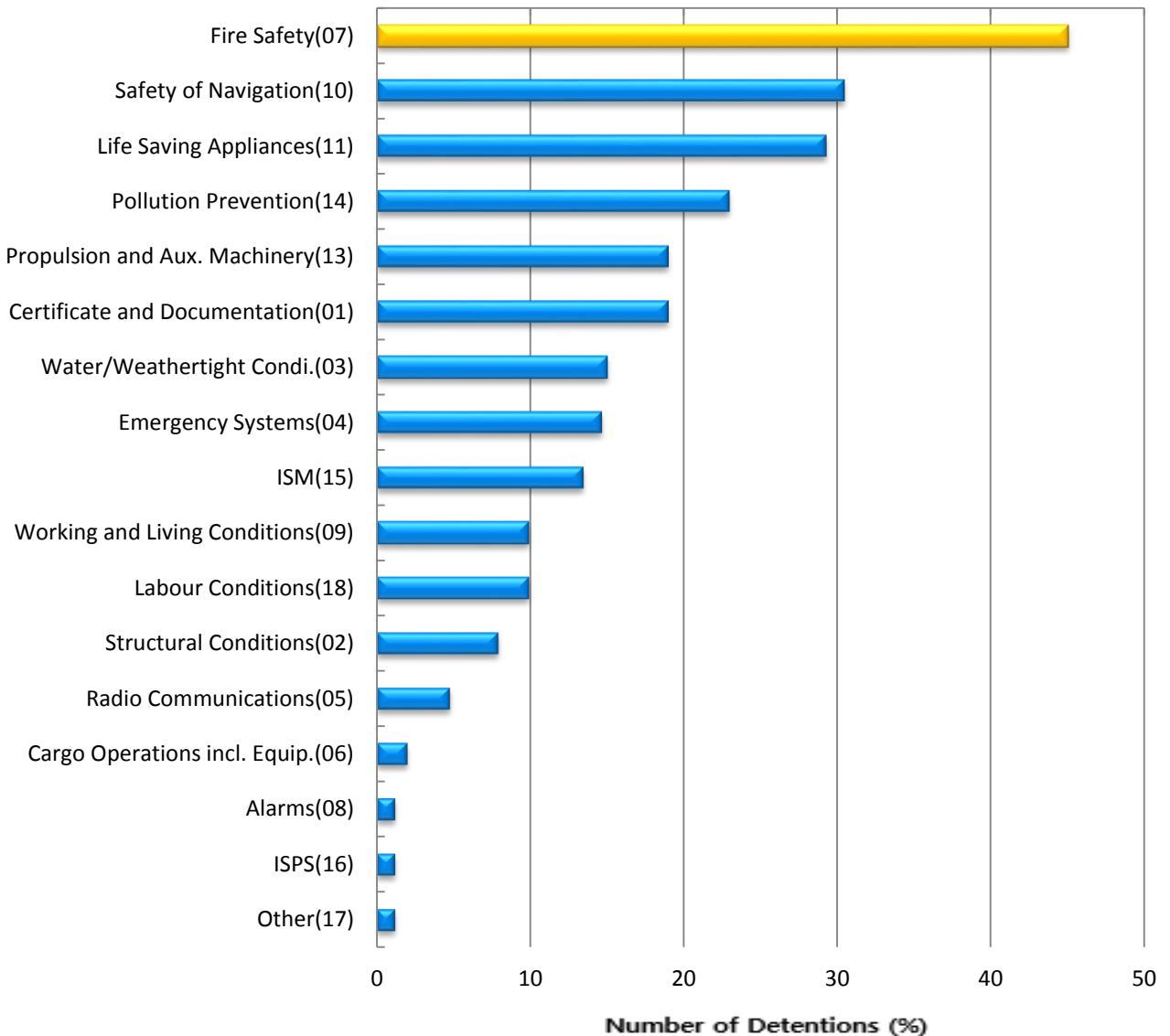


Categories of Deficiencies(Excepting Action Codes 30)

- A 10-percent random selection of KR-classed vessels with deficiencies recorded in Tokyo and Paris MOUs represented that Fire Safety was the highest on record with a rate of 18.3%, followed by Safety of Navigation and Life Saving Appliance with 12.3% and 11.9% respectively in 2018

“Deficiency” means a condition found not to be in compliance with the requirements of the relevant convention. Serious deficiencies contribute to the vessel being substandard or unseaworthy

<Categories of PSC Deficiencies >



PSC Hub on the KR e-Fleet V2 Program

- KR launched a new Port State Control(PSC) Hub, "KR E-fleet V2 (<https://e-fleet.krs.co.kr>)", allowing its users to access all guides and various/multiple information on PSC with a single login.
- Key features includes:
 - 1) PSC Information by region, in the form of a checklist to allow Ship owners/operators to use prior to arrival into port - The PSC information of countries where PSC detention is frequent is provided in the form of a checklist by region, so that the customers can refer to it, when preparing for a PSC inspection.
 - 2) PSC Guidance Book developed by KR with up-to-date information gathered from KR classed ships in PSC detentions
 - 3) PSC Checklist for Ship Owners/Operators with latest PSC trends and issues involved

Survey Fleet Status

Not Due	4
Due	3
Over Due	32

Vessels

#	Ship Type	Vessel	T.GTT
1		3	
2	BULK CARRIER	17	1,090,000
3	CARGO SHIP		
4	CHEMICAL TANKER		
5	CONTAINER SHIP	10	1,082,602
6	GAS CARRIER	1	47,454

COMMON

- Major PSC Deficiencies
- PSC Deficiency Data
- PSC Monitoring
- PSC Information
- PSC Annual Report

PSC CHECKLIST

- PSC Checklist
- PSC Guidance Book
- PSC Information by region

Regional Information:

- Vancouver:** Areas in Canada and Alaska state of U.S.A.
- Seattle:** Washington state, Portland in Oregon state of U.S.A.
- Los Angeles:** Western America (Excluding Minnesota, Iowa, Missouri, Arkansas) and the north central states (Excluding New Mexico, Texas, Kansas, Oklahoma), Western Mexico
- Houston:** New Mexico, Kansas, Oklahoma, Louisiana (Lake Charles), Texas State, Eastern Mexico, Panama, Cuba, Central America, Ecuador, Colombia, Venezuela, Guyana, Peru and the Caribbean countries
- Panama:** Panama, Cuba, Central America, Ecuador, Colombia, Venezuela, Guyana, Peru
- New York:** Missouri, Arkansas eastern regions except the west and Tennessee, northern regions, including South Carolina State
- New Orleans:** Louisiana (Excluding Lake Charles), Mississippi, Alabama, Florida, Georgia, Missouri, Arkansas

PSC Seminar and Training

- KR PSC Seminar delivered the latest regulatory update and key issues relating to safe operations, with over 150 participants attended at the seminar including ship owners, operators, ship management companies and marine personnel to elevate their capabilities to response PSC inspection effectively
- Various educational training and information for ship owners and their crews
 - ✓ Training on the statutory inspections
 - ✓ PSC information on major deficiencies, latest PSC trends and policies of PSC MOUs
 - ✓ PSC Concentrated Inspection Campaign(CIC) Seminar for ship owners and operators in preparation for the CIC each year



Additional Safety Measures

- Safety alerts/advisories for ship-owners, operators and other marine industry personnel with timely information or updates on the cause(s) of PSC detention and noticeable deficiency through KR website and periodic publications (PSC Guidance Book, PSC Quick Check as a brief type of PSC checklist with high efficiency) to raise awareness of the relevant issues
- KR-classed fleet real-time observation with the data obtained from Lloyd List Intelligence(LLI) to track its vessels movement, and PSC Pre-inspection services for KR-classed vessels before entering a port in main PSC MOU regions as its precautionary and preventive measures to avoid any possible PSC detention
- KR-CON(Ver.17 in 2019)
 - ✓ International award-winning electronic database of IMO instruments containing IMO Conventions, Codes, Resolutions and Circulars in English, Korean and Chinese, allowing Maritime Administrations(PSCO) and marine industry personnel to approach the comprehensive IMO regulations in an easy and efficient way



KR PSC Performance in Major PSC MOUs

14 Tokyo MOU

17 Paris MOU

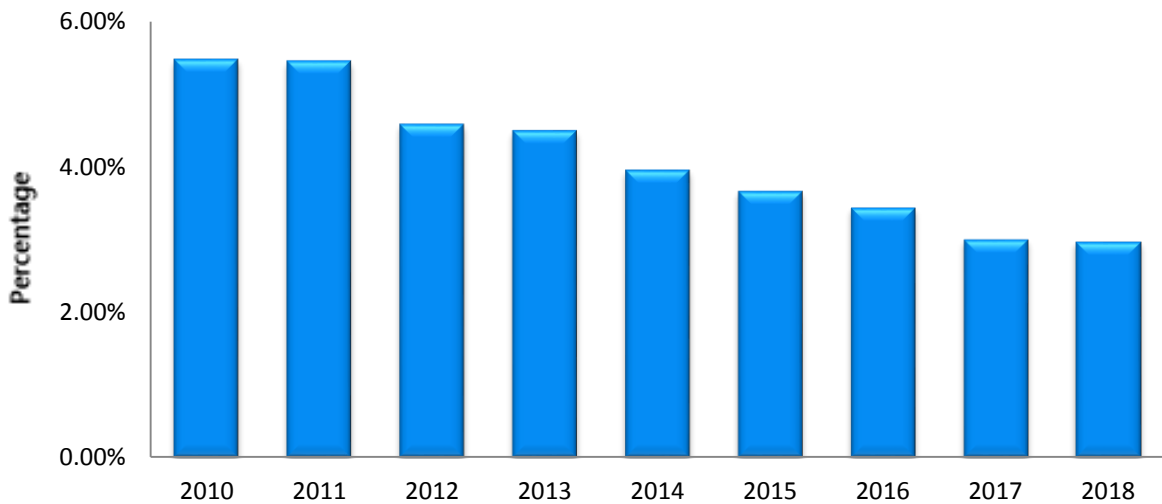
20 Indian Ocean MOU

23 United States Coast Guard(USCG)

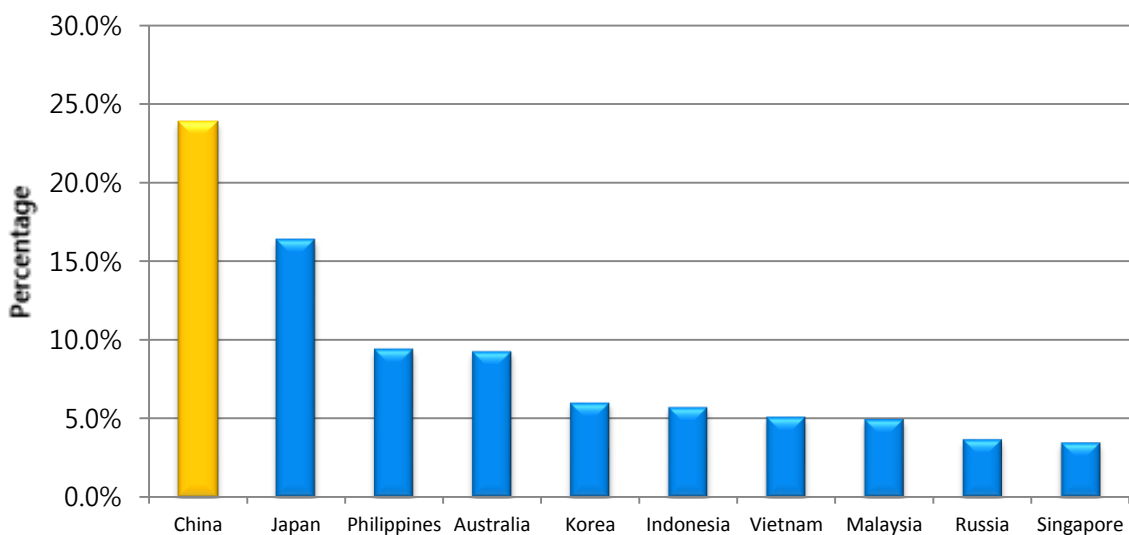
Tokyo MOU

- A total of 31,589 inspections were carried out by the member Authorities in Tokyo MOU in 2018, of which 934 ships were detained with the rates of 2.96%
- Marshall Islands was the member State with the highest PSC inspection recorded (detention rates: 14.29%) in Tokyo MOU , followed by Russian Federation and New Zealand with the detention rates of 7.75% and 5.56% respectively

<Annual PSC Detention Statistics in Tokyo MOU Region>

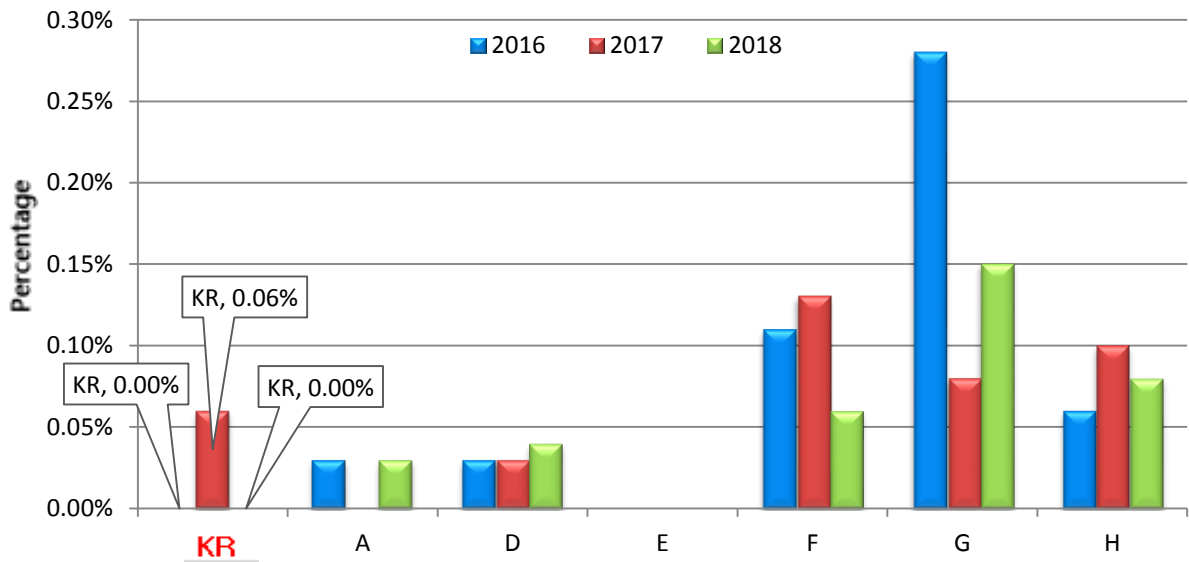


<Member States of Tokyo MOU Inspection Efforts 2018>

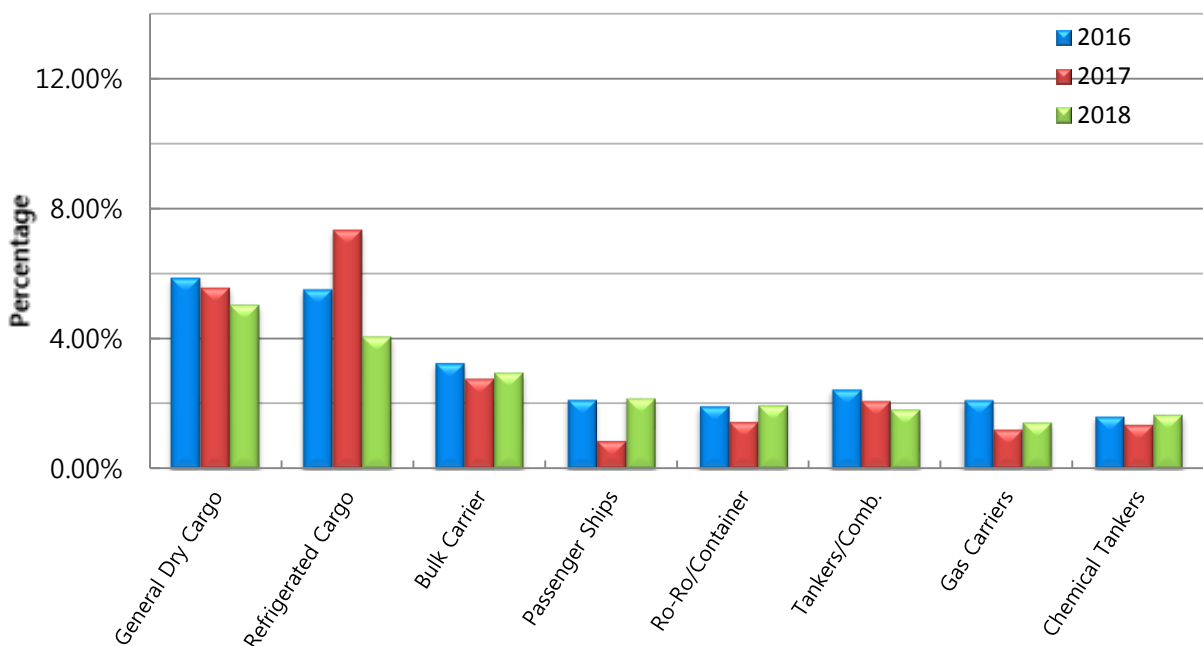


- With enhanced surveys/audits, and ship crew education and training in response to PSC inspections, no detentions of KR classed ships with RO related detainable deficiencies was recorded in Tokyo MOU during 2018
- Detention statistics by ship type reflected that General Dry Cargo ships (5.03%) were mostly detained in the region, followed by Refrigerated Cargo ships (4.06%) and Bulk Carriers(2.96%) in 2018

<KR PSC Performance over the last three(3)-year period in Tokyo MOU>

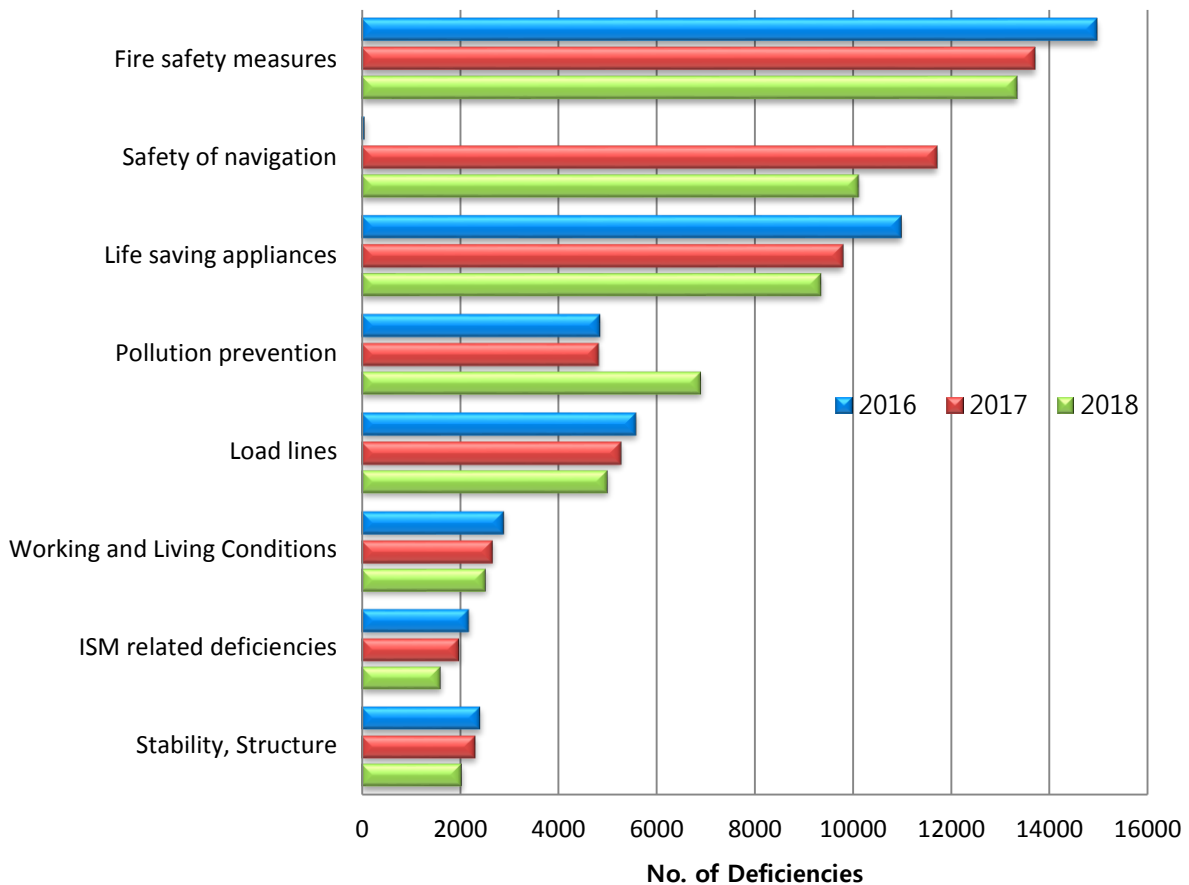


<PSC detentions by Ship Type>



- A total of 74,957 deficiencies were recorded in the Tokyo MOU; Fire Safety Measures(17.8%) was the most frequently identified deficiencies, followed by Safety of Navigation(13.5%), and Life Saving Appliances(12.5%) each in 2018
- Fiji and Tanzania are the flag states in the divisions of Black Lists, with Saint Kitts and Jamaica in Grey Lists and Korea, Republic of in White List in 2018

<Categories of Detainable Deficiencies in Tokyo MOU >



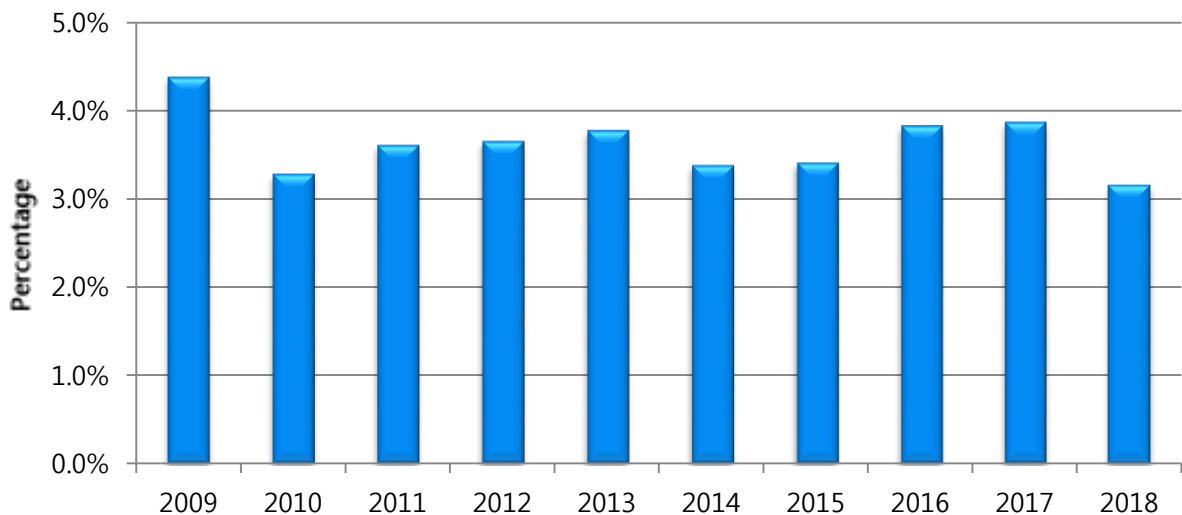
<Flag States targeted on the Black List in Tokyo MOU >

Flag States (categorized as Black List)	Number of Inspections (2016-2018)	Number of Detentions (2016-2018)
Fiji	44	14
Tanzania	130	32
Cambodia	425	76
Togo	1,110	149

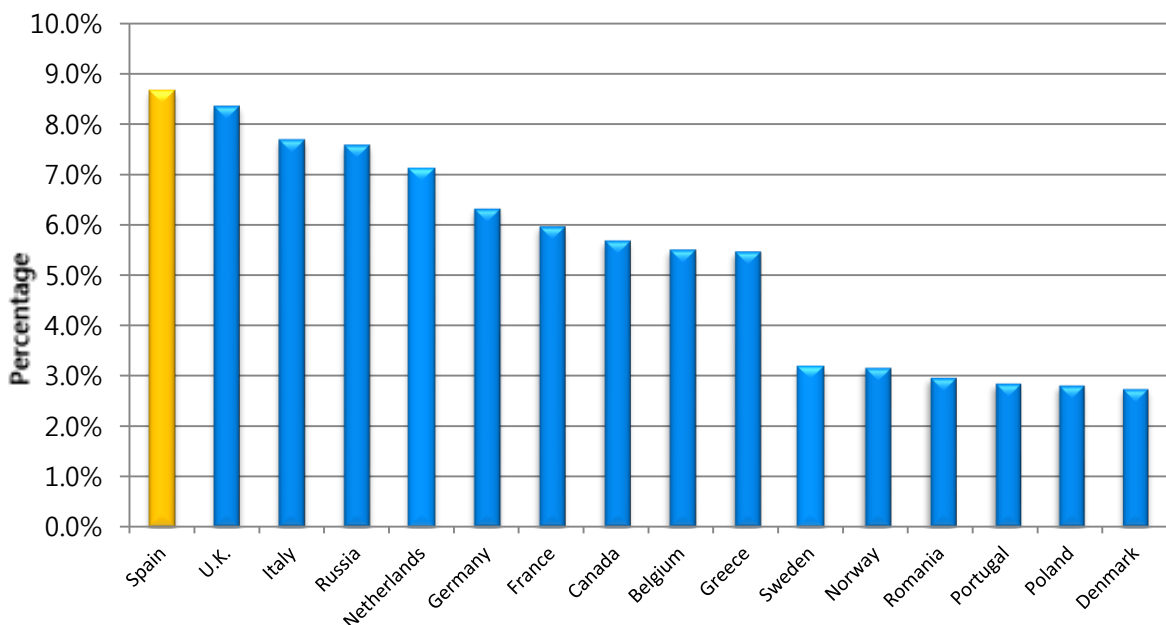
Paris MOU

- With a total number of 17,952 inspections conducted by the member States in Paris MOU, the number of detentions rate was on a significant decrease to 3.15% in 2018, compared to 3.87% in 2017
- Spain was the highest on record for PSC performance amongst Paris MOU member States, with the detention rates of 8.67%, followed by United Kingdom and Italy with 8.35% and 7.69% each in 2018

<Annual PSC Detention Statistics in Paris MOU Region>

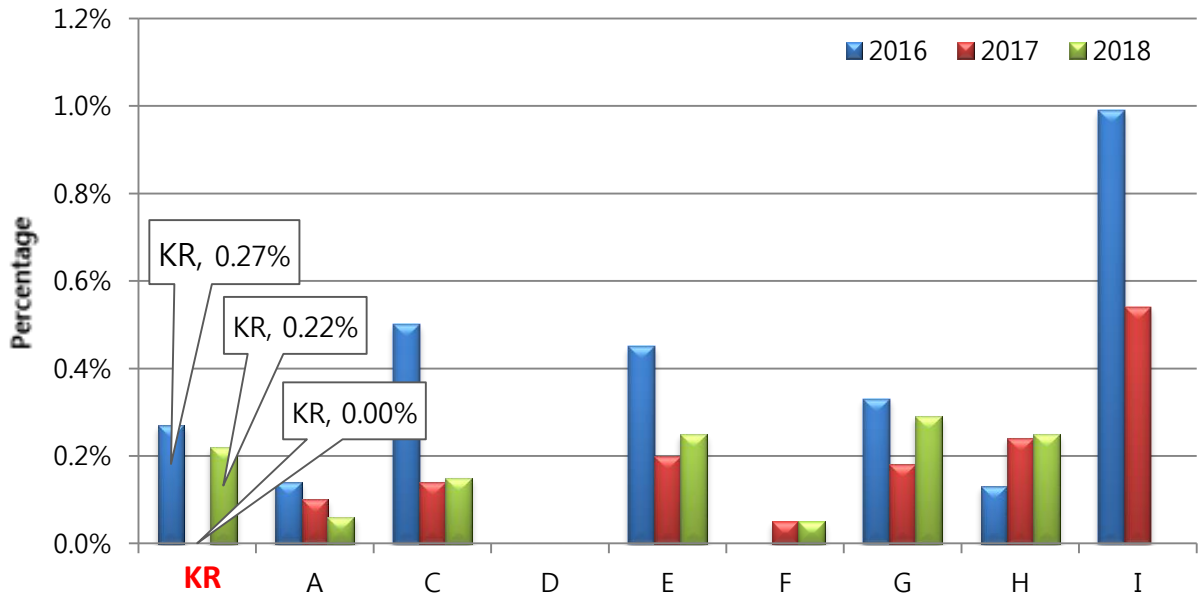


<Member States of Paris MOU Inspection Efforts 2018>

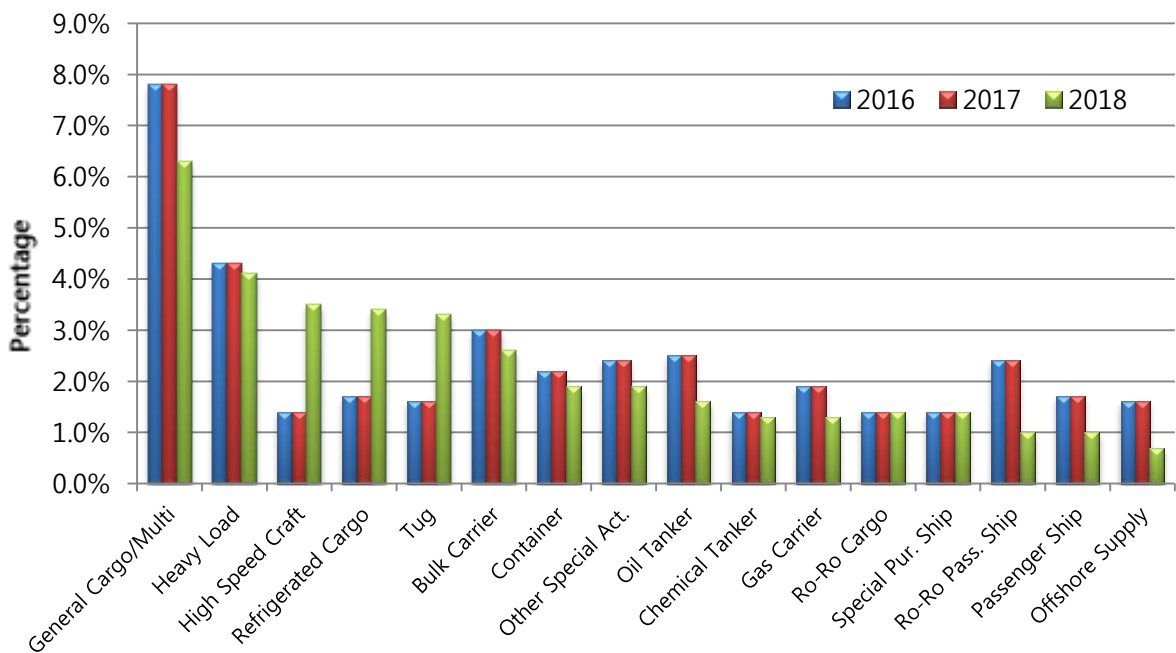


- A three(3)-year rolling average of KR class related detention ratio was 0.16% in the Paris MOU region, lower than the IACS average 0.22%, with major PSC detainable deficiencies reported in the areas of Fire, Life Saving Appliances, I SM deficiencies, leading to the PSC detention rate
- Ro-Ro Cargo Ships lead the detention count in Pars MOU regions with the rates of 6.0%, followed by Oil Tanker and Bulk Carriers with 0.3% and 0.2% each in 2018

<KR PSC Performance over the last three(3)-year period in Paris MOU>

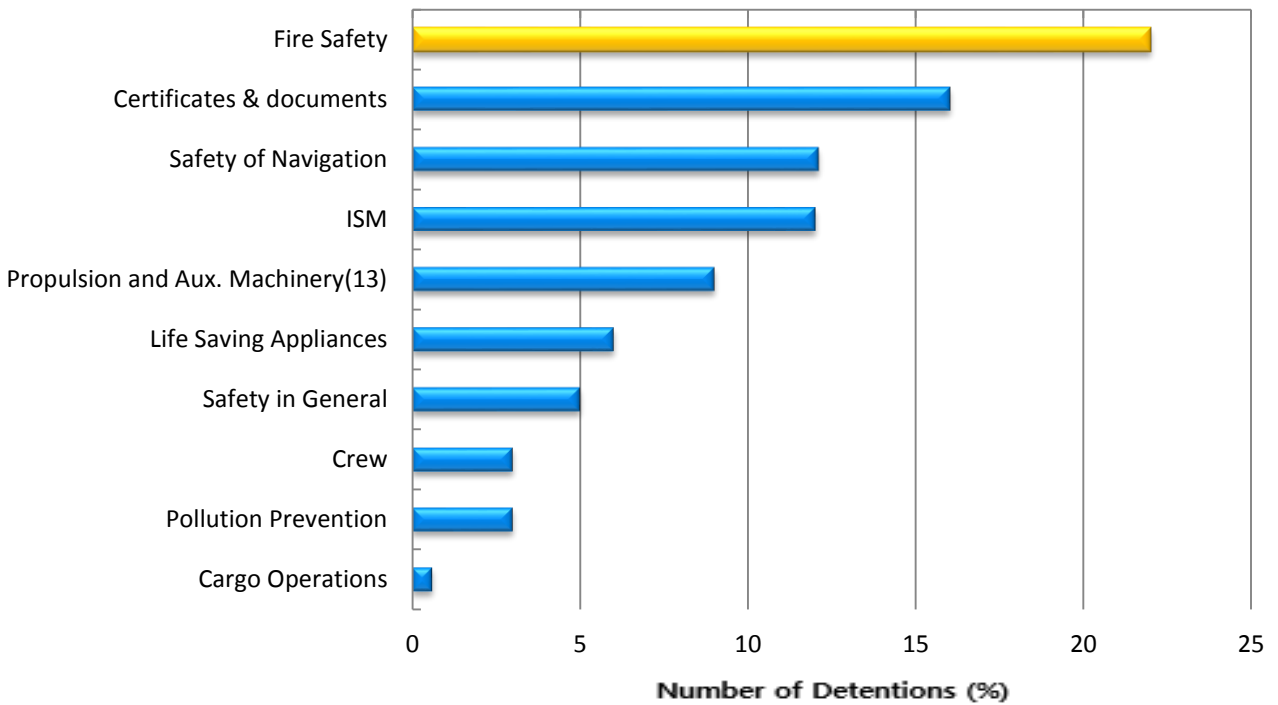


<PSC Detentions by Ship Type>



- 40,368 deficiencies were recorded in 2018, and the top 5 categories of deficiencies were Fire Safety(13.06%), Safety of Navigation(12.10%), Working & Living Conditions(8.35%), Life Saving Appliances(8.20%),and Certificate & Documents(6.75%)
- Republic of Congo/Togo was recorded in the Divisions of Very High Risk, with Comoros, Palau, Cambodia, Moldova, Ukraine, Sierra Leone in Medium to High Risk and Belize, Cook Islands, Saint Kitts and Nevis, Cambodia in Medium Risk during 2018

<Categories of PSC Detainable Deficiencies in USCG>



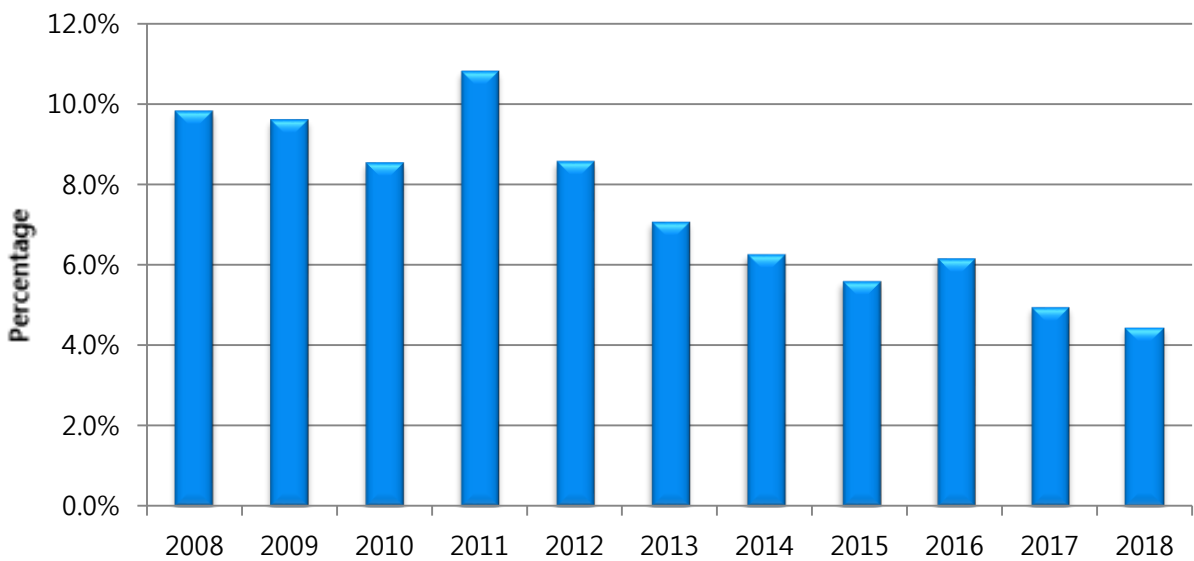
<Targeted Flag States on the Black List in Paris MOU>

Flag States (categorized as Black List)	Number of Inspections (2016-2018)	Number of Detentions (2016-2018)
Congo, Republic of the	98	26
Togo	486	92
Comoros	351	67
Palau	210	41

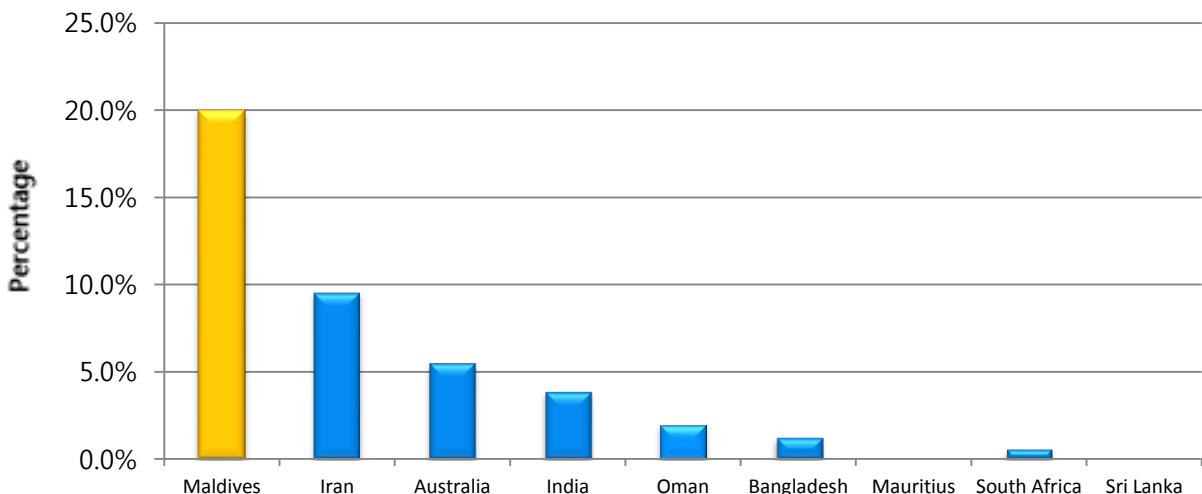
Indian Ocean MOU

- 5,697 inspections were carried out in 2018, leading to 252 ship detentions with a rate of 4.42% down from 4.95% recorded in 2017
- Maldives was the member State with the highest PSC inspections recorded (detention rates: 20.00%) in the Indian Ocean MOU, followed by Iran and Myanmar with the detention rates of 9.53% and 8.06% respectively in 2018

<Annual PSC Detention Statistics in Paris MOU Region>

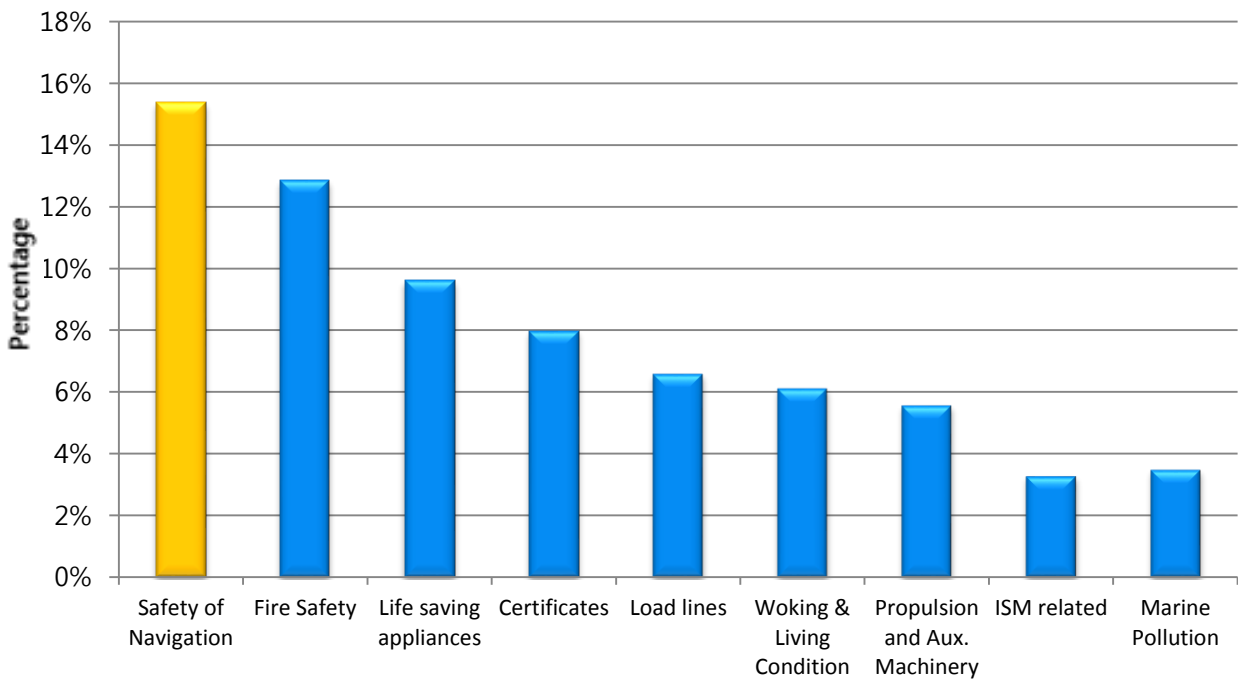


<Member States of Indian Ocean MOU Inspection Efforts 2018>

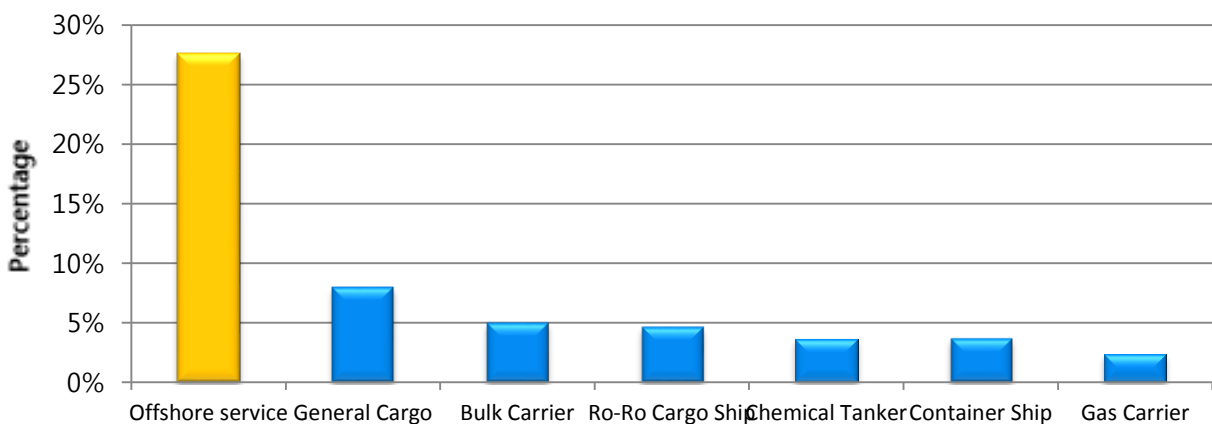


- 11,847 deficiencies were reported in the Indian Ocean MOU, of which three major categories of deficiencies were related to Safety of Navigation(13.96%), Fire Safety(12.05%) and Life Saving Appliances(8.65%)
- A 3-year (2016-2018) rolling percentage of PSC detention by ship type indicates that Offshore service vessel on the largest number of PSC detentions in Indian Ocean MOU, with a rate of 27.64%, followed by Tugboat and Ro-Ro Cargo Ship with 16.67% and 4.65% each in 2018

<Categories of Detainable Deficiencies>



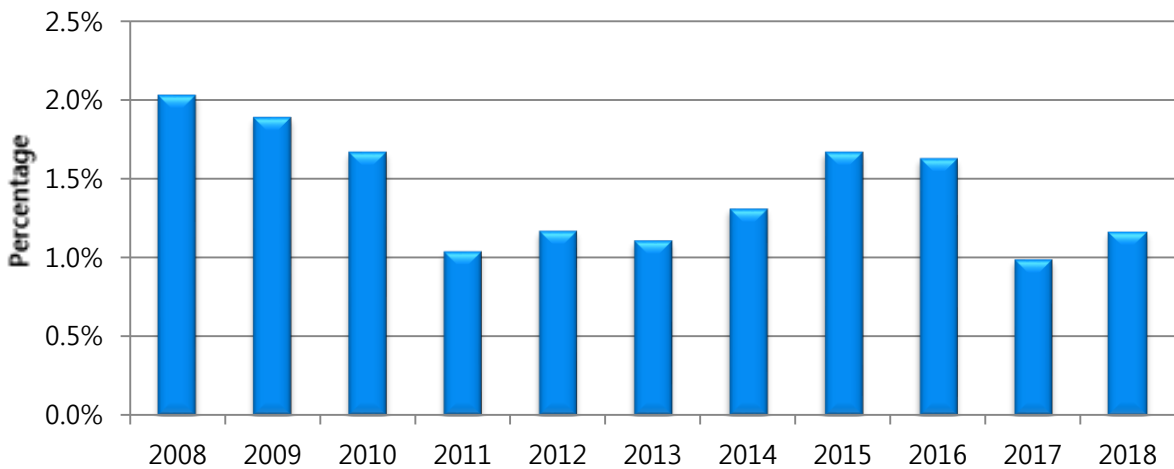
<PSC Detentions by Ship Type>



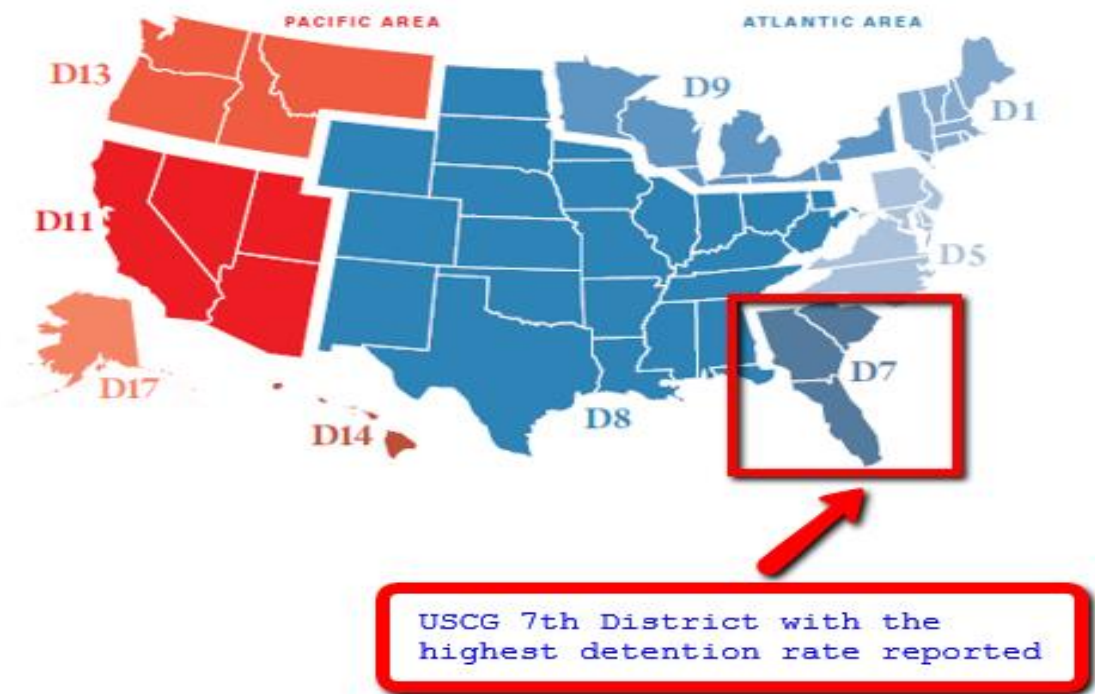
United States Coast Guard (USCG)

- In 2018, USCG carried out 9,205 SOLAS safety exams, leading to a total of 105 detentions, a slight increase of annual detention rate from 0.99% to 1.16% in comparison to the previous year, and KR had continued, in particular, on its zero detention records in USCG since 2002
- USCG 9 districts are currently established, and the 7th district(Miami, Florida) represented the highest detention rates by region

<Annual PSC Detention Statistics in USCG>

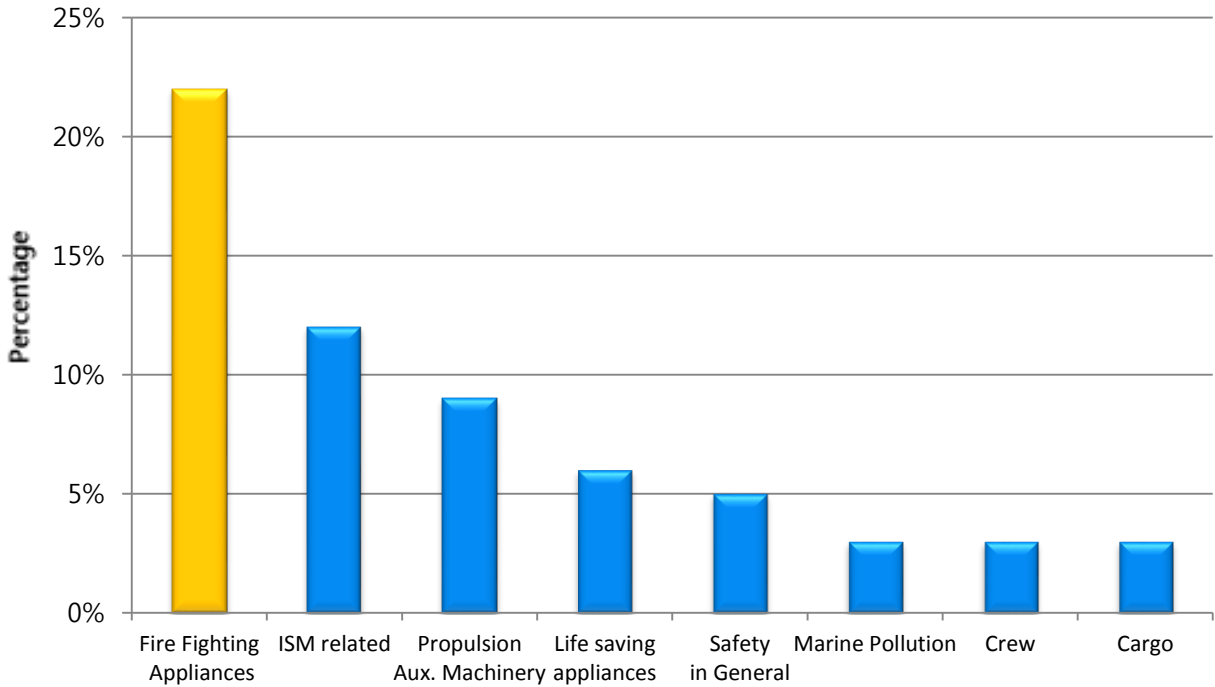


<Port State Control Statistics by Region>

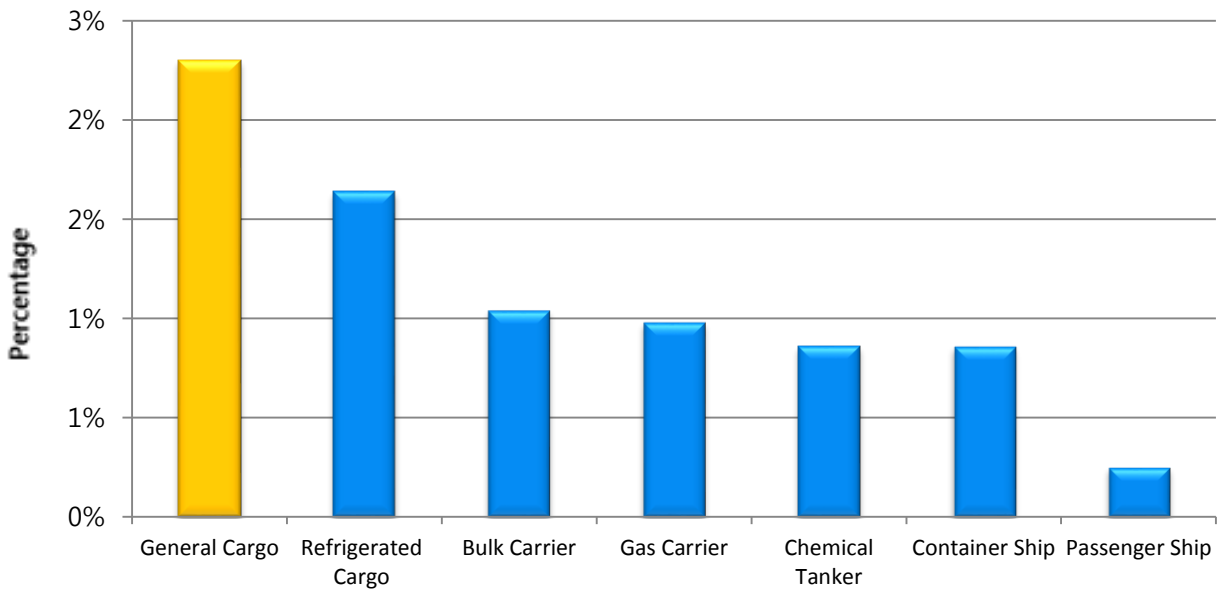


- Detention statistics by ship type reflected that General Dry Cargo Ship(2.30%) was the most type of PSC detention with the number of 27, followed by Gas Carrier and Refrigerated Cargo with the detention rate of 1.81% and 1.64% each for the year 2018
- Detainable deficiencies relating to Fire Fighting Appliances, Life Saving Appliances and ISM accounted for 50% of overall deficiencies reported in the year

<Categories of Detainable Deficiencies in USCG>



<PSC Detentions by Ship Type>

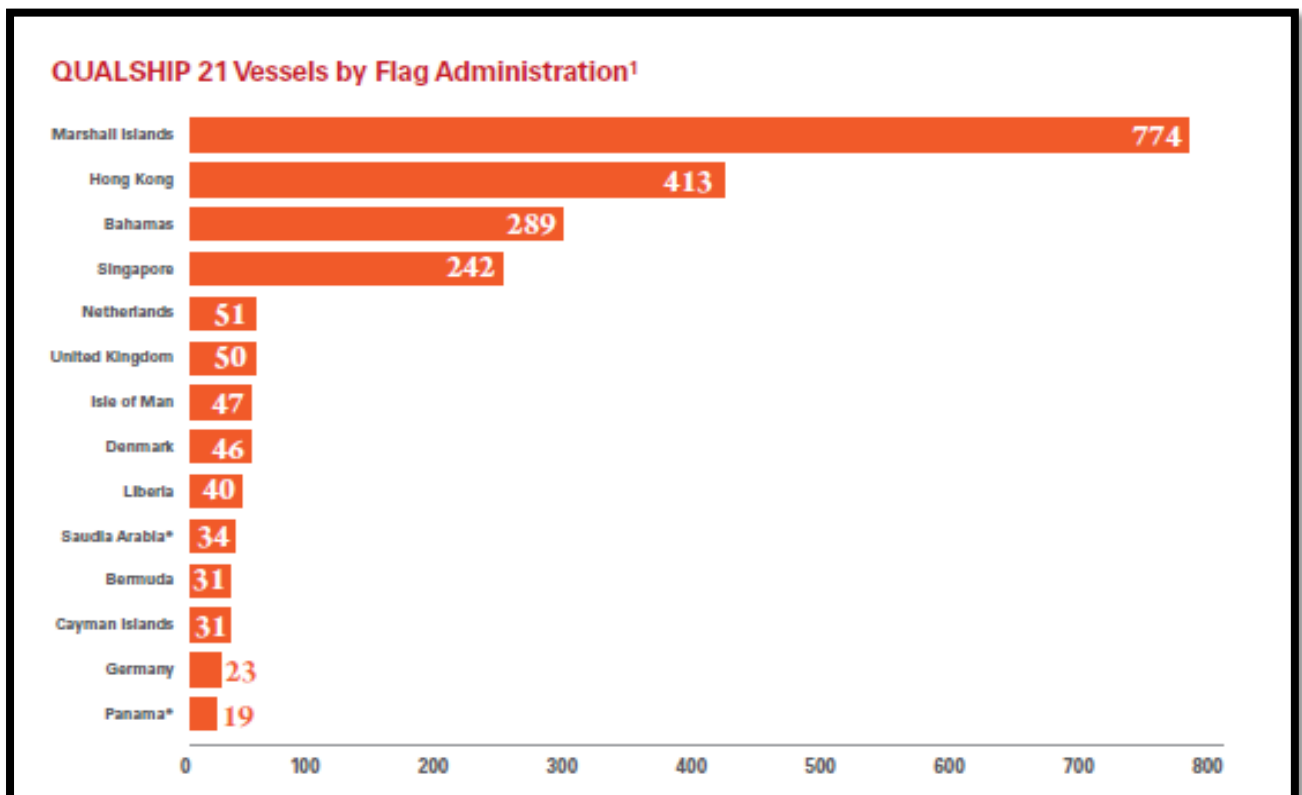


- The Quality Shipping for the 21st Century program, or QUALSHIP 21, recognizes and rewards vessels, as well as their owners and Flag Administrations, for their commitment to safety and quality. 21 Flag Administrations were certified under the QUALSHIP 21 program: Bahamas, Belgium, Bermuda, British Virgin Islands, Canada, Cayman, China, Croatia, Curacao, Denmark, France, Germany, Gibraltar, Hong Kong, Isle of Man, Italy, Jamaica, Japan, Liberia, Marshall Islands, Netherlands, Norway, Singapore, Switzerland, Taiwan, Thailand, United Kingdom (27 eligible Flag Administrations)

<Qualified Flag Administrations (27 states in total) for QUALSHIP 21>

Bahamas	Croatia	Isle of Man	Norway
Belgium	Curacao	Italy	Singapore
Bermuda	Denmark	Jamaica	Switzerland
British Virgin Islands	France	Japan	Taiwan
Canada	Germany	Liberia	Thailand
Cayman Islands	Gibraltar	Marshall Islands	United Kingdom
China	Hong Kong	Netherlands	

<Number of QUALSHIP 21 Vessels by Flag Administration>





Korean Register of Shipping(KR) Annual Report 2018



Published by

KOREAN REGISTER OF SHIPPING

36 Myeongji ocean city 9-ro, Gangseo-gu, Busan, Republic of Korea

For more information, please visit <http://www.krs.co.kr>

Tel : +82 70 8799 8200 / E-mail : psc@krs.co.kr / Fax No : +82 70 8799 8219
