### PSC/FSI Report for the month of June 2017

### A) Methodology used for report preparation and analysis

- 1. To assess the performance of various Flags, vessels, companies etc., three performance indicators are used:
- Number of detentions
- Deficiency ratio= <u>Total number of deficiencies</u>

Total number of inspections of ship type/age/risk etc.

- Nil deficiency ratio= <u>Total number of vessels inspected with nil deficiencies</u>
   Total number of inspections.
- 2. The performances and trends are evaluated for ship type inspected or size (based on Gross Tonnage) or age grouping or belonging to a flag or belonging to a risk type.
- 3. Following may be helpful while analyzing the report:
- A high "deficiency index" and a high "nil deficiency index" indicates that only
  a few ships in the category being analyzed have high number of
  deficiencies, increasing the deficiency index, while nil deficiency index
  remains high.
- A low deficiency index and a low nil deficiency index may be an indicator that the majority ofships inspected in the category being analyzed have few non-compliances.
- A low deficiency index and high nil deficiency index is an indicator of well-compliant ships in that category.
- A high deficiency index and low nil deficiency index is an indicator of non-compliant ships across the category.
- Number of inspections may be taken into consideration while assessing performance based on deficiency index and nil deficiency index. However, it is also to be considered that Company with only few inspections (say 1 or 2) are unable to keep their few vessels compliant when these are plying in foreign ports and may be inspected for PSC.

#### B) Port State Inspections in India by Indian Administration Surveyors

- The number of inspections have reduced from 57 in May 2017 to 27 in June 2017, that is, a reduction of about 52%. This is because majority of the surveyors were away for training of 15 days duration.
- Kochi and Chennai district carried out maximum number of Port state inspections with 8 and 7 respectively.
- There is a marginal reduction from about 77% to 70% of the high-risk vessels being inspected.
- The increasing compliance with statutory requirements is demonstrated by the figures of nil detentions in May and June 2017, and a continual trend of reducing deficiency index and a nearly consistent nil deficiency index of about 0.2.
- Performance of various risk categories: High risk ships with a reducing trend of deficiency index from 3.5 in April to 2.7 in June 2017 and reducing nil deficiency index from 0.4 in April to 0.22 in June is an indicator that though number of non-compliances per inspected ship are reducing, there is also an increase in non-compliance with statutory requirements for an increasing number of inspected ships. The medium risk vessels with reducing deficiency index from 4 in May to 3.5 in June 17 and increasing nil deficiency index from 0.11 to 0.16 is an indicator of increasing compliance in this risk category. In low risk category, the deficiency index has reduced from 2 in May to 0.5 in June 17 and nil deficiency index has increased from 0 in May to 0.5 in June 17 indicating an overall improved performance.
- Performance in various age categories: Between May and June 2017, the performance of vessels in the age category 5-15 years has come down with increase in deficiency index from 2.1 to 2.8 and reduction in nil deficiency index from 0.27 to 0.2. In other age categories, the ships have performed better with either a reduction in deficiency or increase in nil deficiency index or both.
- Performance of various types of vessels: Apart from Other Cargo vessels, the performance of vessels in all other type categories have improved with either a reduction in deficiency index or an increase in nil deficiency index or both. However, the performance of other cargo vessels has marginally

- dipped in June 17 when compared to May, with deficiency index increasing from 4.1 to 4.2 and nil deficiency index reducing from 0.07 to 0.
- Performance of Recognized Organizations: Among all the Recognized Organizations with 3 or more inspections, the performance of DNV/GL/DNV-GL(AS) with a deficiency ratio of 1.9 and nil deficiency ratio of 0.28 was better than others.
- Performance of Flags: Among all the Flags with 3 or more inspections, the performance of Singapore Flag with a deficiency index of 1.2 and nil deficiency index of 0.2 was better than other Flags.
- Deficiency areas: The living conditions of seafarers continue to be an area of concern with maximum number of deficiencies in this area.

### C) Flag State Inspections of Indian Flag Vessels

- The decrease in number of Flag State Inspections is due to Flag State Surveyors being involved in training.
- The number of vessels detained for non-compliances have remained the same, that is, 3 each in May and June 2017. However, the detention rate has gone up from 12% in May to 30% in June 2017 and is on a continual rising trend since last 3-4 months. The detention index is also going up from 8.5 in April 8.8 in May to 11.5 in June 2017. With nil deficiency ratio of almost zero, the above all indicates increasing non-compliance across the Indian Flag vessels.
- Overall Performance: A rising deficiency index, almost zero nil deficiency index and no reduction in number of detentions, provide enough evidence of increasing non-compliances.
- Age based performance: The vessels between 15-25 years of age has continuously demonstrated poor performance with rising deficiency index, zero nil deficiency index and increasing number of detentions.
- Ship type based performance: Oil/Chemical/Gas tankers have performed poorly in 2017 with consistent detentions and a high deficiency index. However, a nil deficiency ratio of 0.2 in most of the months in 2017 indicates that there are fully compliant vessels in this type category. Other cargo vessels continue to show poor performance with rising deficiency index and almost zero nil deficiency index.

- Ship size based performance: The performance of vessels less than 3000 gt continue to be a cause of concern with rising deficiency index and almost zero nil deficiency index. In-spite of being small size, the number of non-compliances are on a continually rising trend. Though, vessels above 3000gt have higher number of detentions, the nil deficiency index is on a decreasing trend.
- Performance of Recognized Organizations in June 17: Single Class IRS had 2 detentions in June, while there was one detention of vessel dual classed with IRS & BV.
- The working condition of seafarers is a continual area of concern with high number of deficiencies. With Propulsion & Machinery being another area with large number of deficiencies, these all may be indicators towards increased susceptibility of seafarers towards accidents.

### D) Port State Inspections of Indian Flag Vessels abroad

- The average performance of Indian Flag vessels across PSC regimes is reduced due to poor performance in TOKYO MOU. The Indian vessels were inspected in 7 PSC regimes and had no deficiencies in 6 of these regimes.
- IRS-ABS dual class vessels had nil deficiencies in all the PSC inspections conducted, while IRS-LR Class vessels had a deficiency index less than that of the average Indian Flag deficiency index.
- Among Indian DOC holders, the performance of Bernhard-Schulte Ship Managements was well below average Indian Flag performance, with only a single PSC inspection and that too resulted in detention with 20 deficiencies.
- The performance of Indian vessels shows increasing susceptibility to high number of deficiencies/detentions of vessels in the age bracket 15-25 years with a high deficiency index and 1 detentions. Based on type, the Bulk Carrier segment had a high number of deficiencies increasing the deficiency index of Indian Flag and a detention.
- The major areas of concern with high number of detainable deficiencies were noted to be water/weather-tightness of hull and Fire Safety measures.

#### E) Corrective and Preventive action

- Following vessels were detained under FSI inspections in June 2017:

Name of	IMO No.	Age/Type	Last	Managers
Vessel			Annual	
			Survey	
PFS	9221176	45/OSV	15.12.2016	PFS
Supplier				Shipping(India)
				Ltd.
BON	9248203	16/OIL&	17.05.2016	Zen Shipping
ATLANTICO		Chemical		& Ports Ltd.
		Tanker		
Maharshi	9034547	15/Oil-	04.01.2017	SCI Ltd.
Parshuram		Tanker		

-

- Following vessel detained under PSC in June 2017:

Name of	IMO No.	Place of	MOU	Managers
Vessel		Detention		
AEGIS	9222601	TIANJIN(China)	ТОКҮО	Bernhard
FORTUNE				Schulte Ship
				Management
				Co. Ltd.
CLASS/RO	Date of Last	Last FSI date	Age of	Type of
	Annual		Vessel	Vessel
	Surveys			
IRS	01.02.2017		16	Bulk Carrier

- The Directorate has been implementing corrective and preventive action for Indian Flag vessels detained under Port State or Flag State Intervention inspections.
- Following corrective and preventive measures are being implemented on vessels detained under FSI.

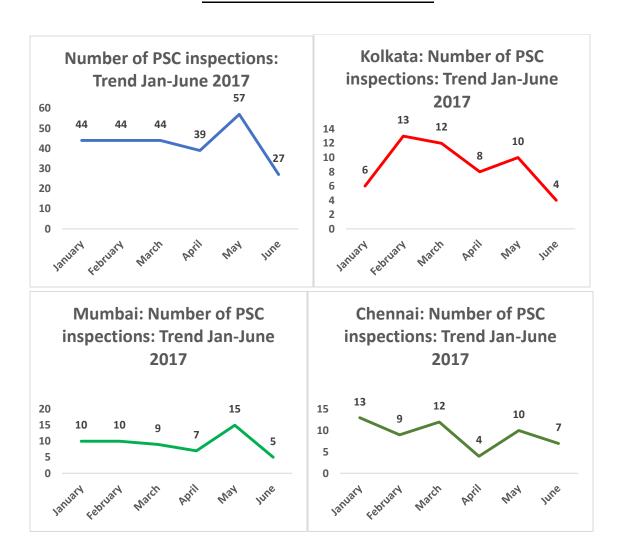
Name of Vessel	Corrective & Preventive Action
PFS Supplier	The Company was asked to take following immediate action:
	1. Appointment of DPA.
	2. DPA to report to DGS
	3. Payment of Crew salary.
	4. Manning of all vessels as per Safe Manning
BON ATLANTICO	1. Additional FSI within a month
	2. Additional Safety(DOC) audit within a month after FSI.
Maharshi	Company to offer for FSI prior carrying out commercial operations.
Parashuram	
Aegis Fortune	Additional General Examination.
	2. Additional SMC Audit

### F) Review of Merchant Shipping Notice 4 of 2017

- i) Vessels not complying with regards to FSI inspection within 1-3 months after Annual/Intermediate/Renewal Surveys: The frequency of FSI inspection of Vessel MT. Hari-Sagar is increased from 1 to 2 between Annual surveys as per Clause F(1) of the MS Notice 4 of 2017 for conducting last FSI inspection after 1-3 months of last Annual survey and after issuance of the said MS Notice.
- Grant of exemption from FSI for vessels having conducted satisfactory PSC in countries under PARIS MOU & certain countries under TOKYO MOU:Vessel Bon Atlantico, an Oil tanker was detained on 05 June 2017 under FSI inspection. It is noted that the vesselPSC inspection was conducted at Constanta under Paris MOU on 08.07.2016(less than a year ago) with nil deficiencies. The vessel was also inspected at Bandar Khomeni under IOMOU on 08.10.2016 with 3 deficiencies. It is worth noting here that vessels who have

## demonstrated good performance in Paris MOU are granted exemption from FSI as per MS Notice 4 of 2017.

## Graphical representation of the performance of Foreign Flag Vessels in the Port State Control in India



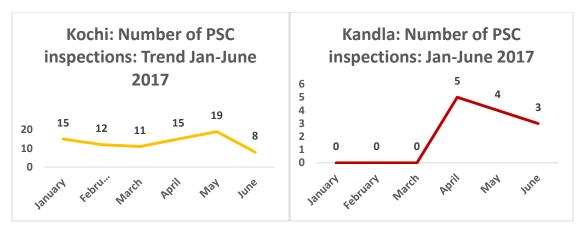


Figure 1: Trends in number of PSC inspections

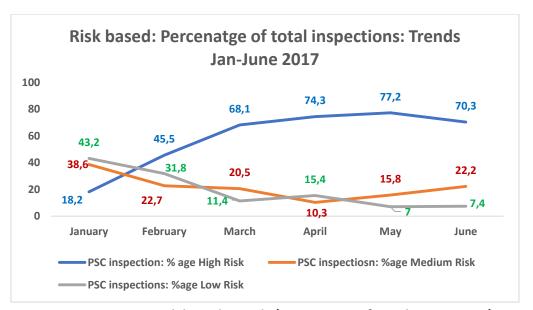


Figure 2: IOMOU Risk based Trends (Percentage of Total inspections)

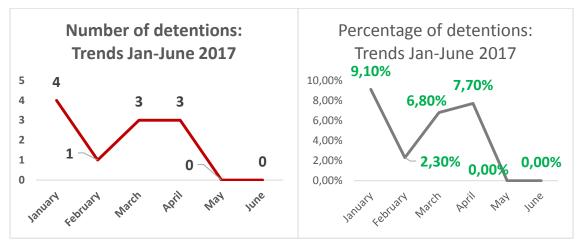


Figure 3: Trends in detentions (number & percentage of total inspections)

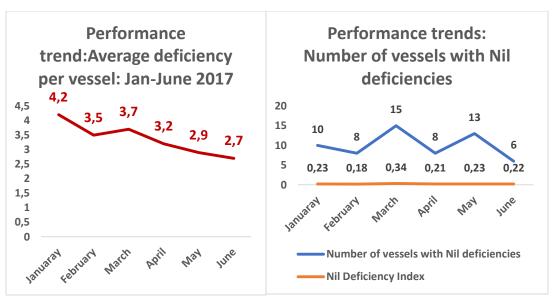


Figure 4: Performance trend based on nil deficiency index and deficiency index

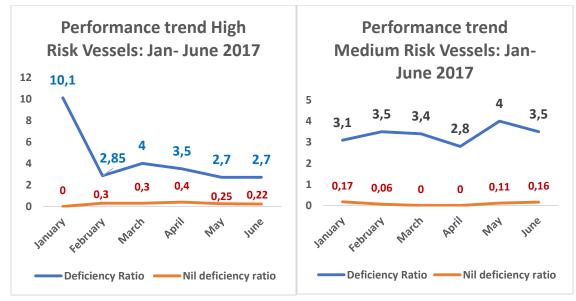


Figure 5: Performance trend of IOMOU High & Medium Risk Category Vessels

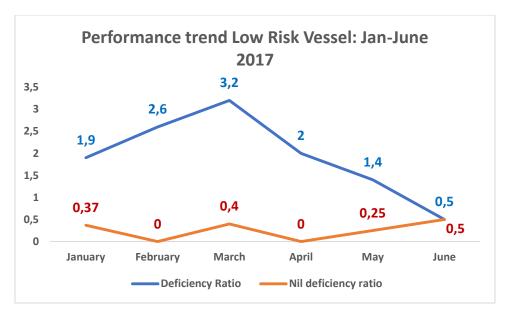


Figure 6: Performance trend of IOMOU Low risk category vessels

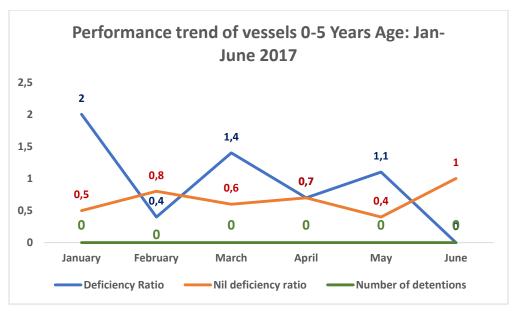


Figure 7: Trends in performance of vessels between 0-5 years of age

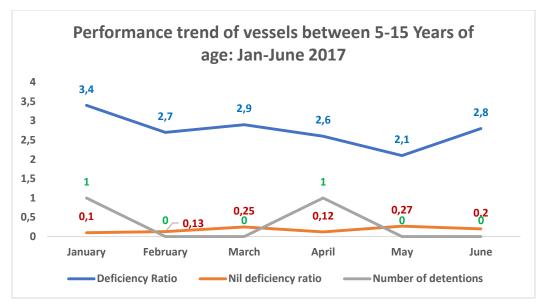


Figure 8: Trends in performance of vessels between 5-15 years of age

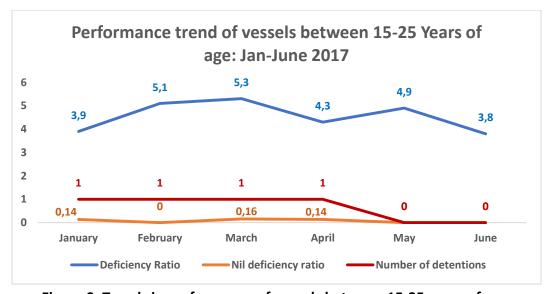


Figure 9: Trends in performance of vessels between 15-25 years of age.

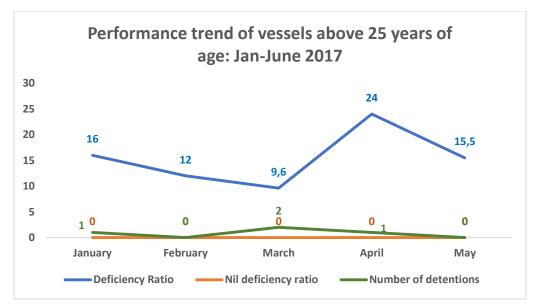


Figure 10: Trends of performance of vessels above 25 years of age.

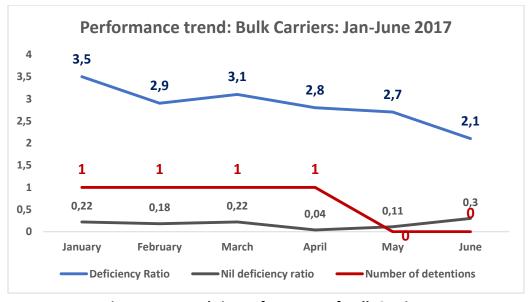


Figure 11: Trends in performance of Bulk Carriers

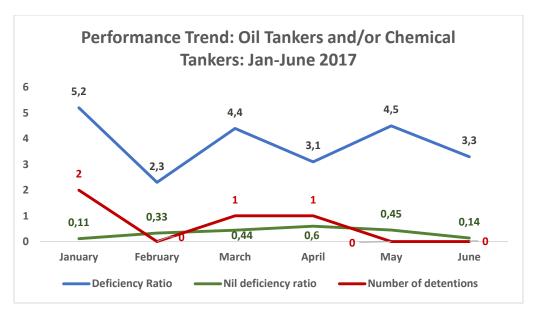


Figure 12: Trends in performance of Oil and/or Chemical Tankers

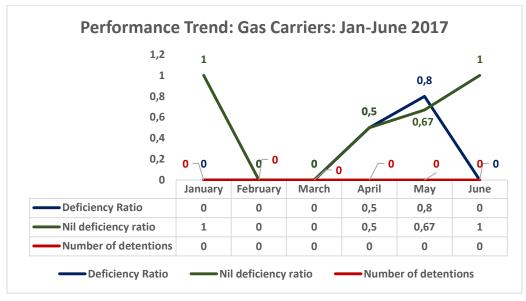


Figure 13: Trends in performance of Gas Carriers

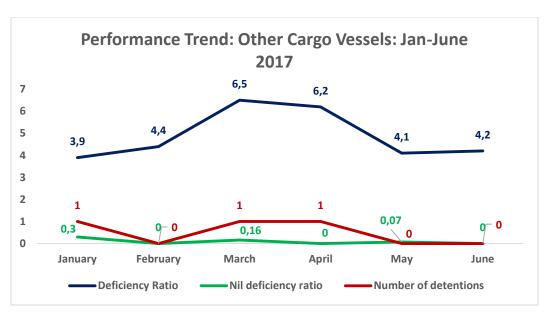


Figure 14: Trends in performance of Other Cargo Vessels

Name of Recognized Organization	Number of Inspections	Number of Detentions	Deficiency Ratio	Nil Deficiency Ratio		
ABS	5	0	3	0.2		
BV	2	0	5	0		
CCS	1	0	4	0		
DNV/GL/DNV- GL(AS)	7	0	1.9	0.28		
LR	1	0	0	1		
NK	8	0	2.9	0.12		
RINA	1	0	2	0		
VR	1	0	0			

Table 1: Performances of various Recognized Organizations in June 2017

Flag	Number of Inspections	Number of Detentions	Deficiency Ratio	Nil Deficiency Ratio			
Belgium	1	0	0	1			
Cayman Island	1	0	8	0			
People Republic of China	1	0	4	0			
Ethopia	1	0	3	0			
Hong Kong	3	0	2	0			
Liberia	3	0	3.7	0			
Malta	1	0	2.3	0.33			
Marshall Island	3	0	1	0.67			
Norway	1	0	0	1			
Panama	3	0	5.3	0			
Singapore	6	0	1.2	0.2			
Vietnam	1	0	4	0			

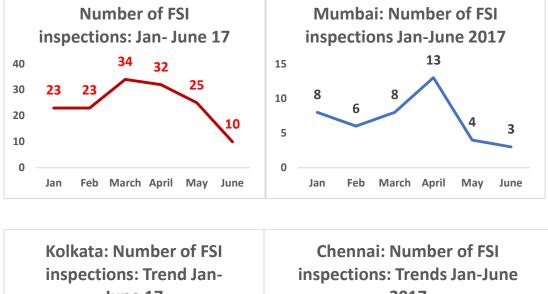
Table 2: Performances of various Foreign Flags in June 2017

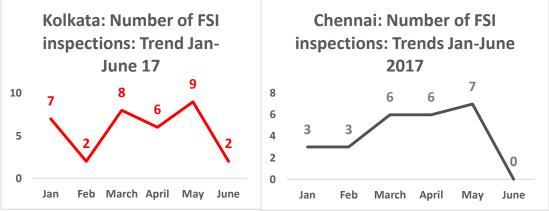
Deficiency Head	Number of Deficiencies
Safety of Navigation	5
Life Saving Appliances	5
Propulsion and Auxiliary Machineries	6
Pollution Prevention: MARPOL Annex IV	2
Pollution Prevention: MARPOL Annex V	2
ISPS	2
Labor Conditions: Condition of Employment	1
Labor Conditions: Accommodation, recreational facilities, Food & Catering	1
LaborConditions: Health protection, medical care, welfare and social security	1
Certificates & Documentation: Ship Certificates	2
Certificates & Documentation: Crew Certificates	1
Certificates & Documentation: Documents	9
Structural Conditions	1
Water/Weathertight Conditions	6
Emergency Systems	1
Radio Communications	1
Cargo operations including equipment's	2
Fire Safety	5
Alarms	2
Working and Living Conditions: Living Conditions	3
Working and Living Conditions: Working Conditions	13

Table 3: Distribution of deficiencies identified during various PSC inspections in June

2017

## Graphical representation of the performance of Indian Flag Vessels in the Flag State Control inspections





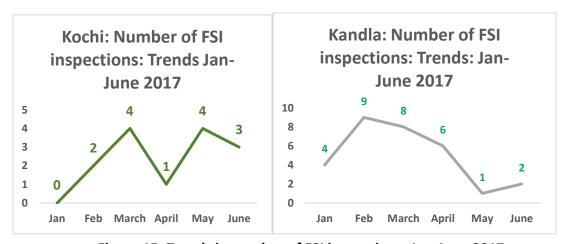


Figure 15: Trends in number of FSI inspections: Jan-June 2017

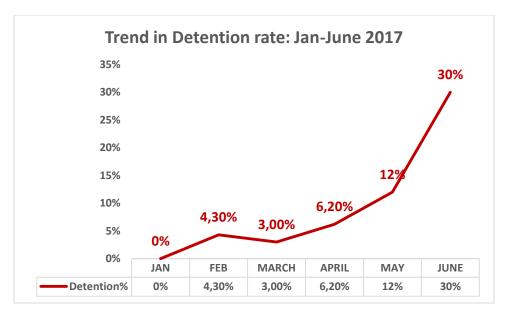


Figure 16: Trends in detention rate

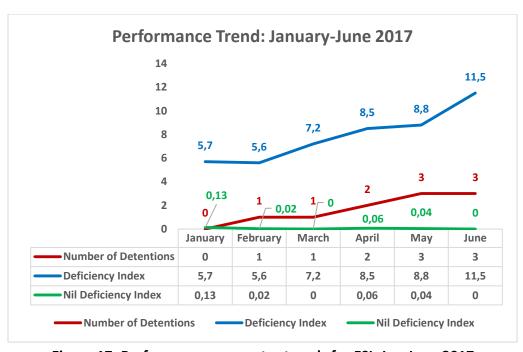


Figure 17: Performance parameter trends for FSI: Jan-June 2017

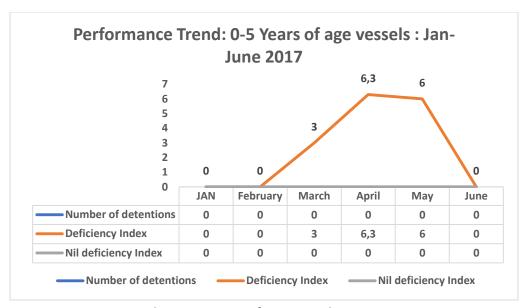


Figure 18: Trends in 0-5 years of age vessels in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of

detentions are zero, that means no vessels in this age category was inspected during the month

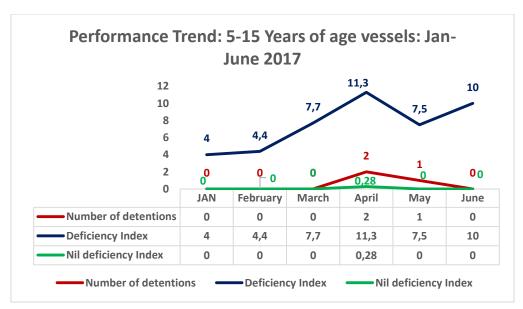


Figure 19: Trends in 5-15 years of age vessels in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of detentions are zero, that means no vessels in this age category was inspected during the month

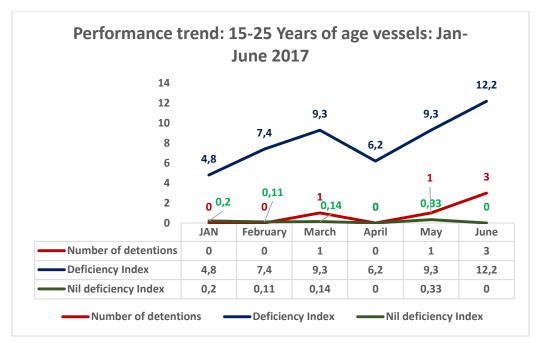


Figure 20: Trends in 15-25 years of age vessels in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of detentions are zero, that means no vessels in this age category was inspected during the month

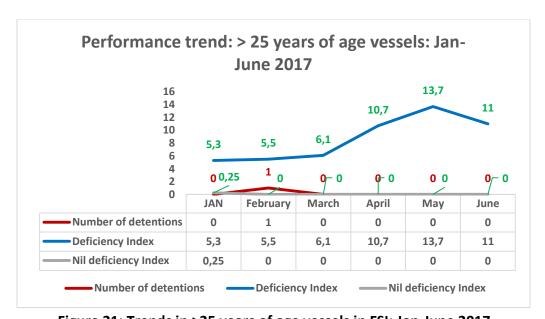


Figure 21: Trends in >25 years of age vessels in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of detentions are zero, that means no vessels in this age category was inspected during the month

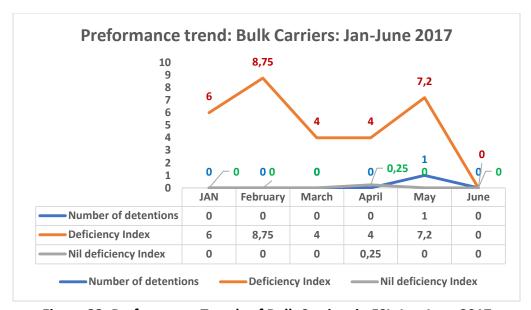
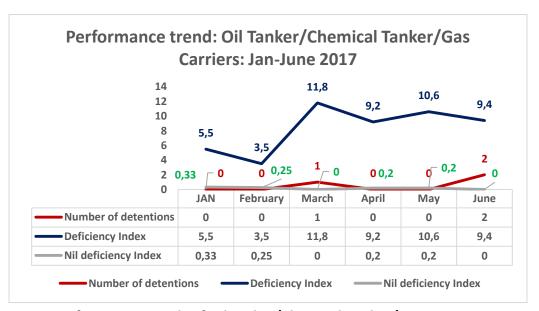


Figure 22: Performance Trends of Bulk Carriers in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of detentions are zero, that means no vessels in this type category was inspected during the month



<u>Figure 23: Performance Trends of Oil tanker/Chemical Tanker/Gas Carriers in FSI: Jan-June 2017</u>

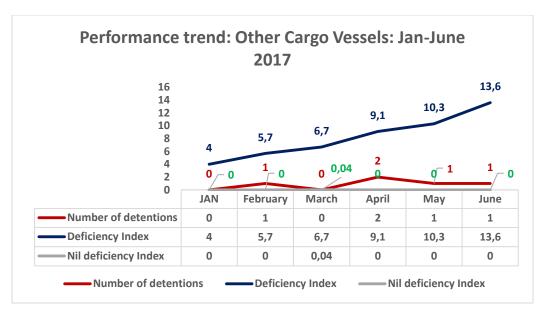


Figure 24: Performance Trends of Other Cargo Vessels in FSI: Jan-June 2017

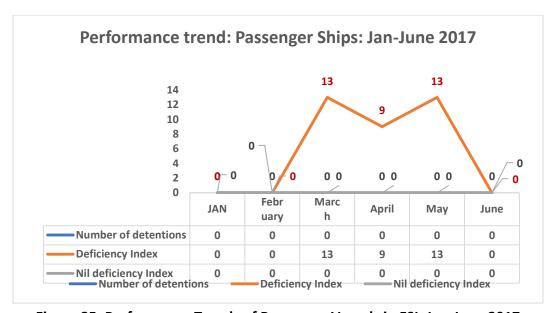


Figure 25: Performance Trends of Passenger Vessels in FSI: Jan-June 2017

Note: If all the performance parameters, that is, deficiency index, nil deficiency index and number of detentions are zero, that means no vessels in this type category was inspected during the month

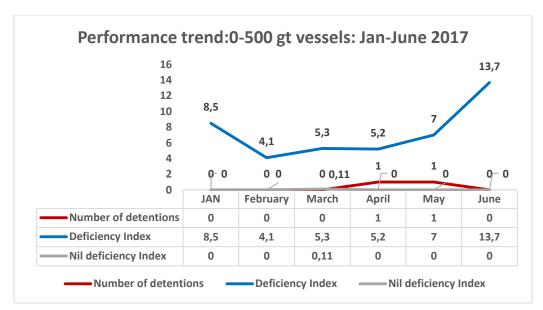


Figure 26: Performance Trends of 0-500 gt Vessels in FSI: Jan-June 2017

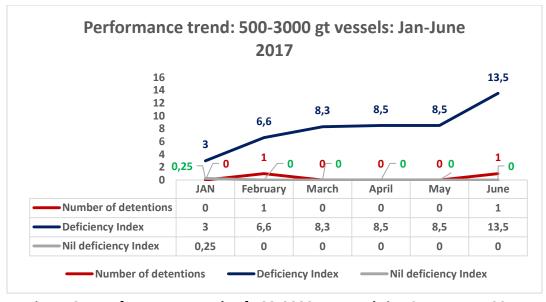


Figure 27: Performance Trends of 500-3000 gt Vessels in FSI: Jan-June 2017

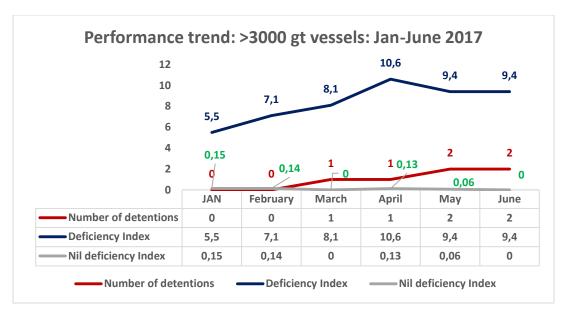


Figure 28: Performance Trends of > 3000 gt Vessels in FSI: Jan-June 2017

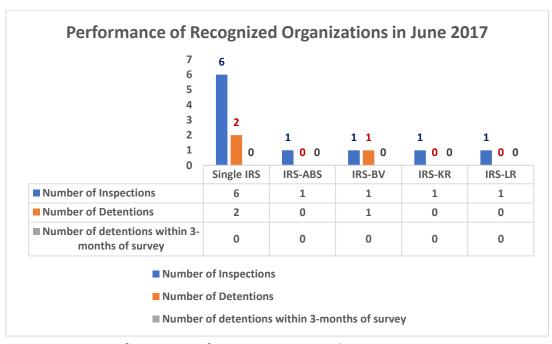


Figure 29: Performances of various Recognized Organizations in June 2017

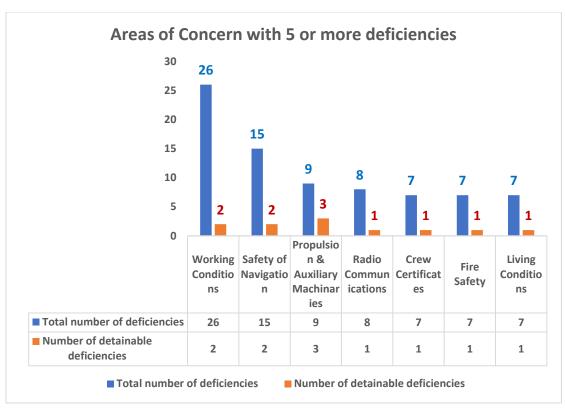


Figure 30: The detainable areas in June 2017

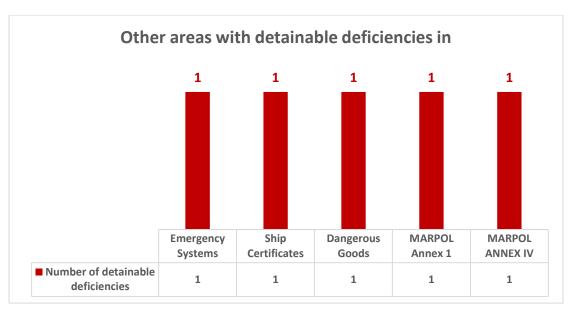


Figure 31: The detainable areas in June 2017

# <u>Graphical representation of the performance of Indian Flag Vessels in the</u> <u>Port State Control inspections</u>

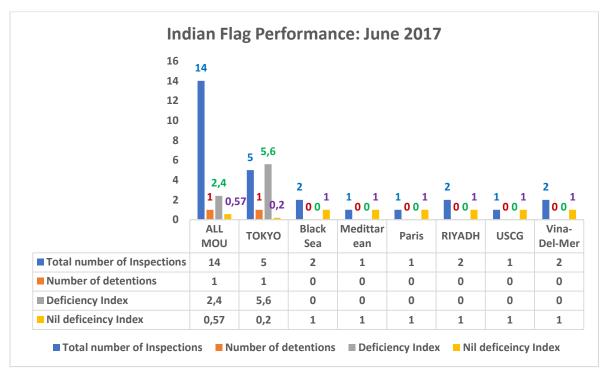


Figure 32: Average Indian Flag Performance (All inspections & in each PSC regime)

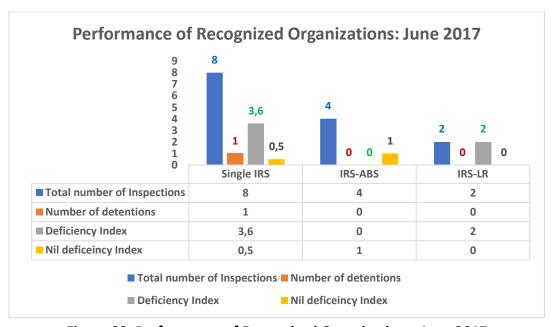


Figure 33: Performance of Recognized Organizations: June 2017

Name of Company	Type of Ships inspected/Number of ships inspected	Number of detentions	<u>Deficiency</u> <u>Index</u>	<u>Nil</u> <u>Deficiency</u> <u>Index</u>
AZA Shipping	Oil tanker/1	0	2	0
Bernhard Schulte	Bulk Carrier/1	1	20	0
Five Star	Bulk Carrier/2	0	0	1
GESCO	Bulk Carrier/3 & Oil Tanker/2	0	0.6	0.6
SAI Shipping	Other Cargo Vessel/1	0	0	1
Shipping Corporation	Oil tanker/1 & Bulk Carrier/1	0	4	0
Tolani	Bulk Carrier/2	0	0	1

**Table 4: Performance of Indian Flag DOC Holders** 

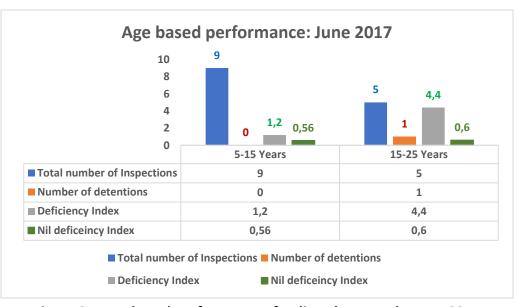


Figure 34: Age based performance of Indian Flag Vessels: June 2017

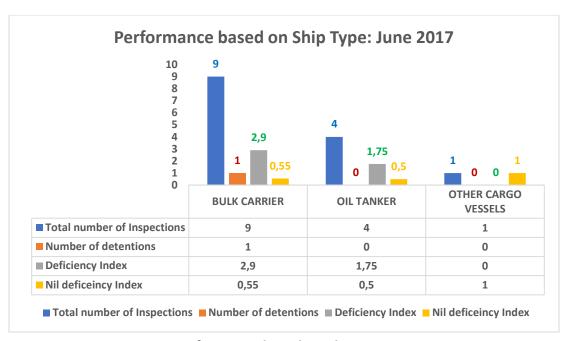


Figure 35: Performance based on Ship type: June 2017

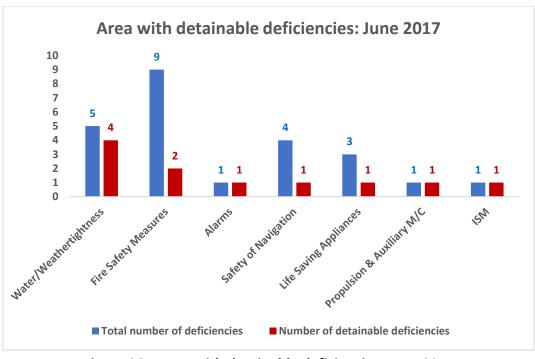


Figure 36: Areas with detainable deficiencies: June 2017

### Surveyour List For the Year 2017

Areas of concern	Total Number of deficiencies
MARPOL Annex I	2
MARPOL Annex IV	1
Living Conditions of Seafarers	1
Accommodation & recreational facilities	2
for seafarers	
Structural Conditions	2

**Table 5: Other areas with deficiencies** 

#### 

Prepared by: Shri Vikrant Rai, Engineer & Ship Surveyor

Approved by: Shri B.R.Sekhar, Chief Surveyor

0			Ja	an	F	eb	M	lar	А	pr	М	ay	Ju	ne	ТО	TAL
Sr. No.	Name	MMD	FSI	PSC	FSI	PSC	FSI	PSC	FSI	PSC	FSI	PS C	FSI	PSC	FSI	PSC
1	Shri P C Majhi, E&SS	Kandla	3	0	9	0	8	0	2	2	2	2	1	0	25	4
2	Capt. S.K.Shukla, NS	Kandla	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3	Shri Jaisinghani, SS	Kandla	NA	NA	NA	0	0									
4	Capt A K Patel, NS	Kandla	0	NA	1	NA	1	NA	4	0	0	0	1	0	7	0
5	Capt R Sagar, NS	Kolkata	0	NA	0	NA	0	NA	0	NA	1	NA	0	NA	1	0
6	Shri K M Rao, E&SS	Kolkata	0	NA	0	NA	0	NA	2	NA	2	NA	0	NA	4	1
7	Shri Sujit K Das, E&SS	Kolkata	0	2	1	2	0	3	0	3	0	4	0	1	1	17
8	Shri S S Murty, E&SS	Vizag	0	1	1	2	1	2	3	0	4	3	0	3	9	11
9	Capt N Mukesh, NS	Mumbai	NA	NA	NA	NA	2	NA	0	NA	0	NA	0	NA	2	0
10	Shri A K Sinha , E&SS	Port Blair	3	NA	0	NA	2	NA	3	NA	3	NA	0	NA	11	0
11	Shri U Rehman, E&SS	Kolkata	0	3	0	0	0	1	1	0	0	0	1	1	2	5
12	Shri A Chaki, E&SS	Haldia	4	NA	1	7	2	6	1	5	2	6	1	2	11	26
13	Shri R R Subbarao, E&SS	Paradip	NA	NA	NA	NA	1	NA	0	NA	3	NA	0	NA	4	0
14	Shri J Mukhopadhya, E&SS	Mumbai	2	3	2	2	2	2	1	0	0	0	0	0	7	7
15	Capt S K Das , Dy NA	Chennai	0	0	0	2	0	0	0	0	2	0	0	0	2	2
16	Shri A K Choudhary, E&SS	Chennai	0	1	0	1	2	2	0	2	1	1	0	1	3	8
17	Shri J Senthilkumar, E&SS	Mumbai	1	7	0	5	0	6	1	0	1	3	1	1	4	22
18	Shri Gopikrishna C, E&SS	Tuticorin	0	2	1	1	2	2	2	2	1	5	0	2	6	14
19	Capt M K Behl,NS	DGS	NA	NA	NA	0	0									
20	Capt T Ghosh,NS	Chennai	NA	NA	NA	0	0									
21	Shri S S Gadkar, Dy CS (I/C)	Delhi	1	0	0	0	0	0	0	0	0	0	0	0	1	0
22	Capt S I Abul Kalam Azad, N S	Mumbai	0	2	0	3	0	1	0	3	0	3	1	1	1	13
23	Shri S Oraon, E&SS	Jamnagar	0	0	0	0	0	0	3	2	2	4	1	3	6	9
24	Capt D J Joseph,NS	DGS	NA	NA	NA	0	0									
25	Capt A Joseph ,NS	DGS	NA	NA	NA	0	0									
26	Shri S Kumar , E&SS	Chennai	5	1	2	1	1	1	1	0	0	0	0	1	9	4

27	Shri S K Shrivastava ,E&SS	Mumbai	1	1	3	1	4	0	6	0	1	2	0	0	15	4
28	Shri N Oommen, Ship surveyour	Mumbai	NA	0	0											
29	Capt V S Manhas , NS	Mumbai	NA	0	0											
30	Shri Anapu Srinvas Parsad	Mumbai	NA	NA	NA	NA	4	NA	2	NA	0	NA	0	NA	6	0
31	Capt R Poswal, NS	Delhi	NA	0	0											
32	Shri G L Meena , E&SS	Delhi	NA	0	0											
33	Capt K R Sundaram, NS	Delhi	NA	0	0											
34	Shri B Mohapatra, R I	Mumbai	NA	0	0											
35	Shri V R Padukone, R I	Mumbai	NA	0	0											
36	Shri B Raj , E&SS	Goa	2	6	2	5	0	7	0	4	0	5	0	2	4	29
37	Shri Gopi Nandan Papineni E&SS DGS	DGS	NA	0	0											
38	Shri A Wankhede, E&SS	DGS	NA	0	0											
39	Shri S Kamath, E&SS	DGS	NA	0	0											
40	Shri Vikrant Rai, E&SS	DGS	NA	0	0											
41	Shri L Natrajan	Kochi	0	2	0	1	0	3	0	2	0	0	0	0	0	8
42	Capt S K Nair, NS	Kochi	NA	0	0											
43	Shri P Nair, E&SS	Kochi	0	NA	0	NA	1	NA	1	NA	0	NA	0	NA	2	0
44	Shri Kiran C S , E&SS	Kochi	0	4	0	3	0	3	0	2	0	6	1	0	1	18
45	Shri V V Paul, E&SS	New Manglore	0	9	1	8	3	5	0	11	4	13	2	8	10	54
46	Capt. P. C. Meena, NS	DGS	NA	0	0											
	Total		22	44	24	44	36	44	33	39	29	57	10	26		