

ANNUAL REPORT

ON

PORT STATE CONTROL

IN THE ASIA-PACIFIC REGION

2015



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FOREWORD

We are pleased to present the **Annual Report on Port State Control in the Asia-Pacific Region 2015**.

As time passes there is an increasing body of evidence and key performance indicators that have confirmed the significant developments and achievements on port State control occurring in the region. These have been achieved through successful and effective operation of the Tokyo MOU. Member Authorities of the Tokyo MOU have made great efforts for continuous enhancement and improvement of PSC inspections. Tokyo MOU has gained the confidence to continue along the path of sustained development and continuous improvement of its PSC activities in the long term.

This annual report highlights the port State control developments and activities of the Tokyo MOU in 2015. In addition, the report also provides port State control statistics and analysis on the results of inspections carried out by member Authorities during the year.

With the aim of eliminating sub-standard shipping in the region entirely, the Tokyo MOU will continue its endeavours to improve upon and harmonize PSC activities among its members. At the same time, the Tokyo MOU will continue to utilize all possible enforcement measures so as to leave little space in the region for operation of ships which pose a threat to maritime safety, the marine environment or living and working conditions on board.

Carlos Fanta
Chairman
Port State Control Committee

Mitsutoyo Okada
Secretary
Tokyo MOU Secretariat

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OVERVIEW

GENERAL INTRODUCTION

The Annual Report on Port State Control in the Asia-Pacific Region is published under the auspices of the Port State Control Committee of the Memorandum of Understanding on Port State Control in the Asia-Pacific Region (Tokyo MOU). This annual report is the twenty-first issue and covers port State control activities and developments in the 2015 calendar year.

The Memorandum was formed in Tokyo on 1 December 1993 and came into effect on 1 April 1994. In accordance with the provisions of the Memorandum, Authorities which have signed and formally accepted the Memorandum or who have been accepted by unanimous consent of the Port State Control Committee become full members. Currently, the Memorandum has 20 full members, namely: Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, the Republic of the Marshall Islands, New Zealand, Papua New Guinea, Peru, the Philippines, the Russian Federation, Singapore, Thailand, Vanuatu and Viet Nam. A maritime Authority that has declared its intention to fully adhere to the Memorandum within a three-year period may be accepted as a co-operating member by unanimous consent of the Port State Control Committee. Panama is currently participating in the Tokyo MOU as a co-operating member Authority.

The main objectives of the Memorandum are to establish an effective port State control regime in the Asia-Pacific region through co-operation of its members, harmonization of the members' activities, to eliminate sub-standard shipping, to promote maritime safety, to protect the marine environment and to safeguard seafarers working and living conditions on board ships.

The Port State Control Committee established under the Memorandum monitors and controls the implementation and on-going operation of the Memorandum. The Committee consists of representatives from the member Authorities, co-operating member Authorities and observers. Observer status has been granted to the following maritime Authorities and inter-governmental organizations by the Committee: Democratic People's Republic of Korea, Macao (China), Solomon Islands, Tonga, United States Coast Guard, the International Maritime Organization (IMO), the International Labour Organization (ILO), the Paris MOU, the Viña del Mar Agreement, the Indian Ocean MOU, the Black Sea MOU and the Riyadh MOU. The Secretariat of the Memorandum is located in Tokyo, Japan.

For the purpose of the Memorandum, the following instruments are the basis for port State control activities in the region:

- the International Convention on Load Lines, 1966;

- the Protocol of 1988 relating to the International Convention on Load Lines, 1966, as amended;
- the International Convention for the Safety of Life at Sea, 1974, as amended;
- the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974;
- the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974;
- the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto, as amended;
- the International Convention on Standards for Training, Certification and Watchkeeping for Seafarers, 1978, as amended;
- the Convention on the International Regulations for Preventing Collisions at Sea, 1972;
- the International Convention on Tonnage Measurement of Ships, 1969;
- the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147);
- the Maritime Labour Convention, 2006;
- the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001; and
- the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969.

REVIEW OF YEAR 2015

Implementation of the new inspection regime (NIR) entered into the second year in 2015. Preliminary assessment has indicated that the percentage of inspections of high risk ships (HRS) has increased during this period. This is regarded as a positive indication of the effective and successful implementation of the NIR. Continuous improvements have been observed on application of measures on under-performing ships. The total number of under-performing ships identified and the number of individual ships involved in 2015 were further reduced by nearly 50% and 40% respectively, comparing with the numbers in 2014.

Membership of the Tokyo MOU was further enhanced in 2015. Peru was accepted as the twentieth member Authority of the Tokyo MOU, upon completion of its three-year term of co-operating membership. In addition, Panama was granted a co-operating member status. It is expected that Panama will attain full membership of the Tokyo MOU in due course.

The concentrated inspection campaign (CIC) on Crew Familiarization for Enclosed Space Entry was carried out from 1 September to 30 November 2015. During the three-month CIC period, a total of 8,429 PSC inspections were conducted by the member Authorities, of which 6,826 were related to a CIC inspection.

In 96% of CIC inspections, there was evidence of the ship's crew having participated in an enclosed space entry and rescue drill at the required interval in accordance with applicable regulations. During the CIC inspections, Port State Control Officers were required to observe an enclosed space entry drill where practicable. 4,487 such drills were observed during the campaign and of these, 93% were conducted to a satisfactory standard. There were a total of 1,584 CIC related deficiencies recorded during the campaign period. The results of the CIC confirmed an overall general satisfactory level of compliance with the applicable

requirements of the SOLAS Convention relating to enclosed space entry. However, there is still room for improvement as about one third of CIC inspections received unsatisfactory responses to the questions. The CIC on Crew Familiarization for Enclosed Space Entry was developed jointly by the Paris and the Tokyo Memoranda. Regional PSC regimes of the Black Sea MOU, the Indian Ocean MOU, the Mediterranean MOU and the Viña del Mar Agreement also participated in the CIC.

THE PORT STATE CONTROL COMMITTEE



The twenty-sixth Committee meeting, Putrajaya, October 2015.

The Port State Control Committee held its twenty-sixth meeting from 5 to 8 October 2015 in Putrajaya, Malaysia. The meeting was hosted by the Marine Department of Malaysia. Mr. Abdul Samad Bin Shaik Osman, Principal Assistant Director, Maritime Industry Control Division, Marine Department Malaysia, chaired the meeting.

The meeting was attended by representatives from the member Authorities of Australia, Canada, Chile, China, Hong Kong (China), Japan, the Republic of Korea, Malaysia, the Marshall Islands, New Zealand, Papua New Guinea, the

Philippines, the Russian Federation, Singapore, Thailand and Viet Nam; co-operating member Authority of Peru; and observers of DPR Korea, Macao (China), the United States Coast Guard, the Black Sea MOU, the Indian Ocean MOU, the Paris MOU, the Riyadh MOU and the Viña del Mar Agreement. Furthermore, Panama, the newly accepted Co-operating Member Authority, also attended the meeting.

The Committee considered the application for full membership by Peru, which had participated in the Tokyo MOU as a Co-operating Member Authority for three years. The Committee also considered the report of a fact finding mission that verified full compliance with the qualitative membership criteria by Peru. In accordance with provision of the Memorandum, the Committee unanimously agreed to accept Peru as the 20th member Authority. The Committee considered the application for Co-operating Member status by Panama. The Committee unanimously agreed to accept Panama as a Co-operating Member of the Tokyo MOU in accordance with the relevant provisions of the Memorandum.

The Committee reviewed and revised the Strategic Plan, Strategic Directions and the list of planned actions for the five-year period from 2016 to 2020. The Committee considered and approved amendments to the guidelines for the detention review panel, guidelines for the responsibility assessment of RO and guidelines for PSC officers on Maritime Labour Convention. The Committee approved the new version of the Port State Control Manual.

The Committee reviewed the analysis report of the most important key performance

indicators (KPIs). The Committee received a general report on analysis of implementation of the new inspection regime (NIR) in 2014. The Committee agreed that the implementation of NIR should be monitored and evaluated continuously. The Committee was also informed of the effective implementation of measures on under-performing ships.

The Committee considered the final report of the CIC on STCW Hours of Rest 2014. Taking the relevant circumstance into consideration, the Committee decided to conduct the CIC on Cargo Securing Arrangements in 2016 and approved the questionnaire and guidelines for the mentioned CIC. With the agreement of the Paris MOU, the Committee confirmed to carry out a joint CIC on Safety of Navigation in 2017.

Moreover, the Committee also gave consideration and made decisions on the following:

- assessment of performance of member Authorities;
- revision of questionnaire on national arrangement for PSC;
- amendments to the policy on CICs;
- adoption of amendments to the Memorandum;
- aspects concerning PSC for fishing vessels;
- approval of revised integrated strategic plan for technical co-operation programmes for 2016 - 2020; and

- awarding of the winner of the best deficiency photo of the year.

As the terms of office of both the Chairman and the Vice-Chairman expired at the end of the PSCC26 meeting, the Committee unanimously elected Mr. Carlos Fanta, Head, Port State Control Division, Directorate of Maritime Safety, Security and Operation, Directorate General of the Maritime Territory and Merchant Marine (DIRECTEMAR) of Chile, as the Chairman and Mr. Alex Schultz-Altmann, Manager, Ship Inspection and Registration, Ship Safety Division, Australian Maritime Safety Authority (AMSA), as the Vice Chairman of the Committee for the next three meetings.

In conjunction with the Committee meeting, an open forum with industry was conducted. According to the topic selected, INTERTANKO, ICS and BIMCO were invited to the forum for discussion and exchange of views on issues of mutual interest.

The twenty-seventh meeting of the Port State Control Committee will be held in Australia in October 2016.

TECHICAL WORKING GROUP (TWG)

The ninth meeting of the Technical Working Group (TWG) was held in Putrajaya, Malaysia, from 2 to 3 October 2015, prior to the twenty-sixth meeting of the Committee. The TWG09 meeting was chaired by Mr. Kenny Crawford, Manager, Navigation, Environment and International Operations (NEIO), Maritime New Zealand.

The TWG meeting discussed and made recommendations to the Committee on matters relating to:

- cases considered by the detention review panel;
- periodical revision of the PSC Manual;
- development and review of PSC guidelines;
- preparation and arrangements for on-going and upcoming CICs;
- reports of intersessional groups: advisory group on information exchange (AG-IE), intersessional group on batch protocol (IG-BP) and intersessional group on statistics (IG-Statistics);
- activities and operation of the APCIS system;
- management and maintenance of the coding system;
- analysis and statistics on PSC;
- information exchange with other regional PSC databases; and
- reports and evaluations of technical co-operation activities.

As the terms of office of both the Chairman and the Vice-Chairman expired at the end of the TWG09 meeting, the meeting unanimously re-elected Mr. Kenny Crawford of New Zealand as the Chairman and elected Mr. Hu Rong Hua of China as the Vice Chairman for the next three sessions of TWG.

PREPARATION OF THE THIRD JOINT MINISTERIAL CONFERENCE

By the initiative of Canada, a Third Joint Ministerial Conference of the Paris and the Tokyo Memoranda on Port State Control has been planned to be held in Canada at the beginning of May 2017. The First Joint Ministerial Conference of the two Memoranda was held in 1998 and the Second was in 2004, both of which were hosted by the Transport Canada.

Two preparatory discussion group (PDG) meetings were organized in conjunction with the second session of the Sub-Committee on Implementation of IMO Instruments (III) and the PSCC26 meeting respectively. The purpose of PDG meetings was to identify issues to be addressed at the conference and to prepare draft text of the Ministerial Declaration of the conference. Further PDG and high level meetings are also planned.

ASIA-PACIFIC COMPUTERIZED INFORMATION SYSTEM (APCIS)

For reporting and storing of port State inspection results and facilitating exchange of information in the region, a computerized database system, the Asia-Pacific Computerized Information System (APCIS), was established. The central site of the APCIS is located in Moscow, under the auspices of the Ministry of Transport of the Russian Federation.

The APCIS system is connected by member Authorities on-line or by batch protocol for searching ships for inspection and for inputting and transmitting inspection reports. The APCIS also supports on-line publication of

PSC data on the Tokyo MOU web-site (<http://www.tokyo-mou.org>) on a real time basis. Based on data stored in the database, the APCIS produces annual and detailed PSC statistics.

For inter-regional information exchange, the APCIS has established deep hyperlinks with the databases of:

- THETIS of the Paris MOU;
- BSIS of the Black Sea MOU;
- IOCIS of the Indian Ocean MOU; and
- CIALA of the Viña del Mar Agreement.

Furthermore, the Tokyo MOU PSC data is also provided to GISIS and EQUASIS.

TRAINING AND SEMINARS FOR PORT STATE CONTROL OFFICERS

The fifth general training course for PSC officers was held in Yokohama, Japan, from 24 August to 18 September 2015. This was the eleventh training course jointly organized by IMO and the Tokyo MOU. A total of 22 PSC officers participated in the training course. Fourteen of them were from the Tokyo MOU Authorities of China, Fiji, Indonesia, Macao (China), Malaysia, the Marshall Islands, New Zealand, the Philippines, the Russian Federation, the Solomon Islands, Thailand, Tonga, Vanuatu and Viet Nam. Seven of them were invited by IMO, one each from the Abuja MOU, the Black Sea MOU, the Caribbean MOU, the Indian Ocean MOU, the Mediterranean MOU, the Riyadh MOU and the Viña del Mar Agreement. In addition, one more participant was sent and supported by the Indian Ocean MOU. The course was conducted with the assistance of the Shipbuilding Research Center of Japan (SRC).



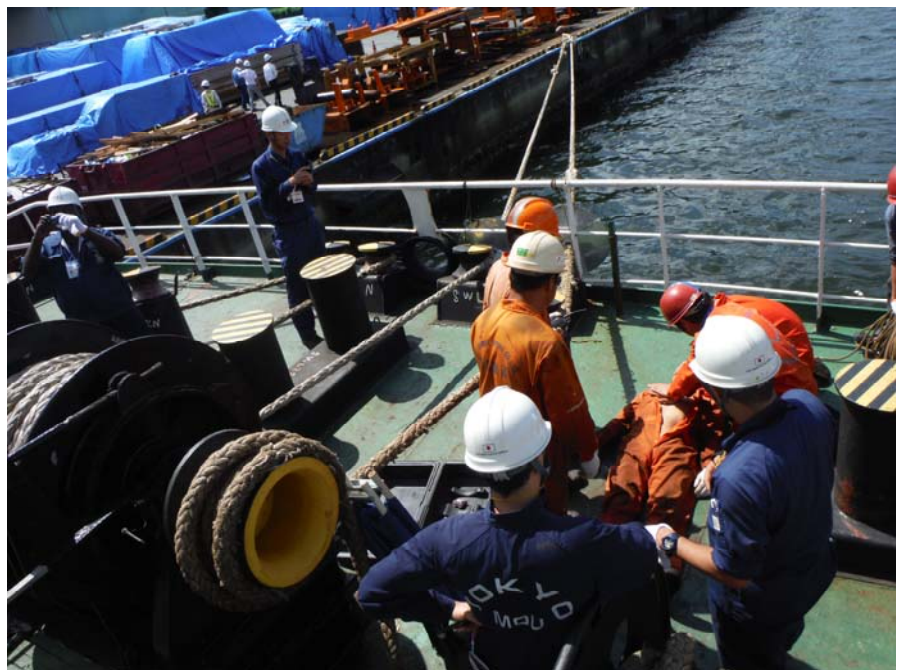
Training course for PSC officers

allocated in nine District Transport Bureaus. In addition, a technical visit to a liferaft manufacturer was also arranged.

The twenty-third seminar for PSC officers and the Workshop on Effective Implementation of IMO Conventions were held in Nadi, Fiji, from 13 to 17 July 2015. The seminar and workshop were hosted by the Maritime Safety Authority of Fiji (MSAF). Participants from Authorities of Canada, China, Fiji, Hong Kong

(China), Indonesia, Japan, the Republic of Korea, Macao (China), Malaysia, Marshall Islands, New Zealand, Papua New Guinea, the Philippines, the Russian Federation, Thailand, Tonga, Vanuatu and Viet Nam attended the seminar. In addition,

The general training course consisted of two parts, i.e. classroom lectures and onboard exercises. Classroom lectures were arranged in the first two weeks, during which participants received a wide range of lectures focussing on IMO conventions and regulations relevant to port State control (PSC) implementation. Experts from the Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT), SRC and the Secretariat delivered lectures on relevant subjects. Onboard training was carried out in the following two weeks, during which participants received practical training on PSC inspections at ports of Otaru, Tomakomai, Yokohama, Niigata, Nagoya, Osaka, Kobe, Hiroshima, Takamatsu or Hakata



Onboard training



Onboard training

representatives from the Secretariat of Pacific Community (SPC) also participated in the seminar.

The major topics of the seminar were the Concentrated Inspection Campaign (CIC) on Crew Familiarization for Enclosed Space Entry, Introduction of Energy Efficiency Requirements under MARPL Annex VI, PSC relating to MLC, results of CIC on STCW Hours of Rest 2014. Experts from the Maritime New Zealand, the Maritime Safety Administration of China and MLIT of Japan provided the comprehensive and informative presentations on the relevant topics. Two case study sessions were carried out to discuss actual cases provided by Authorities or reviewed by the detention



The twenty-third seminar for PSC officers

review panel. Along with the seminar, a Workshop on Effective Implementation of IMO Conventions was organized jointly by IMO and the Tokyo MOU. Experts from the Korean Register of Shipping and the Hong Kong Marine Department designated by IMO gave presentations on recent development on IMO conventions and PSCO decision support tool.

There were four expert missions conducted in 2015. The first mission was conducted in Xiamen, China, from 23 to 26 July 2015 by an expert from Canada. The second mission was delivered in Batam and Balikpapan, Indonesia, from 24 August to 4 September 2015 by experts from the Republic of Korea. The third mission was carried out in Phu Quoc, Viet Nam, and the fourth mission was organized in Suva, Fiji,

from 30 November to 4 December 2015 respectively. Both the missions were conducted by experts from Japan.

Eight PSC officer exchanges were completed in 2015, namely one PSC officer from the Republic of Korea to Australia, one from Singapore to Hong Kong (China), one from Australia to Canada, one from Hong Kong (China) to the Russian Federation, one from Canada to the Republic of Korea, one from Chile to China, one from the Russian Federation to New Zealand and one from Japan to Singapore. Currently, the PSC officers exchange programme is implemented among the Authorities of Australia, Canada, Chile, China, Hong Kong (China), Japan, the Republic of Korea, New Zealand, the Russian Federation and Singapore.

The successful and effective implementation of technical co-operation programmes promotes improvements and harmonization of PSC activities within the Tokyo MOU. The Nippon Foundation kindly provided funding for the Tokyo MOU technical co-operation activities.

CO-OPERATION WITH OTHER REGIONAL PORT STATE CONTROL AGREEMENTS

Establishment and effective operation of regional co-operation regimes on port State control has formed a worldwide network for elimination of substandard shipping. Currently, there are a total of nine regional port State control agreements (MOUs) covering the major part of the world, namely:

- Abuja MOU
- Black Sea MOU
- Caribbean MOU
- Indian Ocean MOU

- Mediterranean MOU
- Paris MOU
- Riyadh MOU
- Tokyo MOU
- Viña del Mar Agreement

As one of the inter-governmental organizations (IGO) associated with IMO, the Tokyo MOU has attended meetings of the Flag State Implementation (FSI) Sub-Committee since 2006. The Tokyo MOU Secretariat attended the second meeting of the Sub-Committee on Implementation of IMO Instruments (III) in July 2015.

In support of inter-regional collaboration on port State control, the Tokyo MOU holds observer status within the Paris MOU, the Caribbean MOU and the Indian Ocean MOU. In a similar manner, the Tokyo MOU has granted observer status to the Paris MOU, the Indian Ocean MOU, the Viña del Mar Agreement and the Black Sea MOU.

The Tokyo MOU has established, and maintains, effective and close co-operation with the Paris MOU at both administrative and technical levels. Representatives of the two Secretariats attend the Port State Control Committee meetings of each MOU on a regular basis. During the period of 2015, continuous efforts and further coordinated actions by the two Memoranda were made on the following:

- carrying out the joint CIC on Crew Familiarization for Enclosed Space Entry 2015;
- co-ordination on subjects of future joint CICs;
- continuous submission to IMO on



Expert mission training course for the Viña del Mar Agreement

annual list of flags targeted by the Paris MOU, Tokyo MOU and the United States Coast Guard; and

- continuous analysis of performance of flag and RO and joint submission of the outcome to IMO.

Authorities and six other regional PSC regimes attended the course.

Under the project of Australian Aid's Public Sector Linkages Programme, the third PSC training course for the Indian Ocean MOU was carried out in Muscat and Sohar, Oman, from 6 to 17 December 2015. Experts from the Tokyo MOU Authorities of Australia, New Zealand and Japan

and an officer from the Tokyo MOU Secretariat were dispatched to carry out the training. A total of 17 participants from the Indian Ocean MOU Authorities participated in the training course.

The third PSC training course was held in Lima, Peru, from 16 to 27 March 2015, under the project of technical co-operation with the Viña del Mar Agreement. The course was organized jointly by the Tokyo MOU, the Viña del Mar Agreement and IMO. Training was conducted by experts from the Tokyo MOU Authorities of Canada, Chile and Japan and an officer from the Tokyo MOU Secretariat. A total of 25 participants from the Latin American



Expert mission training course for the Indian Ocean MOU

PORT STATE CONTROL UNDER THE TOKYO MOU, 2015

INSPECTIONS

In 2015, 31,407 inspections, involving 17,269 individual ships, were carried out on ships registered under 96 flags. Figure 3 and Table 2 show the number of inspections carried out by the member Authorities of the Tokyo MOU. Out of 31,407 inspections, there were 19,142 inspections where ships were found with deficiencies. Since the total number of individual ships operating in the region was estimated at 24,632*, the inspection rate in the region was approximately 70%** in 2015 (see Figure 1).

Information on inspections according to ships' flag is shown in Table 4.

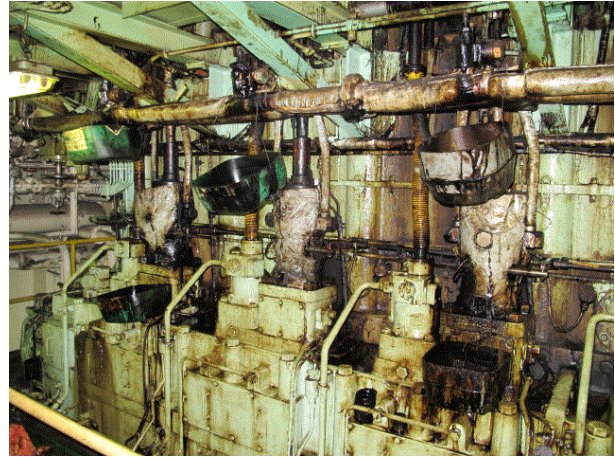
Figure 2 and Table 3 provide information on inspections per ship risk profile.

Figures summarizing inspections according to ship type are set out in Figure 4 and Table 5.



* Number of individual ships which visited the ports of the region during the year (the figure was provided by LLI).

** The inspection rate is calculated by: number of individual ships inspected/number of individual ships visited.



Inspection results regarding recognized organizations are shown in Table 6.

DETENTIONS

Ships are detained when the condition of the ship or its crew does not correspond substantially with the applicable conventions. Such strong action is to ensure that the ship can 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.

In 2015, 1,153 ships registered under 62 flags were detained due to serious deficiencies having been found onboard. The detention rate of ships inspected was 3.67%. Both the number of detentions and detention percentage has decreased continuously.

Figure 5 shows the detention rate by flag for flags where at least 20 port State inspections had been conducted and whose detention rate was above the average regional rate. Figure 6 gives the detention rate by ship type. A newly



introduced Figure 8 illustrates the most frequent detainable deficiencies found during inspections.

The Black-grey-white list (Table 8) indicates levels of performance of flags over a three-year rolling period. The black-grey-white list for 2013-2015 consists of 65 flags, whose ships were involved in 30 or more inspections during the period. Same as the last year, the number of flags in the black list is 12. Bangladesh downgraded from the black list into the grey list while Togo moved from the grey list into the black list. The number of flags on the grey list decreased from 19 to 17 during the reporting period. The white list increased to 36 flags. Antigua and Barbuda, Portugal, Thailand and Tuvalu joined in the white list.

A list of under-performing ships (i.e. ships detained three or more times during previous

twelve months) is published monthly. A total of 141 vessels, involving 37 individual ships, were identified as under-performing ships in 2015. The list of under-performing ships is provided in Table 16.

DEFICIENCIES

Where conditions on board are found that are not in compliance with the requirements of the relevant instruments by the port State control officers, these are recorded as deficiencies and required to be rectified.

A total of 83,606 deficiencies were recorded in 2015. The deficiencies found are categorized and shown in Figure 7 and Table 7.

It has been noted that fire safety measures, safety of navigation and life-saving appliances continue to be the top three categories of deficiencies discovered on ships. In 2015,





OVERVIEW OF PORT STATE CONTROL RESULTS 2005 – 2015

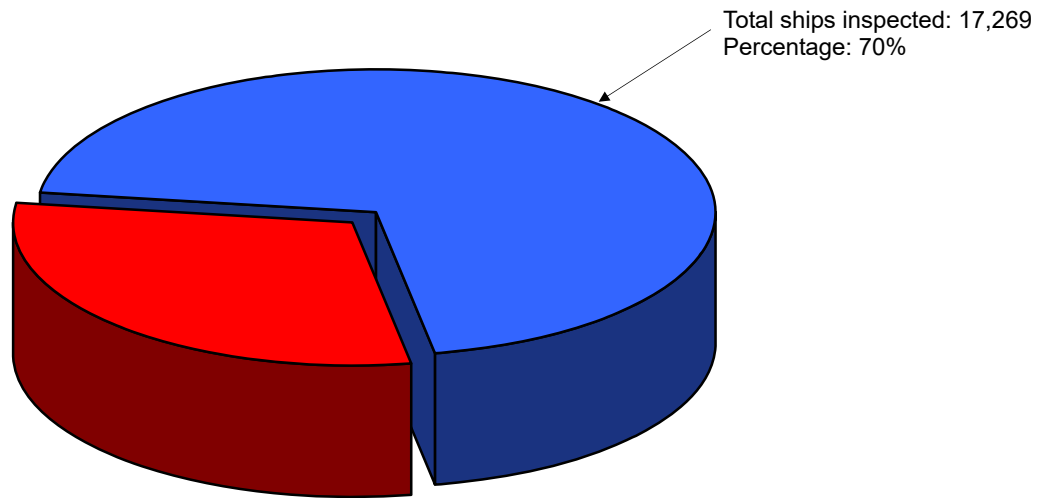
Figures 9-14 show the comparison of port State inspection results for 2005 - 2015. These figures indicate the trends in port State activities and ship performance over the past eleven years.

15,143 deficiencies related to fire safety measures, 12,619 safety of navigation related deficiencies and 11,213 deficiencies related to life-saving appliances were recorded, representing almost 50% of the total number of all recorded deficiencies.

The total number of recorded deficiencies has decreased continuously during the past five years. In 2015, deficiencies reduced 5,954 in number or 6.65% by percentage. The major reduction is found in categories of fire safety and safety of navigation. Deficiencies relating to emergency systems increased more than 10% in 2015. This is most likely stemming from the CIC on Crew Familiarization for Enclosed Space Entry conducted during the year.



Figure 1: INSPECTION PERCENTAGE



Total individual ship visited: 24,632

Figure 2: INSPECTION PER SHIP RISK PROFILE

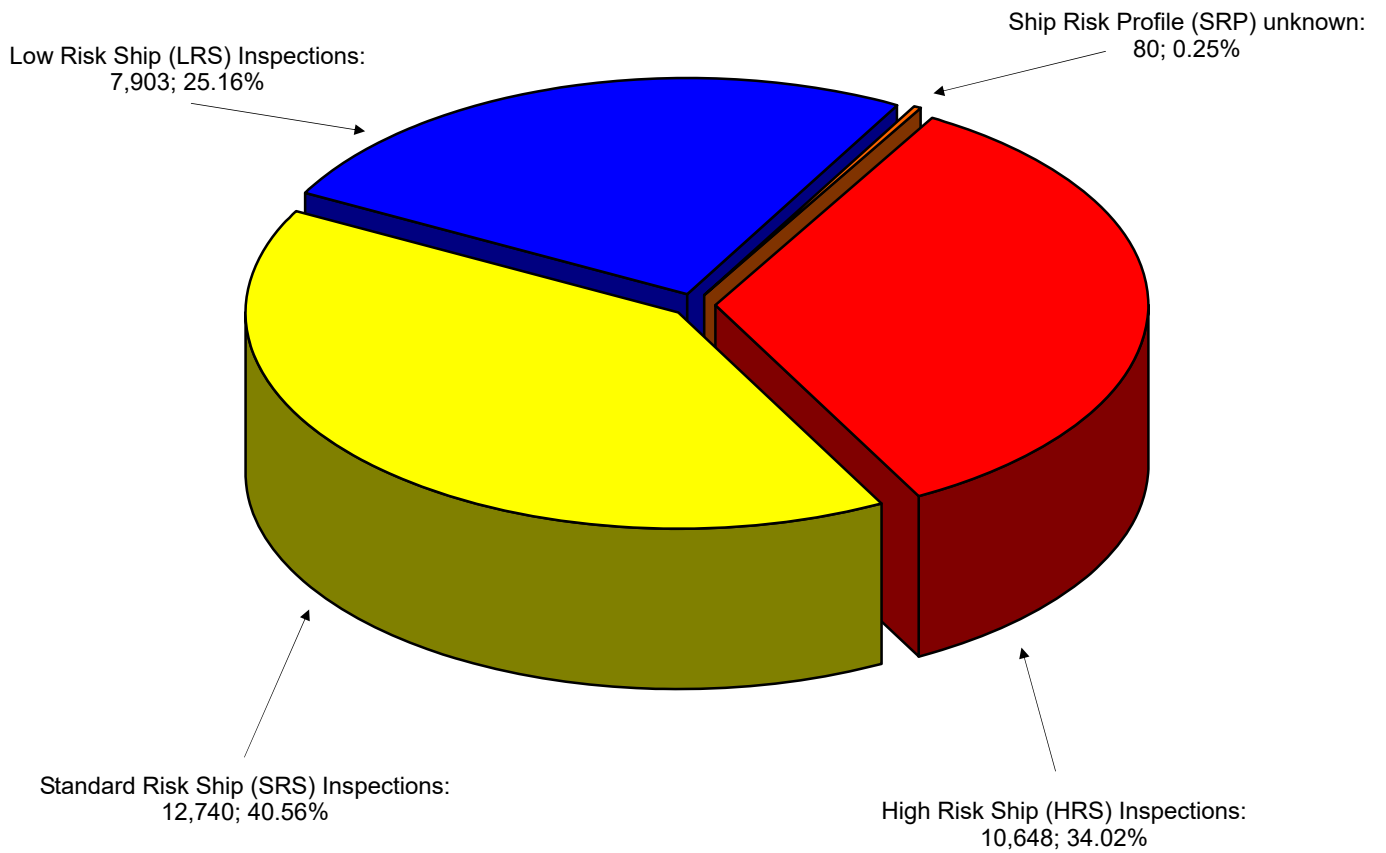


Figure 3: PORT STATE INSPECTIONS - CONTRIBUTION BY AUTHORITIES

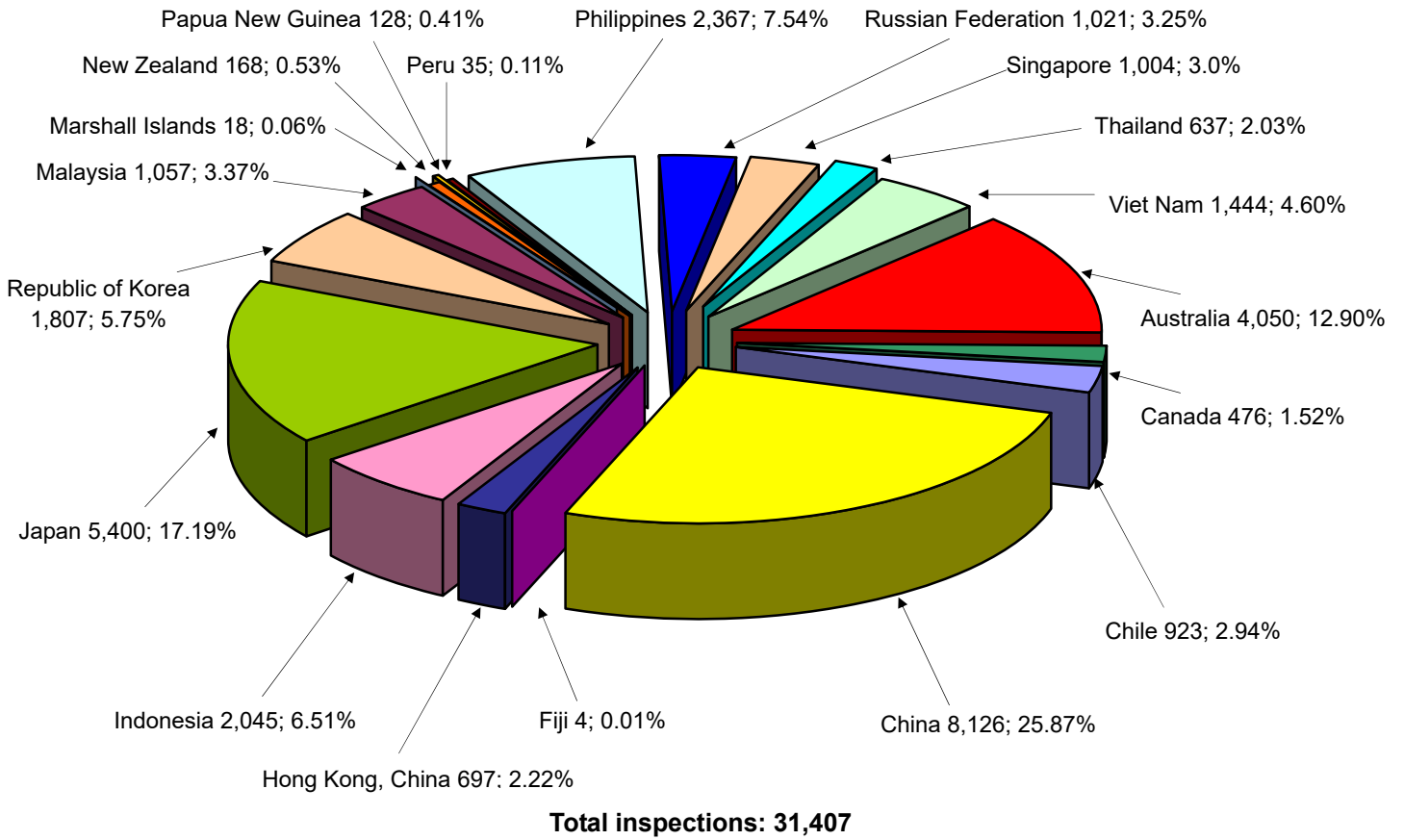


Figure 4: TYPE OF SHIP INSPECTED

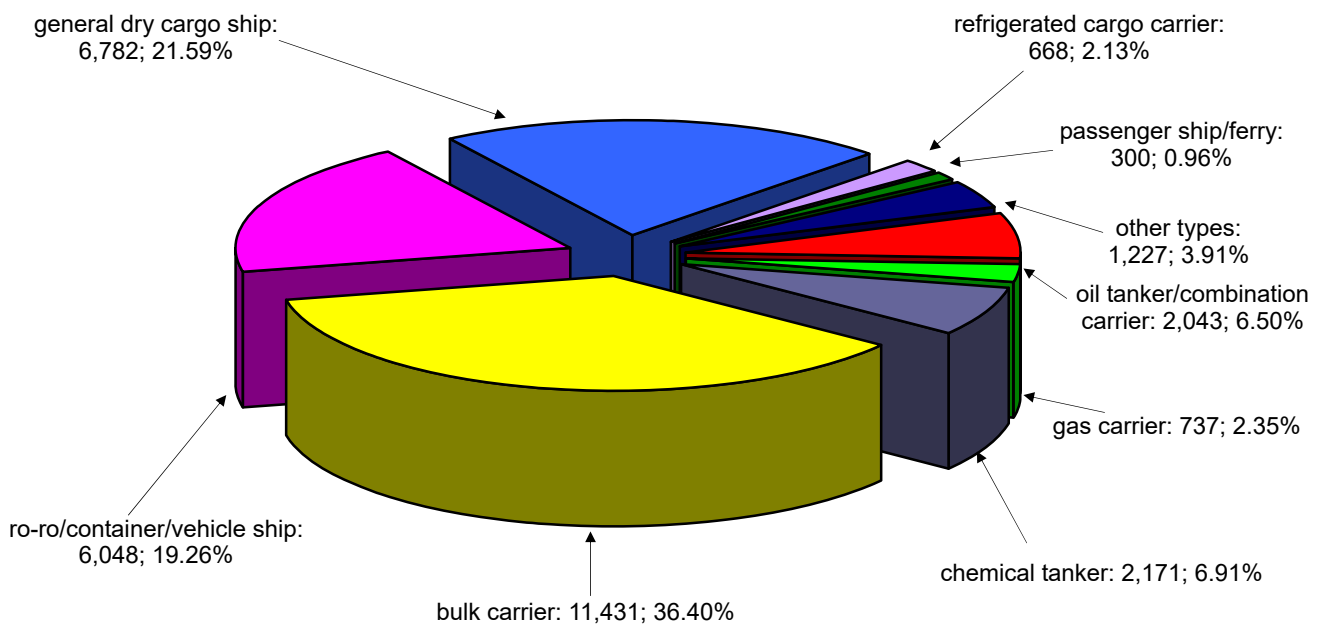
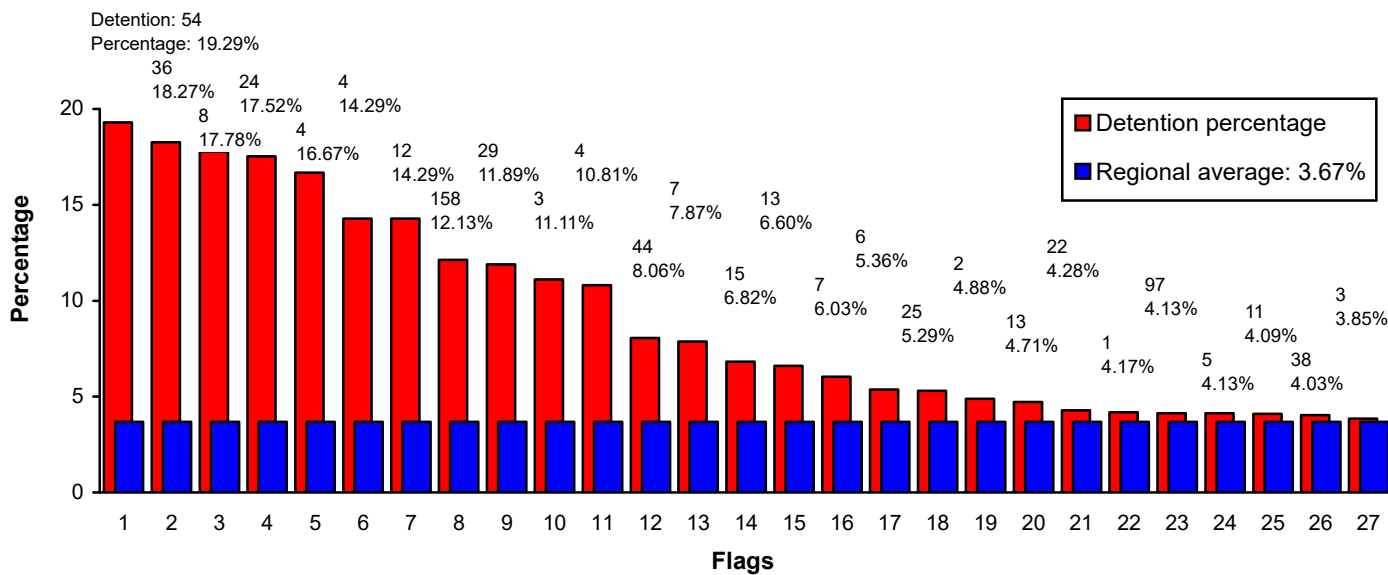


Figure 5: DETENTIONS PER FLAG



Flags:

- | | | | |
|------------------------------|-------------------------|---------------------------|------------------------|
| 1. Sierra Leone | 2. Indonesia | 3. Niue | 4. Mongolia |
| 5. Palau | 6. Cook Islands | 7. Togo | 8. Cambodia |
| 9. Korea, Dem. People's Rep. | 10. Tanzania | 11. Saint Kitts and Nevis | 12. Belize |
| 13. India | 14. Kiribati | 15. Philippines | 16. Italy |
| 17. Vanuatu | 18. Antigua and Barbuda | 19. Saudi Arabia | 20. Russian Federation |
| 21. Cyprus | 22. Curacao | 23. Liberia | 24. Taiwan, China |
| 25. Thailand | 26. Malta | 27. Gibraltar (UK) | |

Note: Flags listed above are those flags the ships of which were involved in at least 20 port State inspections and detention percentage of which are above the regional average detention percentage. The complete information on detentions by flag is given in Table 3.

Figure 6: DETENTION PER SHIP TYPE

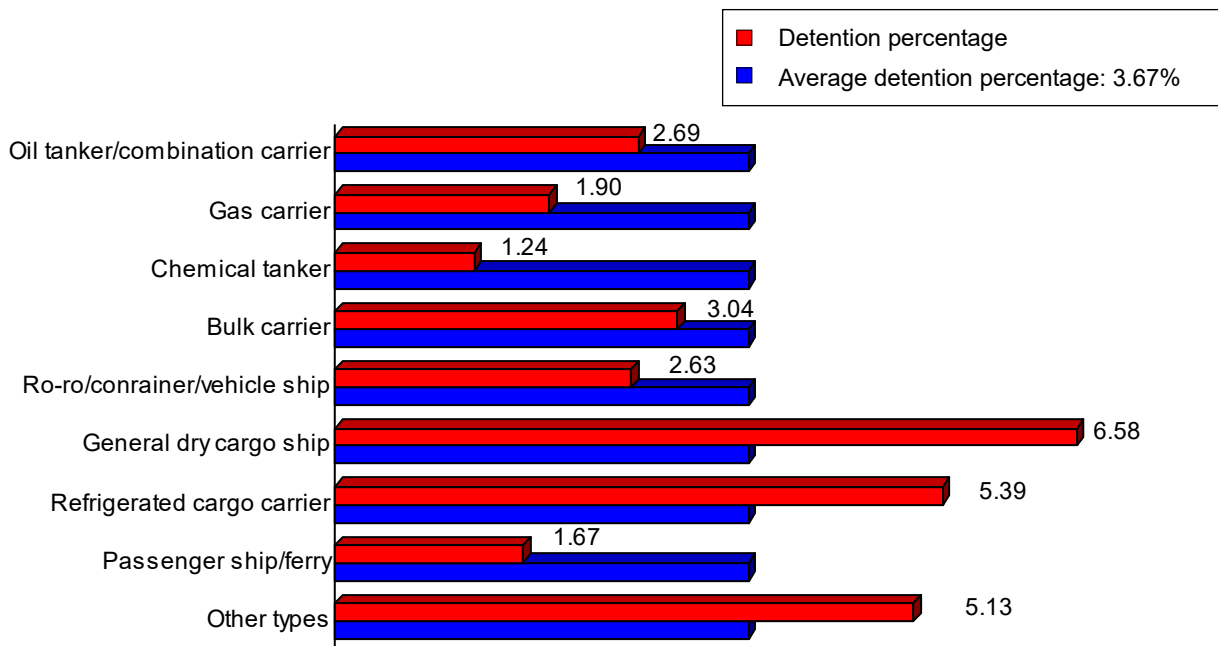


Figure 7: DEFICIENCIES BY MAIN CATEGORIES

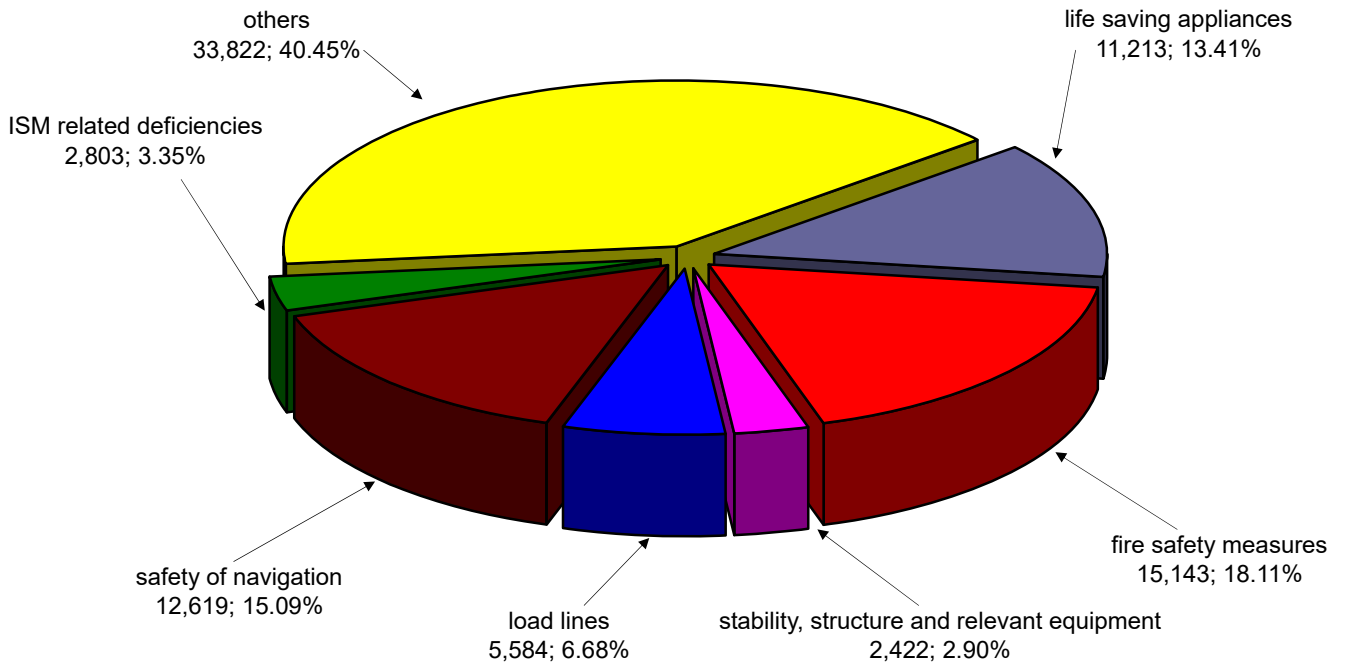
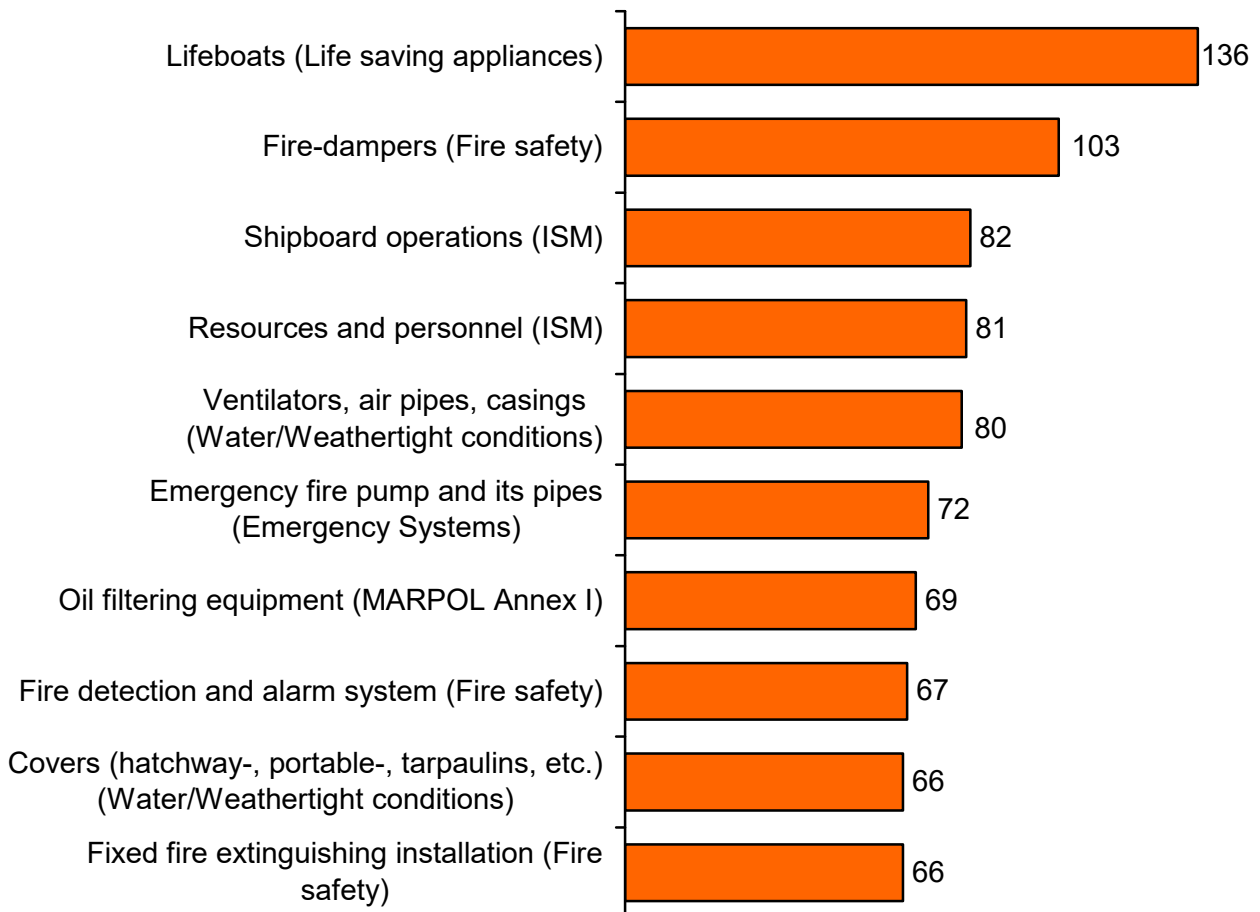


Figure 8: MOST FREQUENT DETAINABLE DEFICIENCIES



OVERVIEW OF PORT STATE CONTROL RESULTS 2005 - 2015

Figure 9: NO. OF INSPECTIONS

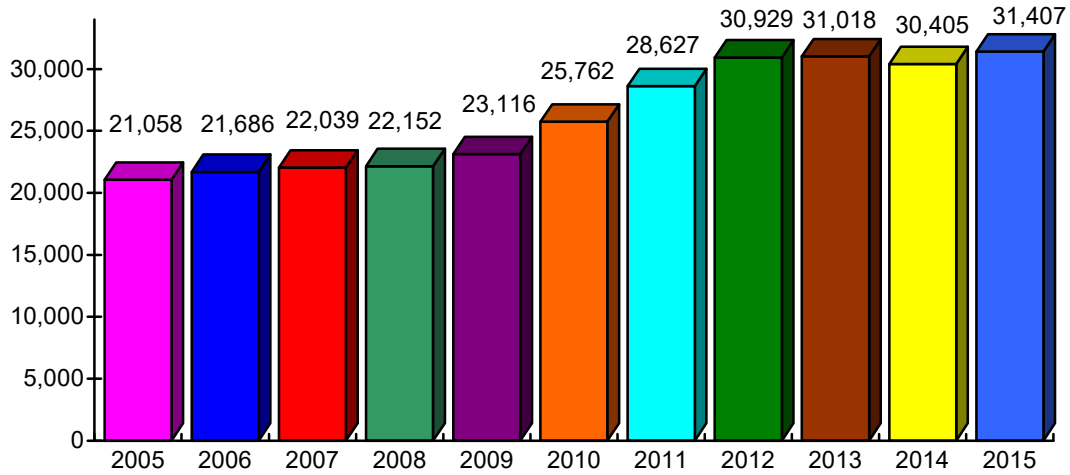


Figure 10: INSPECTION PERCENTAGE

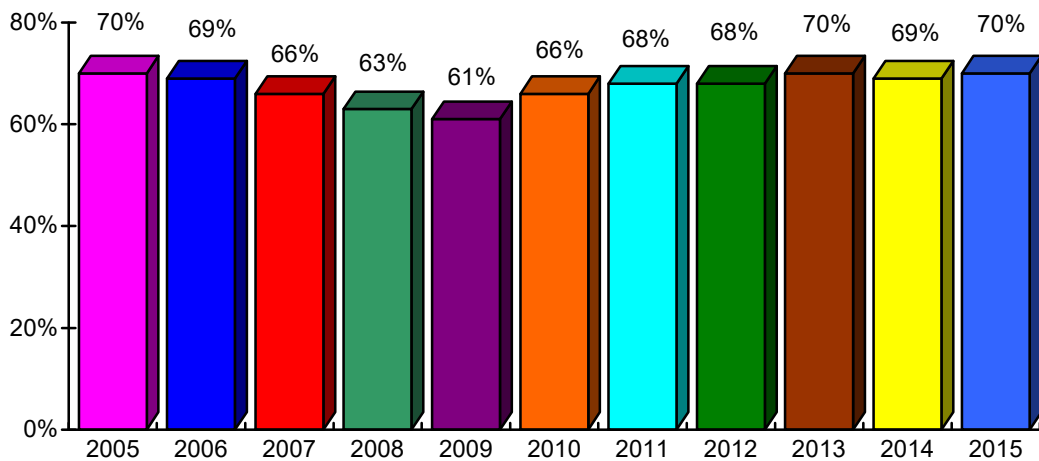


Figure 11: NO. OF INSPECTIONS WITH DEFICIENCIES

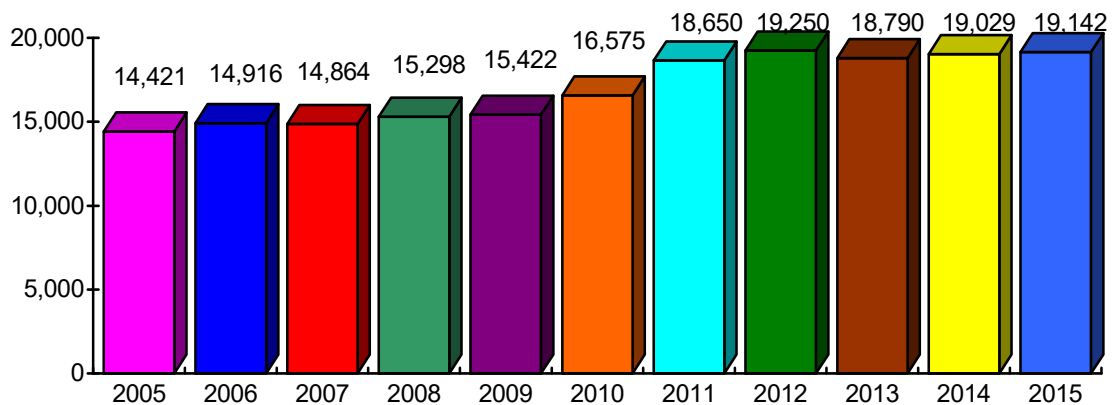


Figure 12: NO. OF DEFICIENCIES

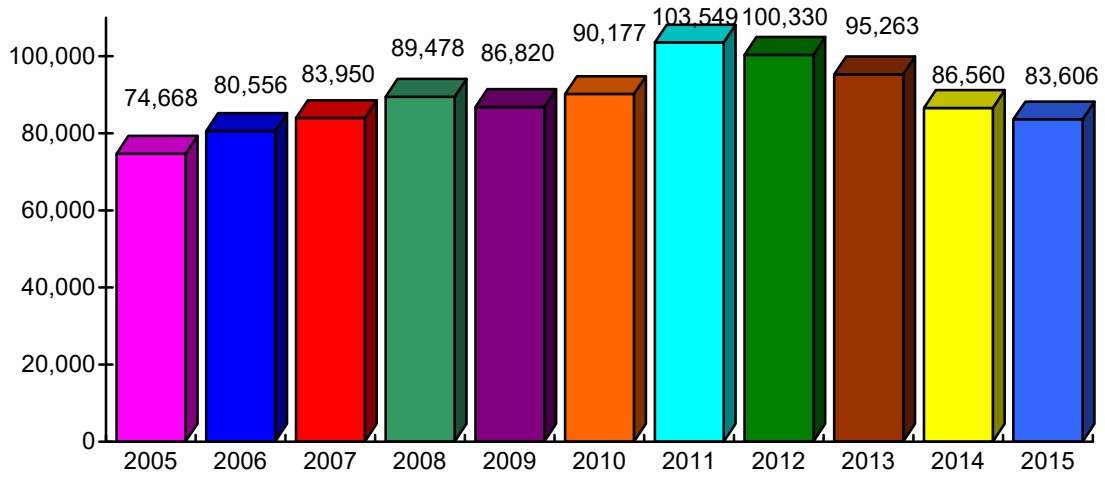


Figure 13: NO. OF DETENTIONS

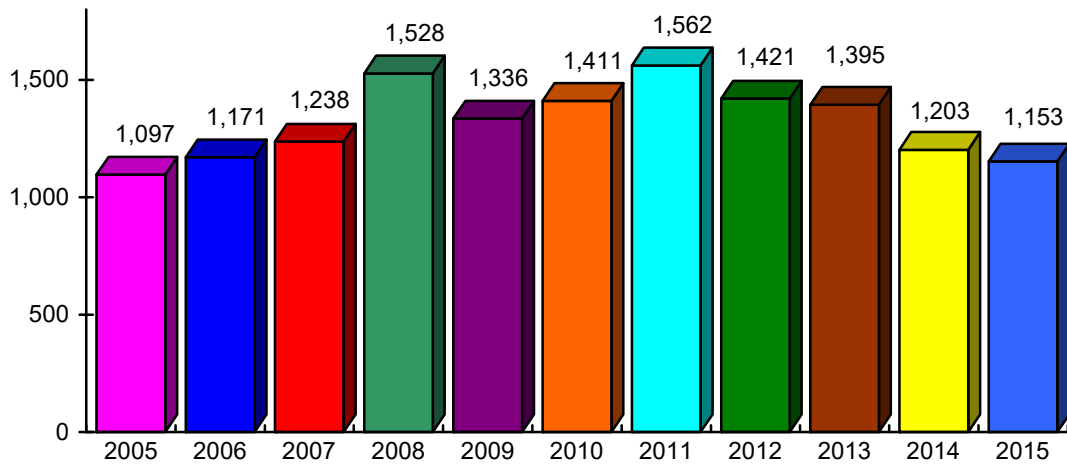
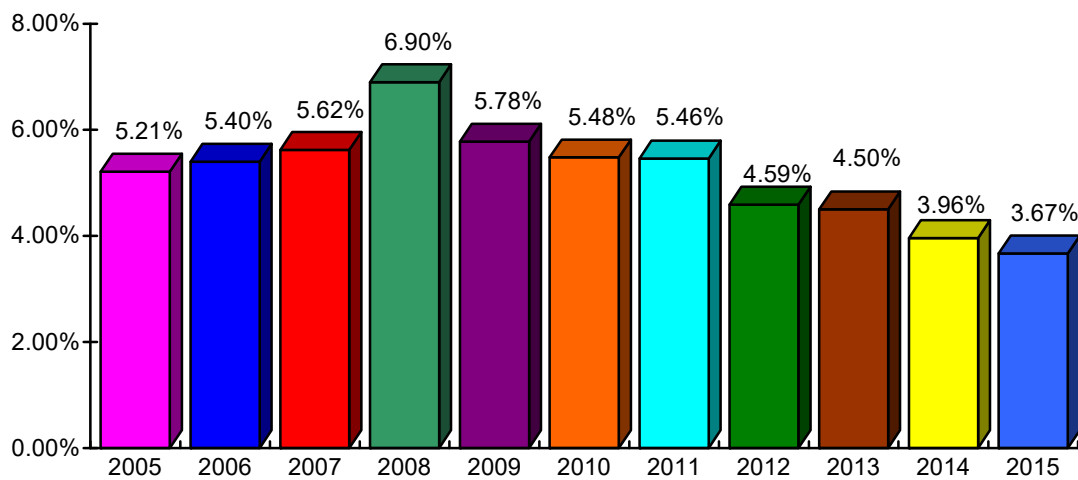


Figure 14: DETENTION PERCENTAGE



ANNEX 1

STATUS OF THE RELEVANT INSTRUMENTS

Table 1: STATUS OF THE RELEVANT INSTRUMENTS
(Date of deposit of instruments)

(as at 31 December 2015)

Authority	LOAD LINES 66	LOAD LINES PROT 88	SOLAS 74	SOLAS PROT 78	SOLAS PROT 88	MARPOL 73/78
Australia	29/07/68	07/02/97	17/08/83	17/08/83	07/02/97	14/10/87
Canada	14/01/70	08/04/10	08/05/78	-	08/04/10	16/11/92
Chile	10/03/75	03/03/95	28/03/80	15/07/92	29/09/95	10/10/94
China	05/10/73	03/02/95	07/01/80	17/12/82	03/02/95	01/07/83
Fiji	29/11/72	28/07/04	04/03/83	28/07/04	28/07/04	-
Hong Kong, China*	16/08/72	23/10/02	25/05/80	14/11/81	23/10/02	11/04/85
Indonesia	17/01/77	-	17/02/81	23/08/88	-	21/10/86
Japan	15/05/68	24/06/97	15/05/80	15/05/80	24/06/97	09/06/83
Republic of Korea	10/07/69	14/11/94	31/12/80	02/12/82	14/11/94	23/07/84
Malaysia	12/01/71	11/11/11	19/10/83	19/10/83	11/11/11	31/01/97
Marshall Islands	26/04/88	29/11/94	26/04/88	26/04/88	16/10/95	26/04/88
New Zealand	05/02/70	03/06/01	23/02/90	23/02/90	03/06/01	25/09/98
Papua New Guinea	18/05/76	-	12/11/80	-	-	25/10/93
Peru	18/01/67	24/06/09	04/12/79	16/07/82	21/08/09	25/04/80
Philippines	04/03/69	-	15/12/81	-	-	15/06/01
Russian Federation	04/07/66	18/08/00	09/01/80	12/05/81	18/08/00	03/11/83
Singapore	21/09/71	18/08/99	16/03/81	01/06/84	10/08/99	01/11/90
Thailand	30/12/92	-	18/12/84	-	-	02/11/07
Vanuatu	28/07/82	26/11/90	28/07/82	28/07/82	14/09/92	13/04/89
Viet Nam	18/12/90	27/05/02	18/12/90	12/10/92	27/05/02	29/05/91
Panama	13/05/66	17/09/07	09/03/78	14/07/82	17/09/07	20/02/85
DPR Korea	18/10/89	08/08/01	01/05/85	01/05/85	08/08/01	01/05/85
Macao, China*	18/07/05	11/10/10	20/12/99	20/12/99	24/06/05	20/12/99
Solomon Islands	30/06/04	-	30/06/04	-	-	30/06/04
Tonga	12/04/77	15/06/00	12/04/77	18/09/03	15/06/00	01/02/96
Entry into force date	21/07/68	03/02/00	25/05/80	01/05/81	03/02/00	02/10/83

* Effective date of extension of instruments.

(as at 31 December 2015)

Authority	STCW 78	COLREG 72	TONNAGE 69	ILO 147**	MLC 2006***	AFS 2001	CLC PROT 92
Australia	07/11/83	29/02/80	21/05/82	-	21/12/11	09/01/07	09/10/95
Canada	06/11/87	07/03/75	18/07/94	25/05/93	15/06/10	08/04/10	29/05/98
Chile	09/06/87	02/08/77	22/11/82	-	-	-	29/05/02
China	08/06/81	07/01/80	08/04/80	-	12/11/15	07/03/11	05/01/99
Fiji	27/03/91	04/03/83	29/11/72	-	21/01/13	-	30/11/99
Hong Kong, China*	03/11/84	15/07/77	18/07/82	28/11/80	-	-	05/01/99
Indonesia	27/01/87	13/11/79	14/03/89	-	-	11/09/14	06/07/99
Japan	27/05/82	21/06/77	17/07/80	31/05/83	05/08/13	08/07/03	24/08/94
Republic of Korea	04/04/85	29/07/77	18/01/80	-	09/01/14	24/07/08	07/03/97
Malaysia	31/01/92	23/12/80	24/04/84	-	20/08/13	27/09/10	09/06/04
Marshall Islands	25/04/89	26/04/88	25/04/89	-	25/09/07	09/05/08	16/10/95
New Zealand	30/07/86	26/11/76	06/01/78	-	-	-	25/06/98
Papua New Guinea	28/10/91	18/05/76	25/10/93	-	-	-	23/01/01
Peru	16/07/82	09/01/80	16/07/82	06/07/04	-	-	01/09/05
Philippines	22/02/84	10/06/13	06/09/78	-	20/08/12	-	07/07/97
Russian Federation	09/10/79	09/11/73	20/11/69	07/05/91	20/08/12	19/10/12	20/03/00
Singapore	01/05/88	29/04/77	06/06/85	-	15/06/11	31/12/09	18/09/97
Thailand	19/06/97	06/08/79	11/06/96	-	-	-	-
Vanuatu	22/04/91	28/07/82	13/01/89	-	-	20/08/08	18/02/99
Viet Nam	18/12/90	18/12/90	18/12/90	-	08/05/13	27/11/15	17/06/03
Panama	29/06/92	14/03/79	09/03/78	-	06/02/09	17/09/07	18/03/99
DPR Korea	01/05/85	01/05/85	18/10/89	-	-	-	-
Macao, China*	18/07/05	20/12/99	18/07/05	-	-	07/03/11	24/06/05
Solomon Islands	01/06/94	12/03/82	30/06/04	-	-	-	30/06/04
Tonga	07/02/95	12/04/97	12/04/97	-	-	16/04/14	10/12/99
Entry into force date	28/04/84	15/07/77	18/07/82	28/11/81	20/08/13	17/09/08	30/05/96

* Effective date of extension of instruments.

** Although some Authorities have not ratified the ILO Convention No.147, parts of the ILO conventions referred to therein are implemented under their national legislation and port State control is carried out on matters covered by the national regulations.

*** MLC 2006 will supersede ILO147 if the Authority ratified both of them.

Table 1a: STATUS OF MARPOL 73/78

(Date of deposit of instruments)

(As at 31 December 2015)

Authority	Annexes I & II	Annex III	Annex IV	Annex V	Annex VI
Australia	14/10/87	10/10/94	27/02/04	14/08/90	07/08/07
Canada	16/11/92	08/08/02	26/03/10	26/03/10	26/03/10
Chile	10/10/94	10/10/94	10/10/94	15/08/08	16/10/06
China	01/07/83	13/09/94	02/11/06	21/11/88	23/05/06
Fiji	-	-	-	-	-
Hong Kong, China*	11/04/85	07/03/95	02/11/06	27/03/96	20/03/08
Indonesia	21/10/86	24/08/12	24/08/12	24/08/12	24/08/12
Japan	09/06/83	09/06/83	09/06/83	09/06/83	15/02/05
Republic of Korea	23/07/84	28/02/96	28/11/03	28/02/96	20/04/06
Malaysia	31/01/97	27/09/10	27/09/10	31/01/97	27/09/10
Marshall Islands	26/04/88	26/04/88	26/04/88	26/04/88	07/03/02
New Zealand	25/09/98	25/09/98	-	25/09/98	-
Papua New Guinea	25/10/93	25/10/93	25/10/93	25/10/93	-
Peru	25/04/80	25/04/80	25/04/80	25/04/80	04/12/14
Philippines	15/06/01	15/06/01	15/06/01	15/06/01	-
Russian Federation	03/11/83	14/08/87	14/08/87	14/08/87	08/04/11
Singapore	01/11/90	02/03/94	01/05/05	27/05/99	08/10/00
Thailand	02/11/07	-	-	-	-
Vanuatu	13/04/89	22/04/91	15/03/04	22/04/91	15/03/04
Viet Nam	29/05/91	19/12/14	19/12/14	19/12/14	19/12/14
Panama	20/02/85	20/02/85	20/02/85	20/02/85	13/05/03
DPR Korea	01/05/01	01/05/01	01/05/01	01/05/01	-
Macao, China*	20/12/99	20/12/99	02/11/06	20/12/99	23/05/06
Solomon Islands	30/06/04	30/06/04	30/06/04	30/06/04	-
Tonga	01/02/96	01/02/96	01/02/96	01/02/96	20/03/15
Entry into force date	02/10/1983	01/07/1992	27/09/2003	31/12/1988	19/05/2005

* Effective date of extension of instruments.

ANNEX 2

PORT STATE INSPECTION STATISTICS

STATISTICS FOR 2015

Table 2: PORT STATE INSPECTIONS CARRIED OUT BY AUTHORITIES

Authority	No. of individual ships inspected (a)	No. of initial and follow-up inspections (b+c)	No. of initial inspections (b)	No. of follow-up inspections (c)	No. of inspections with deficiencies (d)	No. of deficiencies ¹⁾ (e)	No. of detentions ¹⁾ (f)	No. of individual ships visited ²⁾ (g)	Inspection rate (a/g%)	Detention percentage (f/b%)
Australia ³⁾	3,502	7,272	4,050	3,222	2,262	9,477	242	5,686	61.59	5.98
Canada ⁴⁾	475	476	476	0	285	1,087	9	1,900	25.00	1.89
Chile	840	1,395	923	472	418	1,075	15	1,823	46.08	1.63
China	6,315	9,925	8,126	1,799	6,628	31,981	443	15,468	40.83	5.45
Fiji	4	4	4	0	0	0	0	213	1.88	0
Hong Kong, China	694	795	697	98	594	3,030	49	5,074	13.68	7.03
Indonesia	1,703	2,232	2,045	187	566	2,063	29	6,561	25.96	1.42
Japan	3,527	7,187	5,400	1,787	3,341	15,801	178	7,428	47.48	3.30
Republic of Korea	1,555	2,297	1,807	490	1,304	5,159	85	9,929	15.66	4.70
Malaysia	870	1,275	1,057	218	440	1,775	30	6,755	12.88	2.84
Marshall Islands	18	25	18	7	11	65	0	123	14.63	0
New Zealand	154	272	168	104	98	441	9	912	16.89	5.36
Papua New Guinea	111	194	128	66	53	256	3	345	32.17	2.34
Peru ⁵⁾	35	47	35	12	15	42	0	1,639	2.14	0
Philippines	1,736	2,965	2,367	598	610	1,579	3	3,153	55.06	0.13
Russian Federation ⁴⁾	740	1,970	1,021	949	767	3,628	12	2,438	30.35	1.18
Singapore	878	1,423	1,004	419	722	2,898	35	13,462	6.52	3.49
Thailand	494	743	637	106	145	382	3	3,863	12.79	0.47
Vanuatu	0	0	0	0	0	0	0	55	0	0
Viet Nam	1,135	1,945	1,444	501	883	2,867	8	3,324	34.15	0.55
Total	17,269	42,442	31,407	11,035	19,142	83,606	1,153	Regional 24,632	Regional 70%	Regional 3.67%

1) Numbers of deficiencies and detentions do not include those related to security.

2) LLI data for 2015.

3) Data for Australia is also provided to Indian Ocean MOU.

4) Data are only for the Pacific ports.

5) Data for Peru is only for November and December 2015.

Table 2a: PORT STATE INSPECTIONS ON MARITIME SECURITY

Authority	No. of inspections	No. of inspections with security related deficiencies	No. of security related deficiencies	No. of security related detentions	Detention percentage (%)
Australia	4,050	7	7	0	0
Canada	476	4	4	1	0.21
Chile	923	15	15	0	0
China	8,126	438	457	18	0.22
Fiji	4	0	0	0	0
Hong Kong, China	697	82	85	0	0
Indonesia	2,045	12	13	0	0
Japan	5,400	340	373	0	0
Republic of Korea	1,807	156	179	3	0.17
Malaysia	1,057	56	58	6	0.57
Marshall Islands	18	2	2	0	0
New Zealand	168	2	2	0	0
Papua New Guinea	128	3	3	0	0
Peru	35	1	1	0	0
Philippines	2,367	22	24	0	0
Russian Federation	1,021	32	33	0	0
Singapore	1,004	25	25	0	0
Thailand	637	20	20	0	0
Vanuatu	0	0	0	0	0
Viet Nam	1,444	87	88	0	0.07
Total	31,407	1,304	1,389	28	Regional 0.09%

Note: Security related data showing in the above table and the tables of deficiency by category are excluded from all other statistical tables and figures in this report.

Table 3: PORT STATE INSPECTIONS PER SHIP RISK PROFILE

Authority	Ship Risk Profile (SRP)				Total No. of inspections
	HRS	SRS	LRS	SRP Unknown	
Australia	648	1,657	1,731	14	4,050
Canada	66	194	212	4	476
Chile	133	550	238	2	923
China	3,341	3,119	1,666	0	8,126
Fiji	1	1	2	0	4
Hong Kong, China	174	340	182	1	697
Indonesia	575	783	686	1	2,045
Japan	2,238	2,153	976	33	5,400
Republic of Korea	757	675	373	2	1,807
Malaysia	381	416	241	19	1,057
Marshall Islands	5	9	4	0	18
New Zealand	54	97	17	0	168
Papua New Guinea	38	58	32	0	128
Peru	5	18	12	0	35
Philippines	589	1,003	773	2	2,367
Russian Federation	584	301	136	0	1,021
Singapore	252	580	172	0	1,004
Thailand	136	275	225	1	637
Vanuatu	0	0	0	0	0
Viet Nam	707	511	225	1	1,444
Total	10,684	12,740	7,903	80	31,407

Table 4: PORT STATE INSPECTIONS PER FLAG

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Antigua and Barbuda	473	319	1,202	25	5.29
Australia	4	0	0	0	0
Bahamas	733	377	1,358	20	2.73
Bahrain	2	2	3	0	0
Bangladesh	57	44	188	2	3.51
Barbados	13	8	29	0	0
Belgium	28	13	28	0	0
Belize	546	518	2,827	44	8.06
Bermuda (UK)	72	36	94	0	0
Brazil	1	1	2	0	0
Brunei Darussalam	5	2	11	1	20.00
Cambodia	1,303	1,284	9,287	158	12.13
Canada	2	1	5	0	0
Cayman Islands (UK)	100	37	108	3	3.00
Chile	6	3	6	0	0
China	779	346	1,298	2	0.26
Comoros	2	2	39	2	100.00
Cook Islands	28	17	83	4	14.29
Croatia	22	6	25	0	0
Curacao	24	8	24	1	4.17
Cyprus	514	290	1,167	22	4.28
Denmark	181	95	323	3	1.66
Dominica	9	7	50	0	0
Egypt	6	5	57	1	16.67
Estonia	1	0	0	0	0
Ethiopia	9	8	27	0	0
Falkland Islands (UK)	2	2	3	0	0
Faroe Islands	1	0	0	0	0
France	37	18	54	0	0
Germany	144	83	287	5	3.47
Gibraltar (UK)	78	43	172	3	3.85
Greece	364	186	670	11	3.02
Honduras	3	3	56	2	66.67
Hong Kong, China	3,167	1,495	5,170	37	1.17
India	89	56	219	7	7.87
Indonesia	197	163	1,053	36	18.27
Iran	46	42	172	1	2.17
Isle of Man (UK)	206	96	272	6	2.91
Israel	10	9	38	0	0

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Italy	116	76	277	7	6.03
Jamaica	31	31	151	1	3.23
Japan	191	105	322	3	1.57
Kiribati	220	192	1,289	15	6.82
Korea, Democratic People's Republic	244	243	1,901	29	11.89
Korea, Republic of	1,498	1,100	4,563	10	0.67
Kuwait	17	6	16	0	0
Lebanon	1	1	5	0	0
Liberia	2,346	1,354	4,972	97	4.13
Libya	2	0	0	0	0
Lithuania	1	1	3	0	0
Luxembourg	35	24	62	1	2.86
Malaysia	200	127	632	4	2.00
Maldives	2	2	2	0	0
Malta	943	531	1,968	38	4.03
Marshall Islands	2,103	1,045	3,711	45	2.14
Mauritius	2	0	0	0	0
Mongolia	137	132	929	24	17.52
Montenegro	1	0	0	0	0
Myanmar	5	5	31	0	0
Netherlands	113	43	129	1	0.88
New Zealand	7	5	25	1	14.29
Niue	45	41	340	8	17.78
Norway	221	103	376	2	0.90
Pakistan	5	2	20	1	20.00
Palau	24	22	169	4	16.67
Panama	8,547	5,136	21,355	287	3.36
Papua New Guinea	8	8	53	1	12.50
Peru	6	4	30	0	0
Philippines	197	142	600	13	6.60
Portugal	98	64	216	1	1.02
Russian Federation	276	256	1,343	13	4.71
Saint Kitts and Nevis	37	33	192	4	10.81
Saint Vincent and the Grenadines	87	77	302	1	1.15
Samoa	1	1	17	1	100.00
Saudi Arabia	41	27	105	2	4.88
Sierra Leone	280	274	2,468	54	19.29
Singapore	2,250	1,033	3,526	23	1.02
Solomon Islands	8	5	37	1	12.50
South Africa	1	0	0	0	0

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Spain	1	1	1	0	0
Sri Lanka	8	7	26	0	0
Sweden	20	6	18	0	0
Switzerland	30	14	31	0	0
Taiwan, China	121	66	317	5	4.13
Tanzania	27	23	87	3	11.11
Thailand	269	191	804	11	4.09
Togo	84	81	527	12	14.29
Tonga	2	2	28	0	0
Turkey	53	25	79	1	1.89
Tuvalu	103	85	384	2	1.94
Ukraine	3	3	11	0	0
United Arab Emirates (UAE)	3	2	3	0	0
United Kingdom (UK)	186	98	287	4	2.15
United States of America	51	38	141	0	0
Vanuatu	112	75	359	6	5.36
Viet Nam	722	548	1,955	20	2.77
Ship's registration withdrawn	1	1	4	1	100.00
Total	31,407	19,142	83,606	1,153	Regional 3.67

Table 5: PORT STATE INSPECTIONS PER SHIP TYPE

Type of ship	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
NLS tanker	54	25	112	4	7.41
Combination carrier	31	14	50	1	3.23
Oil tanker	1,958	936	3,768	50	2.55
Gas carrier	737	322	1,057	14	1.90
Chemical tanker	2,171	1,073	3,904	27	1.24
Bulk carrier	11,431	6,475	25,541	348	3.04
Vehicle carrier	871	353	1,095	20	2.30
Container ship	5,058	2,967	10,961	131	2.59
Ro-Ro cargo ship	119	100	440	8	6.72
General cargo/multi-purpose ship	6,782	5,380	29,507	446	6.58
Refrigerated cargo carrier	668	487	2,647	36	5.39
Woodchip carrier	223	103	336	7	3.14
Livestock carrier	64	40	164	4	6.25
Ro-Ro passenger ship	76	68	419	2	2.63
Passenger ship	224	143	569	3	1.34
Factory ship	2	2	10	0	0
Heavy load carrier	102	53	196	4	3.92
Offshore service vessel	158	113	499	6	3.80
MODU & FPSO	5	5	47	1	20.00
High speed passenger craft	22	18	73	0	0
Special purpose ship	70	42	191	5	7.14
Tugboat	258	180	830	14	5.43
Others	323	243	1,190	22	6.81
Total	31,407	19,142	83,606	1,153	3.67

Table 6: PORT STATE INSPECTIONS PER RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections	No. of overall detentions	No. of RO responsible detentions	Detention percentage%	RO responsible detention percentage%	Percentage of RO responsible detentions%
American Bureau of Shipping	3,517	65	4	1.85	0.11	6.15
American Register of Shipping	32	1	0	3.13	0	0
Asia Classification Society	6	0	0	0	0	0
Bulgarski Koraben Registar	2	1	0	50	0	0
Bureau Veritas	3,522	112	6	3.18	0.17	5.36
C.T.M. Inspection and Classification Company, S. de R.L.	2	2	0	100	0	0
Caspian Register of Shipping	6	0	0	0	0	0
China Classification Society	2,575	21	0	0.82	0	0
Cosmos Marine Bureau	19	6	0	31.58	0	0
CR Classification Society	280	14	0	5	0	0
Croatian Register of Shipping	39	0	0	0	0	0
Cyprus Bureau of Shipping	6	0	0	0	0	0
Det Norske Veritas	3,248	77	1	2.37	0.03	1.3
DNV GL AS	3,255	86	5	2.64	0.15	5.81
Dromon Bureau of Shipping	15	2	0	13.33	0	0
Germanischer Lloyd	2,695	88	1	3.27	0.04	1.14
Global Marine Bureau	218	26	2	11.93	0.92	7.69
Global Shipping Bureau	11	0	0	0	0	0
Hellenic Register of Shipping	3	0	0	0	0	0
INCLAMAR (Inspection y Classification Maritime, S. de R.L.)	4	0	0	0	0	0
Indian Register of Shipping	105	9	0	8.57	0	0
Indonesian Classification Bureau	110	23	1	20.91	0.91	4.35
Intermaritime Certification Services, S.A.	537	34	2	6.33	0.37	5.88
International Maritime Register	4	0	0	0	0	0
International Naval Surveys Bureau	25	2	0	8	0	0
International Register of Shipping	194	25	1	12.89	0.52	4
International Ship Classification	293	25	4	8.53	1.37	16
Iranian Classification Society	52	1	0	1.92	0	0
Isthmus Bureau of Shipping	549	40	2	7.29	0.36	5
Isthmus Maritime Classification Society S.A.	2	0	0	0	0	0
Korea Classification Society (former Josen Classification Society)	268	30	1	11.19	0.37	3.33
Korea Ship Safety Technology Authority	34	0	0	0	0	0
Korean Register of Shipping	3,154	42	1	1.33	0.03	2.38
Libyan Surveyor Mr. Sif Ennasar Abdulhamid Giahmi	1	0	0	0	0	0

Recognized organization (RO)	No. of overall inspections	No. of overall detentions	No. of RO responsible detentions	Detention percentage%	RO responsible detention percentage%	Percentage of RO responsible detentions%
Lloyd's Register	4,667	110	1	2.36	0.02	0.91
Macosnar Corporation	42	1	0	2.38	0	0
Maritime Technical Systems and Services	9	2	0	22.22	0	0
National Cargo Bureau Inc.	1	0	0	0	0	0
National Shipping Adjusters Inc	2	0	0	0	0	0
New United International Marine Services Ltd	26	6	0	23.08	0	0
Nippon Kaiji Kyokai	10,446	310	16	2.97	0.15	5.16
Novel Classification Society S.A.	1	0	0	0	0	0
Overseas Marine Certification Services	447	45	1	10.07	0.22	2.22
Panama Bureau of Shipping	49	3	0	6.12	0	0
Panama Maritime Documentation Services	383	34	3	8.88	0.78	8.82
Panama Maritime Surveyors Bureau Inc	1	0	0	0	0	0
Panama Register Corporation	82	3	0	3.66	0	0
Panama Shipping Registrar Inc.	76	6	2	7.89	2.63	33.33
Phoenix Register of Shipping	5	0	0	0	0	0
Polski Rejestr Statkow	15	0	0	0	0	0
R.J. Del Pan	1	0	0	0	0	0
Registro Italiano Navale	907	36	0	3.97	0	0
RINAVE Portuguesa	14	1	0	7.14	0	0
Russian Maritime Register of Shipping	422	18	1	4.27	0.24	5.56
Ship Classification Malaysia	23	0	0	0	0	0
Shipping Register of Ukraine	6	1	1	16.67	16.67	100
SingClass International Pte Ltd	87	17	0	19.54	0	0
Sing-Lloyd	158	33	6	20.89	3.8	18.18
Slovak Lloyd	2	1	0	50	0	0
Turkish Lloyd	2	0	0	0	0	0
Union Bureau of Shipping	920	119	7	12.93	0.76	5.88
Union Marine Classification Society	1	1	1	100	100	100
Universal Maritime Bureau	366	45	3	12.3	0.82	6.67
Universal Shipping Bureau	23	1	0	4.35	0	0
Vietnam Register	750	23	3	3.07	0.4	13.04
Other	33	3	0	9.09	0	0

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

Table 7: DEFICIENCIES BY CATEGORIES

Nature of deficiencies		No. of deficiencies
Certificate & Documentation	Crew Certificates	1,593
	Documents	4,500
	Ship Certificates	1,910
Structural Conditions		2,422
Water/Weathertight conditions		5,584
Emergency Systems		5,771
Radio Communications		2,231
Cargo operations including equipment		500
Fire safety		15,143
Alarms		577
Safety of Navigation		12,619
Life saving appliances		11,213
Dangerous goods		352
Propulsion and auxiliary machinery		4,137
Working and Living Conditions	Living Conditions	349
	Working Conditions	2,866
Labour Conditions	Minimum requirements for seafarers	35
	Conditions of employment	515
	Accommodation, recreational facilities, food and catering	998
	Health protection, medical care, social security	1,699
Pollution prevention	Anti Fouling	13
	MARPOL Annex I	1,607
	MARPOL Annex II	17
	MARPOL Annex III	30
	MARPOL Annex IV	1,301
	MARPOL Annex V	1,252
	MARPOL Annex VI	847
ISM		2,803
Other		722
Total		83,606
ISPS		1,389
Grand total		84,995

SUMMARY OF PORT STATE INSPECTION DATA 2013 – 2015

Table 8: BLACK – GREY – WHITE LISTS *

Flag	Inspections 2013-2015	Detentions 2013-2015	Black to Grey Limit	Grey to White Limit	Excess Factor
BLACK LIST					
Mongolia	417	86	38		4.48
Sierra Leone	728	135	63		4.08
Tanzania	87	18	11		3.33
Indonesia	546	85	49		3.03
Cambodia	4,150	560	318		2.88
Korea, Democratic People's Republic	669	98	58		2.83
Papua New Guinea	32	7	5		2.39
Niue	80	14	10		2.37
Egypt	33	6	5		1.55
Togo	177	21	18		1.40
Kiribati	700	68	61		1.32
Belize	1,454	119	118		1.02
GREY LIST					
Cook Islands	78	9	10	1	0.92
Palau	32	4	5	0	0.81
Bangladesh	179	16	19	6	0.78
Saint Kitts and Nevis	108	10	12	3	0.75
Dominica	39	4	6	0	0.70
Iran	126	10	14	4	0.61
Philippines	597	44	53	31	0.60
Jamaica	67	5	9	1	0.54
India	252	16	25	10	0.39
Barbados	44	2	6	0	0.34
Sweden	65	3	8	1	0.30
Vanuatu	341	20	32	16	0.27
Switzerland	87	3	11	2	0.15
Kuwait	49	1	7	0	0.15
Turkey	180	7	19	6	0.04
Curacao	65	1	8	1	0.04
Luxembourg	92	2	11	2	0.01
WHITE LIST					
Russian Federation	801	43		44	-0.03
Gibraltar (UK)	230	9		9	-0.04
Italy	391	18		19	-0.06
Antigua and Barbuda	1,491	84		88	-0.09

Flag	Inspections 2013-2015	Detentions 2013-2015	Black to Grey Limit	Grey to White Limit	Excess Factor
Saudi Arabia	99	2		2	-0.13
Tuvalu	353	14		16	-0.27
Thailand	842	40		46	-0.28
Portugal	152	4		5	-0.29
Taiwan, China	321	12		14	-0.31
Saint Vincent and the Grenadines	370	12		17	-0.58
Malta	2,516	109		155	-0.65
Viet Nam	2,222	93		135	-0.68
Greece	1,048	39		59	-0.72
Cyprus	1,476	55		87	-0.78
Germany	502	15		25	-0.79
Liberia	6,741	274		437	-0.84
Croatia	80	0		1	-0.88
Isle of Man (UK)	569	16		29	-0.90
Panama	26,079	1,025		1,757	-0.96
Belgium	87	0		2	-0.98
Malaysia	738	20		40	-1.01
Denmark	467	11		23	-1.02
Cayman Islands (UK)	325	6		15	-1.10
United Kingdom (UK)	627	14		33	-1.17
United States of America	147	1		5	-1.19
Bahamas	2,127	58		129	-1.21
Japan	554	10		28	-1.32
Norway	740	14		40	-1.35
France	114	0		3	-1.36
Netherlands	418	6		20	-1.39
Marshall Islands	5,569	133		358	-1.42
Bermuda (UK)	223	1		9	-1.60
Hong Kong, China	9,163	103		601	-1.89
Singapore	6,432	61		416	-1.94
Korea, Republic of	4,293	22		273	-2.31
China	2,693	11		166	-2.39

- Note:** 1) Flags listed above are those of ships which were involved in 30 or more port State inspections over the 3-year period.
- 2) According to the decision by the Port State Control Committee, flags involving 30-49 port State inspections with nil detentions are listed on top of the White List.

* See explanatory note on page 54.

$p=7\%$

$z_{95\%}=1.645$

$q=3\%$

Table 9: INSPECTIONS AND DETENTIONS PER FLAG

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2013	2014	2015	Total	2013	2014	2015	Total	
Antigua and Barbuda	516	502	473	1,491	32	27	25	84	5.63
Argentina	1	0	0	1	1	0	0	1	100.00
Australia	5	3	4	12	0	0	0	0	0
Bahamas	733	661	733	2,127	22	16	20	58	2.73
Bahrain	4	4	2	10	1	0	0	1	10.00
Bangladesh	57	65	57	179	7	7	2	16	8.94
Barbados	14	17	13	44	0	2	0	2	4.55
Belgium	35	24	28	87	0	0	0	0	0
Belize	425	483	546	1,454	41	34	44	119	8.18
Bermuda (UK)	81	70	72	223	0	1	0	1	0.45
Bolivia	1	0	0	1	1	0	0	1	100.00
Brazil	3	0	1	4	1	0	0	1	25.00
Brunei Darussalam	5	6	5	16	0	1	1	2	12.50
Cambodia	1,514	1,333	1,303	4,150	219	183	158	560	13.49
Canada	0	0	2	2	0	0	0	0	0
Cayman Islands (UK)	118	107	100	325	3	0	3	6	1.85
Chile	0	1	6	7	0	0	0	0	0
China	991	923	779	2,693	8	1	2	11	0.41
Colombia	2	0	0	2	0	0	0	0	0
Comoros	9	6	2	17	6	2	2	10	58.82
Cook Islands	24	26	28	78	1	4	4	9	11.54
Croatia	34	24	22	80	0	0	0	0	0
Curacao	21	20	24	65	0	0	1	1	1.54
Cyprus	467	495	514	1,476	14	19	22	55	3.73
Denmark	152	134	181	467	6	2	3	11	2.36
Dominica	14	16	9	39	3	1	0	4	10.26
Ecuador	2	0	0	2	0	0	0	0	0
Egypt	13	14	6	33	3	2	1	6	18.18
Equatorial Guinea	2	1	0	3	0	0	0	0	0
Estonia	0	2	1	3	0	1	0	1	33.33
Ethiopia	4	6	9	19	0	0	0	0	0
Falkland Islands (UK)	2	3	2	7	0	0	0	0	0
Faroe Islands (Denmark)	0	0	1	1	0	0	0	0	0
Fiji	0	1	0	1	0	0	0	0	0
France	39	38	37	114	0	0	0	0	0

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2013	2014	2015	Total	2013	2014	2015	Total	
Gambia	1	0	0	1	0	0	0	0	0
Georgia	0	1	0	1	0	0	0	0	0
Germany	200	158	144	502	4	6	5	15	2.99
Gibraltar (UK)	76	76	78	230	3	3	3	9	3.91
Greece	339	345	364	1,048	11	17	11	39	3.72
Honduras	6	5	3	14	1	3	2	6	42.86
Hong Kong, China	3,080	2,916	3,167	9,163	34	32	37	103	1.12
India	90	73	89	252	6	3	7	16	6.35
Indonesia	159	190	197	546	24	25	36	85	15.57
Iran	32	48	46	126	3	6	1	10	7.94
Ireland	1	1	0	2	0	0	0	0	0
Isle of Man (UK)	165	198	206	569	4	6	6	16	2.81
Israel	8	5	10	23	0	0	0	0	0
Italy	169	106	116	391	9	2	7	18	4.60
Jamaica	13	23	31	67	0	4	1	5	7.46
Japan	162	201	191	554	5	2	3	10	1.81
Jordan	0	2	0	2	0	0	0	0	0
Kiribati	237	243	220	700	29	24	15	68	9.71
Korea, Democratic People's Republic	220	205	244	669	35	34	29	98	14.65
Korea, Republic of	1,324	1,471	1,498	4,293	3	9	10	22	0.51
Kuwait	14	18	17	49	1	0	0	1	2.04
Lebanon	0	0	1	1	0	0	0	0	0
Liberia	2,181	2,214	2,346	6,741	88	89	97	274	4.06
Libya	3	4	2	9	0	0	0	0	0
Lithuania	2	1	1	4	0	0	0	0	0
Luxembourg	22	35	35	92	0	1	1	2	2.17
Malaysia	261	277	200	738	12	4	4	20	2.71
Maldives	5	5	2	12	0	0	0	0	0
Malta	752	821	943	2,516	37	34	38	109	4.33
Marshall Islands	1,657	1,809	2,103	5,569	45	43	45	133	2.39
Mauritius	0	1	2	3	0	0	0	0	0
Moldova	2	0	0	2	0	0	0	0	0
Mongolia	142	138	137	417	38	24	24	86	20.62
Montenegro	0	1	1	2	0	0	0	0	0
Myanmar	3	6	5	14	2	1	0	3	21.43
Netherlands	179	126	113	418	5	0	1	6	1.44

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2013	2014	2015	Total	2013	2014	2015	Total	
New Zealand	1	3	7	11	0	0	1	1	9.09
Nigeria	0	1	0	1	0	0	0	0	0
Niue	4	31	45	80	2	4	8	14	17.50
Norway	289	230	221	740	9	3	2	14	1.89
Pakistan	10	11	5	26	0	0	1	1	3.85
Palau	2	6	24	32	0	0	4	4	12.50
Panama	8,928	8,604	8,547	26,079	396	342	287	1,025	3.93
Papua New Guinea	15	9	8	32	3	3	1	7	21.88
Peru	6	6	6	18	1	1	0	2	11.11
Philippines	191	209	197	597	16	15	13	44	7.37
Portugal	8	46	98	152	1	2	1	4	2.63
Qatar	7	3	0	10	1	0	0	1	10.00
Russian Federation	288	237	276	801	16	14	13	43	5.37
Saint Kitts and Nevis	38	33	37	108	3	3	4	10	9.26
Saint Vincent and the Grenadines	151	132	87	370	8	3	1	12	3.24
Samoa	2	3	1	6	0	1	1	2	33.33
Saudi Arabia	22	36	41	99	0	0	2	2	2.02
Sierra Leone	223	225	280	728	39	42	54	135	18.54
Singapore	2,069	2,113	2,250	6,432	16	22	23	61	0.95
Solomon Islands	4	2	8	14	0	0	1	1	7.14
South Africa	0	0	1	1	0	0	0	0	0
Spain	2	3	1	6	1	0	0	1	16.67
Sri Lanka	11	6	8	25	0	0	0	0	0
Sweden	25	20	20	65	1	2	0	3	4.62
Switzerland	22	35	30	87	1	2	0	3	3.45
Taiwan, China	102	98	121	321	4	3	5	12	3.74
Tanzania	38	22	27	87	11	4	3	18	20.69
Thailand	291	282	269	842	19	10	11	40	4.75
Togo	35	58	84	177	2	7	12	21	11.86
Tonga	12	3	2	17	2	0	0	2	11.76
Tunisia	1	2	0	3	0	0	0	0	0
Turkey	76	51	53	180	4	2	1	7	3.89
Tuvalu	143	107	103	353	9	3	2	14	3.97
Ukraine	0	2	3	5	0	1	0	1	20.00
United Arab Emirates (UAE)	3	4	3	10	0	1	0	1	10.00
United Kingdom (UK)	274	167	186	627	6	4	4	14	2.23

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2013	2014	2015	Total	2013	2014	2015	Total	
United States of America	52	44	51	147	1	0	0	1	0.68
Uruguay	1	0	0	1	0	0	0	0	0
Vanuatu	109	120	112	341	6	8	6	20	5.87
Viet Nam	767	733	722	2,222	47	26	20	93	4.19
Ship's registration withdrawn	3	0	1	4	2	0	1	3	75.00
Total	31,018	30,405	31,407	92,830	1,395	1,203	1,153	3,751	4.04

Figure 15: COMPARISON OF INSPECTIONS PER SHIP TYPE

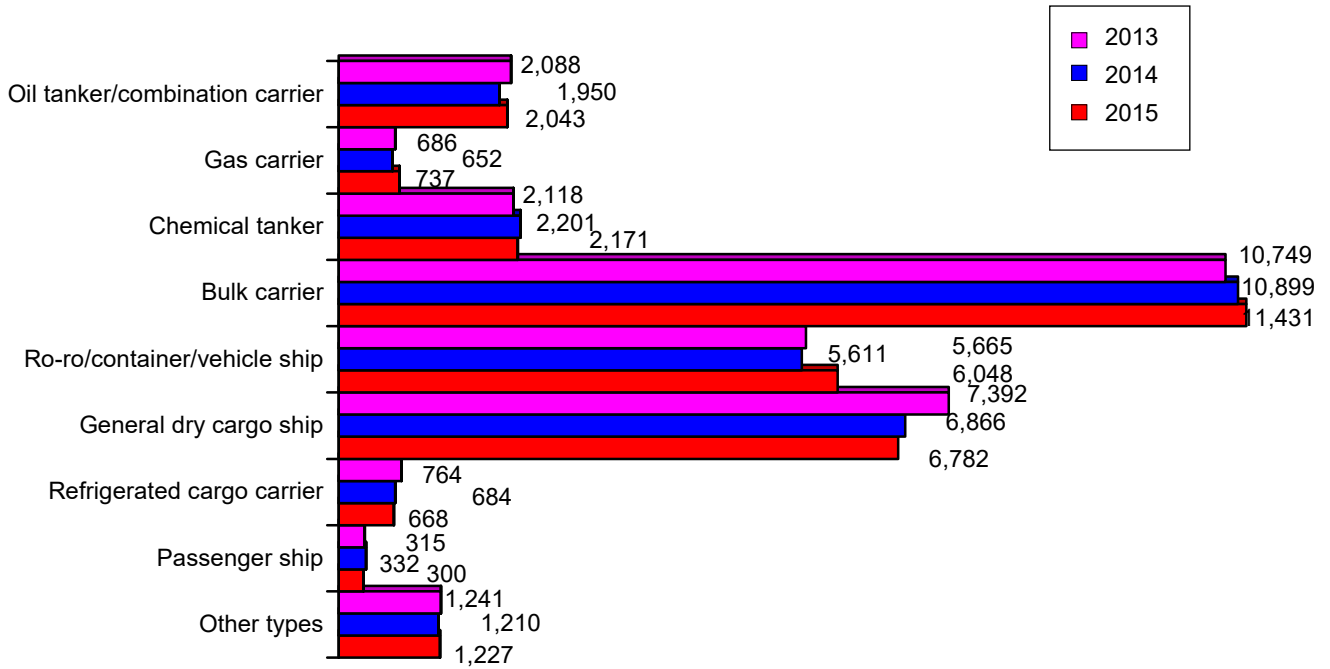


Figure 16: COMPARISON OF DETENTIONS PER SHIP TYPE

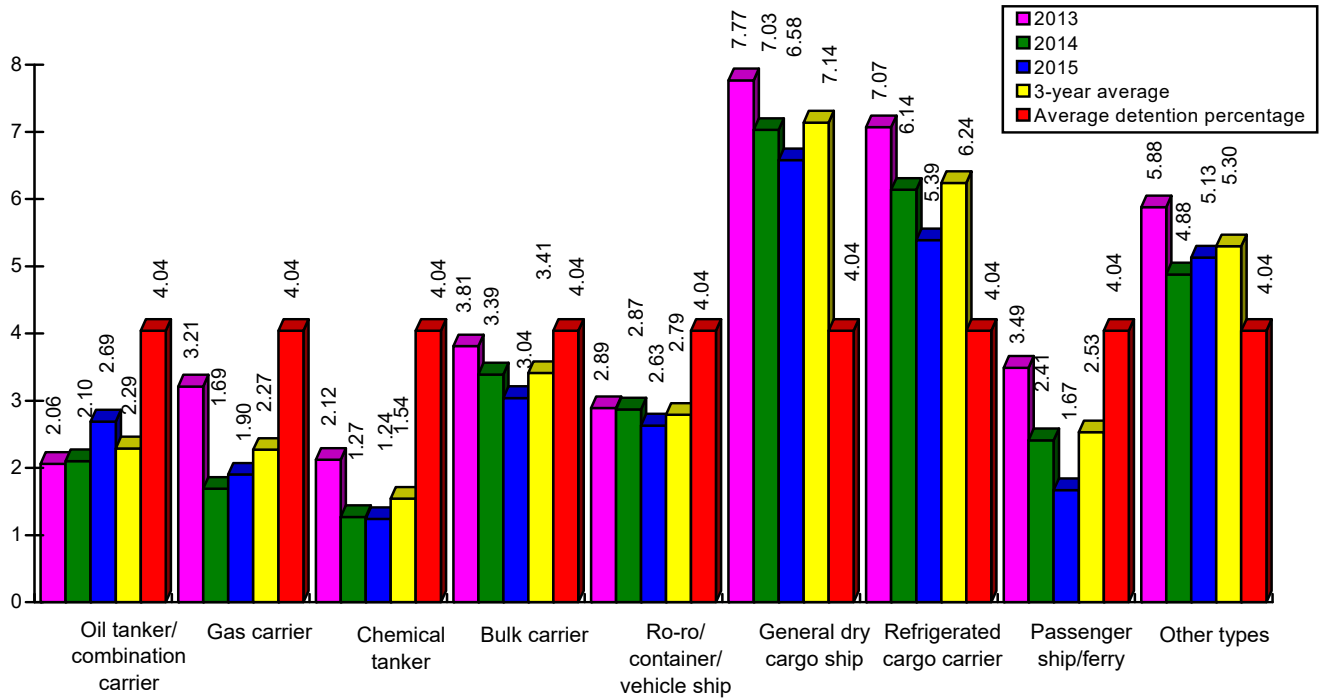
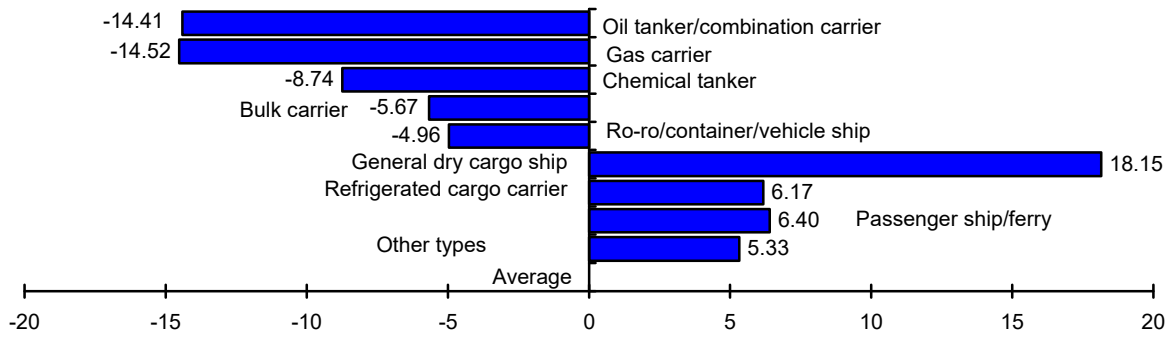


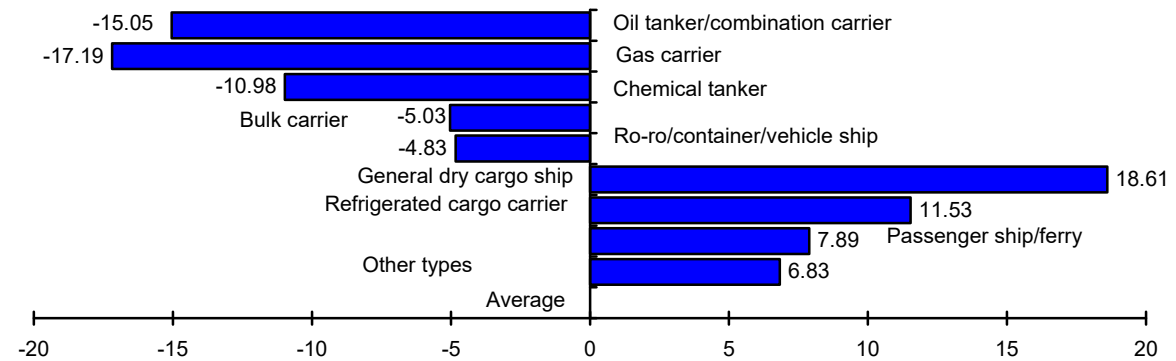
Table 10: INSPECTIONS AND DETENTIONS PER SHIP TYPE

Type of ship	Number of inspections				Number of detentions				Average detention percentage %
	2013	2014	2015	Total	2013	2014	2015	Total	
NLS tanker	40	45	54	139	2	1	4	7	5.04
Combination carrier	36	35	31	102	1	1	1	3	2.94
Oil tanker	2,012	1,870	1,958	5,840	40	39	50	129	2.21
Gas carrier	686	652	737	2,075	22	11	14	47	2.27
Chemical tanker	2,118	2,201	2,171	6,490	45	28	27	100	1.54
Bulk carrier	10,749	10,899	11,431	33,079	409	370	348	1,127	3.41
Vehicle carrier	899	779	871	2,549	18	20	20	58	2.28
Container ship	4,582	4,633	5,058	14,273	135	136	131	402	2.82
Ro-Ro cargo ship	184	199	119	502	11	5	8	24	4.78
General cargo/multi-purpose ship	7,392	6,866	6,782	21,040	574	483	446	1,503	7.14
Refrigerated cargo carrier	764	684	668	2,116	54	42	36	132	6.24
Woodchip carrier	239	227	223	689	4	4	7	15	2.18
Livestock carrier	49	74	64	187	5	7	4	16	8.56
Ro-Ro Passenger ship	72	104	76	252	6	2	2	10	3.97
Passenger ship	243	228	224	695	5	6	3	14	2.01
Factory ship	1	1	2	4	0	1	0	1	25.00
Heavy load carrier	134	115	102	351	7	4	4	15	4.27
Offshore service vessel	149	142	158	449	9	8	6	23	5.12
MODU & FPSO	3	5	5	13	0	2	1	3	23.08
High speed passenger craft	26	26	22	74	0	0	0	0	0.00
Special purpose ship	49	52	70	171	2	5	5	12	7.02
High speed cargo craft	1	0	0	1	0	0	0	0	0
Tugboat	244	257	258	759	10	13	14	37	4.87
Others	346	311	323	980	36	15	22	73	7.45
Total	31,018	30,405	31,407	92,830	1,395	1,203	1,153	3,751	4.04

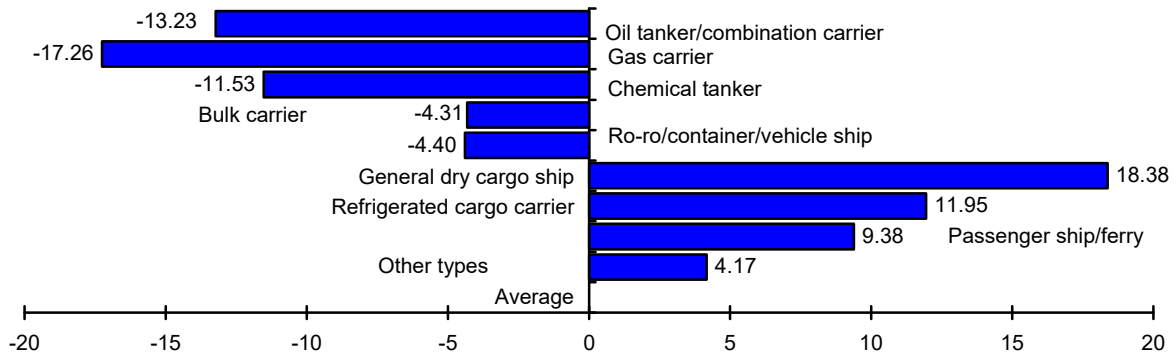
Figure 17: COMPARISON OF INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE



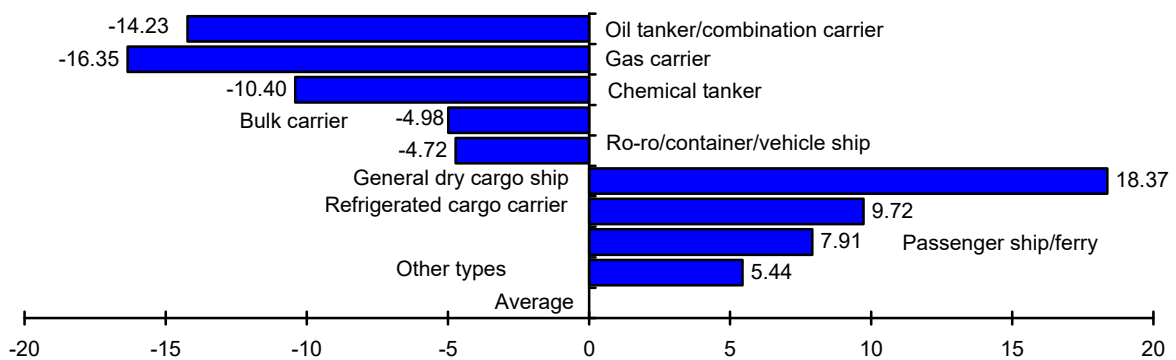
(a) Year 2013



(b) Year 2014



(c) Year 2015



(d) 3-year summary

* % over [+] or under [-] average

Table 11: INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE

Type of ship	Number of inspections				Number of inspections with deficiencies				3-year average percentage %
	2013	2014	2015	Total	2013	2014	2015	Total	
Oil tanker/combination carrier	2,088	1,950	2,043	6,081	964	927	975	2,866	47.13
Gas carrier	686	652	737	2,075	316	296	322	934	45.01
Chemical tanker	2,118	2,201	2,171	6,490	1,098	1,136	1,073	3,307	50.96
Bulk carrier	10,749	10,899	11,431	33,079	5,902	6,273	6,475	18,650	56.38
Ro-ro/container/vehicle ship	5,665	5,611	6,048	17,324	3,152	3,241	3,420	9,813	56.64
General dry cargo ship	7,392	6,866	6,782	21,040	5,820	5,575	5,380	16,775	79.73
Refrigerated cargo carrier	764	684	668	2,116	510	507	487	1,504	71.08
Passenger ship	315	332	300	947	211	234	211	656	69.27
Other types	1,241	1,210	1,227	3,678	818	840	799	2,457	66.80
Total	31,018	30,405	31,407	92,830	18,791	19,029	19,142	56,962	61.36

Table 12: INSPECTIONS AND DETENTIONS PER RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2013-2015	No. of overall detentions 2013-2015	No. of RO responsible detentions 2013-2015	3-year average detention percentage%	3-year average RO responsible detention percentage%	3-year average percentage of RO responsible detentions%
Alfa Register of Shipping	1	0	0	0	0	0
American Bureau of Shipping	9,987	228	13	2.28	0.13	5.70
American Register of Shipping	73	6	0	8.22	0	0
Asia Classification Society	13	1	0	7.69	0	0
Belize Maritime Bureau Inc.	5	1	0	20.00	0	0
Bulgarski Koraben Registar	4	3	0	75.00	0	0
Bureau Securitas	20	1	0	5.00	0	0
Bureau Veritas	10,255	369	15	3.60	0.15	4.07
C.T.M. Inspection and Classification Company, S. de R.L.	9	6	1	66.67	11.11	16.67
Caspian Register of Shipping	6	0	0	0	0	0
Ceskoslovensky Lodin Register	6	0	0	0	0	0
China Classification Society	8,206	71	1	0.87	0.01	1.41
Compania Nacional de Registro e Inspeccion de Naves	3	0	0	0	0	0
Cosmos Marine Bureau	39	7	0	17.95	0	0
CR Classification Society	889	43	1	4.84	0.11	2.33
Croatian Register of Shipping	108	0	0	0	0	0
Cyprus Bureau of Shipping	10	0	0	0	0	0
Det Norske Veritas	10,545	254	5	2.41	0.05	1.97
DNV GL AS	4,249	122	8	2.87	0.19	6.56
Dromon Bureau of Shipping	18	4	0	22.22	0	0
Ferriby Marine	4	2	0	50.00	0	0
Fidenavis SA	37	4	0	10.81	0	0
Germanischer Lloyd	8,827	341	12	3.86	0.14	3.52
Global Marine Bureau	880	100	8	11.36	0.91	8.00
Global Shipping Bureau	34	5	0	14.71	0	0
Hellenic Register of Shipping	6	1	0	16.67	0	0
Honduras Bureau of Shipping	1	0	0	0	0	0
Honduras International Surveying and Inspection Bureau	3	0	0	0	0	0
INCLAMAR (Inspection y Classification Maritime, S. de R.L.)	36	4	0	11.11	0	0
Indian Register of Shipping	278	20	0	7.19	0	0
Indonesian Classification Bureau	292	42	1	14.38	0.34	2.38
Intermaritime Certification Services, S.A.	1,464	100	6	6.83	0.41	6.00
International Maritime Register	16	2	0	12.50	0	0
International Naval Surveys Bureau	80	10	0	12.50	0	0
International Register of Shipping	726	95	9	13.09	1.24	9.47
International Ship Classification	899	99	12	11.01	1.33	12.12
Iranian Classification Society	127	10	0	7.87	0	0
Isthmus Bureau of Shipping	1,517	124	4	8.17	0.26	3.23
Isthmus Maritime Classification Society S.A.	4	0	0	0	0	0
Korea Classification Society (former Joson Classification Society)	733	100	9	13.64	1.23	9.00
Korea Ship Safety Technology Authority	124	0	0	0	0	0
Korean Register of Shipping	8,973	136	3	1.52	0.03	2.21

Recognized organization (RO)	No. of overall inspections 2013-2015	No. of overall detentions 2013-2015	No. of RO responsible detentions 2013-2015	3-year average detention percentage%	3-year average RO responsible detention percentage%	3-year average percentage of RO responsible detentions%
Libyan Surveyor Mr. Sif Ennasar Abdulhamid Giahmi	1	0	0	0	0	0
Lloyd's Register	12,855	355	6	2.76	0.05	1.69
Macosnar Corporation	106	5	0	4.72	0	0
Maritime Bureau of Shipping	1	0	0	0	0	0
Maritime Lloyd Ltd, Georgia	12	2	0	16.67	0	0
Maritime Technical Systems and Services	28	6	1	21.43	3.57	16.67
National Cargo Bureau Inc.	2	0	0	0	0	0
National Shipping Adjusters Inc	15	1	0	6.67	0	0
New United International Marine Services Ltd	50	12	0	24.00	0	0
Nippon Kaiji Kyokai	30,187	928	43	3.07	0.14	4.63
Novel Classification Society S.A.	1	0	0	0	0	0
NV Unitas	1	0	0	0	0	0
Overseas Marine Certification Services	1,185	133	7	11.22	0.59	5.26
Panama Bureau of Shipping	104	10	0	9.62	0	0
Panama Marine Survey and Certification Services, Inc.	8	0	0	0	0	0
Panama Maritime Documentation Services	1,221	123	8	10.07	0.66	6.50
Panama Maritime Surveyors Bureau Inc	7	0	0	0	0	0
Panama Register Corporation	180	10	0	5.56	0	0
Panama Shipping Certificate Inc.	8	0	0	0	0	0
Panama Shipping Registrar Inc.	265	26	2	9.81	0.75	7.69
Phoenix Register of Shipping	12	0	0	0	0	0
Polski Rejestr Statkow	80	9	1	11.25	1.25	11.11
R.J. Del Pan	2	0	0	0	0	0
Registro Brasileiro de Navios de Aeronaves	1	0	0	0	0	0
Registro Internacional Naval S.A.	73	2	0	2.74	0	0
Registro Italiano Navale	2,564	112	0	4.37	0	0
RINAVE Portuguesa	28	2	0	7.14	0	0
Russian Maritime Register of Shipping	1,262	67	3	5.31	0.24	4.48
Ship Classification Malaysia	84	2	0	2.38	0	0
Shipping Register of Ukraine	8	1	1	12.50	12.50	100.00
SingClass International Pte Ltd	243	55	4	22.63	1.65	7.27
Sing-Lloyd	419	90	8	21.48	1.91	8.89
Slovak Lloyd	2	1	0	50.00	0	0
Turkish Lloyd	5	0	0	0	0	0
Union Bureau of Shipping	2,723	401	38	14.73	1.40	9.48
Union Marine Classification Society	2	1	1	50.00	50.00	100.00
Universal Maritime Bureau	968	118	13	12.19	1.34	11.02
Universal Shipping Bureau	98	5	0	5.10	0	0
Venezuelan Register of Shipping	11	1	0	9.09	0	0
Vietnam Register	2,330	102	6	4.38	0.26	5.88
Other	185	24	0	12.97	0	0

See also the note in page 31.

Table 13: PERFORMANCE OF RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2013-2015	No. of RO responsible detentions 2013-2015	Low/medium Limit	Medium/high Limit	Excess factor	Performance level
Sing-Lloyd	419	8	14	3	0.46	Medium
SingClass International Pte Ltd	243	4	9	1	0.39	
Polski Rejestr Statkow	80	1	4	0	0.38	
Panama Shipping Registrar Inc.	265	2	10	1	0.11	
International Ship Classification	899	12	25	11	0.10	
International Register of Shipping	726	9	21	8	0.09	
Universal Maritime Bureau	968	13	27	12	0.09	
Korea Classification Society (former Josen Classification Society)	733	9	21	8	0.08	
Panama Register Corporation	180	0	7	0	-0.01	
Union Bureau of Shipping	2,723	38	67	42	-0.17	
Indonesian Classification Bureau	292	1	10	1	-0.23	
Global Marine Bureau	880	8	25	10	-0.33	
Indian Register of Shipping	278	0	10	1	-0.73	
Panama Maritime Documentation Services	1,221	8	33	16	-0.80	
Overseas Marine Certification Services	1,185	7	32	15	-0.87	
Intermaritime Certification Services, S.A.	1,464	6	39	20	-1.22	
Russian Maritime Register of Shipping	1,262	3	34	17	-1.49	
Isthmus Bureau of Shipping	1,517	4	40	21	-1.49	
Vietnam Register	2,330	6	58	35	-1.58	
CR Classification Society	889	1	25	10	-1.63	
DNV GL AS	4,249	8	100	69	-1.73	
Bureau Veritas	10,255	15	229	181	-1.82	
Germanischer Lloyd	8,827	12	199	154	-1.83	
American Bureau of Shipping	9,987	13	223	176	-1.84	
Nippon Kaiji Kyokai	30,187	43	644	563	-1.84	
Det Norske Veritas	10,545	5	235	187	-1.94	
Lloyd's Register	12,855	6	284	230	-1.94	
Korean Register of Shipping	8,973	3	202	157	-1.95	
Registro Italiano Navale	2,564	0	63	39	-1.97	
China Classification Society	8,206	1	185	143	-1.98	

- Note: 1) In this table, only recognized organizations (RO) that had more than 60 inspections are taken into account. The formula used is identical to the one used for the Black-Grey-White List. However, the values for P and Q are adjusted to P=2% and Q=1%.
- 2) ROs involving 60-179 inspections with zero detention are not included in this table.

Figure 18: COMPARISON OF NUMBER OF DEFICIENCIES BY MAIN CATEGORIES

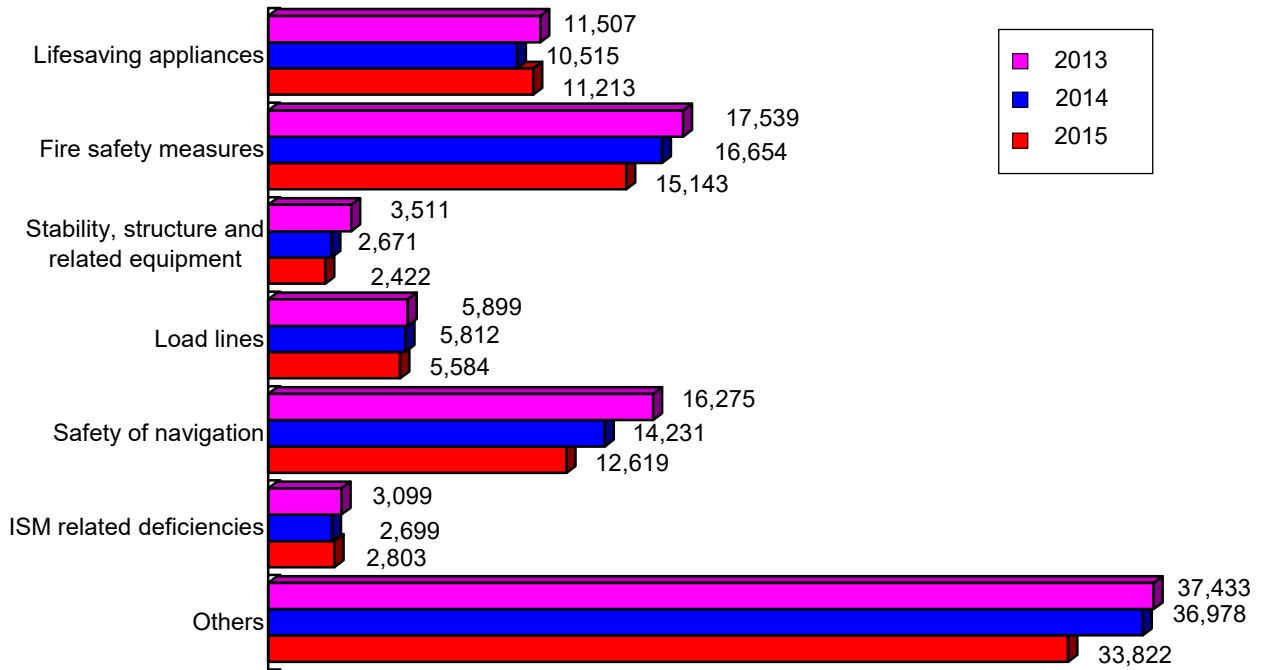


Table 14: COMPARISON OF DEFICIENCIES BY CATEGORIES

Nature of deficiency		Number of deficiencies		
		2013	2014	2015
	Crew Certificates	1,074	1,534	1,593
Certificate & Documentation	Documents	5,345	6,416	4,500
	Ship Certificates	2,348	2,445	1,910
	Structural Conditions	3,511	2,671	2,422
Water/Weathertight conditions		5,899	5,812	5,584
Emergency Systems		5,392	5,093	5,771
Radio Communications		2,500	2,259	2,231
Cargo operations including equipment		575	613	500
Fire safety		17,539	16,654	15,143
Alarms		754	634	577
Safety of Navigation		16,275	14,231	12,619
Life saving appliances		11,507	10,515	11,213
Dangerous goods		216	183	352
Propulsion and auxiliary machinery		5,458	4,549	4,137
Working and Living Conditions	Living Conditions	620	529	349
	Working Conditions	4,887	4,134	2,866
Labour Conditions	Minimum requirements for seafarers	11	74	35
	Conditions of employment	33	363	515
	Accommodation, recreational facilities, food and catering	199	1,017	998
	Health protection, medical care, social security	66	983	1,699
Pollution prevention	Anti Fouling	21	7	13
	MARPOL Annex I	2,037	1,679	1,607
	MARPOL Annex II	40	13	17
	MARPOL Annex III	14	33	30
	MARPOL Annex IV	1,070	1,199	1,301
	MARPOL Annex V	2,618	1,587	1,252
	MARPOL Annex VI	915	758	847
ISM		3,099	2,699	2,803
Other		1,240	876	722
Total		95,263	89,560	83,606
ISPS		2,033	1,615	1,389
Grand total		97,296	91,175	84,995

Figure 19: COMPARISON OF MOST FREQUENT DETAINABLE DEFICIENCIES

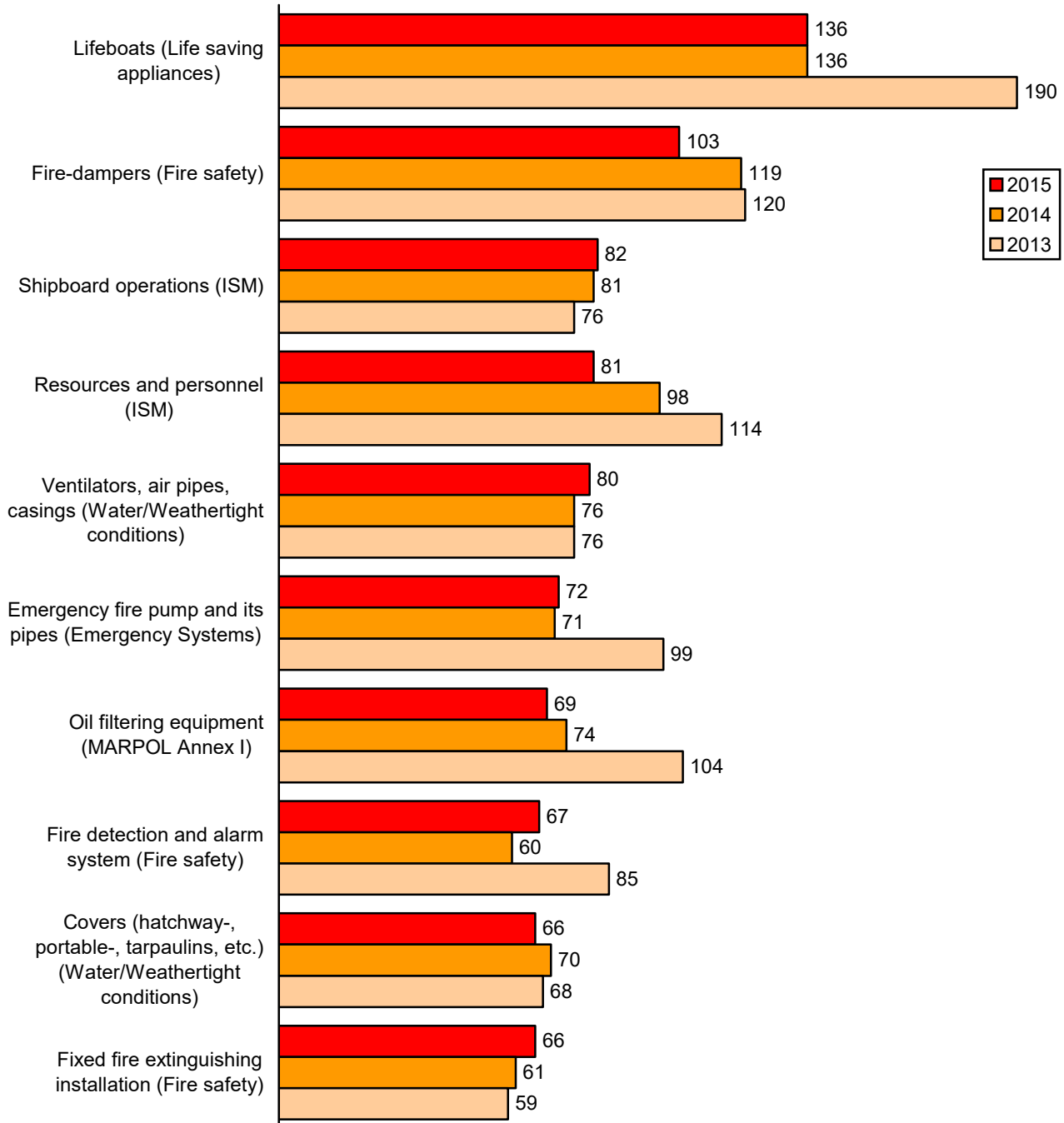


Table 15: COMPARISON OF MOST FREQUENT DETAINABLE DEFICIENCIES

No.	Most frequent deficiencies	Year		
		2013	2014	2015
1	Lifeboats (Life saving appliances)	190	136	136
2	Fire-dampers (Fire safety)	120	119	103
3	Shipboard operations (ISM)	76	81	82
4	Resources and personnel (ISM)	114	98	81
5	Ventilators, air pipes, casings (Water/Weathertight conditions)	76	76	80
6	Emergency fire pump and its pipes (Emergency Systems)	99	71	72
7	Oil filtering equipment (MARPOL Annex I)	104	74	69
8	Fire detection and alarm system (Fire safety)	85	60	67
9	Covers (hatchway-, portable-, tarpaulins, etc.) (Water/Weathertight conditions)	68	70	66
10	Fixed fire extinguishing installation (Fire safety)	59	61	66

Table 16: LIST OF UNDER-PERFORMING SHIPS

IMO No.	Ship name (at the day of detention)	Flag	IMO company No.	No. of times on the list
8028802	FAST	Togo	5584840	1
8412467	SOUTH HILL 2	Sierra Leone	5678925	1
8415366	RICH QUEEN	Cambodia	5676977	11
8515788	YONG SHUN	Cambodia	5169558	3
8604371 ¹	HOLY FAIRY	Cambodia	5076158	3
8604371 ¹	HOLY FAIRY	Cambodia	5803464	3
8606410 ¹	A SON 2	Mongolia	5750056	1
8606410 ¹	VISTA 7	Mongolia	5580100	1
8614467 ¹	SILVA	Tanzania	5672682	6
8614467 ¹	SILVA	Tanzania	5744901	6
8626214 ²	SHENGXIANG 6	Belize	5475436	5
8626214 ²	SHENGXIANG 6	Cambodia	Unknown	5
8649814	PLATINUM	Cambodia	5679044	1
8652756	CHUN YANG 7	Cambodia	5794964	7
8656960	GUO MAO 1	Togo	4190737	2
8661290	CHUN YANG 8	Sierra Leone	5437101	9
8742240	AN QUAN ZHOU 66	Panama	5685808	1
8747446	TIAN YUAN 6	Panama	5678236	2
8804919	HANG CHENG	Cambodia	5298893	1
8810358 ²	MARINE PEACE	Belize	5049445	3
8810358 ²	MARINE PEACE	Cambodia	5049445	3
8817318	YEN DE	Cambodia	5732474	7
8864842 ¹	LIAN MENG 9	Cambodia	5119732	1
8864842 ¹	LIAN MENG 9	Cambodia	5513586	1
8911035 ¹	LONG GANG 9	Cambodia	5720074	8
8911035 ¹	LONG GANG 9	Cambodia	5838827	8
8912900	RED ROVER	Indonesia	0313623	8
8957479	KHUDOZHNIK TSYGANOV	Cambodia	5412019	3
8989070	XIN JIE	Cambodia	5686678	1
8992041	YU HAI 1	Cambodia	5377061	3
9036882	ORIENT SUNSHINE	Cambodia	5290972	7
9088598 ¹	TAI XIN	Cambodia	5191123	9
9088598 ¹	TAI XIN	Cambodia	5679305	9
9092214 ²	MAO XIN	Cambodia	5280211	3
9092214 ²	WINNIE	Sierra Leone	5280211	3
9168506	KEN CAPE	Liberia	1099106	4
9181807 ¹	SEA STAR 9	Panama	5390711	3

IMO No.	Ship name (at the day of detention)	Flag	IMO company No.	No. of times on the list
9181807 ¹	YONG FU	Panama	5169558	3
9312365	SUN HAPPINESS	Panama	5018669	1
9357042 ³	CHENG LU 10	Cambodia	4100686	7
9357042 ³	CHENG LU 10	Cambodia	5606986	7
9357042 ³	CHENG LU 10	Cambodia	5784804	7
9357042 ³	CHENG LU 10	Niue	4100686	7
9362384 ¹	YONG SHUN 7	Niue	5773875	1
9362384 ¹	YONG SHUN 7	Niue	5827147	1
9378424	ANDA NO. 66	Panama	5678236	2
9446893	DONG PENG 58	Cambodia	5675316	8
9450959 ¹	FLYING CRANE	Panama	1130276	1
9450959 ¹	FLYING CRANE	Panama	5066491	1
9540405	HUI JI	Panama	5043711	1
9542245	OCEAN RICH 1	Panama	5786893	2
9673563	TONG RUN 7	Cambodia	5675660	4

1. The ship changed company.
2. The ship changed flag.
3. The ship changed company and flag.

EXPLANATORY NOTE ON THE BLACK – GREY – WHITE LISTS

The Port State Control Committee adopted the same method as used by the Paris MOU for assessment of performance of flags. Compared to the calculation method of previous year, this system has the advantage of providing an excess percentage that is significant and also reviewing the number of inspections and detentions over a 3-year period at the same time, based on binomial calculus.

The performance of each flag State is calculated using a standard formula for statistical calculations in which certain values have been fixed in accordance with the agreement of the Port State Control Committee. Two limits have been included in the new system, the 'black to grey' and the 'grey to white' limit, each with its own specific formula:

$$u_{black - to - grey} = N \cdot p + 0.5 + z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

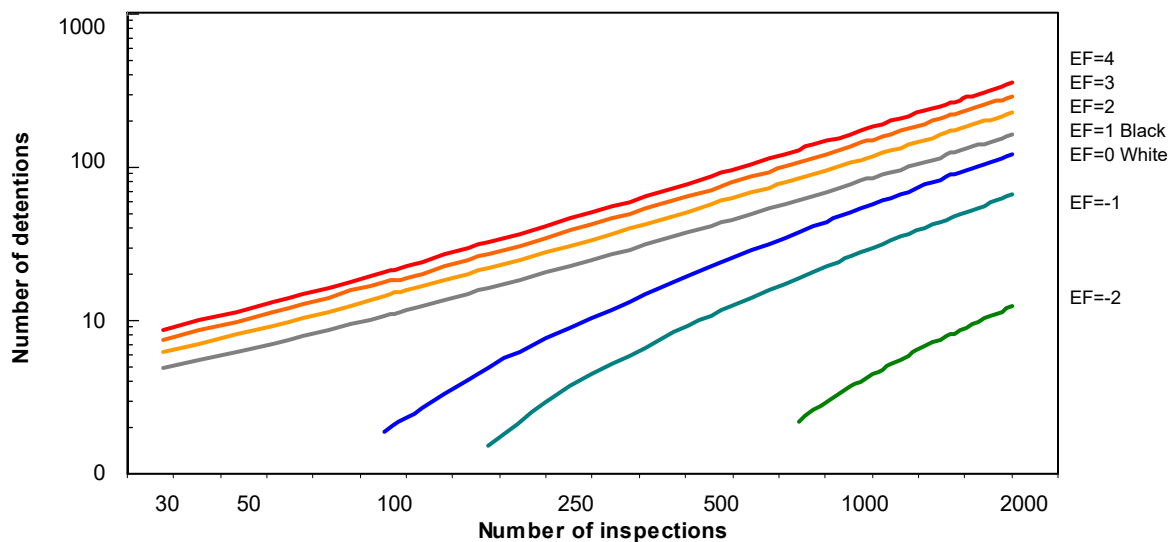
$$u_{white - to - grey} = N \cdot p - 0.5 - z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

In the formula "N" is the number of inspections, "p" is the allowable detention limit (yardstick), set to 7% by the Tokyo MOU Port State Control Committee, and "z" is the significance requested (z=1.645 for a statistically acceptable certainty level of 95%). The result "u" is the allowed number of detentions for either the black or white list. The "u" results can be found in the table as the 'black to grey' or the 'grey to white' limit. A number of detentions above this 'black to grey' limit means significantly worse than average, where a number of detentions below the

'grey to white' limit means significantly better than average. When the amount of detentions for a particular flag State is positioned between the two, the flag State will find itself on the grey list. The formula is applicable for sample sizes of 30 or more inspections over a 3-year period.

To sort results on the black or white list, simply alter the target and repeat the calculation. Flags which are still significantly above this second target are worse than the flags which are not. This process can be repeated, to create as many refinements as desired. (Of course the maximum detention rate remains 100%!) To make the flags' performance comparable, the excess factor (EF) is introduced. Each incremental or decremental step corresponds with one whole EF-point of difference. Thus the excess factor EF is an indication for the number of times the yardstick has to be altered and recalculated. Once the excess factor is determined for all flags, the flags can be ordered by EF. The excess factor can be found in the last column the black, grey or white list. The target (yardstick) has been set on 7% and the size of the increment and decrement on 3%. The Black – Grey – White lists have been calculated in accordance with the above principles.

The graphical representation of the system, below, is showing the direct relations between the number of inspected ships and the number of detentions. Both axis have a logarithmic character.



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The Secretariat (Tokyo MOU Secretariat) of the Memorandum of Understanding on Port State Control in the Asia-Pacific Region is located in Tokyo, Japan. The Secretariat may be approached for further information or inquiries on the operation of the Memorandum.

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