

**ANNUAL REPORT**

**ON**

**PORT STATE CONTROL**

**IN THE ASIA-PACIFIC REGION**

**2014**



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## FOREWORD

We are pleased to present the **Annual Report on Port State Control in the Asia-Pacific Region 2014**.

We feel proud to acknowledge that the development of port State Control activities of the Tokyo MOU has contributed to the promotion of performance and quality of shipping in the Asia-Pacific region positively. It is encouraging to note that both the number of detentions and the detention percentage have continuously declined and, on the other hand, that the number and portion of quality ships have been increasing and ships with high and very high targeting factor values have been falling. Following the introduction of new inspection regime (NIR) in 2014, the Tokyo MOU PSC inspections will be further improved in the coming years.

This annual report summarizes the port State control developments and activities of the Tokyo MOU in 2014. Furthermore, the report also provides port State control statistics and analysis on the results of inspections carried out by member Authorities during the year.

Although the level of compliance and performance of ships operating in the region has been seen improving gradually in the recent years, it is not yet the time to relax and to celebrate, bearing in mind that there are still unsafe and under-performing ships trading around the region. In this regard, the Tokyo MOU will make the everlasting efforts to enhance, improve and harmonize PSC activities in order to reach the final goal of eradication of sub-standard ships in the region.

Abdul Samad Bin Shaik Osman  
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 twentieth issue and covers port State control activities and developments in the 2014 calendar year.

The Memorandum was formed in Tokyo on 1 December 1993. The following maritime Authorities in the Asia-Pacific region are the signatories to the Memorandum: Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, the Philippines, the Russian Federation, Singapore, Solomon Islands, Thailand, Vanuatu and Viet Nam. The Memorandum 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 19 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, 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 would be accepted as a co-operating member by unanimous consent of the Port State Control Committee. Peru is participating in the Tokyo MOU as a co-operating member Authority at the moment.

The main objective of the Memorandum is 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 substandard 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 2014

The new inspection regime (NIR) was smoothly implemented in the Tokyo MOU, as scheduled, from the beginning of 2014. Introduction of NIR enables Authorities to enhance inspection targeting and to improve effective use of limited PSC resources. In addition to relevant information and explanations on the NIR, actual ship risk profile data for each ship and company performance for every ISM company as recorded in the Tokyo MOU PSC database is also published on the Tokyo MOU web-site. This provides industry and the general public with timely and transparent information on implementation of the NIR.

The Tokyo MOU has enacted measures that target under-performing ships for the past four years. It is encouraging that the implementation of these measures has produced very positive results. Based on data analysis, the total number of under-performing ships identified and the number of individual

ships involved in 2014 has decreased by 40% and 30% respectively, comparing with the numbers from three years ago. This proves that the measures taken to target under-performing ships are proving to be correct and effective.

The concentrated inspection campaign (CIC) on STCW Hours of Rest was carried out from 1 September to 30 November 2014. During the three-month CIC period, a total of 8,182 PSC inspections were conducted by the member Authorities, of which 6,392 were related to a CIC inspection. There were a total of 206 detentions recorded during the CIC inspections, among which 16 or 7.8% of them were detained as the direct results of the CIC. A total of 1,589 CIC related deficiencies were recorded. The most significant deficiencies found during the campaign were related to documentation and labour conditions, including records of seafarers daily hours of work/rest 997 (63%), manning specified by the minimum safe manning document 241 (15%), and shipboard working arrangements 232

(15%). The overall results of the CIC demonstrate that considerable room for improvement exists in the areas of record keeping and labour conditions. The CIC on STCW Hours of Rest was launched 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 Port State Control Committee held its twenty-fifth meeting from 10 to 13 November 2014 in Queenstown, New Zealand. The meeting was hosted by Maritime New Zealand. 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,



The twenty-fifth Committee meeting, Queenstown, November 2014.



Canada, Chile, China, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, the Marshall Islands, New Zealand, Papua New Guinea, the Philippines, the Russian Federation, Singapore, Thailand, Vanuatu and Viet Nam; co-operating member Authority of Peru; and observers of Macao (China), the United States Coast Guard, the Black Sea MOU, the Indian Ocean MOU and the Viña del Mar Agreement.

The Committee considered applications for observer status by Tonga and the Riyadh MOU. In accordance with the provisions of the Memorandum, the Committee agreed unanimously to grant observer status to Tonga and the Riyadh MOU. The Committee considered a report of analysis of important key performance indicators (KPIs) adopted at its previous meeting. The Committee agreed that analysis of KPIs would be produced on an annual basis.

The Committee was informed that the new inspection regime (NIR) had been implemented from 1 January 2014 successfully. The Committee received a preliminary analysis on ship risk profile data under the NIR during the initial period. The Committee agreed to instruct the intersessional group on NIR to continue the analysis over a longer period so as to get a clearer picture on implementation of the NIR. The Committee noted with satisfaction that measures taken to target under-performing ships had been implemented effectively. As a result, positive results both in the number of under-performing ships identified each month and the number of individual ships involved each year have been achieved.

The Committee considered the final report of the CIC on Propulsion and Auxiliary

Machinery, 2013. The Committee approved the arrangements for the CIC on Crew Familiarization for Enclosed Space Entry that will be carried out jointly with the Paris MOU from 1 September to 30 November 2015. The Committee also considered the preliminary arrangements and preparations for CICs in 2016 and 2017 respectively.

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

- assessment of performance of member Authorities;
- review of achievements and status of the action plan developed based on the strategic plan;
- approval of approved the amendments to the guidelines for the responsibility assessment of RO, the guidelines for the detention review panel and the guidelines for PSC officers on MLC 2006;
- adoption of a new procedure/time window for verification of rectification of deficiencies for a period of twenty-four months;
- approval of arrangement for finalizing the new version of the PSC Manual;
- obtaining of observer status at the Asia Pacific Heads of Maritime Safety Agencies (APHoMSA) Forum; and
- awarding of the winner of the best deficiency photo of the year.

In conjunction with the Committee meeting, an open forum with industry was conducted. The

International Association of Classification Societies (IACS) and the Association of Asian Classification Societies (ACS) were invited to the forum for discussion and exchange of views on issues of mutual interest.

The twenty-sixth meeting of the Port State Control Committee will be held in Malaysia in October 2015.

#### **TECHICAL WORKING GROUP (TWG)**

The eighth meeting of the Technical Working Group (TWG) was held in Queenstown, New Zealand, from 6 to 7 November 2014, immediately before the twenty-fifth meeting of the Committee. The TWG08 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.

#### **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 fourth general training course for PSC officers was held in Yokohama, Japan, from 25 August to 19 September 2014. This was the tenth training course jointly organized by IMO and the Tokyo MOU. A total of 19 PSC officers participated in the training course. Twelve of them were from the Tokyo MOU Authorities of China, Indonesia, Macao (China), Malaysia, the Marshall Islands, New Zealand, Peru, the Philippines, the Russian Federation, Thailand, Vanuatu and Viet Nam. The other seven 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. The course was conducted with the assistance of the Shipbuilding Research Center of Japan (SRC).

The general training course consisted of two-weeks of classroom lectures which provided participants with a wide range of information. The main focus being IMO conventions and regulations relevant to port State control (PSC) implementation. On site practical training was carried out in the following two weeks. Experts from the Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT), SRC and the Secretariat delivered lectures on relevant subjects. During the onboard training, participants were divided into eight groups to receive practical training on PSC inspections at ports of Yokohama, Niigata, Nagoya, Osaka, Kobe, Hiroshima, Takamatsu or Hakata respectively. In addition, a technical visit to a liferaft manufacturer was also arranged.



Training course for PSC officers

The twenty-second seminar for PSC officers and the Workshop on Effective Implementation of IMO Conventions were held in Manila, the Philippines, from 21 to 25 July 2014. The seminar and workshop were hosted by the Philippine Coast Guard. Participants from Authorities of Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, the Republic of Korea, Macao (China), Malaysia, Papua New Guinea, the Philippines,



Onboard training

provided by Authorities or reviewed by the detention review panel. In conjunction 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 Philippine Overseas Employment Administration (POEA) designated by IMO gave presentations on status and matters relating to implementation of MLC 2006 and PSCO decision support tool.

the Russian Federation, Thailand, Vanuatu and Viet Nam attended the seminar and the workshop.

The major topics of the seminar were the Concentrated Inspection Campaign (CIC) on STCW Hours of Rest, Introduction of STCW Manila Amendments, PSC relating to ECDIS and results of CIC on Propulsion and Auxiliary Machinery 2013. Experts from the Australian Maritime Safety Authority (AMSA), Directorate General of the Maritime Territory and Merchant Marine (DIRECTEMAR) of Chile and MLIT of Japan delivered the comprehensive and informative presentations on the relevant topics. Two case study sessions were carried out to discuss actual cases

At the kind invitation of the China Maritime Safety Administration (MSA), the fifth specialized training course was organized in Ningbo, China, from 18 to 20 June 2014. The subject of this specialized training course was Fire Safety. Participants from Chile, China, Fiji, Hong Kong (China), Macao (China), Malaysia,



Onboard training



The twenty-second seminar for PSC officers

the Marshall Islands, Papua New Guinea, the Philippines, the Russian Federation, Singapore, Thailand, Vanuatu and Viet Nam attended the training course. The course was conducted by the China MSA.

There were three expert missions carried out in 2014. One mission was conducted in Port Kelang, Malaysia, from 19 to 30 May 2014 by experts from the Republic of Korea. Another



Specialized training course

mission was held in Suva, Fiji, from 24 to 28 November 2014 with expert from Singapore dispatched to provide the training. The final mission was organized in Hai Phong, Viet Nam, from 1 to 5 December 2014 with experts from Japan conducting the training.

Nine PSC officer exchanges were completed in 2014, namely one PSC officer from Australia to Chile, one from New Zealand to Hong Kong (China), one from Chile to Australia, one from the Republic of Korea to Singapore, one from the Russian Federation to the Republic of Korea, one from Singapore to the Russian Federation, one from Canada to New Zealand, one from Japan to Canada and one from Hong Kong (China) to Japan. 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 first meeting of the Sub-Committee on Implementation of IMO Instruments (III), the former FSI, in July 2014.

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 2013, continuous efforts and further coordinated actions by the two Memoranda were made on the following:

- carrying out the joint CIC on STCW Hours of Rest 2014;



Expert mission training course for the Viña del Mar Agreement

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

The second PSC training course was held in Buenos Aires, Argentina, from 10 to 21 March 2014, 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 Australia, Canada, Chile and Japan and an officer from the Tokyo MOU Secretariat. A total of 19 participants from the Latin American Authorities and six other regional PSC regimes attended the course.

Under the AusAID project, the second PSC training course for the Indian Ocean MOU was carried out in Durban, South Africa, from September 29 to 10 October 2014. 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 19 participants from the Indian Ocean MOU Authorities participated in the training course.



Expert mission training course for the Indian Ocean MOU

## PORT STATE CONTROL UNDER THE TOKYO MOU, 2014

### INSPECTIONS

In 2014, 30,405 inspections, involving 16,761 individual ships, were carried out on ships registered under 99 flags. Figure 2 and Table 2 show the number of inspections carried out by the member Authorities of the Tokyo MOU. Out of 30,405 inspections, there were 19,029 inspections where ships were found with deficiencies. Since the total number of individual ships operating in the region was estimated at 24,128\*, the inspection rate in the region was approximately 69%\*\* in 2014 (see Figure 1).

Information on inspections according to ships' flag is shown in Table 3.

Figures summarizing inspections according to ship type are set out in Figure 3 and Table 4.

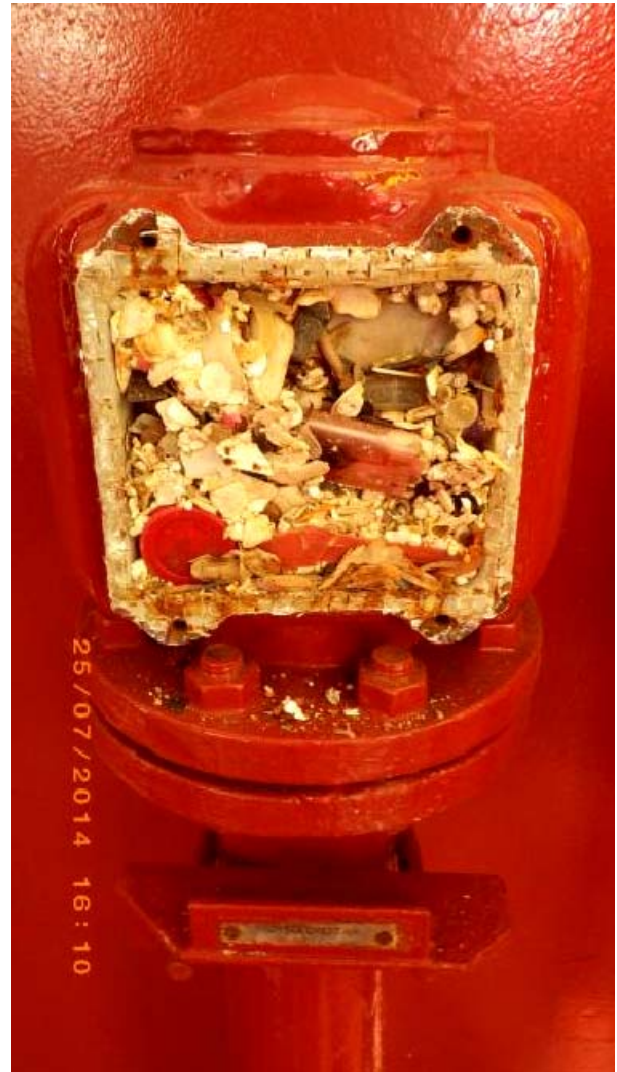
Inspection results regarding recognized organizations are shown in Table 5.

### 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 cannot 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.

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

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



In 2014, 1,203 ships registered under 64 flags were detained due to serious deficiencies having been found onboard. The detention rate of ships inspected was 3.96%. In comparison to last year, detentions decreased in both the overall number and the percentage.

Figure 4 shows the detention rate by flag for flags where at least 20 port State inspections





three-year rolling period. The black-grey-white list for 2012-2014 consists of 64 flags, whose ships were involved in 30 or more inspections during the period. The number of flags in the black list has reduced from 15 to 12 in this reporting period. Georgia, Saint Kitts and Nevis,

had been conducted and whose detention rate was above the average regional rate. Figure 5 gives the detention rate by ship type. A newly introduced Figure 7 illustrates the most frequent detainable deficiencies found during inspections.

Thailand, Tonga and Viet Nam were removed from the black list, which is seen as a positive indication of improvement of flag State performance. Egypt and Niue joined in the black list in the same period. The number of flags on the grey list remained unchanged at 19 during the reporting period. The white list increased to 33 flags. Curacao, Gibraltar (UK) and Viet Nam being new members of flags in the white list.

The Black-grey-white list (Table 7) indicates levels of performance of flags over a

A list of under-performing ships (i.e. ships detained three or more times during previous twelve months) is published monthly. A total of 266 vessels, involving 61 individual ships, were identified as under-performing ships in 2014. The list of under-performing ships is provided in Table 15.



**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 requested to be rectified.

A total of 86,560 deficiencies were recorded in 2014. The deficiencies found are categorized



and shown in Figure 6 and Table 6.

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 2014, 16,654 deficiencies related to fire safety measures, 14,231 safety of navigation related deficiencies and 10,515 deficiencies related to life-saving appliances were recorded, representing almost 50% of the total number of all recorded deficiencies.



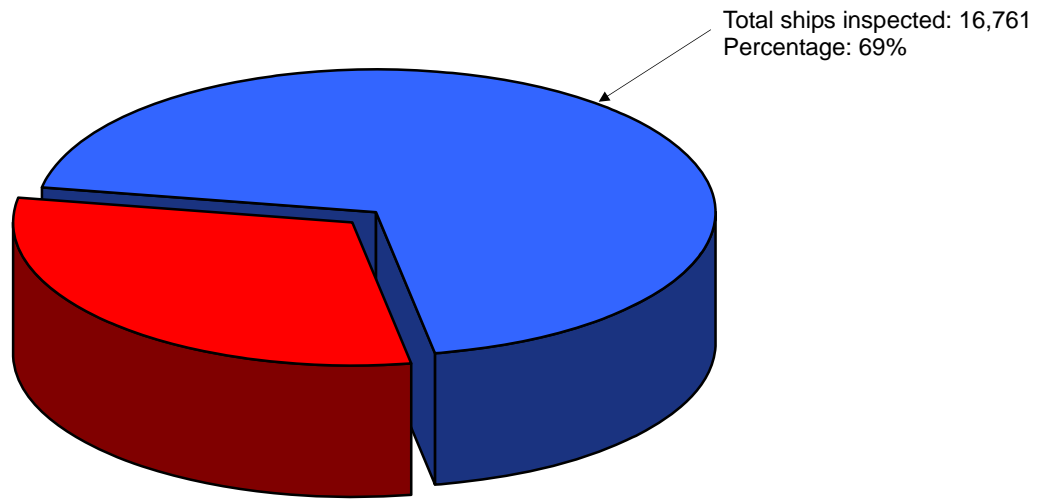
The total number of recorded deficiencies has continued to decrease during the last three years. In 2014, deficiencies reduced 5,703 in number or 6.37% by percentage. Deficiencies relating to the commonly found areas (e.g. fire safety, life-saving appliances, safety of navigation and Load Lines) decreased. On the other hand, an increase has been observed in deficiencies relating to MLC 2006 and hours of rest stemming from the CIC of the year.



**OVERVIEW OF PORT STATE CONTROL RESULTS 2004 – 2014**

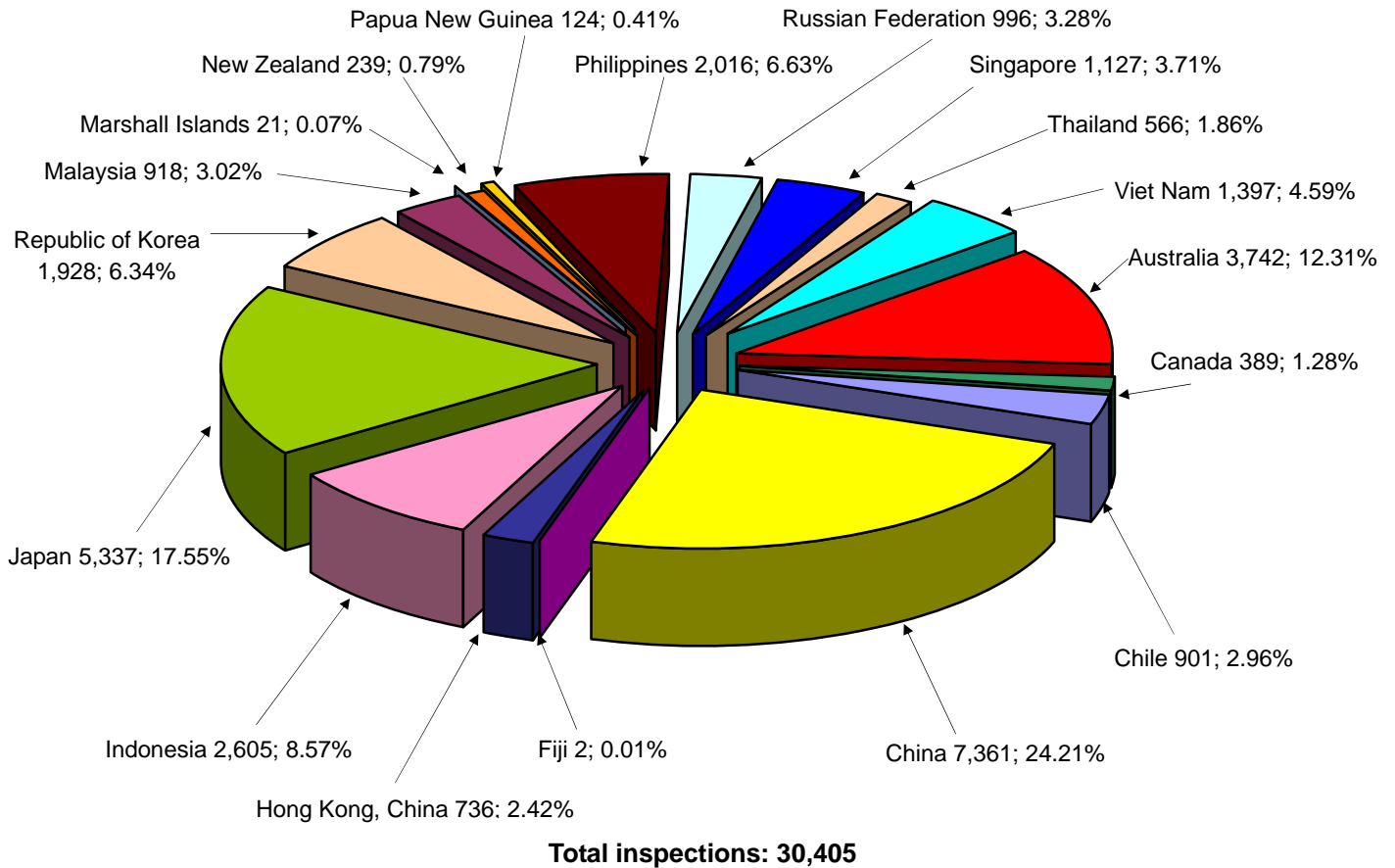
Figures 8-13 show the comparison of port State inspection results for 2004 - 2014. These figures indicate the trends in port State activities and ship performance over the past eleven years.

**Figure 1: INSPECTION PERCENTAGE**

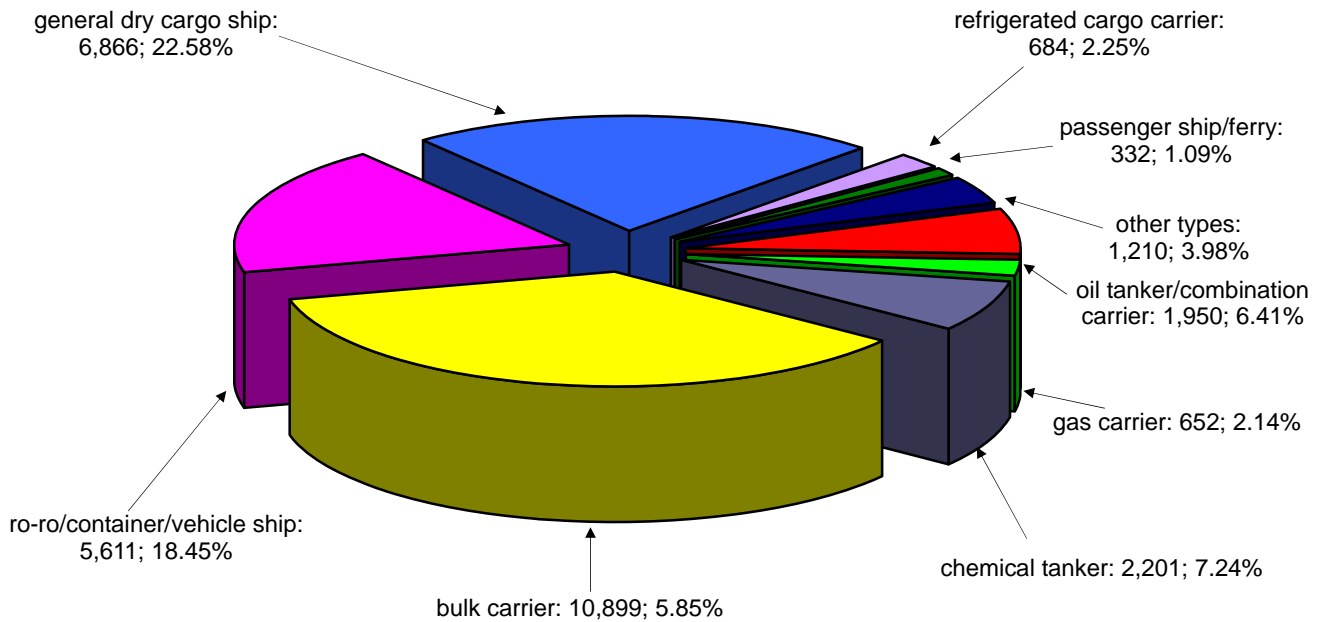


Total individual ship visited: 24,128

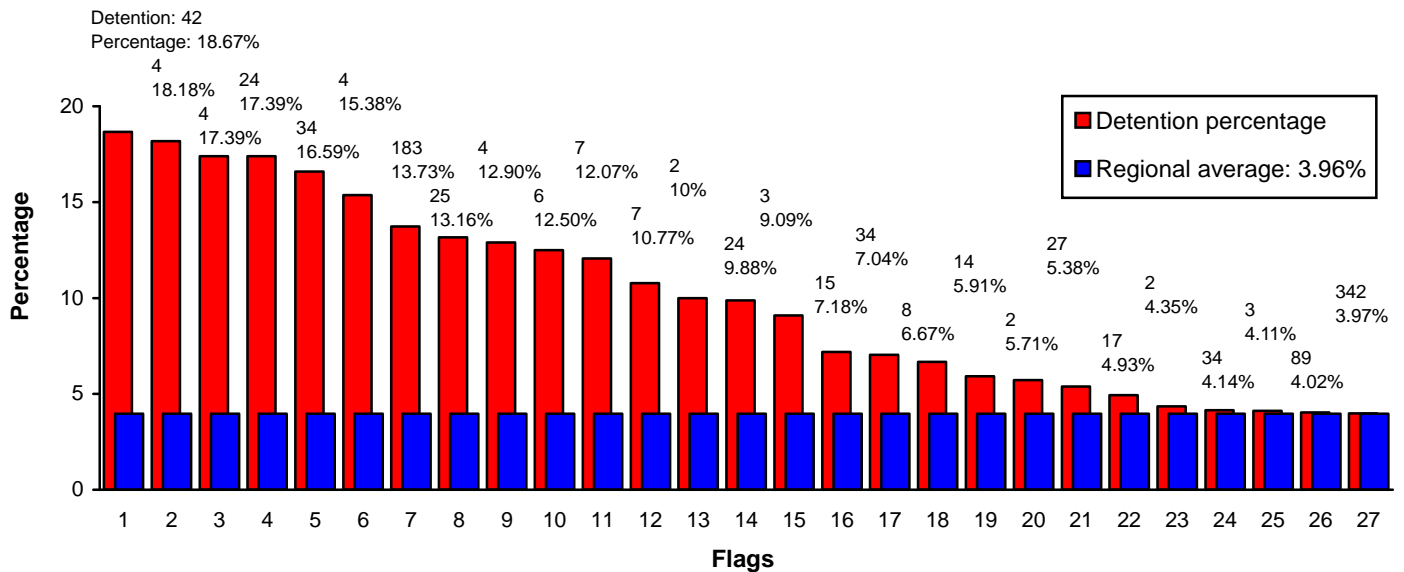
**Figure 2: PORT STATE INSPECTIONS - CONTRIBUTION BY AUTHORITIES**



**Figure 3: TYPE OF SHIP INSPECTED**



**Figure 4: DETENTIONS PER FLAG**

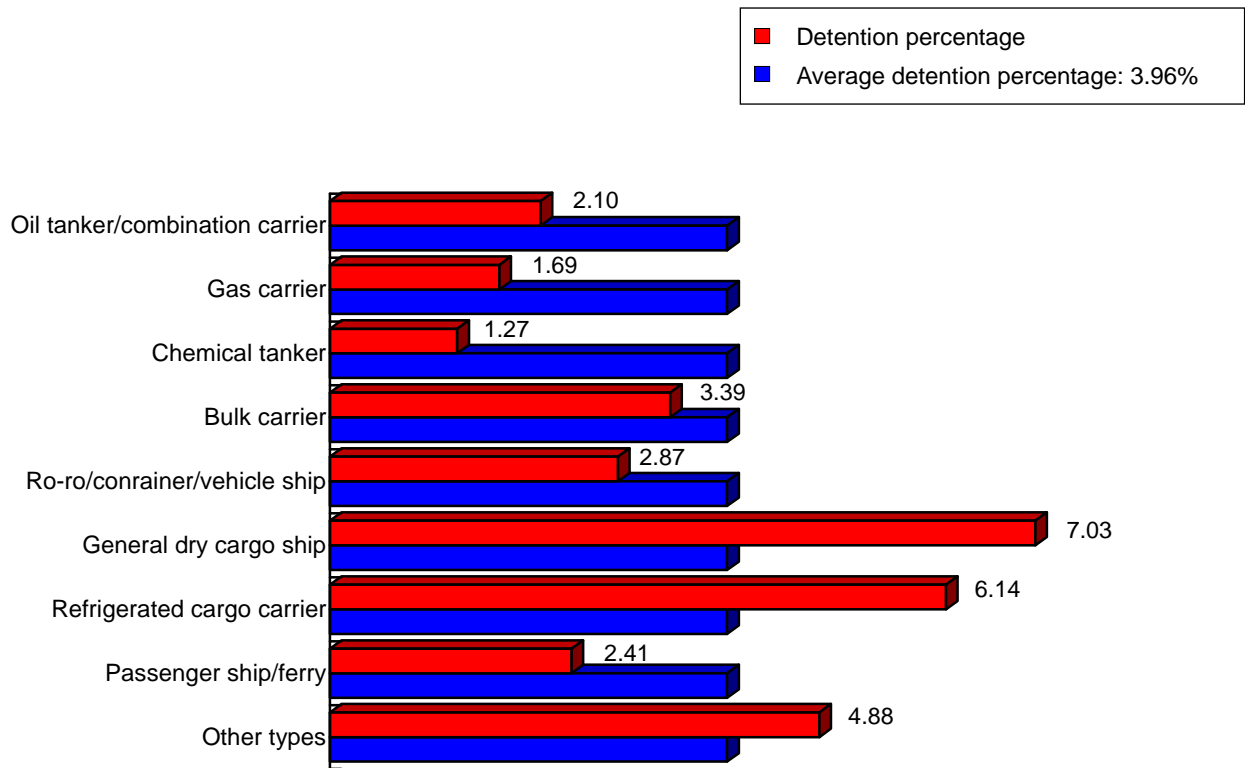


Flags:

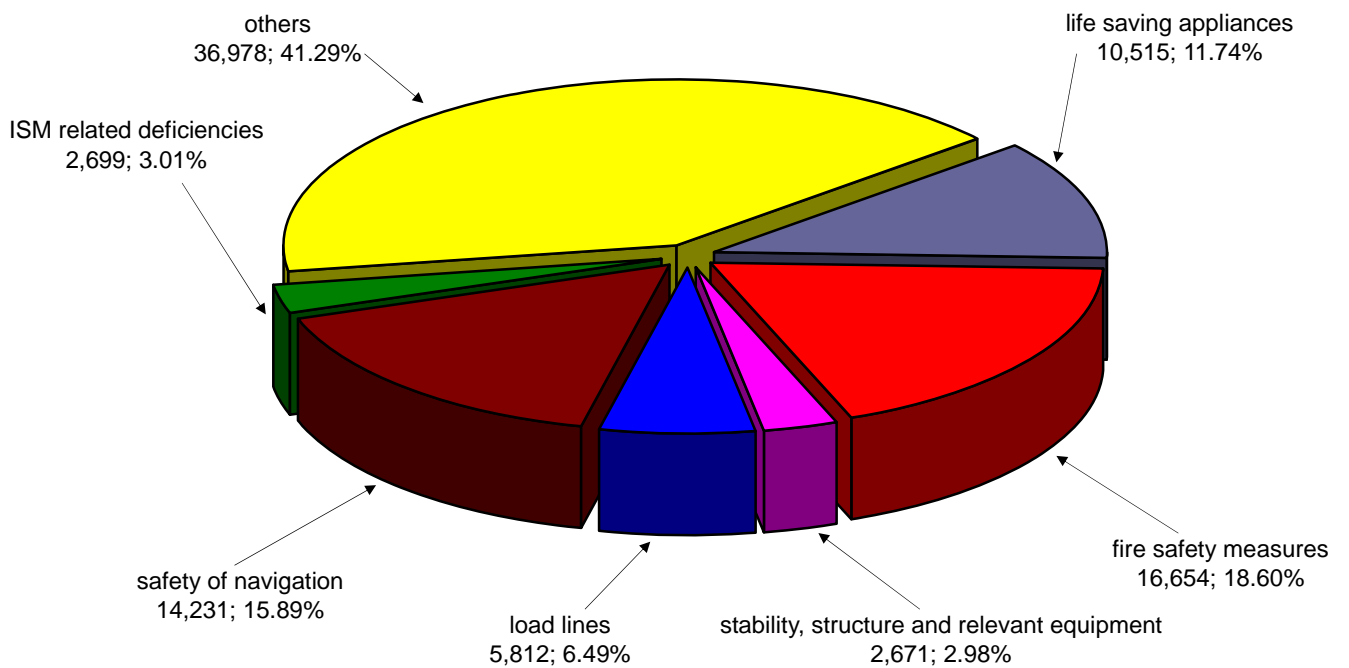
- |                              |                 |                           |                 |
|------------------------------|-----------------|---------------------------|-----------------|
| 1. Sierra Leone              | 2. Tanzania     | 3. Jamaica                | 4. Mongolia     |
| 5. Korea, Dem. People's Rep. | 6. Cook Islands | 7. Cambodia               | 8. Indonesia    |
| 9. Niue                      | 10. Iran        | 11. Togo                  | 12. Bangladesh  |
| 13. Sweden                   | 14. Kiribati    | 15. Saint Kitts and Nevis | 16. Philippines |
| 17. Belize                   | 18. Vanuatu     | 19. Russian Federation    | 20. Switzerland |
| 21. Antigua and Barbuda      | 22. Greece      | 23. Portugal              | 24. Malta       |
| 25. India                    | 26. Liberia     | 27. Panama                |                 |

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.

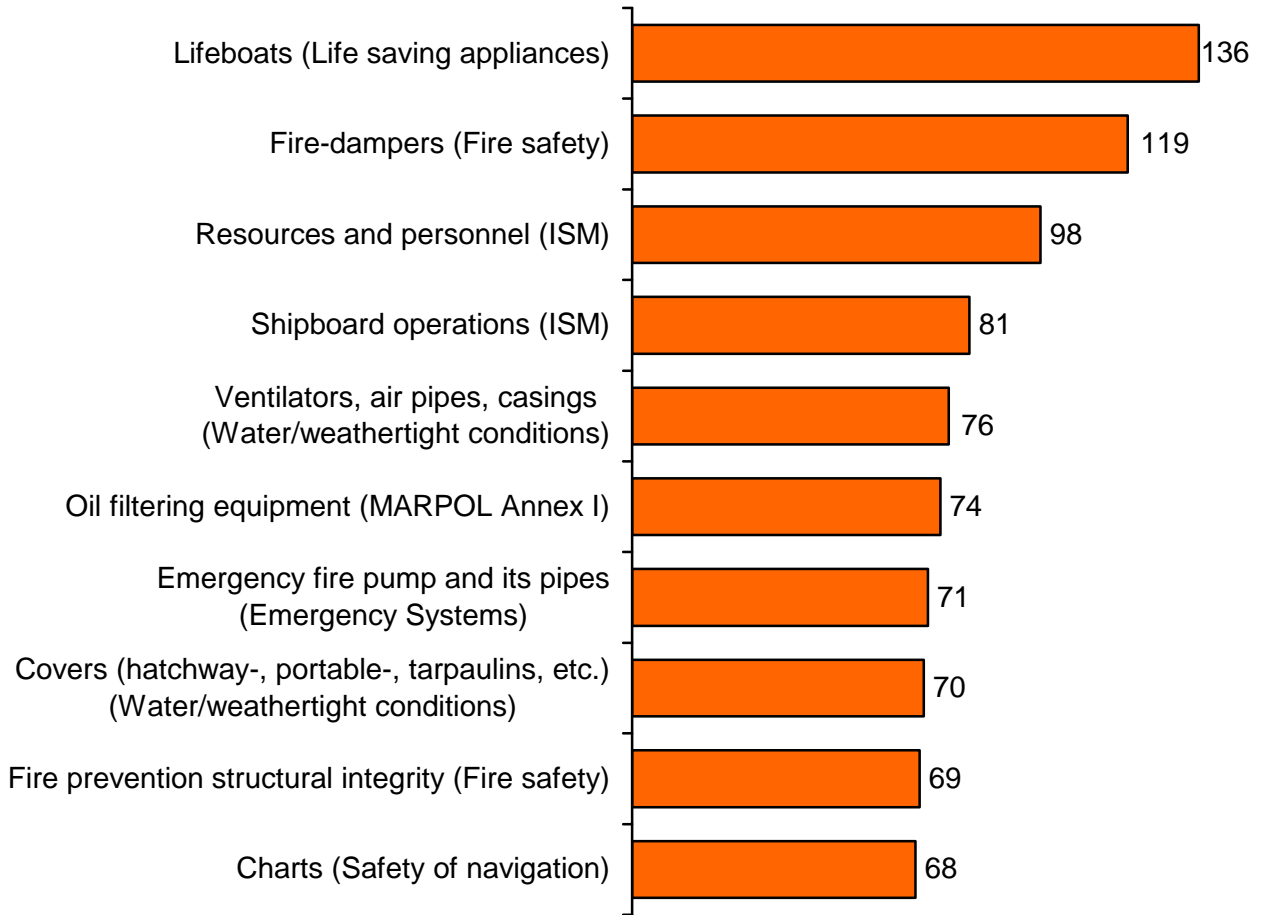
**Figure 5: DETENTION PER SHIP TYPE**



**Figure 6: DEFICIENCIES BY MAIN CATEGORIES**

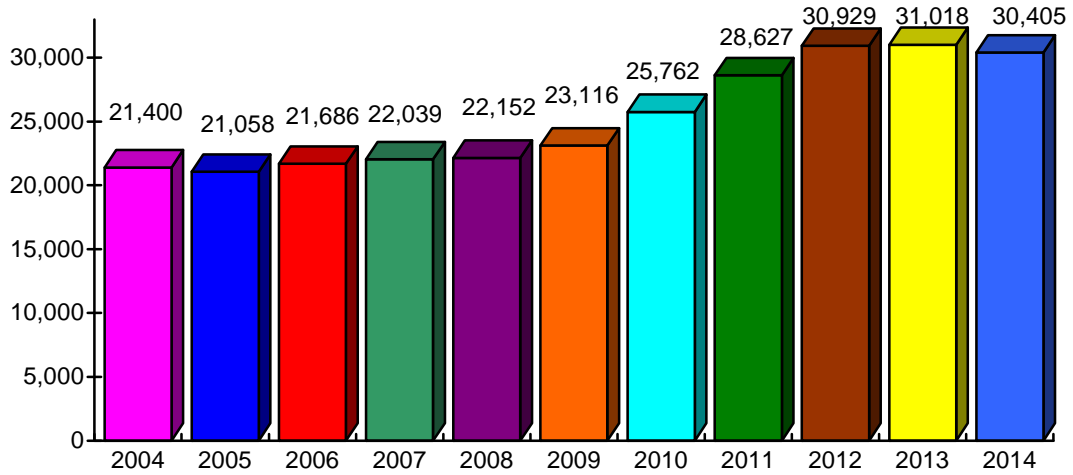


**Figure 7: MOST FREQUENT DETAINABLE DEFICIENCIES**

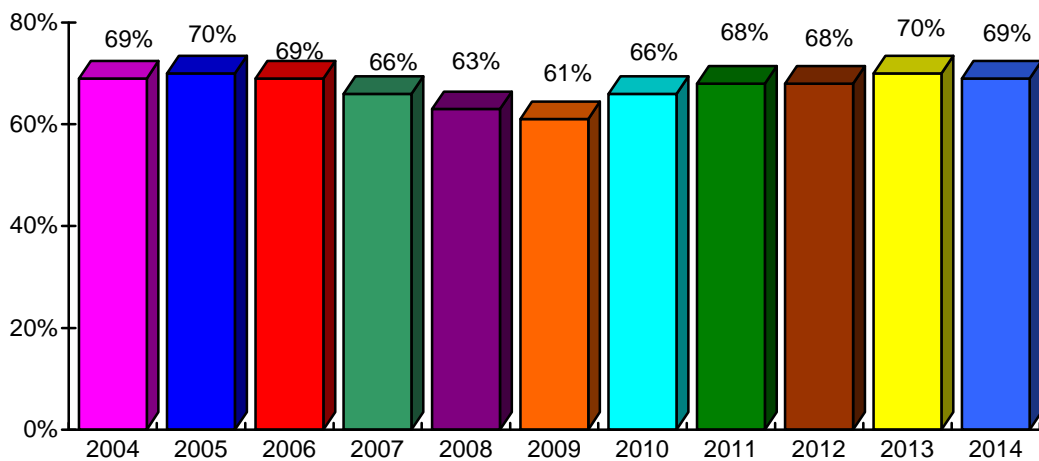


**OVERVIEW OF PORT STATE CONTROL RESULTS 2004 - 2014**

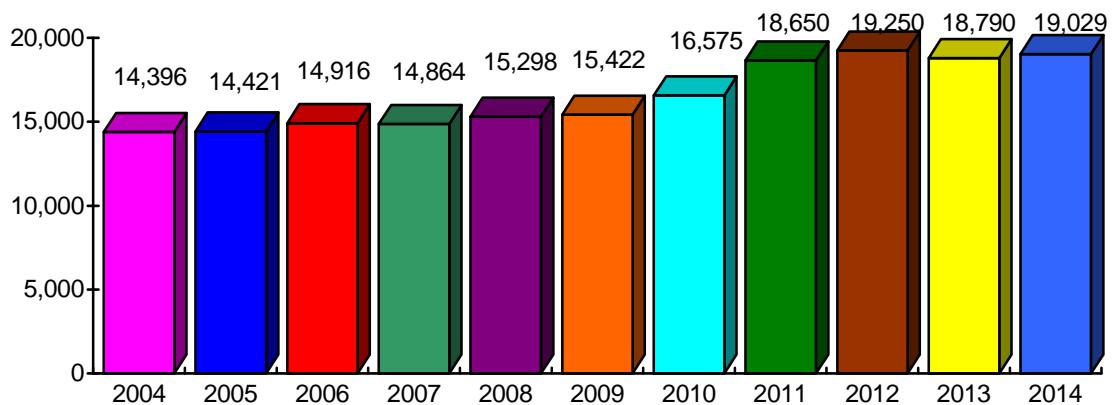
**Figure 8: NO. OF INSPECTIONS**



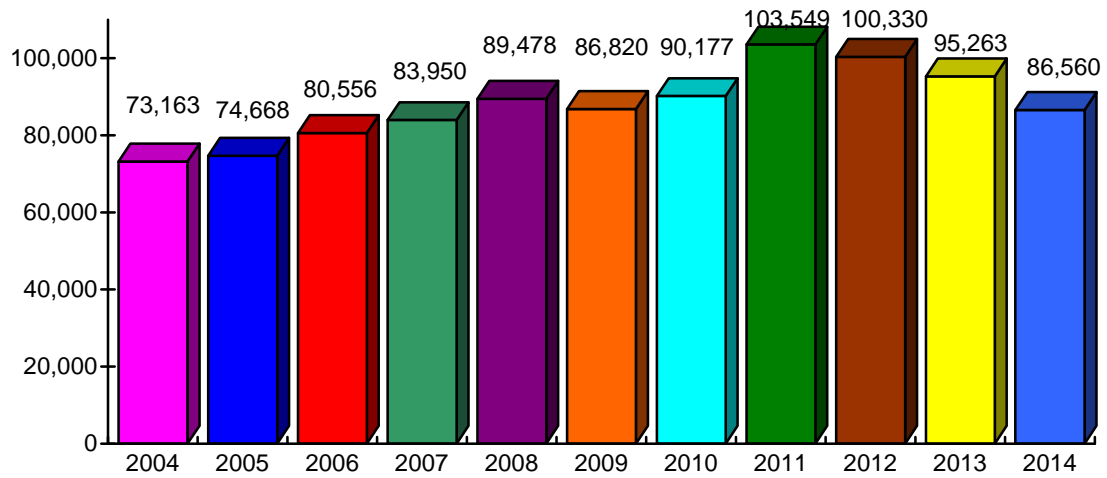
**Figure 9: INSPECTION PERCENTAGE**



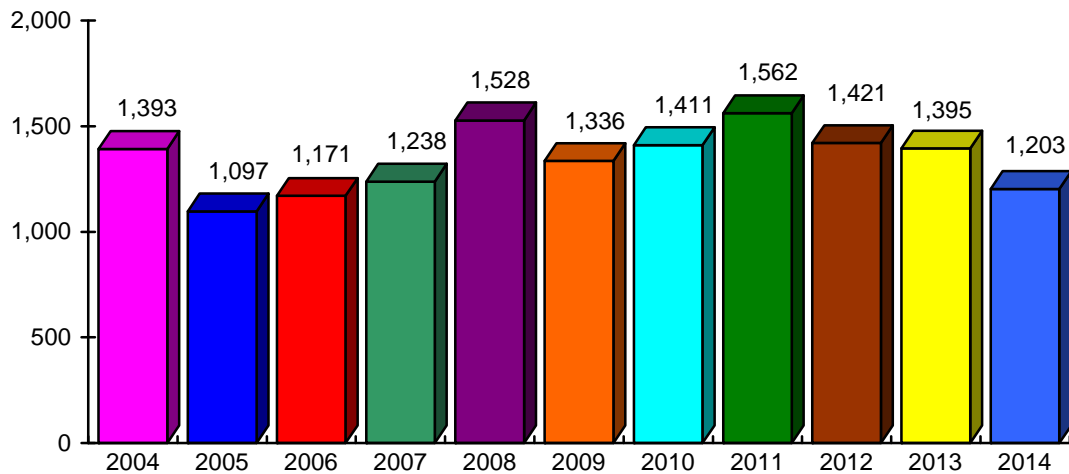
**Figure 10: NO. OF INSPECTIONS WITH DEFICIENCIES**



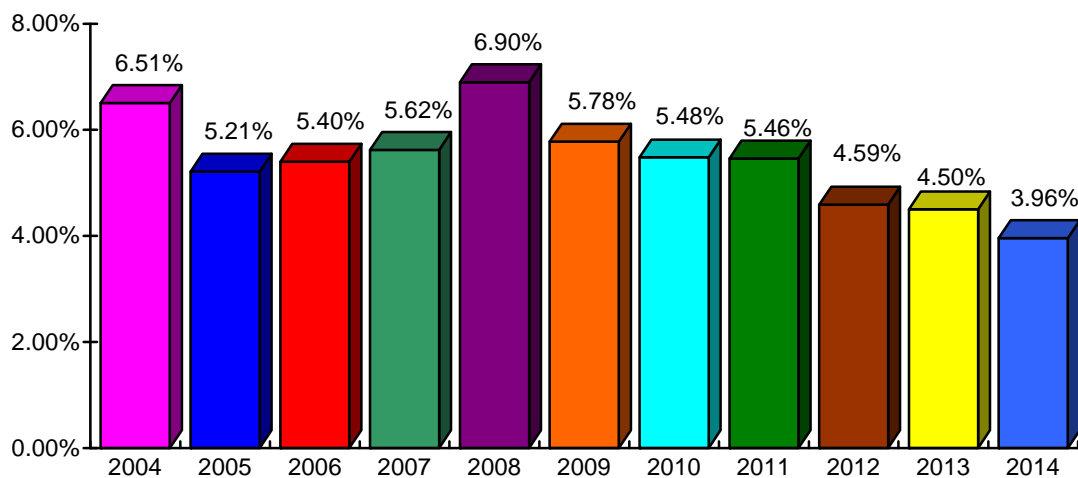
**Figure 11: NO. OF DEFICIENCIES**



**Figure 12: NO. OF DETENTIONS**



**Figure 13: 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 2014)

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
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
Peru	18/01/67	24/06/09	04/12/79	16/07/82	21/08/09	25/04/80
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 2014)

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

\* 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 2014)

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	-
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
Peru	25/04/80	25/04/80	25/04/80	25/04/80	04/12/14
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	-
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 2014

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 <sup>1)</sup> (e)	No. of detentions <sup>1)</sup> (f)	No. of individual ships visited <sup>2)</sup> (g)	Inspection rate (a/g%)	Detention percentage (f/b%)
Australia <sup>3)</sup>	3,267	5,631	3,742	1,889	2,357	10,886	269	5,757	56.75	7.19
Canada <sup>4)</sup>	387	389	389	0	200	720	5	1,898	20.39	1.29
Chile	820	1,272	901	371	428	1,169	26	1,718	47.73	2.89
China	5,792	8,658	7,361	1,297	6,180	33,195	476	14,980	38.66	6.47
Fiji	2	2	2	0	0	0	0	219	0.91	0
Hong Kong, China	722	787	736	51	662	3,327	47	5,035	14.34	6.39
Indonesia	2,205	2,816	2,605	211	570	2,148	24	6,489	33.98	0.92
Japan	3,522	6,475	5,337	1,138	3,538	17,434	208	7,374	47.76	3.90
Republic of Korea	1,633	2,542	1,928	614	1,287	5,094	73	9,637	16.95	3.79
Malaysia	768	1,055	918	137	375	1,317	9	6,385	12.03	0.98
Marshall Islands	20	31	21	10	14	90	1	100	20.00	4.76
New Zealand	204	335	239	96	139	620	9	941	21.68	3.77
Papua New Guinea	103	174	124	50	53	196	4	309	33.33	3.23
Philippines	1,516	2,468	2,016	452	533	1,434	2	2,929	51.76	0.10
Russian Federation <sup>4)</sup>	719	1,885	996	889	758	3,960	13	2,488	28.90	1.31
Singapore	957	1,468	1,127	341	853	4,019	28	12,874	7.43	2.48
Thailand	455	658	566	92	141	343	0	3,598	12.65	0
Vanuatu	0	0	0	0	0	0	0	45	0	0
Viet Nam	1,084	1,868	1,397	471	941	3,608	9	2,681	40.43	0.64
<b>Total</b>	<b>16,761</b>	<b>38,514</b>	<b>30,405</b>	<b>8,109</b>	<b>19,029</b>	<b>89,560</b>	<b>1,203</b>	<b>Regional 24,128</b>	<b>Regional 69%</b>	<b>Regional 3.96%</b>

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

2) LLI data for 2014.

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

4) Data are only for the Pacific ports.

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	3,742	6	6	0	0
Canada	389	1	1	0	0
Chile	901	27	27	1	0.11
China	7,361	505	573	21	0.29
Fiji	2	0	0	0	0
Hong Kong, China	736	87	88	1	0.14
Indonesia	2,605	24	24	1	0.04
Japan	5,337	365	405	0	0
Republic of Korea	1,928	180	216	3	0.16
Malaysia	918	37	40	1	0.11
Marshall Islands	21	1	1	1	4.76
New Zealand	239	6	6	0	0
Papua New Guinea	124	4	5	0	0
Philippines	2,016	16	16	0	0
Russian Federation	996	50	56	0	0
Singapore	1,127	56	60	0	0
Thailand	566	11	11	0	0
Vanuatu	0	0	0	0	0
Viet Nam	1,397	79	80	1	0.07
<b>Total</b>	<b>30,405</b>	<b>1,455</b>	<b>1,615</b>	<b>30</b>	<b>Regional 0.10%</b>

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 FLAG

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Antigua and Barbuda	502	331	1,424	27	5.38
Australia	3	1	2	0	0
Bahamas	661	346	1,253	16	2.42
Bahrain	4	2	5	0	0
Bangladesh	65	57	304	7	10.77
Barbados	17	13	63	2	11.76
Belgium	24	9	53	0	0
Belize	483	450	2,502	34	7.04
Bermuda (UK)	70	29	93	1	1.43
Brunei Darussalam	6	2	3	1	16.67
Cambodia	1,333	1,299	9,716	183	13.73
Cayman Islands (UK)	107	40	104	0	0
Chile	1	1	6	0	0
China	923	432	1,592	1	0.11
Comoros	6	6	43	2	33.33
Cook Islands	26	15	83	4	15.38
Croatia	24	13	42	0	0
Curacao	20	13	34	0	0
Cyprus	495	298	1,313	19	3.84
Denmark	134	85	395	2	1.49
Dominica	16	14	63	1	6.25
Egypt	14	10	65	2	14.29
Equatorial Guinea	1	1	18	0	0
Estonia	2	2	27	1	50.00
Ethiopia	6	6	27	0	0
Falkland Islands (UK)	3	1	1	0	0
Fiji	1	0	0	0	0
France	38	26	69	0	0
Georgia	1	1	3	0	0
Germany	158	108	437	6	3.80
Gibraltar (UK)	76	31	138	3	3.95
Greece	345	175	589	17	4.93
Honduras	5	5	68	3	60.00
Hong Kong, China	2,916	1,456	5,173	32	1.10
India	73	44	255	3	4.11
Indonesia	190	176	1,393	25	13.16
Iran	48	43	267	6	12.50
Ireland	1	1	1	0	0
Isle of Man (UK)	198	102	376	6	3.03

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Israel	5	5	29	0	0
Italy	106	53	229	2	1.89
Jamaica	23	20	129	4	17.39
Japan	201	105	379	2	1.00
Jordan	2	2	3	0	0
Kiribati	243	209	1,456	24	9.88
Korea, Democratic People's Republic	205	205	1,982	34	16.59
Korea, Republic of	1,471	1,121	5,170	9	0.61
Kuwait	18	12	48	0	0
Liberia	2,214	1,295	5,190	89	4.02
Libya	4	3	9	0	0
Lithuania	1	0	0	0	0
Luxembourg	35	20	87	1	2.86
Malaysia	277	170	864	4	1.44
Maldives	5	5	19	0	0
Malta	821	463	1,921	34	4.14
Marshall Islands	1,809	910	3,354	43	2.38
Mauritius	1	0	0	0	0
Mongolia	138	130	1,018	24	17.39
Montenegro	1	1	1	0	0
Myanmar	6	6	43	1	16.67
Netherlands	126	70	200	0	0
New Zealand	3	2	6	0	0
Nigeria	1	1	7	0	0
Niue	31	31	232	4	12.90
Norway	230	107	311	3	1.30
Pakistan	11	8	40	0	0
Palau	6	3	8	0	0
Panama	8,604	5,420	25,024	342	3.97
Papua New Guinea	9	9	61	3	33.33
Peru	6	4	8	1	16.67
Philippines	209	149	662	15	7.18
Portugal	46	26	99	2	4.35
Qatar	3	1	3	0	0
Russian Federation	237	215	1,076	14	5.91
Saint Kitts and Nevis	33	32	210	3	9.09
Saint Vincent and the Grenadines	132	113	471	3	2.27
Samoa	3	3	34	1	33.33
Saudi Arabia	36	21	64	0	0
Sierra Leone	225	218	1,800	42	18.67

<b>Flag</b>	<b>No. of inspections</b>	<b>No. of inspections with deficiencies</b>	<b>No. of deficiencies</b>	<b>No. of detentions</b>	<b>Detention percentage %</b>
Singapore	2,113	994	3,773	22	1.04
Solomon Islands	2	2	13	0	0
Spain	3	0	0	0	0
Sri Lanka	6	5	19	0	0
Sweden	20	10	42	2	10.00
Switzerland	35	23	88	2	5.71
Taiwan, China	98	56	336	3	3.06
Tanzania	22	22	130	4	18.18
Thailand	282	213	911	10	3.55
Togo	58	57	412	7	12.07
Tonga	3	3	18	0	0
Tunisia	2	0	0	0	0
Turkey	51	25	90	2	3.92
Tuvalu	107	84	412	3	2.80
Ukraine	2	2	14	1	50.00
United Arab Emirates (UAE)	4	4	12	1	25.00
United Kingdom (UK)	167	100	335	4	2.40
United States of America	44	30	103	0	0
Vanuatu	120	78	343	8	6.67
Viet Nam	733	509	2,262	26	3.55
<b>Total</b>	<b>30,405</b>	<b>19,029</b>	<b>89,560</b>	<b>1,203</b>	<b>Regional 3.96</b>



Table 4: 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	45	22	103	1	2.22
Combination carrier	35	13	76	1	2.86
Oil tanker	1,870	892	4,026	39	2.09
Gas carrier	652	296	1,104	11	1.69
Chemical tanker	2,201	1,136	4,558	28	1.27
Bulk carrier	10,899	6,273	26,490	370	3.39
Vehicle carrier	779	350	1,120	20	2.57
Container ship	4,633	2,736	11,028	136	2.94
Ro-Ro cargo ship	199	155	793	5	2.51
General cargo/multi-purpose ship	6,866	5,575	32,566	483	7.03
Refrigerated cargo carrier	684	507	2,643	42	6.14
Woodchip carrier	227	118	436	4	1.76
Livestock carrier	74	65	402	7	9.46
Ro-Ro passenger ship	104	96	476	2	1.92
Passenger ship	228	138	561	6	2.63
Factory ship	1	1	9	1	100.00
Heavy load carrier	115	74	250	4	3.48
Offshore service vessel	142	99	508	8	5.63
MODU & FPSO	5	3	9	2	40.00
High speed passenger craft	26	26	125	0	0
Special purpose ship	52	39	217	5	9.62
Tugboat	257	169	855	13	5.06
Others	311	246	1,205	15	4.82
<b>Total</b>	<b>30,405</b>	<b>19,029</b>	<b>89,560</b>	<b>1,203</b>	<b>3.96</b>

Table 5: 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	3,210	81	5	2.52	0.16	6.17
American Register of Shipping	30	4	0	13.33	0	0
Asia Classification Society	4	1	0	25.00	0	0
Belize Maritime Bureau Inc.	4	1	0	25.00	0	0
Biro Klasifikasi Indonesia	104	11	0	10.58	0	0
Bureau Securitas	9	0	0	0	0	0
Bureau Veritas	3,408	133	5	3.90	0.15	3.76
C.T.M. Inspection and Classification Company, S. de R.L.	5	3	0	60.00	0	0
Ceskoslovensky Lodin Register	3	0	0	0	0	0
China Classification Society	2,718	25	1	0.92	0.04	4.00
Compania Nacional de Registro e Inspeccion de Naves	2	0	0	0	0	0
Cosmos Marine Bureau	17	1	0	5.88	0	0
CR Classification Society	313	14	1	4.47	0.32	7.14
Croatian Register of Shipping	27	0	0	0	0	0
Cyprus Bureau of Shipping	3	0	0	0	0	0
Det Norske Veritas	3,460	84	3	2.43	0.09	3.57
DNV GL AS	993	36	3	3.63	0.30	8.33
Dromon Bureau of Shipping	2	1	0	50.00	0	0
Ferriby Marine	2	1	0	50.00	0	0
Fidenavis SA	10	1	0	10.00	0	0
Germanischer Lloyd	3,001	113	3	3.77	0.10	2.65
Global Marine Bureau	273	28	3	10.26	1.10	10.71
Global Shipping Bureau	10	0	0	0	0	0
Hellenic Register of Shipping	1	0	0	0	0	0
INCLAMAR (Inspeccion y Classification Maritime, S. de R.L.)	7	0	0	0	0	0
Indian Register of Shipping	86	4	0	4.65	0	0
Intermaritime Certification Services, S.A.	485	32	3	6.60	0.62	9.38
International Maritime Register	7	1	0	14.29	0	0
International Naval Surveys Bureau	27	5	0	18.52	0	0
International Register of Shipping	242	31	4	12.81	1.65	12.90
International Ship Classification	307	34	3	11.07	0.98	8.82
Iranian Classification Society	50	6	0	12.00	0	0
Isthmus Bureau of Shipping	498	29	0	5.82	0	0
Isthmus Maritime Classification Society S.A.	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%
Korea Classification Society (former Joson Classification Society)	221	34	5	15.38	2.26	14.71
Korea Ship Safety Technology Authority	42	0	0	0	0	0
Korean Register of Shipping	3,009	51	2	1.69	0.07	3.92
Lloyd's Register	4,137	120	3	2.90	0.07	2.50
Macosnar Corporation	45	1	0	2.22	0	0
Maritime Bureau of Shipping	1	0	0	0	0	0
Maritime Lloyd Ltd, Georgia	6	1	0	16.67	0	0
Maritime Technical Systems and Services	10	4	1	40.00	10.00	25.00
National Cargo Bureau Inc.	1	0	0	0	0	0
National Shipping Adjusters Inc	3	0	0	0	0	0
New United International Marine Services Ltd	12	3	0	25.00	0	0
Nippon Kaiji Kyokai	9,899	283	11	2.86	0.11	3.89
Overseas Marine Certification Services	436	50	3	11.47	0.69	6.00
Panama Bureau of Shipping	40	4	0	10.00	0	0
Panama Marine Survey and Certification Services, Inc.	4	0	0	0	0	0
Panama Maritime Documentation Services	421	47	5	11.16	1.19	10.64
Panama Maritime Surveyors Bureau Inc	2	0	0	0	0	0
Panama Register Corporation	64	2	0	3.13	0	0
Panama Shipping Certificate Inc.	5	0	0	0	0	0
Panama Shipping Registrar Inc.	94	11	0	11.70	0	0
Phoenix Register of Shipping	4	0	0	0	0	0
Polski Rejestr Statkow	32	5	1	15.63	3.13	20.00
R.J. Del Pan	1	0	0	0	0	0
Registro Internacional Naval S.A.	36	1	0	2.78	0	0
Registro Italiano Navale	855	30	0	3.51	0	0
RINAVE Portuguesa	5	0	0	0	0	0
Russian Maritime Register of Shipping	383	20	1	5.22	0.26	5.00
Ship Classification Malaysia	41	0	0	0	0	0
Shipping Register of Ukraine	2	0	0	0	0	0
SingClass International Pte Ltd	82	14	2	17.07	2.44	14.29
Sing-Lloyd	139	26	1	18.71	0.72	3.85
Turkish Lloyd	2	0	0	0	0	0
Union Bureau of Shipping	876	135	15	15.41	1.71	11.11
Universal Maritime Bureau	301	38	7	12.62	2.33	18.42
Universal Shipping Bureau	25	0	0	0	0	0
Venezuelan Register of Shipping	10	1	0	10.00	0	0
Vietnam Register	765	29	1	3.79	0.13	3.45
Other	28	3	0	10.71	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 6: DEFICIENCIES BY CATEGORIES

Nature of deficiencies		No. of deficiencies
Certificate & Documentation	Crew Certificates	1,534
	Documents	6,416
	Ship Certificates	2,445
Structural Conditions		2,671
Water/Weathertight conditions		5,812
Emergency Systems		5,093
Radio Communications		2,259
Cargo operations including equipment		613
Fire safety		16,654
Alarms		634
Safety of Navigation		14,231
Life saving appliances		10,515
Dangerous goods		183
Propulsion and auxiliary machinery		4,549
Working and Living Conditions	Living Conditions	529
	Working Conditions	4,134
Labour Conditions	Minimum requirements for seafarers	74
	Conditions of employment	363
	Accommodation, recreational facilities, food and catering	1,017
	Health protection, medical care, social security	983
Pollution prevention	Anti Fouling	7
	MARPOL Annex I	1,679
	MARPOL Annex II	13
	MARPOL Annex III	33
	MARPOL Annex IV	1,199
	MARPOL Annex V	1,587
MARPOL Annex VI		758
ISM		2,699
Other		876
<b>Total</b>		<b>89,560</b>
ISPS		1,615
<b>Grand total</b>		<b>91,175</b>

## SUMMARY OF PORT STATE INSPECTION DATA 2012 – 2014

Table 7: BLACK – GREY – WHITE LISTS \*

Flag	Inspections 2012-2014	Detentions 2012-2014	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Papua New Guinea	38	11	6		4.50
Tanzania	84	20	10		4.18
Mongolia	410	78	38		3.98
Sierra Leone	706	121	61		3.62
Korea, Democratic People's Republic	630	104	55		3.38
Cambodia	4,502	642	344		3.14
Indonesia	528	80	47		2.89
Bangladesh	169	21	18		1.53
Kiribati	692	70	60		1.44
Niue	35	6	5		1.38
Belize	1,319	116	108		1.19
Egypt	47	7	7		1.17
<b>GREY LIST</b>					
Saint Kitts and Nevis	104	12	12	2	0.99
Jamaica	49	6	7	0	0.87
Iran	83	9	10	1	0.87
Togo	116	11	13	3	0.79
Cook Islands	59	6	8	0	0.75
Dominica	43	4	6	0	0.65
Philippines	616	45	54	32	0.59
Portugal	62	4	8	1	0.46
Barbados	50	3	7	0	0.43
Tuvalu	392	25	36	19	0.36
Sweden	74	4	9	1	0.36
Thailand	883	58	75	49	0.35
India	274	16	27	12	0.29
Switzerland	85	4	10	2	0.28
Kuwait	49	1	7	0	0.15
Turkey	178	8	19	6	0.13
Vanuatu	344	18	32	16	0.13
Luxembourg	74	2	9	1	0.11
Antigua and Barbuda	1,579	96	128	93	0.08
<b>WHITE LIST</b>					
Russian Federation	829	44		45	-0.07
Italy	443	20		22	-0.15

Flag	Inspections 2012-2014	Detentions 2012-2014	Black to Grey Limit	Grey to White Limit	Excess Factor
Viet Nam	2,285	127		139	-0.19
Taiwan, China	304	12		13	-0.20
Gibraltar (UK)	211	7		8	-0.24
Croatia	83	1		1	-0.30
Saint Vincent and the Grenadines	467	19		23	-0.35
Denmark	419	16		20	-0.40
Belgium	88	1		2	-0.42
Germany	621	24		33	-0.53
United States of America	158	3		5	-0.65
Curacao	69	0		1	-0.67
Malta	2,313	97		141	-0.68
Greece	1,003	36		56	-0.76
Cyprus	1,457	54		85	-0.79
Panama	26,721	1,155		1,801	-0.82
Liberia	6,673	265		432	-0.87
Malaysia	772	24		42	-0.87
United Kingdom (UK)	703	21		38	-0.90
France	122	1		3	-0.93
Saudi Arabia	84	0		2	-0.94
Isle of Man (UK)	549	14		28	-0.99
Netherlands	461	11		23	-1.00
Bermuda (UK)	223	3		9	-1.14
Bahamas	2,095	56		127	-1.23
Norway	779	17		42	-1.25
Japan	531	10		27	-1.27
Cayman Islands (UK)	342	5		16	-1.30
Marshall Islands	4,958	130		317	-1.33
Singapore	6,083	66		393	-1.89
Hong Kong, China	8,827	90		578	-1.93
China	2,834	17		176	-2.11
Korea, Republic of	4,162	20		264	-2.35

- 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 8: INSPECTIONS AND DETENTIONS PER FLAG

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2012	2013	2014	Total	2012	2013	2014	Total	
Antigua and Barbuda	561	516	502	1,579	37	32	27	96	6.08
Argentina	3	1	0	4	0	1	0	1	25.00
Australia	6	5	3	14	0	0	0	0	0.00
Bahamas	701	733	661	2,095	18	22	16	56	2.67
Bahrain	2	4	4	10	0	1	0	1	10.00
Bangladesh	47	57	65	169	7	7	7	21	12.43
Barbados	19	14	17	50	1	0	2	3	6.00
Belgium	29	35	24	88	1	0	0	1	1.14
Belize	411	425	483	1,319	41	41	34	116	8.79
Bermuda (UK)	72	81	70	223	2	0	1	3	1.35
Bolivia	0	1	0	1	0	1	0	1	100.00
Brazil	4	3	0	7	1	1	0	2	28.57
Brunei Darussalam	6	5	6	17	0	0	1	1	5.88
Cambodia	1655	1514	1333	4,502	240	219	183	642	14.26
Canada	1	0	0	1	0	0	0	0	0
Cayman Islands (UK)	117	118	107	342	2	3	0	5	1.46
Chile	3	0	1	4	0	0	0	0	0
China	920	991	923	2,834	8	8	1	17	0.60
Colombia	0	2	0	2	0	0	0	0	0
Comoros	8	9	6	23	1	6	2	9	39.13
Cook Islands	9	24	26	59	1	1	4	6	10.17
Croatia	25	34	24	83	1	0	0	1	1.20
Curacao	28	21	20	69	0	0	0	0	0
Cyprus	495	467	495	1,457	21	14	19	54	3.71
Denmark	133	152	134	419	8	6	2	16	3.82
Dominica	13	14	16	43	0	3	1	4	9.30
Ecuador	4	2	0	6	0	0	0	0	0
Egypt	20	13	14	47	2	3	2	7	14.89
Equatorial Guinea	3	2	1	6	1	0	0	1	16.67
Estonia	0	0	2	2	0	0	1	1	50.00
Ethiopia	4	4	6	14	1	0	0	1	7.14
Falkland Islands (UK)	1	2	3	6	0	0	0	0	0
Fiji	0	0	1	1	0	0	0	0	0
Finland	4	0	0	4	0	0	0	0	0
France	45	39	38	122	1	0	0	1	0.82



Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2012	2013	2014	Total	2012	2013	2014	Total	
Gambia	0	1	0	1	0	0	0	0	0
Georgia	3	0	1	4	0	0	0	0	0
Germany	263	200	158	621	14	4	6	24	3.86
Gibraltar (UK)	59	76	76	211	1	3	3	7	3.32
Greece	319	339	345	1,003	8	11	17	36	3.59
Honduras	11	6	5	22	1	1	3	5	22.73
Hong Kong, China	2,831	3,080	2,916	8,827	24	34	32	90	1.02
Iceland	1	0	0	1	0	0	0	0	0
India	111	90	73	274	7	6	3	16	5.84
Indonesia	179	159	190	528	31	24	25	80	15.15
Iran	3	32	48	83	0	3	6	9	10.84
Ireland	1	1	1	3	0	0	0	0	0
Isle of Man (UK)	186	165	198	549	4	4	6	14	2.55
Israel	5	8	5	18	2	0	0	2	11.11
Italy	168	169	106	443	9	9	2	20	4.51
Jamaica	13	13	23	49	2	0	4	6	12.24
Japan	168	162	201	531	3	5	2	10	1.88
Jordan	1	0	2	3	0	0	0	0	0
Kiribati	212	237	243	692	17	29	24	70	10.12
Korea, Democratic People's Republic	205	220	205	630	35	35	34	104	16.51
Korea, Republic of	1,367	1,324	1,471	4,162	8	3	9	20	0.48
Kuwait	17	14	18	49	0	1	0	1	2.04
Lao, People's Democratic Republic	1	0	0	1	0	0	0	0	0
Liberia	2,278	2,181	2,214	6,673	88	88	89	265	3.97
Libya	6	3	4	13	0	0	0	0	0
Lithuania	3	2	1	6	0	0	0	0	0
Luxembourg	17	22	35	74	1	0	1	2	2.70
Malaysia	234	261	277	772	8	12	4	24	3.11
Maldives	12	5	5	22	0	0	0	0	0
Malta	740	752	821	2,313	26	37	34	97	4.19
Marshall Islands	1,492	1,657	1,809	4,958	42	45	43	130	2.62
Mauritius	0	0	1	1	0	0	0	0	0
Moldova	3	2	0	5	0	0	0	0	0
Mongolia	130	142	138	410	16	38	24	78	19.02
Montenegro	0	0	1	1	0	0	0	0	0
Myanmar	5	3	6	14	0	2	1	3	21.43

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2012	2013	2014	Total	2012	2013	2014	Total	
Netherlands	156	179	126	461	6	5	0	11	2.39
New Zealand	1	1	3	5	0	0	0	0	0
Nigeria	1	0	1	2	0	0	0	0	0
Niue	0	4	31	35	0	2	4	6	17.14
Norway	260	289	230	779	5	9	3	17	2.18
Pakistan	7	10	11	28	0	0	0	0	0
Palau	1	2	6	9	0	0	0	0	0
Panama	9,189	8,928	8,604	26,721	417	396	342	1,155	4.32
Papua New Guinea	14	15	9	38	5	3	3	11	28.95
Peru	4	6	6	16	1	1	1	3	18.75
Philippines	216	191	209	616	14	16	15	45	7.31
Portugal	8	8	46	62	1	1	2	4	6.45
Qatar	4	7	3	14	0	1	0	1	7.14
Russian Federation	304	288	237	829	14	16	14	44	5.31
Saint Kitts and Nevis	33	38	33	104	6	3	3	12	11.54
Saint Vincent and the Grenadines	184	151	132	467	8	8	3	19	4.07
Samoa	4	2	3	9	0	0	1	1	11.11
Saudi Arabia	26	22	36	84	0	0	0	0	0
Sierra Leone	258	223	225	706	40	39	42	121	17.14
Singapore	1,901	2,069	2,113	6,083	28	16	22	66	1.08
Solomon Islands	0	4	2	6	0	0	0	0	0
Spain	1	2	3	6	0	1	0	1	16.67
Sri Lanka	8	11	6	25	1	0	0	1	4.00
Sweden	29	25	20	74	1	1	2	4	5.41
Switzerland	28	22	35	85	1	1	2	4	4.71
Taiwan, China	104	102	98	304	5	4	3	12	3.95
Tanzania	24	38	22	84	5	11	4	20	23.81
Thailand	310	291	282	883	29	19	10	58	6.57
Togo	23	35	58	116	2	2	7	11	9.48
Tonga	12	12	3	27	1	2	0	3	11.11
Tunisia	1	1	2	4	0	0	0	0	0
Turkey	51	76	51	178	2	4	2	8	4.49
Tuvalu	142	143	107	392	13	9	3	25	6.38
Ukraine	1	0	2	3	0	0	1	1	33.33
United Arab Emirates (UAE)	3	3	4	10	0	0	1	1	10.00
United Kingdom (UK)	262	274	167	703	11	6	4	21	2.99

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2012	2013	2014	Total	2012	2013	2014	Total	
United States of America	62	52	44	158	2	1	0	3	1.90
Uruguay	0	1	0	1	0	0	0	0	0
Vanuatu	115	109	120	344	4	6	8	18	5.23
Viet Nam	785	767	733	2,285	54	47	26	127	5.56
Ship's registration withdrawn	4	3	0	7	3	2	0	5	71.43
<b>Total</b>	<b>30,929</b>	<b>31,018</b>	<b>30,405</b>	<b>92,352</b>	<b>1,421</b>	<b>1,395</b>	<b>1,203</b>	<b>4,019</b>	<b>4.35</b>

Figure 14: COMPARISON OF INSPECTIONS PER SHIP TYPE

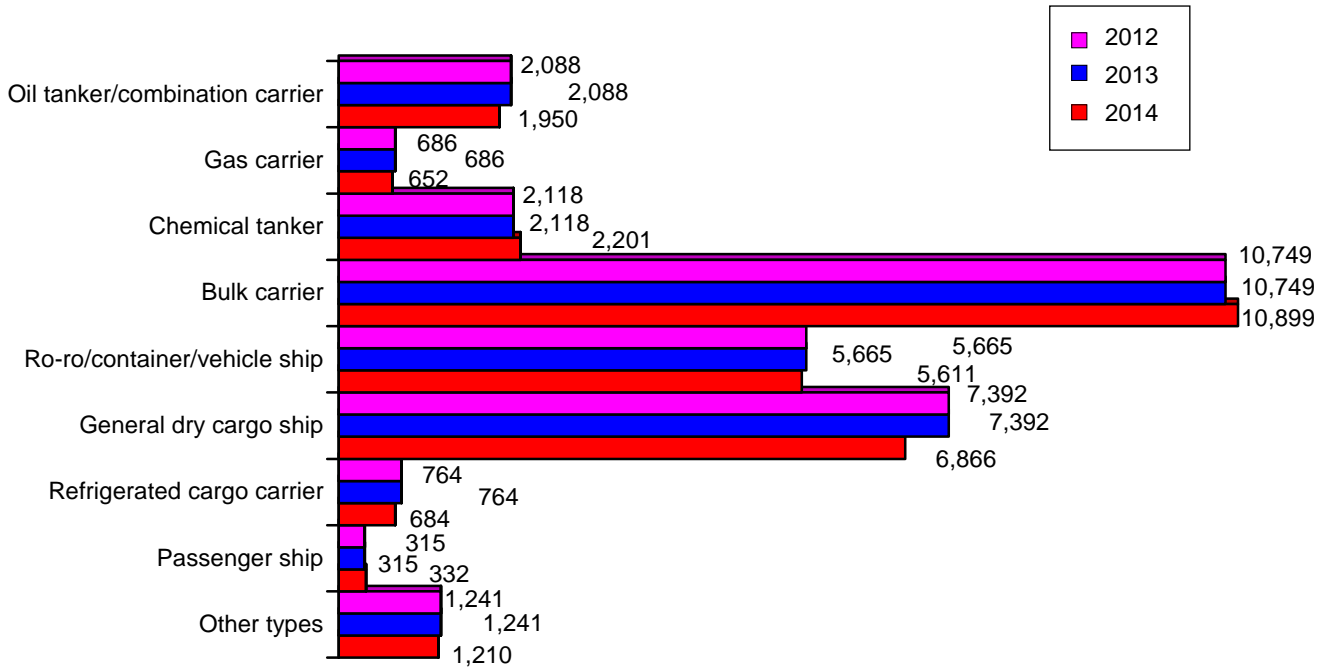


Figure 15: COMPARISON OF DETENTIONS PER SHIP TYPE

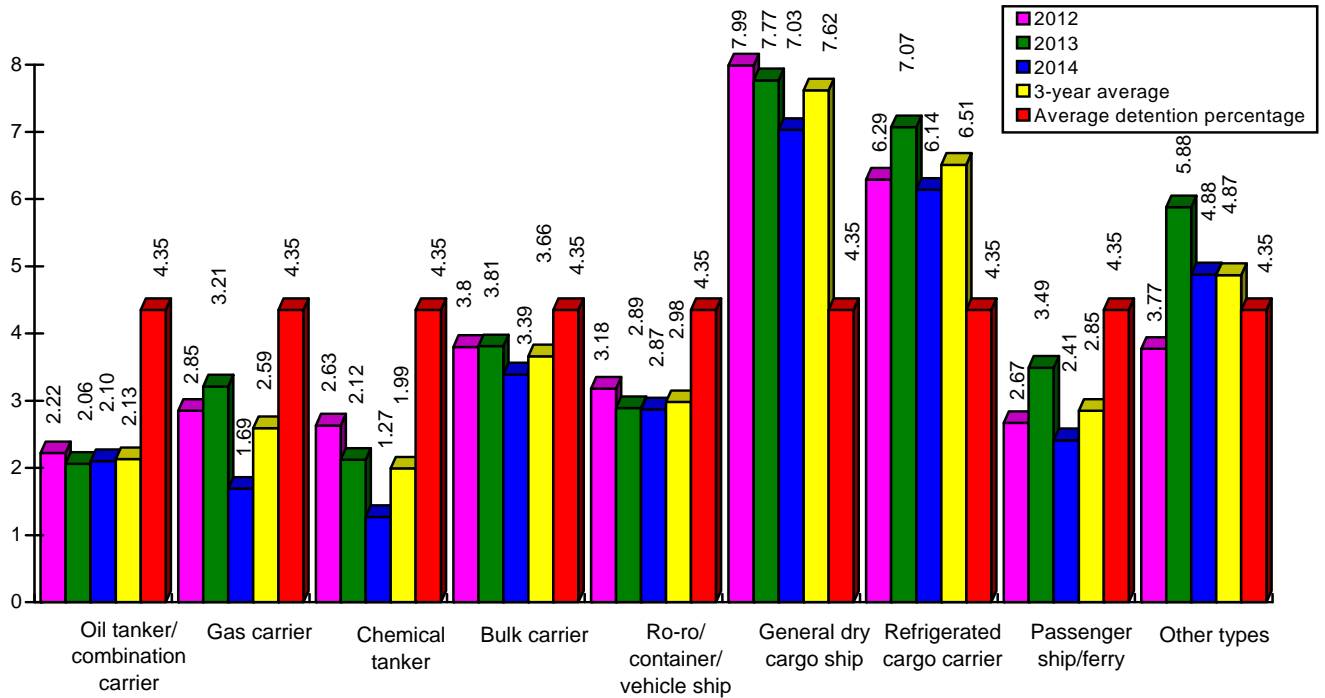
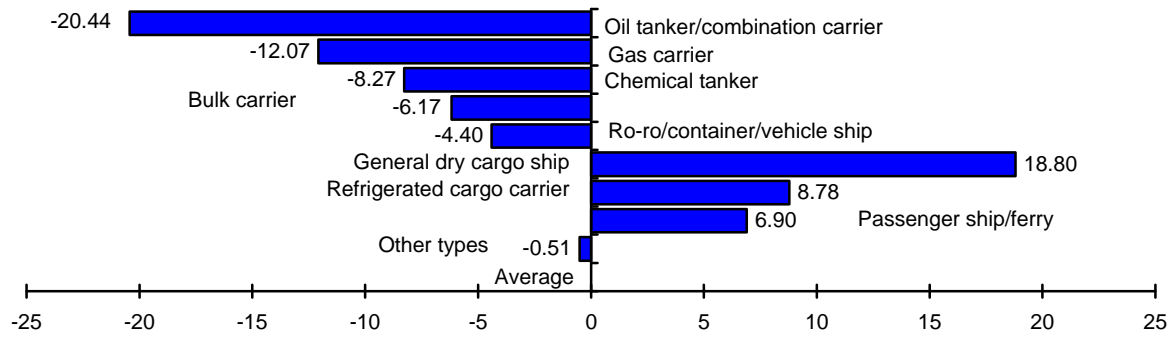


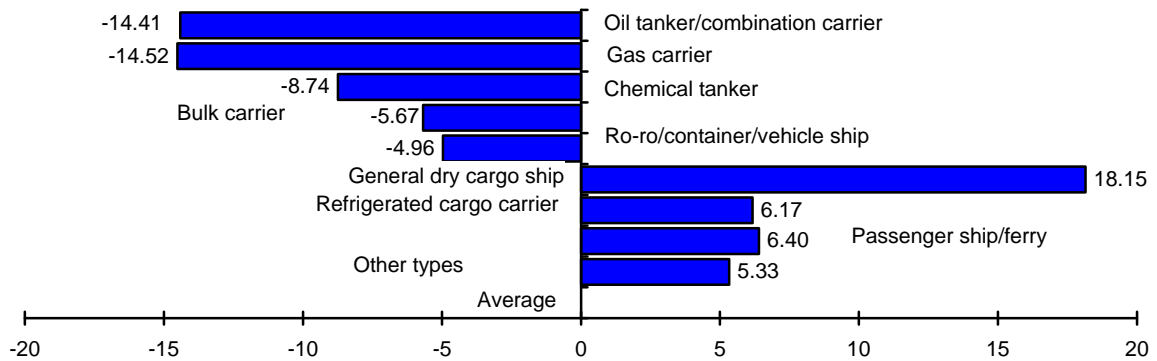
Table 9: INSPECTIONS AND DETENTIONS PER SHIP TYPE

Type of ship	Number of inspections				Number of detentions				Average detention percentage %
	2012	2013	2014	Total	2012	2013	2014	Total	
NLS tanker	54	40	45	139	3	2	1	6	4.32
Combination carrier	45	36	35	116	2	1	1	4	3.45
Oil tanker	1,973	2,012	1,870	5,855	41	40	39	120	2.05
Gas carrier	596	686	652	1,934	17	22	11	50	2.59
Chemical tanker	2,016	2,118	2,201	6,335	53	45	28	126	1.99
Bulk carrier	10,389	10,749	10,899	32,037	395	409	370	1,174	3.66
Vehicle carrier	876	899	779	2,554	10	18	20	48	1.88
Container ship	4,685	4,582	4,633	13,900	154	135	136	425	3.06
Ro-Ro cargo ship	198	184	199	581	19	11	5	35	6.02
General cargo/multi-purpose ship	7,807	7,392	6,866	22,065	624	574	483	1,681	7.62
Refrigerated cargo carrier	811	764	684	2,259	51	54	42	147	6.51
Woodchip carrier	245	239	227	711	6	4	4	14	1.97
Livestock carrier	45	49	74	168	3	5	7	15	8.93
Ro-Ro Passenger ship	90	72	104	266	4	6	2	12	4.51
Passenger ship	247	243	228	718	5	5	6	16	2.23
Factory ship	2	1	1	4	0	0	1	1	25.00
Heavy load carrier	108	134	115	357	7	7	4	18	5.04
Offshore service vessel	157	149	142	448	6	9	8	23	5.13
MODU & FPSO	5	3	5	13	0	0	2	2	15.38
High speed passenger craft	26	26	26	78	1	0	0	1	1.28
Special purpose ship	54	49	52	155	2	2	5	9	5.81
High speed cargo craft	0	1	0	1	0	0	0	0	0
Tugboat	220	244	257	721	4	10	13	27	3.74
Others	280	346	311	937	14	36	15	65	6.94
<b>Total</b>	<b>30,929</b>	<b>31,018</b>	<b>30,405</b>	<b>92,352</b>	<b>1,421</b>	<b>1,395</b>	<b>1,203</b>	<b>4,019</b>	<b>4.35</b>

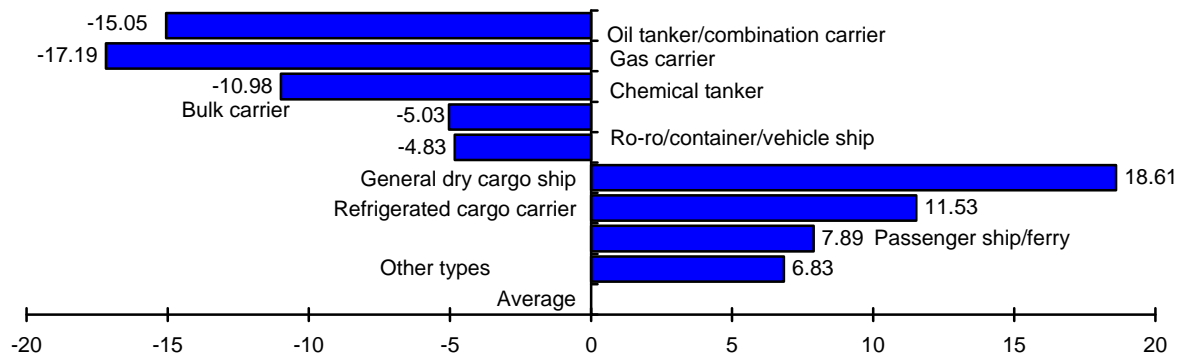
Figure 16: COMPARISON OF INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE



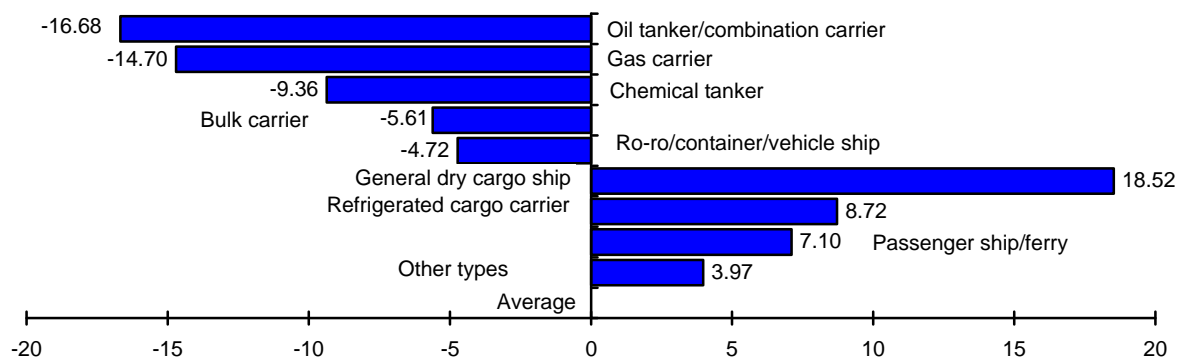
(a) Year 2012



(b) Year 2013



(c) Year 2014



(d) 3-year summary

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

Table 10: INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE

Type of ship	Number of inspections				Number of inspections with deficiencies				3-year average percentage %
	2012	2013	2014	Total	2012	2013	2014	Total	
Oil tanker/combination carrier	2,072	2,088	1,950	6,110	866	964	927	2,757	45.12
Gas carrier	596	686	652	1,934	299	316	296	911	47.10
Chemical tanker	2,016	2,118	2,201	6,335	1,088	1,098	1,136	3,322	52.44
Bulk carrier	10,389	10,749	10,899	32,037	5,825	5,902	6,273	18,000	56.19
Ro-ro/container/vehicle ship	5,759	5,665	5,611	17,035	3,331	3,152	3,241	9,723	57.08
General dry cargo ship	7,807	7,392	6,866	22,065	6,327	5,820	5,575	17,722	80.32
Refrigerated cargo carrier	811	764	684	2,259	576	510	507	1,593	70.52
Passenger ship	337	315	332	984	233	211	234	678	68.90
Other types	1,142	1,241	1,210	3,593	705	818	840	2,363	65.77
<b>Total</b>	<b>30,929</b>	<b>31,018</b>	<b>30,405</b>	<b>92,352</b>	<b>19,250</b>	<b>18,791</b>	<b>19,029</b>	<b>57,069</b>	<b>61.80</b>

Table 11: INSPECTIONS AND DETENTIONS PER RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2012-2014	No. of overall detentions 2012-2014	No. of RO responsible detentions 2012-2014	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	9,630	259	15	2.69	0.16	5.79
American Register of Shipping	41	5	0	12.20	0	0
Asia Classification Society	7	1	0	14.29	0	0
Belize Maritime Bureau Inc.	10	1	0	10.00	0	0
Biro Klasifikasi Indonesia	283	40	2	14.13	0.71	5.00
Bulgarski Koraben Registar	4	2	0	50.00	0	0
Bureau Securitas	34	2	0	5.88	0	0
Bureau Veritas	9,967	405	17	4.06	0.17	4.20
C.T.M. Inspection and Classification Company, S. de R.L.	7	4	1	57.14	14.29	25.00
Ceskoslovensky Lodin Register	8	0	0	0	0	0
China Classification Society	8,428	79	2	0.94	0.02	2.53
Compania Nacional de Registro e Inspeccion de Naves	4	0	0	0	0	0
Cosmos Marine Bureau	31	2	0	6.45	0	0
CR Classification Society	930	50	1	5.38	0.11	2.00
Croatian Register of Shipping	103	1	1	0.97	0.97	100.00
Cyprus Bureau of Shipping	8	0	0	0	0	0
Det Norske Veritas	10,849	261	9	2.41	0.08	3.45
DNV GL AS	994	36	3	3.62	0.30	8.33
Dromon Bureau of Shipping	3	2	0	66.67	0	0
Ferriby Marine	6	2	0	33.33	0	0
Fidenavis SA	49	5	0	10.20	0	0
Germanischer Lloyd	9,419	406	18	4.31	0.19	4.43
Global Marine Bureau	1,131	148	14	13.09	1.24	9.46
Global Shipping Bureau	31	7	1	22.58	3.23	14.29
Hellenic Register of Shipping	4	1	0	25.00	0	0
Honduras Bureau of Shipping	2	0	0	0	0	0
Honduras International Surveying and Inspection Bureau	5	0	0	0	0	0
INCLAMAR (Inspection y Classification Maritime, S. de R.L.)	73	10	0	13.70	0	0
Indian Register of Shipping	283	18	0	6.36	0	0
Intermaritime Certification Services, S.A.	1,320	96	11	7.27	0.83	11.46
International Maritime Register	12	2	0	16.67	0	0
International Naval Surveys Bureau	122	14	1	11.48	0.82	7.14
International Register of Shipping	863	117	10	13.56	1.16	8.55
International Ship Classification	905	103	13	11.38	1.44	12.62
Iranian Classification Society	75	9	0	12.00	0	0
Isthmus Bureau of Shipping	1,477	142	12	9.61	0.81	8.45
Isthmus Maritime Classification Society S.A.	2	0	0	0	0	0
Korea Classification Society (former Joson Classification Society)	688	105	11	15.26	1.60	10.48
Korea Ship Safety Technology Authority	134	0	0	0	0	0
Korean Register of Shipping	8,582	142	3	1.65	0.03	2.11
Lloyd's Register	11,992	349	10	2.91	0.08	2.87



Recognized organization (RO)	No. of overall inspections 2012-2014	No. of overall detentions 2012-2014	No. of RO responsible detentions 2012-2014	3-year average detention percentage%	3-year average RO responsible detention percentage%	3-year average percentage of RO responsible detentions%
Macosnar Corporation	78	4	0	5.13	0	0
Marconi International Marine Company Ltd.	3	0	0	0	0	0
Maritime Bureau of Shipping	1	0	0	0	0	0
Maritime Lloyd Ltd, Georgia	29	2	0	6.90	0	0
Maritime Technical Systems and Services	53	6	1	11.32	1.89	16.67
National Cargo Bureau Inc.	2	0	0	0	0	0
National Shipping Adjusters Inc	52	6	0	11.54	0	0
New United International Marine Services Ltd	31	6	0	19.35	0	0
Nippon Kaiji Kyokai	29,280	945	38	3.23	0.13	4.02
NV Unitas	1	0	0	0	0	0
Overseas Marine Certification Services	1,037	125	8	12.05	0.77	6.40
Panama Bureau of Shipping	90	10	0	11.11	0	0
Panama Marine Survey and Certification Services, Inc.	10	1	0	10.00	0	0
Panama Maritime Documentation Services	1,336	133	6	9.96	0.45	4.51
Panama Maritime Surveyors Bureau Inc	19	2	0	10.53	0	0
Panama Register Corporation	142	13	0	9.15	0	0
Panama Shipping Certificate Inc.	10	0	0	0	0	0
Panama Shipping Registrar Inc.	332	37	2	11.14	0.60	5.41
Phoenix Register of Shipping	10	1	0	10.00	0	0
Polski Rejestr Statkow	82	9	1	10.98	1.22	11.11
R.J. Del Pan	1	0	0	0	0	0
Registro Brasileiro de Navios de Aeronaves	2	0	0	0	0	0
Registro Internacional Naval S.A.	88	3	0	3.41	0	0
Registro Italiano Navale	2,410	105	0	4.36	0	0
RINAVE Portuguesa	25	2	0	8.00	0	0
Russian Maritime Register of Shipping	1,338	76	2	5.68	0.15	2.63
Ship Classification Malaysia	67	2	0	2.99	0	0
Shipping Register of Ukraine	3	0	0	0	0	0
SingClass International Pte Ltd	171	40	4	23.39	2.34	10.00
Sing-Lloyd	292	61	4	20.89	1.37	6.56
Turkish Lloyd	6	0	0	0	0	0
Union Bureau of Shipping	2,864	431	48	15.05	1.68	11.14
Union Marine Classification Society	1	0	0	0	0	0
Universal Maritime Bureau	872	106	14	12.16	1.61	13.21
Universal Shipping Bureau	156	17	1	10.90	0.64	5.88
Venezuelan Register of Shipping	11	1	0	9.09	0	0
Vietnam Register	2,404	134	7	5.57	0.29	5.22
Other	520	71	4	13.65	0.77	5.63

See also the note in page 31.

Table 12: PERFORMANCE OF RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2012-2014	No. of RO responsible detentions 2012-2014	Low/medium Limit	Medium/high Limit	Excess factor	Performance level
SingClass International Pte Ltd	171	4	7	0	0.58	Medium
Polski Rejestr Statkow	82	1	4	0	0.38	
Croatian Register of Shipping	103	1	5	0	0.31	
Sing-Lloyd	292	4	10	1	0.29	
Korea Classification Society (former Josen Classification Society)	688	11	20	7	0.29	
Universal Maritime Bureau	872	14	25	10	0.26	
International Naval Surveys Bureau	122	1	5	0	0.26	
Universal Shipping Bureau	156	1	6	0	0.19	
International Ship Classification	905	13	26	11	0.16	
Union Bureau of Shipping	2,864	48	70	44	0.14	
Biro Klasifikasi Indonesia	283	2	10	1	0.08	
Panama Shipping Registrar Inc.	332	2	11	2	0.01	
International Register of Shipping	863	10	25	10	0	
Global Marine Bureau	1,131	14	31	14	-0.04	High
Overseas Marine Certification Services	1,037	8	29	13	-0.59	
Intermaritime Certification Services, S.A.	1,320	11	35	18	-0.61	
Isthmus Bureau of Shipping	1,477	12	39	20	-0.67	
Indian Register of Shipping	283	0	10	1	-0.75	
Panama Maritime Documentation Services	1,336	6	36	18	-1.12	
DNV GL AS	994	3	28	12	-1.27	
Vietnam Register	2,404	7	60	36	-1.53	
CR Classification Society	930	1	26	11	-1.65	
Russian Maritime Register of Shipping	1,338	2	36	18	-1.66	
Germanischer Lloyd	9,419	18	211	166	-1.76	
Bureau Veritas	9,967	17	223	176	-1.79	
American Bureau of Shipping	9,630	15	216	170	-1.81	
Nippon Kaiji Kyokai	29,280	38	626	546	-1.85	
Det Norske Veritas	10,849	9	241	192	-1.90	
Lloyd's Register	11,992	10	266	214	-1.90	
Korean Register of Shipping	8,582	3	193	150	-1.95	

Recognized organization (RO)	No. of overall inspections 2012-2014	No. of RO responsible detentions 2012-2014	Low/medium Limit	Medium/high Limit	Excess factor	Performance level
China Classification Society	8,428	2	190	147	-1.96	High
Registro Italiano Navale	2,410	0	60	36	-1.97	

- 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 17: COMPARISON OF NUMBER OF DEFICIENCIES BY MAIN CATEGORIES**

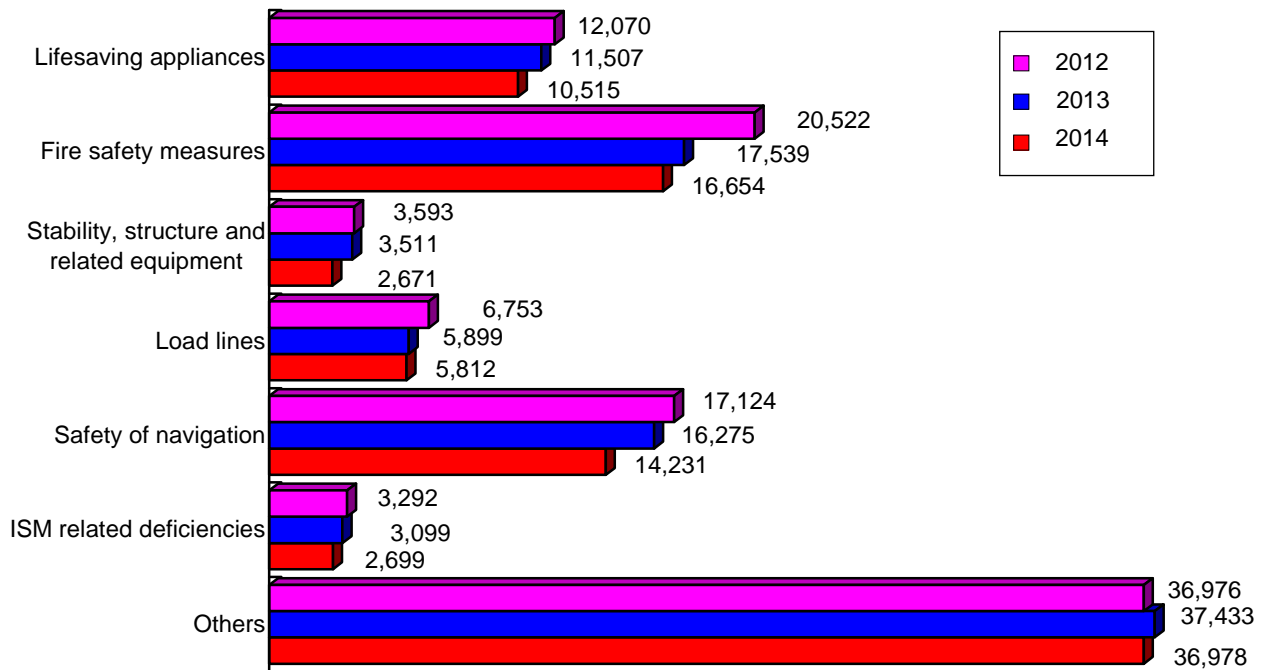
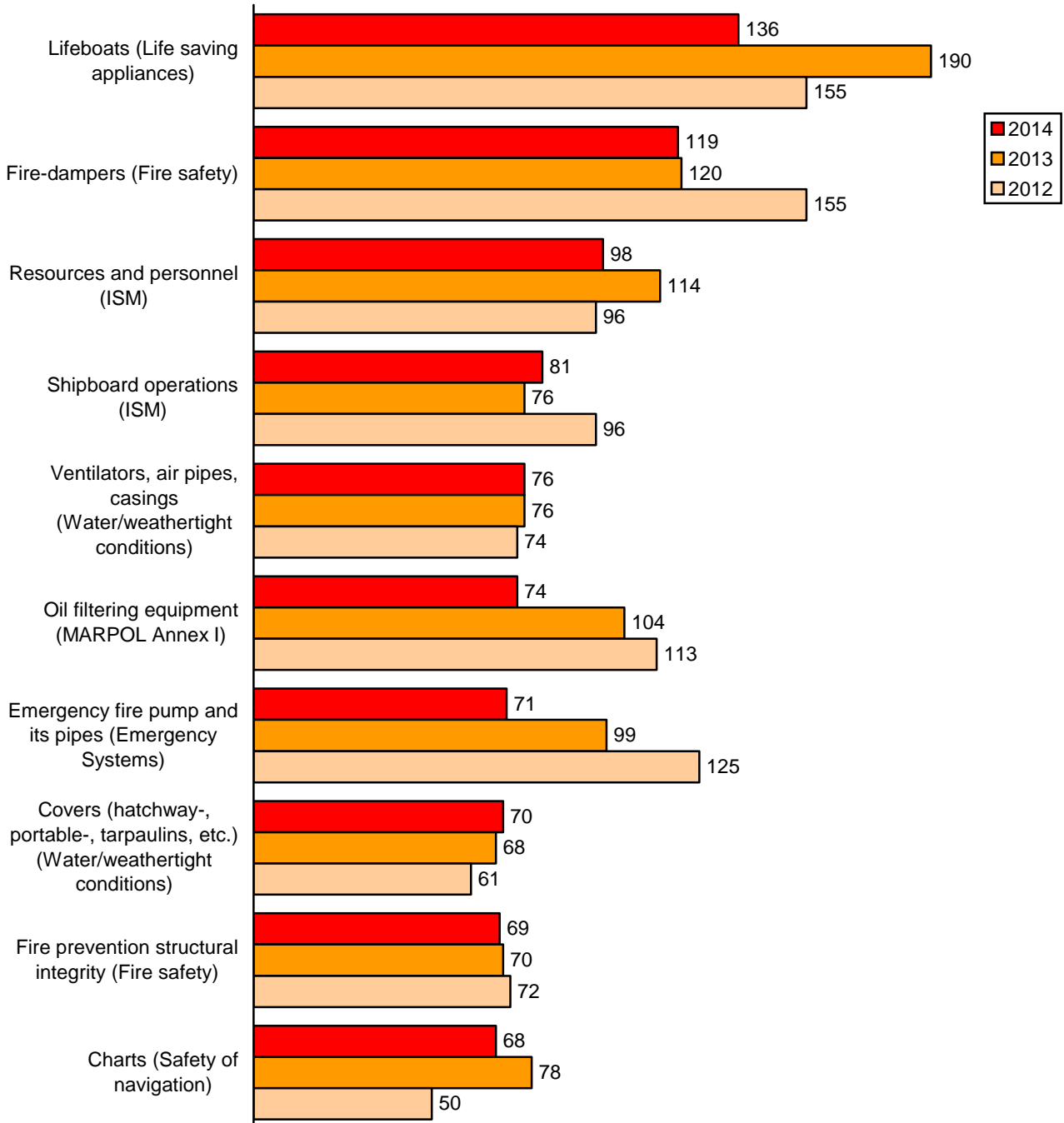


Table 13: COMPARISON OF DEFICIENCIES BY CATEGORIES

Nature of deficiency		Number of deficiencies		
		2012	2013	2014
	Crew Certificates	1,275	1,074	1,534
Certificate & Documentation	Documents	5,359	5,345	6,416
	Ship Certificates	2,754	2,348	2,445
	Structural Conditions	3,593	3,511	2,671
Water/Weathertight conditions		6,753	5,899	5,812
Emergency Systems		5,628	5,392	5,093
Radio Communications		2,987	2,500	2,259
Cargo operations including equipment		675	575	613
Fire safety		20,522	17,539	16,654
Alarms		798	754	634
Safety of Navigation		17,124	16,275	14,231
Life saving appliances		12,070	11,507	10,515
Dangerous goods		241	216	183
Propulsion and auxiliary machinery		5,470	5,458	4,549
Working and Living Conditions	Living Conditions	672	620	529
	Working Conditions	4,496	4,887	4,134
Labour Conditions	Minimum requirements for seafarers	-	11	74
	Conditions of employment	-	33	363
	Accommodation, recreational facilities, food and catering	-	199	1,017
	Health protection, medical care, social security	-	66	983
Pollution prevention	Anti Fouling	16	21	7
	MARPOL Annex I	2,335	2,037	1,679
	MARPOL Annex II	27	40	13
	MARPOL Annex III	17	14	33
	MARPOL Annex IV	1,013	1,070	1,199
	MARPOL Annex V	981	2,618	1,587
	MARPOL Annex VI	796	915	758
ISM		3,292	3,099	2,699
Other		1,436	1,240	876
<b>Total</b>		<b>100,330</b>	<b>95,263</b>	<b>89,560</b>
ISPS		2,490	2,033	1,615
<b>Grand total</b>		<b>102,820</b>	<b>97,296</b>	<b>91,175</b>

**Figure 18: COMPARISON OF MOST FREQUENT DETAINABLE DEFICIENCIES**



**Table 14: COMPARISON OF MOST FREQUENT DETAINABLE DEFICIENCIES**

No.	Most frequent deficiencies	Year		
		2012	2013	2014
1	Lifeboats (Life saving appliances)	155	190	136
2	Fire-dampers (Fire safety)	155	120	119
3	Resources and personnel (ISM)	96	114	98
4	Shipboard operations (ISM)	96	76	81
5	Ventilators, air pipes, casings (Water/weathertight conditions)	74	76	76
6	Oil filtering equipment (MARPOL Annex I)	113	104	74
7	Emergency fire pump and its pipes (Emergency Systems)	125	99	71
8	Covers (hatchway-, portable-, tarpaulins, etc.) (Water/weathertight conditions)	61	68	70
9	Fire prevention structural integrity (Fire safety)	72	70	69
10	Charts (Safety of navigation)	50	78	68

Table 15: LIST OF UNDER-PERFORMING SHIPS

IMO No.	Ship name (at the day of detention)	Flag	IMO company No.	No. of times on the list
7610098	LADY FOX	Comoros	5532461	4
8107311	RAYNA	Comoros	1806180	5
8113724	XIANG YUN HAI	Cambodia	5675660	6
8313453	TOYOKICHI	Togo	5301275	3
8323525	NEW SEASON	Thailand	1598940	4
8410861	GOLDEN SHINE NO.2	Cambodia	5076158	1
8415366	RICH QUEEN	Cambodia	5676977	4
8508656	HIBOR	Cambodia	5679058	3
8510128	SHUN FA 19	Cambodia	5724783	1
8514409	TAIYO	Cambodia	5318319	1
8515788	YONG SHUN	Cambodia	5169558	12
8519289	KAIGEN MARU	Cambodia	5550114	3
8602816	FORESIGHTER	Panama	5018669	7
8604371	HOLY FAIRY	Cambodia	5076158	6
8614467	SILVA	Tanzania	5744901	2
8622127	SHUN FA 6	Sierra Leone	5308286	4
8622206	FU YUAN	Cambodia	5277521	2
8626214 <sup>1</sup>	SHENGXIANG 6	Belize	5475436	8
8626214 <sup>1</sup>	SHENGXIANG 6	Cambodia	Unknown	8
8631013	YE DA	Cambodia	5675660	6
8654479	UN PHA SAN 1	Korea, Democratic People's Republic of	5666661	4
8656570	UNION GLORY	Cambodia	5727814	1
8657574	XIN HAI 98	Belize	5471963	2
8657847	TONG YUAN HAI	Cambodia	5513586	2
8708828 <sup>2</sup>	TONG AN HAI	Belize	5119936	4
8708828 <sup>2</sup>	TONG AN HAI	Belize	5685595	4
8712324	QUEEN ACE	Panama	1897171	1
8747173	HAI HENG 1	Sierra Leone	5607746	5
8810358	MARINE PEACE	Belize	5049445	2
8817318	YEN DE	Cambodia	5732474	1
8820157	SHUN FA 16	Sierra Leone	5308286	5
8844232	HAPPY SAILING	Cambodia	5679764	10
8864282	HAODA 6	Cambodia	5468037	6
8891297	DOUBLE HAPPINESS I	Panama	5679614	11
8909680	KAIHO MARU	Vanuatu	0941637	2
8957479	KHUDOZHNIK TSYGANOV	Cambodia	5412019	3

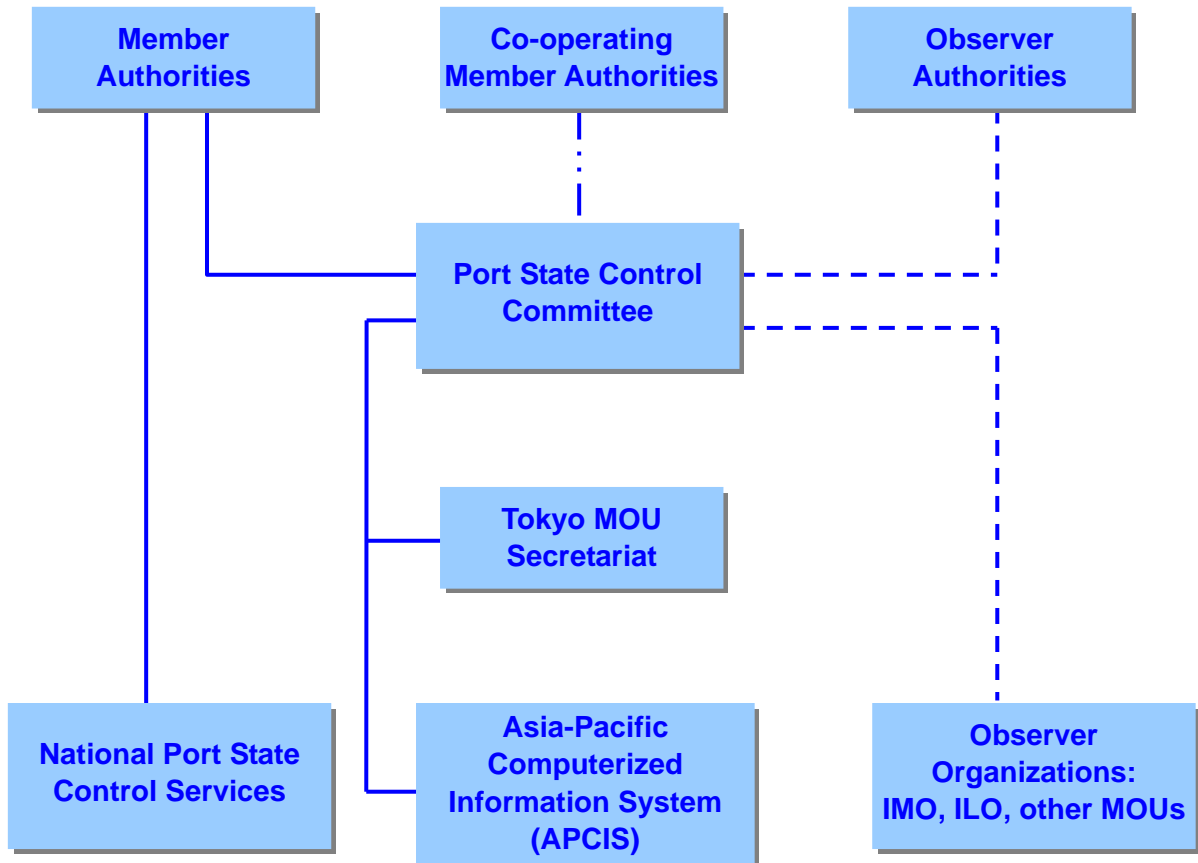


IMO No.	Ship name (at the day of detention)	Flag	IMO company No.	No. of times on the list
8989070	XIN JIE	Cambodia	5686678	1
9036533	RYU GYONG	Korea, Democratic People's Republic of	5756599	4
9077903	WADI SUDR	Egypt	0957062	3
9088598 <sup>2</sup>	TAI XIN	Cambodia	5191123	3
9088598 <sup>2</sup>	TAI XIN	Cambodia	5679305	3
9092109	AN YANG HE	Cambodia	5574049	4
9215737	MEDI KOBE	Philippines	1703013	1
9264037	NEMORINO	Liberia	5096782	3
9313620	NOAH SATU	Indonesia	5661158	11
9342944	CAPTAIN KANG	Cambodia	5070940	3
9350484	ANSHUN 68	Cambodia	5678236	8
9357042 <sup>1</sup>	CHENG LU 10	Niue	4100686	12
9357042 <sup>1</sup>	CHENG LU 10	Cambodia	4100686	12
9373163	RICH SPRING	Kiribati	4100686	3
9373175	RICH HONOR	Sierra Leone	5546942	9
9376189	RSS PIONEER	Panama	5678236	1
9378424	ANDA NO.66	Panama	5678236	2
9378967	HUA SHUN DA 3	Cambodia	5066491	8
9379870	ASIAN POWER	Panama	0200407	3
9446893 <sup>2</sup>	DONG PENG 58	Cambodia	5675316	12
9446893 <sup>2</sup>	DONG PENG 58	Cambodia	5295678	12
9450959 <sup>2</sup>	FLYING CRANE	Panama	5066491	6
9450959 <sup>2</sup>	FLYING CRANE	Panama	1130276	6
9484699	TALIA	Liberia	5184254	1
9532070	DONG FENG 1	Niue	5607746	12
9540405	HUI JI	Panama	5043711	2
9542245	OCEAN RICH 1	Panama	5786893	1
9546356	LIAO YUAN 7	Cambodia	5284881	2
9548433	HAO JIN 2	Cambodia	5389679	3
9569566	HAO XIANG 66	Tanzania	5350999	6
9666728	JIA HE 88	Cambodia	5675660	6

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

### ANNEX 3

## ORGANIZATIONAL STRUCTURE OF THE TOKYO MOU



## 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:

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

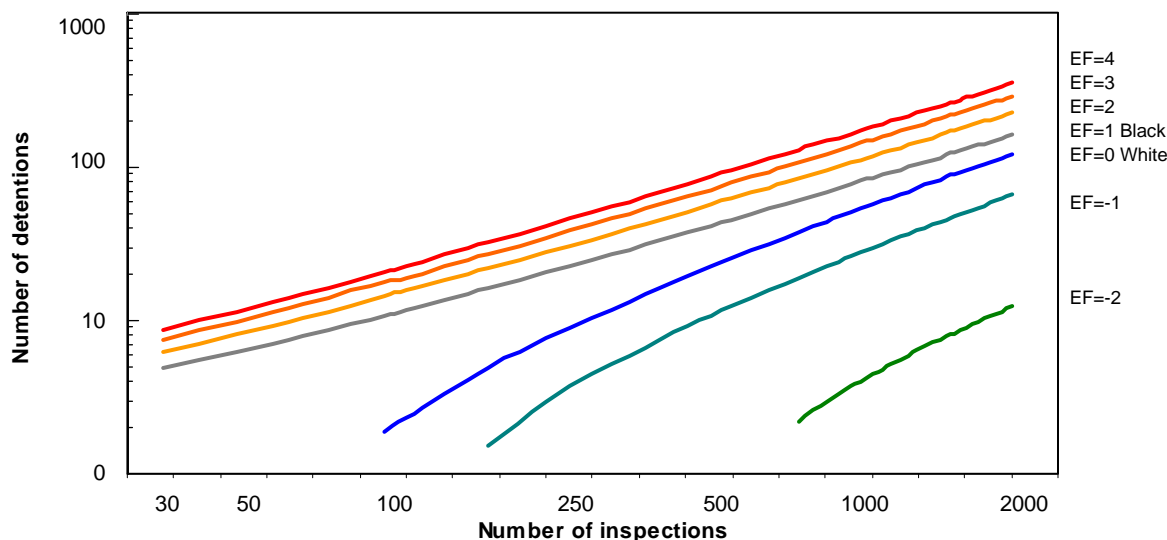
$$U_{white - to - grey} = N \cdot p - 0.5 - z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

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.



**Example flag on Black list:**

Ships of Niue were subject to 35 inspections of which 6 resulted in a detention. The "black to grey limit" is 5 detentions. The excess factor is 1.38.

$N$  = total inspections

$P$  = 7%

$Q$  = 3%

$Z$  = 1.645

How to determine the black to grey limit:

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

$$u_{black - to - grey} = 35 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{35 \cdot 0.07 \cdot 0.93}$$

$$u = 5$$

The excess factor is 1.38. This means that 'p' has to be adjusted in the formula. The black to grey limit has an excess factor of 1, so to determine the new value for 'p', 'q' has to be multiplied with 0.38, and the outcome has to be added to the normal value for 'p':

$$p + 0.38q = 0.07 + (0.38 \cdot 0.03) = 0.0814$$

$$u_{excessfactor} = 35 \cdot 0.0814 + 0.5 + 1.645 \cdot \sqrt{35 \cdot 0.0814 \cdot 0.9186}$$

$$u_{excessfactor} = 6$$

**Example flag on Grey list:**

Ships of Tuvalu were subject to 392 inspections, of which 25 resulted in a detention. The "black to grey limit" is 36 and the "grey to white limit" is 19. The excess factor is 0.36.

How to determine the black to grey limit:

$$u_{black - to - grey} = 392 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{392 \cdot 0.07 \cdot 0.93}$$

$$u_{black-to-grey} = 36$$

How to determine the grey to white limit:

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

$$u_{white - to - grey} = 392 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{392 \cdot 0.07 \cdot 0.93}$$

$$u_{white-to-grey} = 19$$

To determine the excess factor the following formula is used:

$$ef = (\text{Detentions} - \text{white to grey limit}) / (\text{grey to black limit} - \text{white to grey limit})$$

$$ef = (25 - 18.63) / (36.25 - 18.63)$$

$$ef = 0.36$$

#### Example flag on White list:

Ships of Viet Nam were subject to 2,285 inspections of which 127 resulted in detention. The "grey to white limit" is 139 detentions. The excess factor is -0.19.

How to determine the grey to white limit:

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

$$u_{\text{white-to-grey}} = 2,285 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{2,285 \cdot 0.07 \cdot 0.93}$$

$$u_{\text{white-to-grey}} = 139$$

The excess factor is -0.19. This means that 'p' has to be adjusted in the formula. The grey to white limit has an excess factor of 0, so to determine the new value for 'p', 'q' has to be multiplied with -0.19, and the outcome has to be added to the normal value for 'p':

$$p + (-0.19q) = 0.07 + (-0.19 \cdot 0.03) = 0.0643$$

$$u_{\text{excessfactor}} = 2,285 \cdot 0.0643 - 0.5 - 1.645 \cdot \sqrt{2,285 \cdot 0.0643 \cdot 0.9357}$$

$$u_{\text{excessfactor}} = 127$$

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.

## TOKYO MOU SECRETARIAT

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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Technical Officer

Fumiko Akimoto  
Projects Officer