

ANNUAL REPORT

ON

PORT STATE CONTROL

IN THE ASIA-PACIFIC REGION

2008



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FOREWORD

We are pleased to present the **Annual Report on Port State Control in the Asia-Pacific Region 2008**.

Tokyo MOU continues to observe its strong commitment to improve and enhance port State control activities in the region. A number of developments took place in 2008. Tokyo MOU is poised to develop a long-term strategic plan to react to internal and external challenges effectively and efficiently. Tokyo MOU has successfully completed the joint CIC with the Paris MOU on safety of navigation and is preparing for the upcoming CIC on lifeboats in 2009. For the purpose of promoting inter-regional co-operation, Tokyo MOU is going to provide technical co-operation to other PSC regimes.

This annual report contains general description about the port State control developments and activities of the Tokyo MOU in 2008. Furthermore, the report also provides port State control statistics and analysis which summarizes the results of inspections carried out by member Authorities during the year.

Port State control as one of the most effective measures for eradication of substandard shipping will continue to play its important role. Tokyo MOU will continue to make every effort to further develop and enhance port State control activities in the region so as to eliminate substandard ships to a maximum extent.

Vitaly Klyuev
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 fourteenth issue and covers port State control activities and developments in the year 2008.

The Memorandum was concluded 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 Vietnam. The Memorandum came into effect on 1 April 1994.

In accordance with the provisions of the Memorandum, the Authorities which have signed and formally accepted the Memorandum or which have been accepted with unanimous consent of the Port State Control Committee would become full members. Currently, the Memorandum has 18 full members, namely: 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, Thailand, Vanuatu and Vietnam.

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 and harmonization of their activities, to eliminate substandard shipping so as to promote maritime safety, to protect the marine environment and to safeguard 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 of the member Authorities and also observers from the maritime Authorities and the inter-governmental organizations which have been granted observer status by the Committee, namely: Democratic People's Republic of Korea, Macao (China), Solomon Islands, 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 and the Black Sea 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); and
- the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001.

REVIEW OF YEAR 2008

It was encouraging that the number of detentions begun to show a declining trend several years ago. However, an opposite trend has been observed during the recent two years with detentions on the rise again. It is notable that in 2008 detentions in the Tokyo MOU region increased by 19% or 292 compared with 2007. Several well-known factors are considered to have contributed to this situation. The tonnage of aged ships kept increasing. Some ship owners and managers, taking advantage of increasing demand of world tonnage in the shipping market, persistently operate substandard ships. Provision of qualified seafarers can not sufficiently meet the demand. Under such circumstance, Tokyo MOU will endeavour to enhance its activities and to increase pressure on the substandard ships. In order to ensure maritime safety, security and protection of the marine environment, Tokyo MOU may be compelled to detain more substandard ships, should they be continuously operated in the region.

Tokyo MOU carried out a concentrated inspection campaign (CIC) on safety of navigation (SOLAS Chapter V) from 1 September to 30 November 2008. The purpose of the CIC was to verify that navigation equipment carried on board vessels are in compliance with the carriage requirements and appropriately certified with relevant record; have appropriate type approval and are functioning effectively; and master and watchkeeping officers are familiar with operation of the equipment. During the campaign period, the Tokyo MOU member Authorities inspected a total of 4,836 vessels. 31 vessels were detained as a direct result of the CIC, which represented a CIC detention

rate of 0.64%. The overall detention percentage during the period was 4.07%. The most notable deficiencies found were the lack of adequate charts and publications (1,183; 54.44%), other navigational deficiencies (167; 7.69%) and deficiencies relating to voyage data recorder (VDR) (170; 7.82%). As was the case with the 2007 CIC on ISM, the CIC on safety of navigation was conducted jointly with the Paris MOU and participated by other regional PSC regimes.

The International Convention on the Control of Harmful Anti-fouling Systems (AFS) on Ships, 2001, came into force on 17 September 2008. For the purpose of implementing the control provisions of the AFS Convention, the Tokyo MOU introduced the AFS Convention as one of the relevant instruments under the Memorandum. In order to provide necessary guidance for PSC officers, the interim guidelines for inspection of AFS on ships were adopted, which are harmonized with those of the Paris MOU.

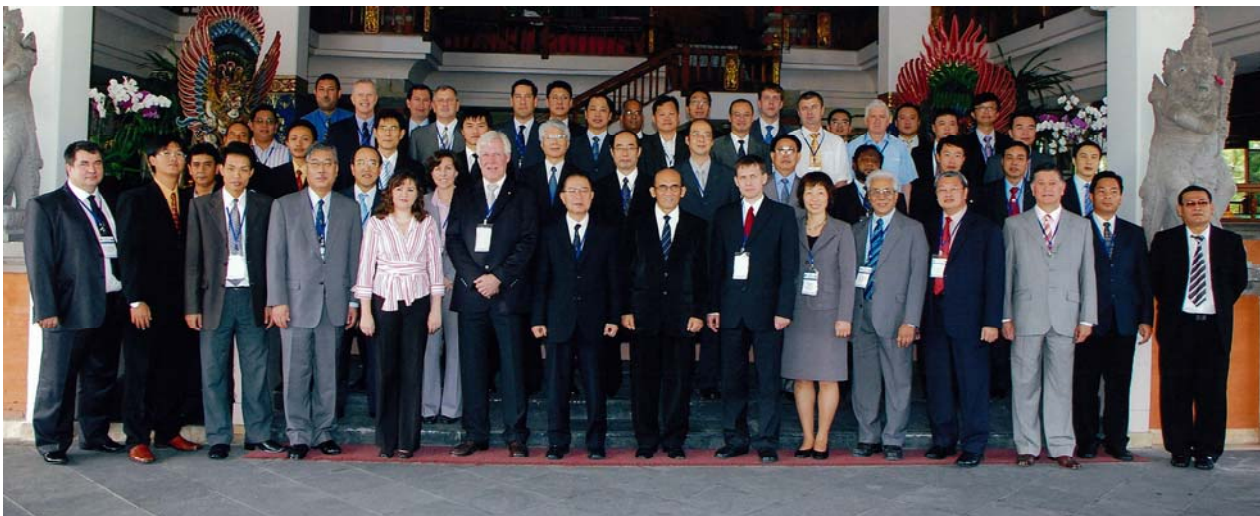
THE PORT STATE CONTROL COMMITTEE

The Port State Control Committee held its

eighteenth meeting in Bali, Indonesia, from 17 to 20 November 2008. The meeting was hosted by the Directorate General of Sea Transportation of Indonesia. Dr. Vitaly Klyuev, Deputy Director of the Department of State Policy for Maritime and River Transport, Ministry of Transport of the Russian Federation, chaired the meeting.

The eighteenth Committee meeting was attended by representatives of the member Authorities of Canada, Chile, China, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, Papua New Guinea, the Philippines, the Russian Federation, Singapore, Thailand and Viet Nam, and observers from DPR Korea, Macao (China), the United States Coast Guard, the Black Sea MOU, the Indian Ocean MOU, the Paris MOU and the Viña del Mar Agreement.

The Committee adopted an amendment to the Memorandum for inclusion of the AFS Convention in the relevant Instruments for port State control, which came into effect on 18 November 2008. Furthermore, the Committee approved the interim guidelines for inspection of AFS on ships. The Committee also adopted



The eighteenth Committee meeting, Bali, November 2008.

another amendment to the Memorandum to increase the regional target inspection rate from 75% to 80%. This amendment will take effect in July 2009.

The Committee considered the proposal on the development of a strategic plan for the Tokyo MOU. The Committee agreed to develop the strategic plan which will address the middle and long term objectives and directions of development of the Memorandum. This will enable the Tokyo MOU to be in a better position to actively react to internal and external challenges and to maintain sustainable development and improvement in the years to come. For that purpose, the Committee established an inter-sessional working group with the task to prepare a draft strategic plan for its consideration.

The Committee considered a detailed report on analysis of the results of the CIC on the ISM Code in 2007. The Committee approved the recommendations contained in the report. The Committee noted the ongoing CIC on safety of navigation (SOLAS Chapter V) in 2008. The Committee approved in principle, the questionnaire and the guidelines for the next CIC on lifeboats. The Committee decided that the CIC on lifeboats would be conducted from September to November 2009 jointly with the Paris MOU. The Committee agreed to co-ordinate with the Paris MOU in selection of subjects for preparation for future joint CICs.

The Committee decided to reinstate the expert mission programme, which had been suspended since 2006. The expert mission programme is targeted to strengthen the technical co-operation activities and to enhance regional PSC activities. The Committee agreed to establish a pool of

experts for more effective organization of expert missions. Bearing in mind the instruction from the 2nd Joint Ministerial Declaration to support provision of technical co-operation to other PSC regimes, the Committee approved in general the project for technical co-operation with other MOUs by taking the advantage of Tokyo MOU experience and know-how on training programmes.

Other issues discussed and decided by the Committee were:

- review of work of the MOU-SWG;
- list of follow-up actions emanating from the second Joint Ministerial Conference;
- proposal for a 3rd Joint Ministerial Conference;
- progress of work on improvement and harmonization of the coding system; and
- development of an interface for collecting and displaying deficiency photos in the APCIS.

The nineteenth meeting of the Port State Control Committee will be held in Papua New Guinea in August 2009.

TECHICAL WORKING GROUP (TWG)

As mentioned in the previous Annual Report, the Committee decided to replace the meeting of Regional Database Managers (DBM) with the meeting of Technical Working Group (TWG) to facilitate the decision making process of the Committee and to make maximize use of the limited meeting time.

The first meeting of TWG was held in Bali, Indonesia, on 14 November 2008, prior to the commencement of the eighteenth Committee meeting. The TWG01 meeting was chaired by Mr. Ong Hua Siong, Assistant Director (Ship Regulation and Development), Shipping Division, Maritime and Port Authority of Singapore, who was elected acting chairman for the session, since the elected chairman - Mr. Christopher Lindesay, Principal System Officer, Australian Maritime Safety Authority, was unable to attend the meeting.

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

- cases considered by the detention review panel;
- 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;
- amendments to the codes;
- detailed statistics on PSC; and
- information exchange with other regional PSC databases.

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 hyperlink with the databases of:

- SIRENAC of the Paris MOU;
- BSIS of the Black Sea MOU; and
- IOIS of the Indian Ocean MOU.

TRAINING AND SEMINARS FOR PORT STATE CONTROL OFFICERS

From 30 June to 18 July 2008, the eighteenth basic training course for PSC officers was held in Yokohama, Japan. This training course was conducted in the same manner as the previous one organized jointly by IMO and the Tokyo MOU. A total of 20 PSC officers



Training course for PSC officers

participated in the training course. Thirteen of them were from the Tokyo MOU Authorities of Chile, Fiji, Indonesia, Republic of Korea, Macao (China), Malaysia, Papua New Guinea, the Philippines, the Russian Federation, Thailand and Viet Nam. The other 7 were individually invited by IMO from Abuja MOU, the Viña del Mar Agreement, Black Sea MOU, Caribbean MOU, Indian Ocean MOU, Mediterranean MOU and Riyadh MOU. The course was conducted with the assistance by the Shipbuilding Research Center of Japan (SRC).

The basic training course aims to provide junior or newly recruited PSC officers with necessary knowledge on maritime conventions and essential port State control procedures and requirements. During the training course, trainees received a wide range of lectures and presentations

relating to port State control provisions, convention requirements and regulations, PSC inspection and reporting procedures. Experts from SRC, Nippon Kaiji Kyokai (ClassNK), Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT) and the Secretariat delivered lectures on the relevant subjects. Apart from the classroom lectures, onboard trainings were conducted in Yokohama and Nagoya respectively for the trainees to gain practical experience on PSC inspections. Moreover, a

technical visit to a liferaft manufacturer was also arranged.

The sixteenth seminar for PSC officers was held in Auckland, New Zealand, from 13 to 16 October 2008. The seminar was hosted by the Maritime New Zealand. Participants from Authorities of Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan,



On-the-job training



On-the-job training

Republic of Korea, Macao (China), Malaysia, New Zealand, Papua New Guinea, the Philippines, the Russian Federation, Singapore, Thailand and Viet Nam attended the seminar.

At the seminar, experts from the Australian Maritime Safety Authority (AMSA) and Transport Canada made presentations on the results of the previous CIC on the ISM Code, the ongoing CIC on safety of navigation and the forthcoming CIC on lifeboats. Speakers from MLIT of Japan and the Maritime New Zealand gave introductions to the participants about the interim guidelines for inspection of anti-fouling system (AFS) on ships and the safety of ships' lifting appliances. In addition, participants were informed of the recent development and

activities of the Tokyo MOU and PSC in New Zealand. During the seminar, two case study sessions were also carried out. The actual cases provided by Authorities or reviewed by the detention review panel were used for discussion, exchange of views among participants and promotion of harmonization on PSC procedures.

Four fellowship trainings were conducted in 2008. The Russian Federation received one PSC officer from the Republic of Korea for the

fellowship training in Vladivostok from 27 May to 6 June 2008. Two PSC officers, one from Indonesia and the other from Thailand, attended the fellowship training in Pusan, Republic of Korea, from 7 to 17 October 2008. Three PSC officers, one each from Republic of Korea, Malaysia and the Philippines



The sixteenth seminar for PSC officers



Fellowship training for PSC officers

participated in the training in China from 14 to 24 October 2008: the first two officers were trained in Dalian while the remaining officer in Shanghai. From 5 to 19 December 2008, 10 PSC officers from the Authorities of Chile, China, Indonesia, Republic of Korea, Malaysia, the Philippines, the Russian Federation, Thailand and Viet Nam received the fellowship training in Japan. Participants took part in the onboard training in five groups in Yokohama, Nagoya, Osaka, Kobe and Fukuoka respectively.

Seven PSC officer exchanges were carried out in 2008, namely one PSC officer from Japan to New Zealand, one from New Zealand to Japan, one from Hong Kong (China) to Canada, one from Singapore to Australia, one from Canada to China, one from Singapore to Hong Kong (China) and one from Australia to Hong Kong (China). At the moment, the PSC officers exchange programme is implemented among Authorities of Australia, Canada, China, Hong Kong (China), Japan, Republic of Korea, New Zealand and Singapore.

Based on requests by the Authorities concerned, two expert missions were organized in 2008, i.e. one was in Bangkok, Thailand, from 25 February to 1 March 2008 and another was in Ho Chi Minh, Viet Nam, from 22 September to 3 October 2008. Experts from the Authorities of Japan and the Republic of Korea conducted the trainings in Thailand and Viet Nam respectively.

The above technical co-operation programmes are fully supported and actively participated by all Authorities. The Nippon Foundation kindly provides the continuous financial assistance to 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:

- Paris MOU
- Viña del Mar Agreement
- Tokyo MOU
- Caribbean MOU
- Mediterranean MOU
- Indian Ocean MOU
- Abuja MOU
- Black Sea MOU
- Riyadh MOU

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

With inter-governmental status (IGO) obtained in 2006, the Tokyo MOU attends the meetings of the Flag State Implementation (FSI) Sub-Committee to take part in discussions on PSC related issues at the IMO forum and to provide IMO with information of the Tokyo MOU activities. The Tokyo MOU Secretariat presented at the sixteenth session of FSI in June 2008.

Tokyo MOU has established and maintained effective and close co-operation with the Paris MOU both at administrative and the 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 2008, continuous efforts and further co-ordinated actions by the two Memoranda were made on the following:

- review of PSC coding system for further improvement and harmonization; and
 - consideration of the proposal for a 3rd Joint Ministerial Conference.
- Tokyo MOU receives a standing invitation from the Paris MOU for PSC seminars. One PSC officer from the Authority of China attended the forty-sixth PSC seminar of the Paris MOU in June 2008.
- As highlighted earlier, for the purpose of enhancement of inter-regional co-operation and sharing of experience on organization of technical co-operation programmes, the Tokyo MOU is preparing a project for technical co-operation with other regions.
- the joint press release on announcement of the CIC on safety of navigation 2008;
 - arrangement and preparation for the CIC on lifeboats 2009;
 - continuous submissions to IMO on annual list of flags targeted by the Paris MOU, Tokyo MOU and the United States Coast Guard and the updated list of follow-up actions emanating from the 2nd Ministerial Declaration;

PORT STATE CONTROL UNDER THE TOKYO MOU, 2008

INSPECTIONS

In 2008, 22,149 inspections, involving 12,622 individual ships, were carried out on ships registered under 105 flags. Figure 2 and Table 2 show the number of inspections carried out by the member Authorities of the Tokyo MOU. Out of 22,149 inspections, there were 15,297 inspections where ships were found with deficiencies. Since the total number of individual ships operating in the region was estimated at 19,947*, the inspection rate in the region was approximately 63%** in 2008 (see Figure 1). Although both the number of inspections and the number ships inspected have increased, the inspection rate has dropped down due to the big increase of the number of individual ships in the region.

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.



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

** 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 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 will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment.

In 2008, 1,530 ships registered under 68 flags were detained because of serious deficiencies found onboard. The detention rate of ships inspected was 6.91%. Comparing with the figure in 2007, detentions increased by 292 (19%).

Figure 4 shows the detention rate by flag that had at least 20 port State inspections and whose detention rate was above the average regional rate. Figure 5 gives the detention rate by ship type. A newly introduced Figure 7



shows the most frequent detainable deficiencies found during inspections.

Black-grey-white list (Table 7) indicates levels of performance of flags during three-year rolling period. The black-grey-white list for 2006-2008 consists of 61 flags, whose ships were involved in 30 or more inspections during the period. As in 2007, there are 13 flags in the black list. Georgia and Sierra Leone change their positions in the black list to the first and the second worst flags from the



second and the third positions in 2007. St. Kitts & Nevis and Maldives join the black list for the first time. Dominica and Taiwan, China are transferred from the black list to the grey list this year as a result of the decrease of detentions under their flag. There are 18 flags shown in the grey list. The white list remains unchanged with 30 flags in the list.

DEFICIENCIES

All conditions on board found not in compliance with the requirements of the relevant instruments by the port State control officers were recorded as deficiencies and requested to be rectified.



A total of 89,477 deficiencies were recorded in 2008. The deficiencies found are categorized and shown in Figure 6 and Table 6.

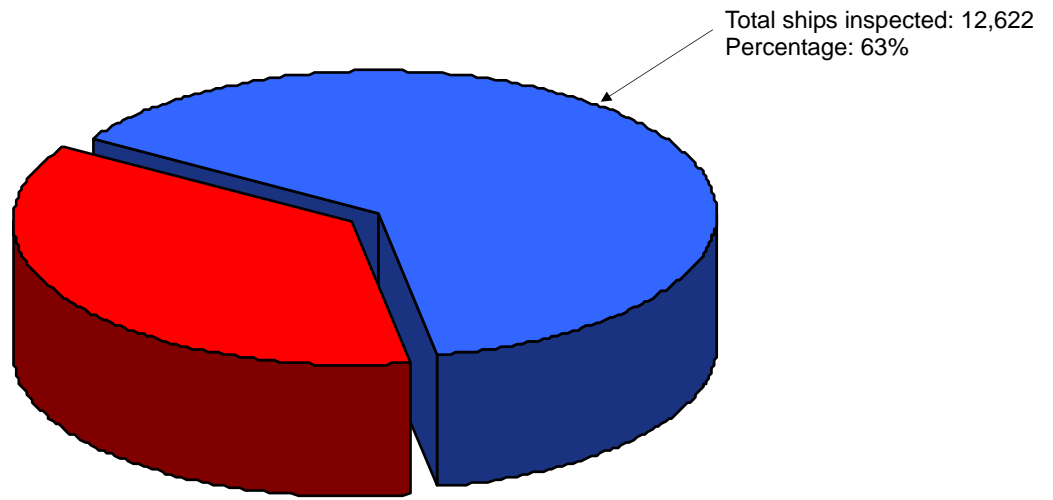
It is noted that life-saving appliances and fire safety measures remained as the two major categories of deficiencies which were frequently discovered on ships. In 2008, 11,491 life-saving appliances related deficiencies and 14,796 fire safety measures related deficiencies were recorded, representing 29% of the total number of deficiencies.

More deficiencies related to safety of navigation were recorded as a result from the CIC on SOLAS Chapter V in 2008. There were a total of 15,438 deficiencies found regarding safety of navigation, which was 2,721 (18%) higher than the figure of 12,717 in 2007.

**OVERVIEW OF PORT STATE CONTROL
RESULTS 1998 – 2008**

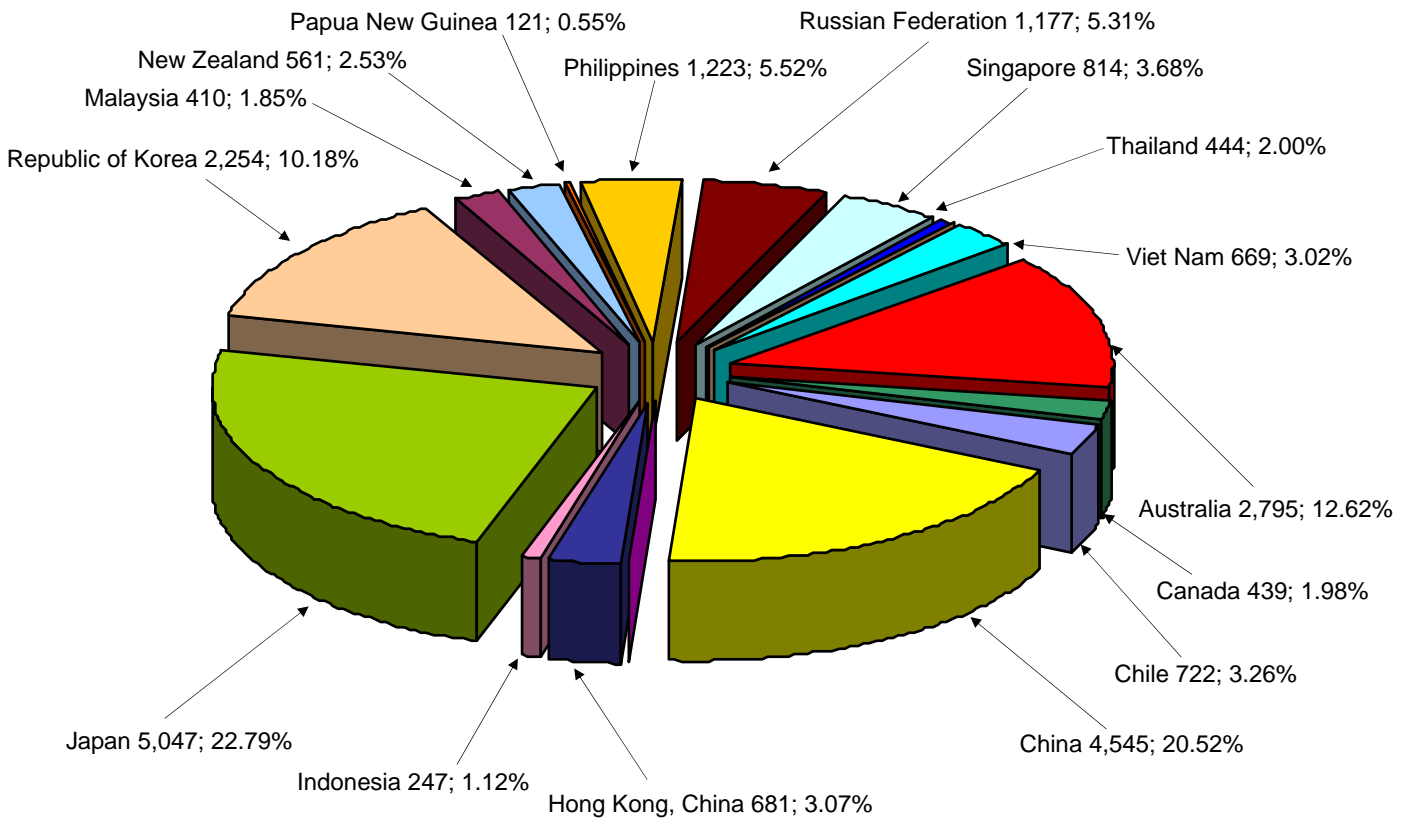
Figures 8-13 show the comparison of port State inspection results for 1998 - 2008. These figures indicate the trends in port State activities and ship performance over the past ten years.

Figure 1: INSPECTION PERCENTAGE



Total individual ship visited: 19,947

Figure 2: PORT STATE INSPECTIONS - CONTRIBUTION BY AUTHORITIES



Total inspections: 22,149

Figure 3: TYPE OF SHIP INSPECTED

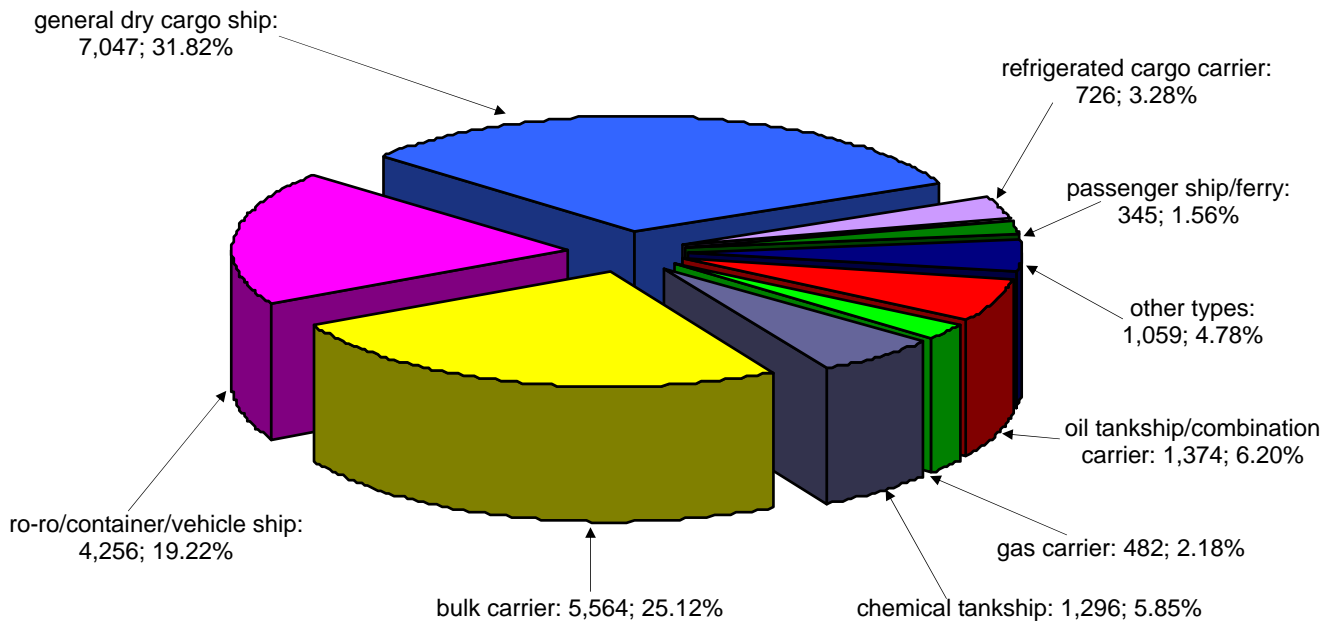
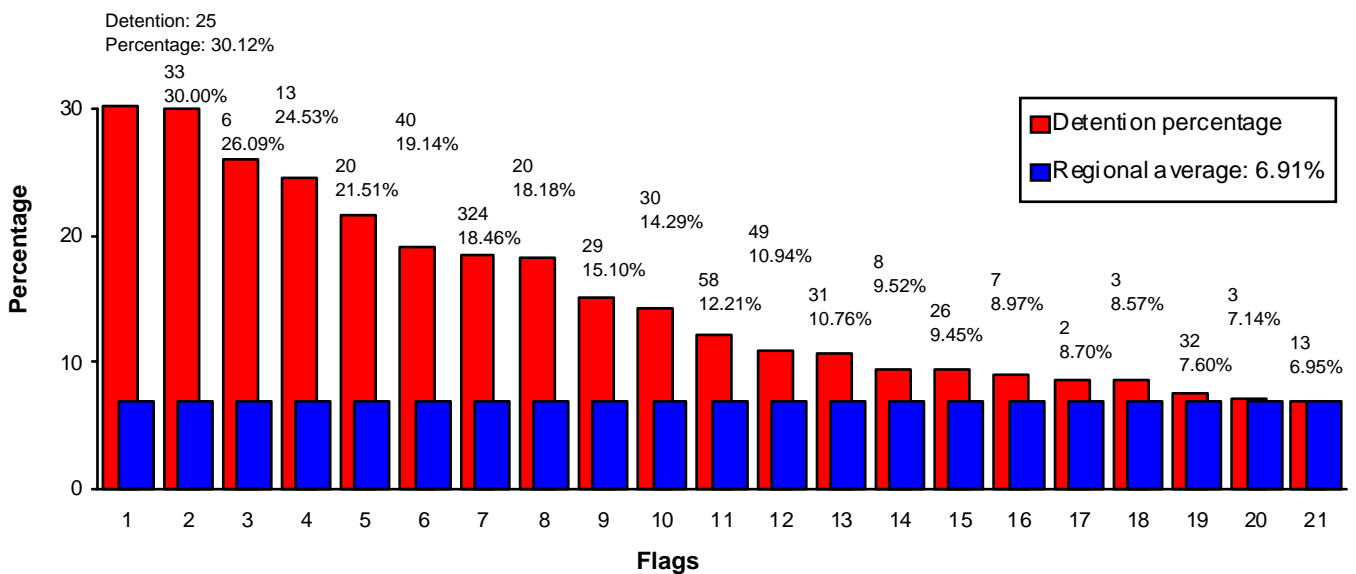


Figure 4: DETENTIONS PER FLAG



Flags:

- | | | | |
|--------------------------------------|--------------|--------------|----------------------|
| 1. Sierra Leone | 2. Georgia | 3. Maldives | 4. St. Kitts & Nevis |
| 5. Korea, Dem. People's Rep. | 6. Indonesia | 7. Cambodia | 8. Kiribati |
| 9. Tuvalu | 10. Mongolia | 11. Viet Nam | 12. Belize |
| 13. Saint Vincent and the Grenadines | 14. India | 15. Thailand | 16. Taiwan, China |
| 17. Netherlands Antilles | 18. Iran | 19. Malta | 20. Turkey |
| 21. Malaysia | | | |

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

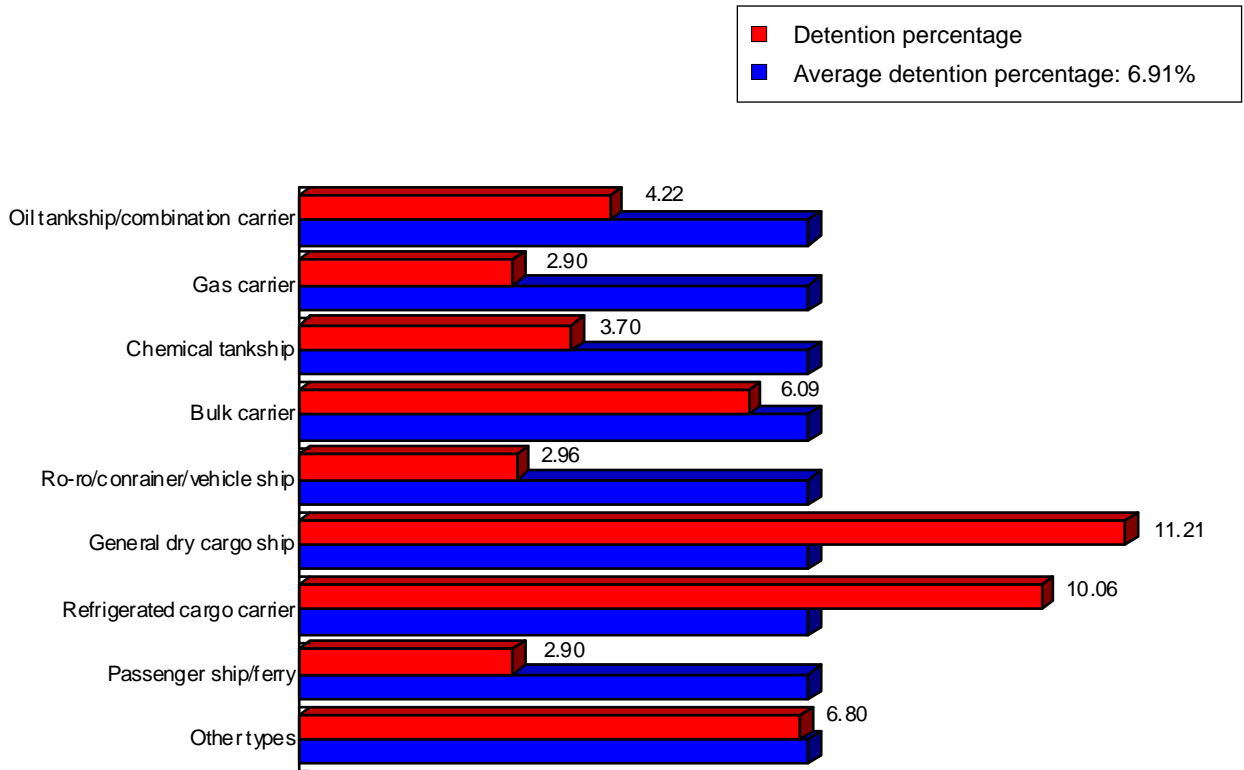


Figure 6: DEFICIENCIES BY MAIN CATEGORIES

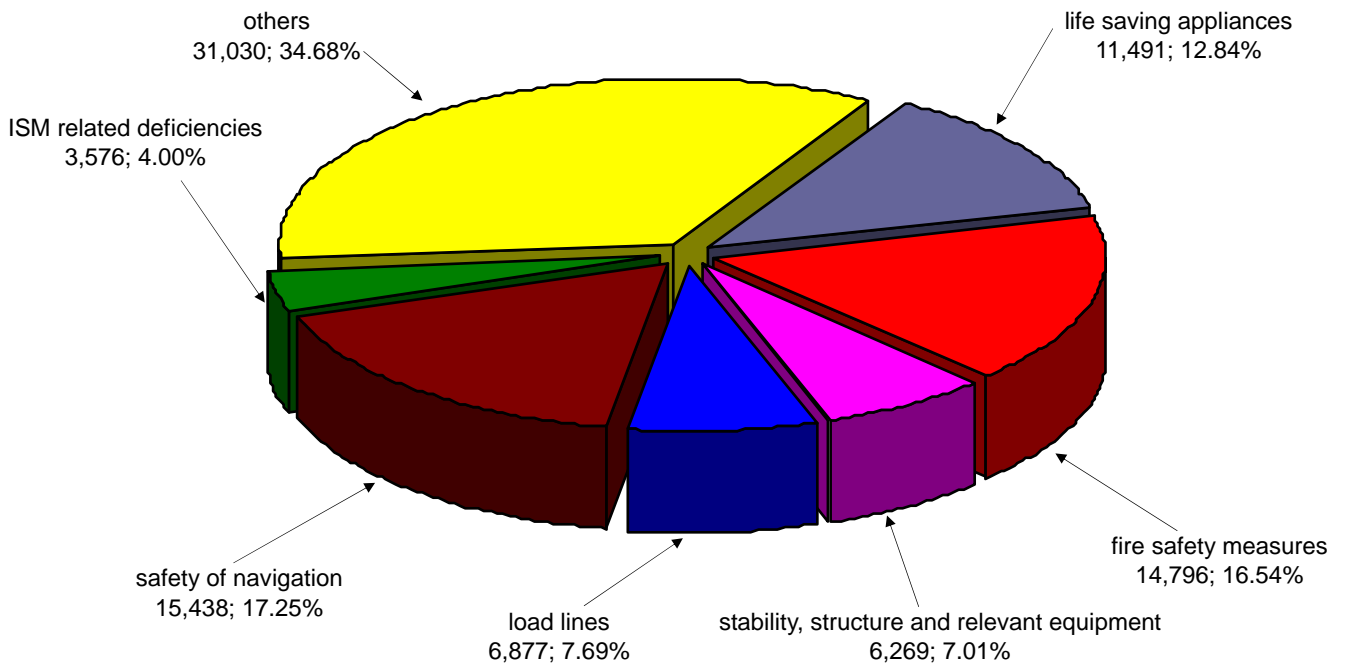
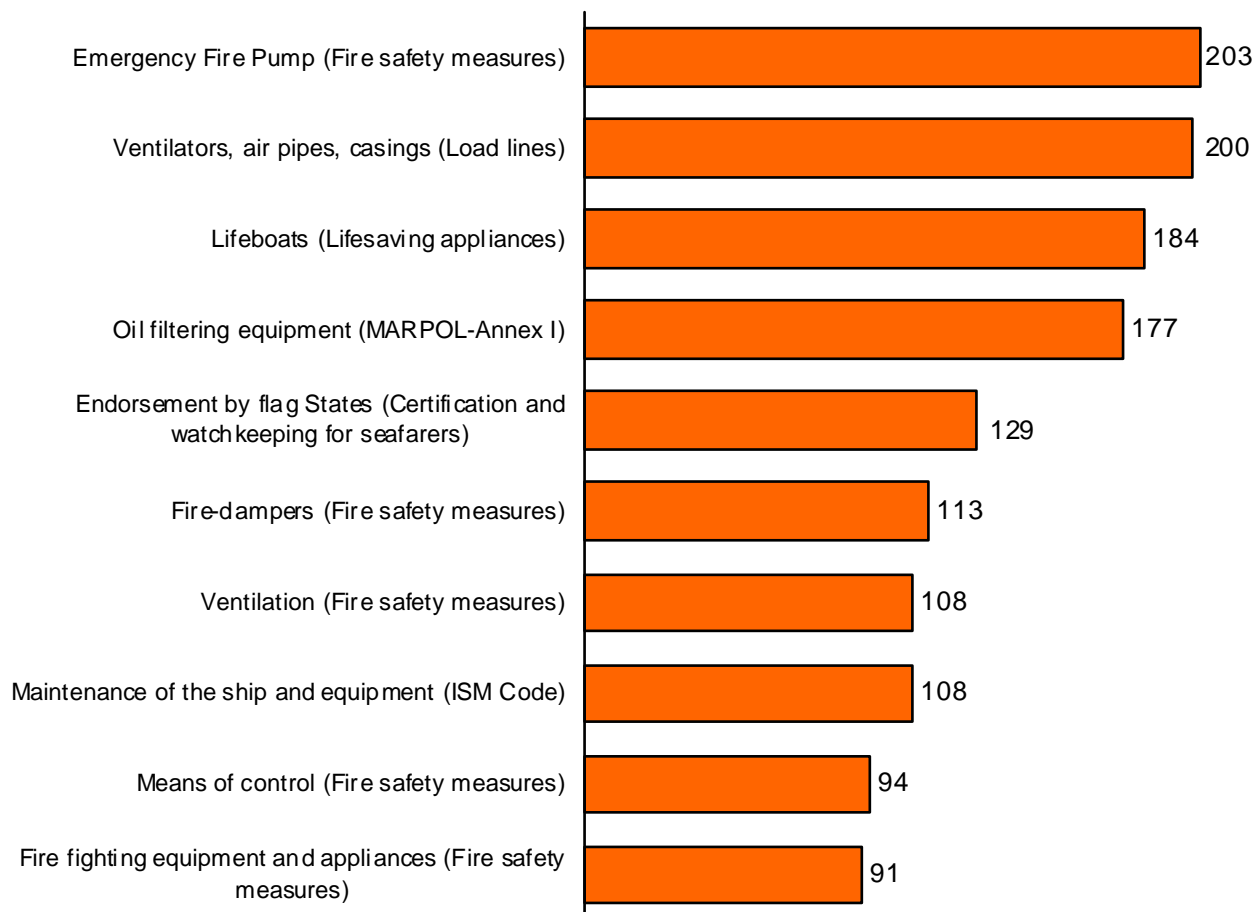


Figure 7: MOST FREQUENT DETAINABLE DEFICIENCIES



OVERVIEW OF PORT STATE CONTROL RESULTS 1998 - 2008

Figure 8: NO. OF INSPECTIONS

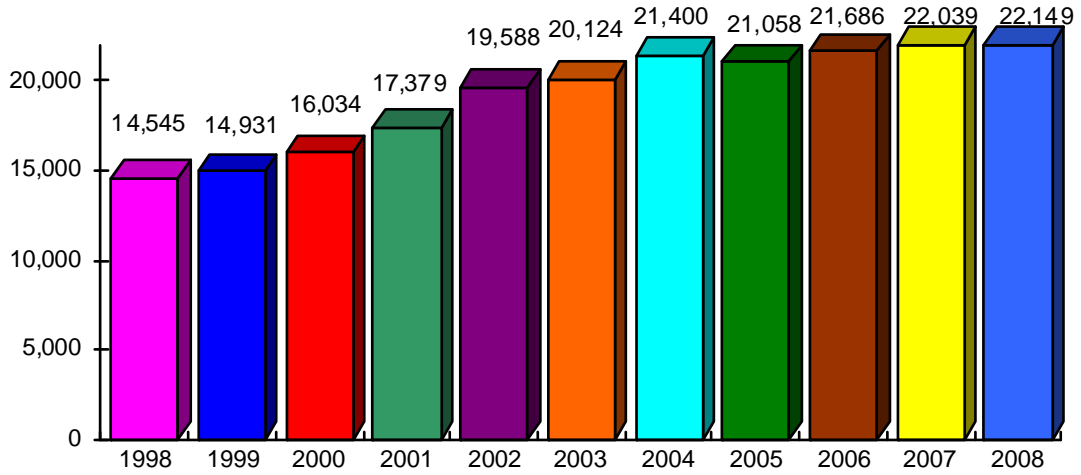


Figure 9: INSPECTION PERCENTAGE

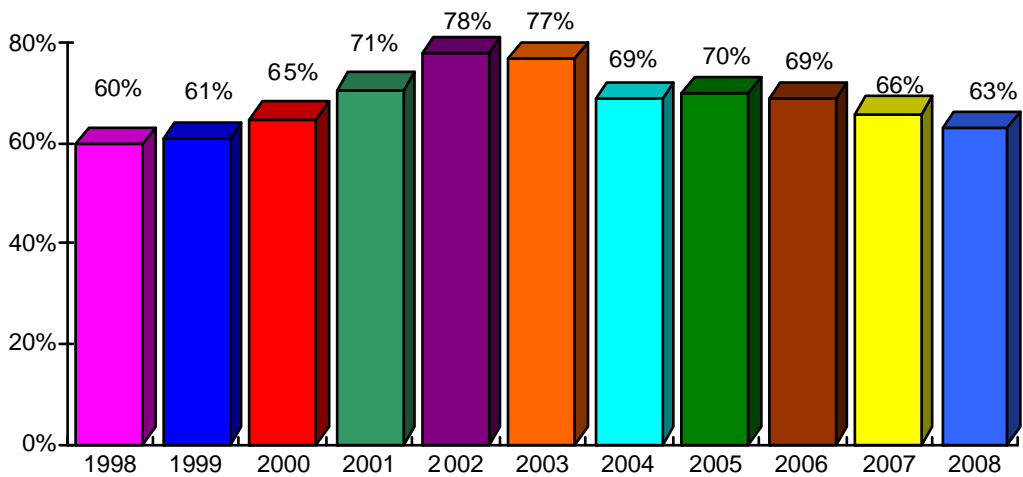


Figure 10: NO. OF INSPECTIONS WITH DEFICIENCIES

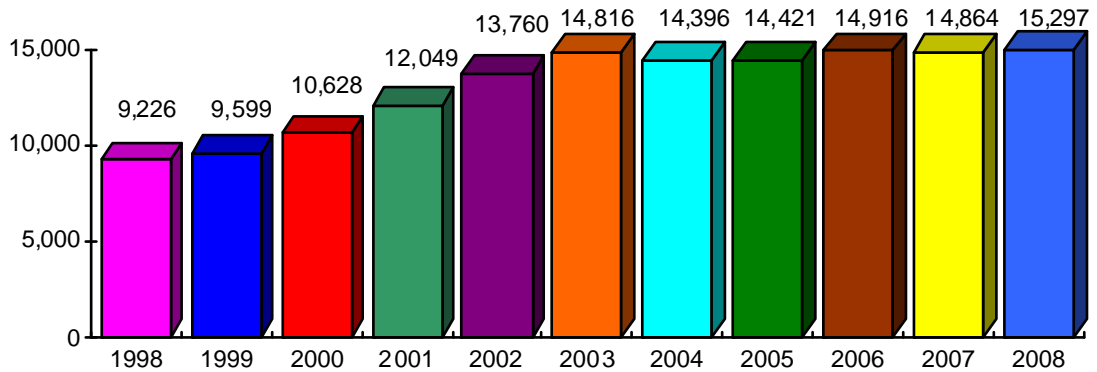


Figure 11: NO. OF DEFICIENCIES

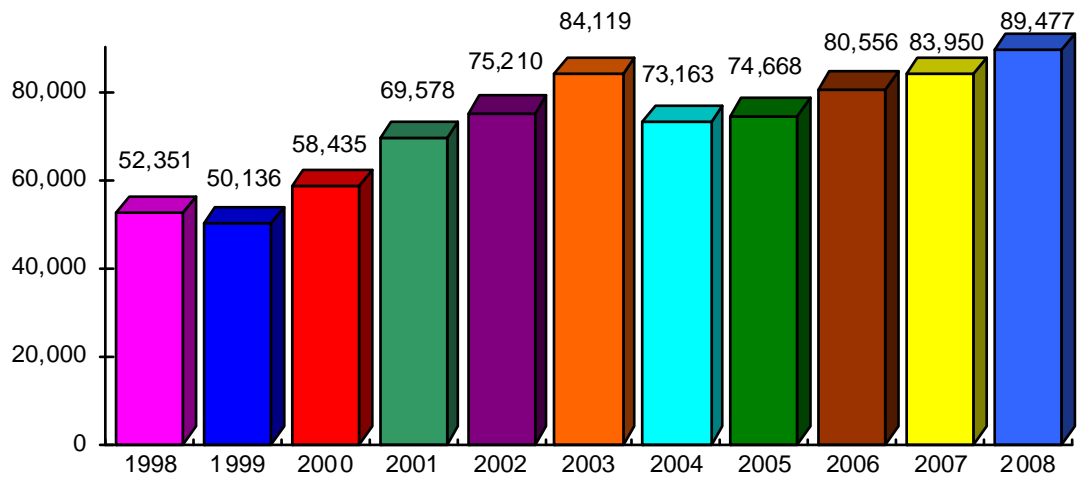


Figure 12: NO. OF DETENTIONS

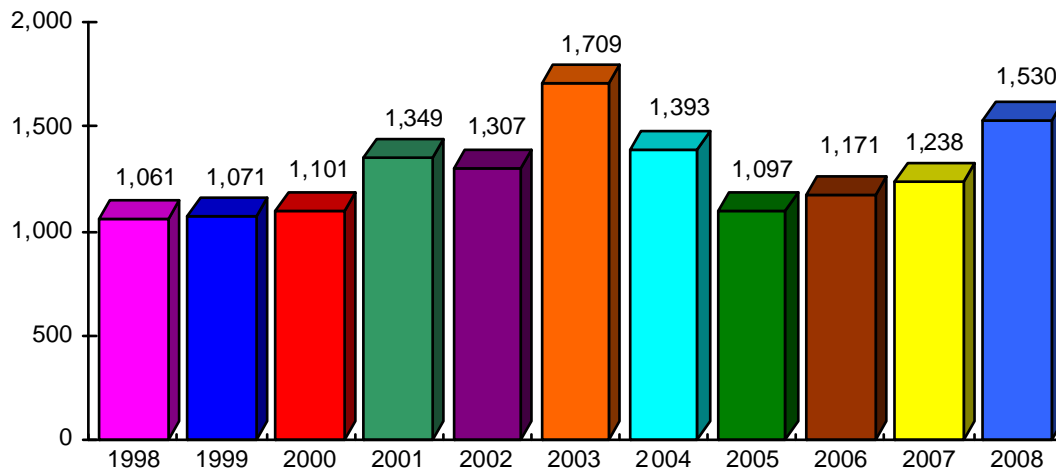
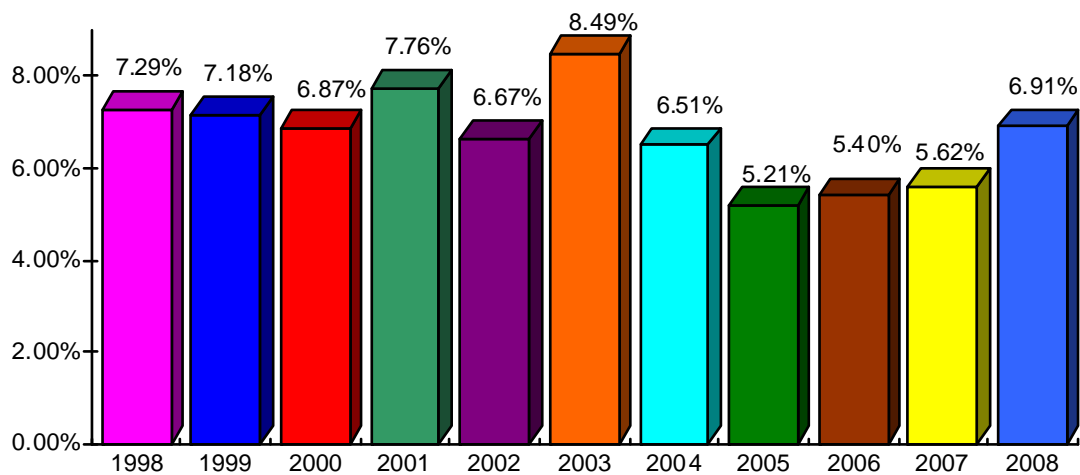


Figure 13: DETENTION PERCENTAGE



ANNEX 1

STATUS OF THE RELEVANT INSTRUMENTS

Table 1: STATUS OF THE RELEVANT INSTRUMENTS

(Date of deposit of instruments)

(As at 31 December 2008)

Authority	TONNAGE 69	LOAD LINE 66	LOAD LINE PROT 88	SOLAS 74	SOLAS PROT 78	SOLAS PROT 88	MARPOL 73/78	STCW 78	AFS 2001	COLREG 72	ILO 147**
Australia	21/05/82	29/07/68	07/02/97	17/08/83	17/08/83	07/02/97	14/10/87	07/11/83	09/01/07	29/02/80	-
Canada	18/07/94	14/01/70	-	08/05/78	-	-	16/11/92	06/11/87	-	07/03/75	25/05/93
Chile	22/11/82	10/03/75	03/03/95	28/03/80	15/07/92	29/09/95	10/10/94	09/06/87	-	02/08/77	-
China	08/04/80	05/10/73	03/02/95	07/01/80	17/12/82	03/02/95	01/07/83	08/06/81	-	07/01/80	-
Fiji	29/11/72	29/11/72	28/07/04	04/03/83	28/07/04	28/07/04	-	27/03/91	-	04/03/83	-
Hong Kong, China*	18/07/82	16/08/72	23/10/02	25/05/80	14/11/81	23/10/02	11/04/85	03/11/84	-	15/07/77	28/11/80
Indonesia	14/03/89	17/01/77	-	17/02/81	23/08/88	-	21/10/86	27/01/87	-	13/11/79	-
Japan	17/07/80	15/05/68	24/06/97	15/05/80	15/05/80	24/06/97	09/06/83	27/05/82	08/07/03	21/06/77	31/05/83
Republic of Korea	18/01/80	10/07/69	14/11/94	31/12/80	02/12/82	14/11/94	23/07/84	04/04/85	24/07/08	29/07/77	-
Malaysia	24/04/84	12/01/71	-	19/10/83	19/10/83	-	31/01/97	31/01/92	-	23/12/80	-
New Zealand	06/01/78	05/02/70	03/06/01	23/02/90	23/02/90	03/06/01	25/09/98	30/07/86	-	26/11/76	-
Papua New Guinea	25/10/93	18/05/76	-	12/11/80	-	-	25/10/93	28/10/91	-	18/05/76	-
Philippines	06/09/78	04/03/69	-	15/12/81	-	-	15/06/01	22/02/84	-	-	-
Russian Federation	20/11/69	04/07/66	18/08/00	09/01/80	12/05/81	18/08/00	03/11/83	09/10/79	-	09/11/73	07/05/91
Singapore	06/06/85	21/09/71	18/08/99	16/03/81	01/06/84	10/08/99	01/11/90	01/05/88	-	29/04/77	-
Thailand	11/06/96	30/12/92	-	18/12/84	-	-	02/11/07	19/06/97	-	06/08/79	-
Vanuatu	13/01/89	28/07/82	26/11/90	28/07/82	28/07/82	14/09/92	13/04/89	22/04/91	20/08/08	28/07/82	-
Viet Nam	18/12/90	18/12/90	27/05/02	18/12/90	12/10/92	27/05/02	29/05/91	18/12/90	-	18/12/90	-
DPR Korea	18/10/89	18/10/89	08/08/01	01/05/85	01/05/85	08/08/01	01/05/85	01/05/85	-	01/05/85	-
Macao, China	18/07/05	18/07/05	-	20/12/99	20/12/99	24/06/05	20/12/99	18/07/05	-	20/12/99	-
Solomon Islands	30/06/04	30/06/04	-	30/06/04	-	-	30/06/04	01/06/94	-	12/03/82	-
Entry into force date	18/07/82	21/07/68	03/02/00	25/05/80	01/05/81	03/02/00	02/10/83	28/04/84	17/09/08	15/07/77	28/11/81

* 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.

Table 1a: STATUS OF MARPOL 73/78

(Date of deposit of instruments)

(As at 31 December 2008)

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	-	-	-
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	-	-	-	-
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	-	-	31/01/97	-
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	-
Singapore	01/11/90	02/03/94	01/05/05	27/05/99	10/08/00
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	-	-	-	-
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	-
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 2008

Table 2: PORT STATE INSPECTIONS CARRIED OUT BY AUTHORITIES

Authority	No. of individual ships inspected (a)	No. of 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⁾	2,419	2,795	565	1,706	9,074	225	3,892	62.15	8.05
Canada ⁴⁾	435	439	0	231	856	10	1,381	31.50	2.28
Chile	640	722	197	396	1,147	27	1,677	38.16	3.74
China	3,417	4,545	1,416	4,044	32,594	553	10,978	31.13	12.17
Fiji	0	0	0	0	0	0	122	0	0
Hong Kong, China	680	681	9	576	2,418	28	4,493	15.13	4.11
Indonesia	229	247	1	13	38	1	5,095	4.49	0.40
Japan	3,649	5,047	855	3,325	18,395	243	7,332	49.77	4.81
Republic of Korea	1,849	2,254	298	1,686	8,372	241	7,780	23.77	10.69
Malaysia	382	410	77	238	1,040	18	4,768	8.01	4.39
New Zealand	461	561	360	324	1,136	8	771	59.79	1.43
Papua New Guinea	108	121	74	53	345	2	341	31.67	1.65
Philippines	1,001	1,223	208	439	1,887	1	1,989	50.33	0.08
Russian Federation ⁴⁾	693	1,177	1,120	957	6,434	55	1,090	63.58	4.67
Singapore	663	814	484	467	1,570	21	10,890	6.09	2.58
Thailand	405	444	82	278	657	30	2,753	14.71	6.76
Vanuatu	0	0	0	0	0	0	36	0	0
Viet Nam	559	669	138	564	3,514	67	1,767	31.64	10.01
Total	12,622	22,149	5,884	15,297	89,477	1,530	Regional 19,947	Regional 63%	Regional 6.91%

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

2) LMIU data for 2008.

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	2,795	8	9	0	0
Canada	439	5	5	0	0
Chile	722	12	15	3	0.42
China	4,545	864	1,155	51	1.12
Fiji	0	0	0	0	0
Hong Kong, China	681	9	12	0	0
Indonesia	247	1	1	0	0
Japan	5,047	376	452	0	0
Republic of Korea	2,254	251	279	8	0.35
Malaysia	410	48	56	2	0.49
New Zealand	561	14	16	0	0
Papua New Guinea	121	0	0	0	0
Philippines	1,223	10	12	0	0
Russian Federation	1,177	78	92	1	0.08
Singapore	814	185	186	3	0.37
Thailand	444	10	12	5	1.13
Vanuatu	0	0	0	0	0
Vietnam	669	15	16	2	0.30
Total	22,149	1,886	2,318	75	Regional 0.34%

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 %
Afghanistan	1	0	0	0	0
Algeria	2	2	16	0	0
Antigua and Barbuda	367	225	921	23	6.27
Argentina	3	2	26	2	66.67
Australia	4	1	4	0	0
Bahamas	533	295	1,247	16	3.00
Bahrain	2	2	2	0	0
Bangladesh	8	6	34	1	12.50
Barbados	15	12	144	1	6.67
Belgium	22	7	31	1	4.55
Belize	448	424	3,128	49	10.94
Bermuda (UK)	47	20	96	0	0
Bolivia	3	3	27	1	33.33
Brazil	2	2	18	1	50.00
Brunei Darussalam	3	2	4	0	0
Bulgaria	2	2	4	0	0
Cambodia	1,755	1,656	14,096	324	18.46
Canada	2	1	8	1	50.00
Cayman Islands (UK)	81	32	104	0	0
Chile	1	1	1	0	0
China	695	452	2,298	10	1.44
Comoros	6	6	41	1	16.67
Cook Islands	8	8	39	1	12.50
Croatia	18	11	54	1	5.56
Cyprus	437	283	1,341	18	4.12
Denmark	108	51	162	2	1.85
Dominica	39	32	215	1	2.56
Ecuador	5	5	10	0	0
Egypt	9	8	40	0	0
Equatorial Guinea	1	1	39	1	100.00
Ethiopia	4	4	44	1	25.00
Fiji	1	1	22	0	0
France	35	22	76	0	0
Gambia	1	1	6	0	0
Georgia	110	109	1,063	33	30.00
Germany	172	100	340	2	1.16
Gibraltar (UK)	28	16	54	0	0
Greece	214	108	433	5	2.34
Honduras	2	1	2	0	0

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Hong Kong, China	1,320	783	3,775	26	1.97
India	84	61	362	8	9.52
Indonesia	209	191	1,486	40	19.14
Iran	35	31	192	3	8.57
Isle of Man (UK)	103	47	153	6	5.83
Israel	11	9	50	1	9.09
Italy	100	69	240	3	3.00
Jamaica	6	6	20	0	0
Japan	112	76	316	1	0.89
Jordan	2	2	14	1	50.00
Kiribati	110	103	908	20	18.18
Korea, Democratic People's Republic	93	90	837	20	21.51
Korea, Republic of	1,124	871	4,820	23	2.05
Kuwait	12	7	21	0	0
Lebanon	1	1	9	0	0
Liberia	1,227	733	3,181	50	4.07
Lithuania	1	1	3	1	100.00
Luxemburg	9	4	9	0	0
Malaysia	187	120	630	13	6.95
Maldives	23	18	93	6	26.09
Malta	421	273	1,439	32	7.60
Marshall Islands	557	327	1,516	31	5.57
Mauritania	1	1	5	0	0
Mongolia	210	194	1,409	30	14.29
Myanmar	24	18	57	0	0
Netherlands	129	69	228	3	2.33
Netherlands Antilles	23	11	45	2	8.70
New Zealand	2	2	15	1	50.00
Norway	212	104	439	6	2.83
Pakistan	12	10	54	1	8.33
Panama	7,155	4,718	26,779	458	6.40
Papua New Guinea	16	16	196	2	12.50
Philippines	197	132	657	5	2.54
Poland	1	1	1	0	0
Portugal	2	1	1	1	50.00
Qatar	4	2	10	0	0
Russian Federation	335	268	1,140	11	3.28
Saint Vincent and the Grenadines	288	257	1,755	31	10.76
Samoa	2	2	8	0	0
Saudi Arabia	8	6	19	1	12.50

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Seychelles	4	2	7	0	0
Sierra Leone	83	81	910	25	30.12
Singapore	1,038	587	2,697	30	2.89
Slovakia	3	3	38	1	33.33
Solomon Islands	2	2	15	1	50.00
South Africa	2	1	10	0	0
Spain	3	1	2	0	0
Sri Lanka	3	2	27	0	0
St. Kitts & Nevis	53	49	466	13	24.53
Sweden	25	7	29	0	0
Switzerland	11	5	22	0	0
Syrian Arab Republic	1	1	1	0	0
Taiwan, China	78	55	259	7	8.97
Tanzania	2	2	56	0	0
Thailand	275	207	1,324	26	9.45
Togo	1	1	3	0	0
Tonga	14	9	77	1	7.14
Tunisia	2	1	13	0	0
Turkey	42	28	149	3	7.14
Tuvalu	192	171	1,326	29	15.10
Ukraine	2	2	11	1	50.00
United Arab Emirates (UAE)	6	5	40	0	0
United Kingdom (UK)	143	71	235	1	0.70
United States of America	45	25	82	1	2.22
Vanuatu	82	51	181	0	0
Viet Nam	475	379	2,415	58	12.21
Total	22,149	15,297	89,477	1,530	Regional 6.91

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	54	30	191	4	7.41
Combination carrier	63	43	241	1	1.59
Oil tanker	1,257	697	3,919	53	4.22
Gas carrier	482	238	958	14	2.90
Chemical tanker	1,296	760	3,501	48	3.70
Bulk carrier	5,564	3,584	19,664	339	6.09
Vehicle carrier	752	389	1,487	20	2.66
Container ship	3,246	1,903	7,781	90	2.77
Ro-Ro cargo ship	258	194	1,023	16	6.20
General cargo/multi-purpose ship	7,047	5,937	42,087	790	11.21
Refrigerated cargo carrier	726	551	3,178	73	10.06
Woodchip carrier	230	105	327	4	1.74
Livestock carrier	43	36	235	2	4.65
Ro-Ro passenger ship	96	85	696	7	7.29
Passenger ship	249	159	798	3	1.20
Factory ship	1	1	3	0	0
Heavy load carrier	48	27	115	2	4.17
Offshore service vessel	129	93	509	9	6.98
MODU & FPSO	6	4	28	0	0
High speed passenger craft	52	45	244	0	0
Special purpose ship	59	33	181	1	1.69
High speed cargo craft	1	1	3	0	0
Tugboat	239	196	1,244	35	14.64
Others	251	186	1,064	19	7.57
Total	22,149	15,297	89,477	1,530	6.91

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%
Alfa Register of Shipping	5	0	0	0	0	0
American Bureau of Shipping	1,731	67	7	3.87	0.40	10.45
Belize Maritime Bureau Inc.	125	10	0	8.00	0	0
Belize Register Corporation	2	0	0	0	0	0
Biro Klasifikasi Indonesia	94	25	5	26.60	5.32	20.00
Bureau Securitas	2	0	0	0	0	0
Bureau Veritas	1,728	117	7	6.77	0.41	5.98
Ceskoslovensky Lodin Register	3	0	0	0	0	0
China Classification Society	2,016	31	4	1.54	0.20	12.90
China Corporation Register of Shipping	361	34	9	9.42	2.49	26.47
Croatian Register of Shipping	20	2	0	10.00	0	0
Det Norske Veritas	2,276	87	13	3.82	0.57	14.94
Fidenavis SA	34	1	0	2.94	0	0
Germanischer Lloyd	1,900	79	3	4.16	0.16	3.80
Global Marine Bureau	1,044	188	35	18.01	3.35	18.62
Hellenic Register of Shipping	41	9	1	21.95	2.44	11.11
Honduras Bureau of Shipping	3	0	0	0	0	0
Honduras International Surveying and Inspection Bureau	2	0	0	0	0	0
INCLAMAR (Inspección y Clasificación Marítima, S. de R.L.)	262	41	10	15.65	3.82	24.39
Indian Register of Shipping	88	8	0	9.09	0	0
Intermaritime Certification Services, S.A.	162	27	5	16.67	3.09	18.52
International Merchant Marine Registry of Belize	14	4	0	28.57	0	0
International Naval Surveys Bureau	35	4	1	11.43	2.86	25.00
International Register of Shipping	369	74	17	20.05	4.61	22.97
International Ship Classification	419	67	12	15.99	2.86	17.91
Isthmus Bureau of Shipping	538	78	10	14.50	1.86	12.82
Korea Classification Society (former Joson Classification Society)	94	18	7	19.15	7.45	38.89
Korea Ship Safety Technology Authority	51	3	0	5.88	0	0
Korean Register of Shipping	1,954	81	3	4.15	0.15	3.70
Lloyd's Register	2,502	123	9	4.92	0.36	7.32
Maritime Technical Systems and Services	67	13	2	19.40	2.99	15.38
Mongolia Ship Registry	14	2	0	14.29	0	0
National Cargo Bureau Inc.	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%
National Shipping Adjusters Inc	3	1	1	33.33	33.33	100.00
Nippon Kaiji Kyokai	6,829	281	22	4.11	0.32	7.83
NV Unitas	1	0	0	0	0	0
Overseas Marine Certification Services	108	23	3	21.30	2.78	13.04
Panama Bureau of Shipping	48	1	0	2.08	0	0
Panama Maritime Documentation Services	159	14	1	8.81	0.63	7.14
Panama Maritime Surveyors Bureau Inc	173	37	2	21.39	1.16	5.41
Panama Register Corporation	88	10	2	11.36	2.27	20.00
Panama Shipping Certificate Inc.	3	0	0	0	0	0
Panama Shipping Registrar Inc.	162	34	6	20.99	3.70	17.65
Polski Rejestr Statkow	39	4	1	10.26	2.56	25.00
Register of Shipping (Albania)	1	0	0	0	0	0
Registro Cubano de Buques	1	0	0	0	0	0
Registro Internacional Naval S.A.	8	0	0	0	0	0
Registro Italiano Navale	285	28	0	9.82	0	0
RINAVE Portuguesa	4	0	0	0	0	0
Russian Maritime Register of Shipping	611	41	1	6.71	0.16	2.44
Russian River Register	2	0	0	0	0	0
Societe Generale de Surveillance	1	0	0	0	0	0
Turkish Lloyd	10	2	0	20.00	0	0
Union Bureau of Shipping	747	170	33	22.76	4.42	19.41
Universal Maritime Bureau	255	37	4	14.51	1.57	10.81
Universal Shipping Bureau	73	11	0	15.07	0	0
Viet Nam Register of Shipping	510	65	6	12.75	1.18	9.23
Other	436	75	12	17.20	2.75	16.00

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
Ship's certificates and documents	2,611
Stability, structure and related equipment	6,269
Propulsion and auxiliary machinery	5,185
Alarm signals	490
Fire safety measures	14,796
Oil, chemical tankers and gas carriers	213
Lifesaving appliances	11,491
Radiocommunications	3,527
Safety of navigation	15,438
Carriage of cargo and dangerous goods	537
ISM related deficiencies	3,576
SOLAS related operational deficiencies	4,076
Additional measures to enhance maritime safety	874
Bulk carriers-additional safety measures	310
Load lines	6,877
MARPOL-Annex I	5,505
MARPOL-Annex II	77
MARPOL-Annex III	26
MARPOL-Annex IV	340
MARPOL-Annex V	1,687
MARPOL-Annex VI	358
MARPOL related operational deficiencies	440
AFS Convention	31
Certification and watchkeeping for seafarers	1,817
Crew and accommodation (ILO 147)	413
Food and catering (ILO 147)	167
Working spaces (ILO 147)	756
Accident prevention (ILO 147)	746
Mooring arrangements (ILO 147)	747
Other deficiencies	97
Total	89,477
Maritime security related deficiencies	2,318
Grand total	91,795

SUMMARY OF PORT STATE INSPECTION DATA 2006 – 2008

Table 7: BLACK – GREY – WHITE LISTS *

Flag	Inspections 2006-2008	Detentions 2006-2008	Black to Grey Limit	Grey to White Limit	Excess Factor
BLACK LIST					
Georgia	270	84	26		7.50
Sierra Leone	157	49	17		7.06
Kiribati	147	35	16		4.75
St. Kitts & Nevis	74	19	9		4.57
Indonesia	634	123	55		4.29
Cambodia	4,797	808	365		3.99
Mongolia	598	104	53		3.64
Korea, Democratic People's Republic	523	90	47		3.53
Tuvalu	605	102	53		3.48
Maldives	40	8	6		2.24
Viet Nam	1,156	126	96		1.82
Belize	1,730	183	139		1.80
Thailand	898	83	76		1.24
GREY LIST					
Saint Vincent and the Grenadines	927	73	78	52	0.81
Taiwan, China	256	22	25	11	0.78
Dominica	124	11	14	4	0.72
Turkey	136	11	15	4	0.64
Papua New Guinea	49	4	7	0	0.58
Israel	57	4	8	0	0.50
Malaysia	622	42	55	33	0.43
Barbados	36	2	6	0	0.41
Pakistan	37	2	6	0	0.40
Egypt	38	2	6	0	0.39
Tonga	43	2	6	0	0.34
Myanmar	94	5	11	2	0.33
India	282	16	27	12	0.25
Belgium	72	3	9	1	0.25
Netherlands Antilles	96	4	11	2	0.21
Croatia	62	2	8	1	0.19
Iran	130	5	14	4	0.11
Gibraltar (UK)	82	2	10	1	0.07
WHITE LIST					
Kuwait	33	0		0	0
Switzerland	45	0		0	0

Flag	Inspections 2006-2008	Detentions 2006-2008	Black to Grey Limit	Grey to White Limit	Excess Factor
Cayman Islands (UK)	226	9		9	0
Italy	279	12		12	0
Malta	1,302	74		75	-0.04
Sweden	80	1		1	-0.23
Cyprus	1,462	67		86	-0.47
Panama	20,694	1,088		1388	-0.49
Antigua and Barbuda	1,045	45		59	-0.50
Philippines	599	22		31	-0.59
Greece	721	27		39	-0.62
Isle of Man (UK)	359	11		17	-0.64
Marshall Islands	1,554	55		92	-0.86
Russian Federation	1,156	39		66	-0.87
Netherlands	385	9		18	-0.96
Liberia	3,655	113		230	-1.13
Norway	661	15		35	-1.17
United States of America	153	1		5	-1.24
Germany	602	12		31	-1.26
Bahamas	1,827	46		109	-1.27
Japan	349	5		16	-1.32
Singapore	2,852	69		177	-1.35
Vanuatu	224	2		9	-1.38
France	122	0		3	-1.43
Bermuda (UK)	138	0		4	-1.54
Korea, Republic of	3,194	57		199	-1.60
Denmark	331	2		15	-1.69
United Kingdom (UK)	511	4		26	-1.74
Hong Kong, China	3,835	54		242	-1.75
China	2,297	23		140	-1.86

- 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 47.

$p=7\%$

$Z_{95\%}=1.645$

$q=3\%$

Table 8: INSPECTIONS AND DETENTIONS PER FLAG

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2006	2007	2008	Total	2006	2007	2008	Total	
Afghanistan	0	0	1	1	0	0	0	0	0
Algeria	0	0	2	2	0	0	0	0	0
Antigua and Barbuda	347	331	367	1,045	13	9	23	45	4.31
Argentina	0	2	3	5	0	0	2	2	40.00
Australia	11	8	4	23	0	0	0	0	0
Austria	3	3	0	6	1	0	0	1	16.67
Bahamas	673	621	533	1,827	16	14	16	46	2.52
Bahrain	3	2	2	7	0	0	0	0	0
Bangladesh	7	2	8	17	1	0	1	2	11.76
Barbados	9	12	15	36	0	1	1	2	5.56
Belgium	26	24	22	72	0	2	1	3	4.17
Belize	664	618	448	1,730	76	58	49	183	10.58
Bermuda (UK)	49	42	47	138	0	0	0	0	0
Bolivia	5	4	3	12	1	1	1	3	25.00
Brazil	0	6	2	8	0	0	1	1	12.50
Brunei Darussalam	3	3	3	9	0	0	0	0	0
Bulgaria	4	2	2	8	0	0	0	0	0
Cambodia	1,332	1,710	1,755	4,797	215	269	324	808	16.84
Canada	0	0	2	2	0	0	1	1	50.00
Cayman Islands (UK)	80	65	81	226	6	3	0	9	3.98
Chile	3	1	1	5	0	0	0	0	0
China	804	798	695	2,297	6	7	10	23	1.00
Colombia	0	1	0	1	0	0	0	0	0
Comoros	14	9	6	29	4	0	1	5	17.24
Cook Islands	2	11	8	21	0	0	1	1	4.76
Croatia	22	22	18	62	0	1	1	2	3.23
Cyprus	548	477	437	1,462	34	15	18	67	4.58
Denmark	119	104	108	331	0	0	2	2	0.60
Dominica	44	41	39	124	3	7	1	11	8.87
Ecuador	0	0	5	5	0	0	0	0	0
Egypt	19	10	9	38	1	1	0	2	5.26
Equatorial Guinea	0	0	1	1	0	0	1	1	100.00
Ethiopia	3	7	4	14	0	0	1	1	7.14
Fiji	1	1	1	3	1	0	0	1	33.33
Finland	0	2	0	2	0	0	0	0	0

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2006	2007	2008	Total	2006	2007	2008	Total	
France	49	38	35	122	0	0	0	0	0
Gambia	0	0	1	1	0	0	0	0	0
Georgia	64	96	110	270	21	30	33	84	31.11
Germany	229	201	172	602	8	2	2	12	1.99
Gibraltar (UK)	24	30	28	82	0	2	0	2	2.44
Greece	291	216	214	721	17	5	5	27	3.74
Honduras	5	12	2	19	3	7	0	10	52.63
Hong Kong, China	1,213	1,302	1,320	3,835	12	16	26	54	1.41
India	103	95	84	282	6	2	8	16	5.67
Indonesia	196	229	209	634	43	40	40	123	19.40
Iran	58	37	35	130	1	1	3	5	3.85
Isle of Man (UK)	148	108	103	359	4	1	6	11	3.06
Israel	25	21	11	57	2	1	1	4	7.02
Italy	93	86	100	279	3	6	3	12	4.30
Jamaica	2	2	6	10	0	0	0	0	0
Japan	126	111	112	349	2	2	1	5	1.43
Jordan	2	1	2	5	1	0	1	2	40.00
Kiribati	3	34	110	147	0	15	20	35	23.81
Korea, Democratic People's Republic	299	131	93	523	41	29	20	90	17.21
Korea, Republic of	1,007	1,063	1,124	3,194	17	17	23	57	1.78
Kuwait	12	9	12	33	0	0	0	0	0
Latvia	1	0	0	1	0	0	0	0	0
Lebanon	1	1	1	3	0	0	0	0	0
Liberia	1,171	1,257	1,227	3,655	35	28	50	113	3.09
Lithuania	1	1	1	3	0	0	1	1	33.33
Luxemburg	12	6	9	27	0	0	0	0	0
Malaysia	240	195	187	622	18	11	13	42	6.75
Maldives	11	6	23	40	2	0	6	8	20.00
Malta	459	422	421	1,302	21	21	32	74	5.68
Marshall Islands	490	507	557	1,554	13	11	31	55	3.54
Mauritania	0	0	1	1	0	0	0	0	0
Mauritius	2	0	0	2	0	0	0	0	0
Mexico	0	1	0	1	0	0	0	0	0
Mongolia	162	226	210	598	24	50	30	104	17.39
Morocco	0	1	0	1	0	0	0	0	0
Myanmar	36	34	24	94	3	2	0	5	5.32

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2006	2007	2008	Total	2006	2007	2008	Total	
Netherlands	122	134	129	385	1	5	3	9	2.34
Netherlands Antilles	42	31	23	96	1	1	2	4	4.17
New Zealand	5	5	2	12	0	0	1	1	8.33
Norway	215	234	212	661	6	3	6	15	2.27
Pakistan	13	12	12	37	1	0	1	2	5.41
Panama	6,609	6,930	7,155	20,694	302	328	458	1,088	5.26
Papua New Guinea	18	15	16	49	1	1	2	4	8.16
Philippines	207	195	197	599	11	6	5	22	3.67
Poland	1	0	1	2	0	0	0	0	0
Portugal	6	2	2	10	0	0	1	1	10.00
Qatar	3	6	4	13	0	0	0	0	0
Romania	1	0	0	1	0	0	0	0	0
Russian Federation	450	371	335	1,156	11	17	11	39	3.37
Saint Vincent and the Grenadines	336	303	288	927	22	20	31	73	7.87
Samoa	3	2	2	7	0	1	0	1	14.29
Saudi Arabia	5	6	8	19	0	0	1	1	5.26
Seychelles	1	3	4	8	0	1	0	1	12.50
Sierra Leone	22	52	83	157	2	22	25	49	31.21
Singapore	883	931	1,038	2,852	17	22	30	69	2.42
Slovakia	4	8	3	15	2	2	1	5	33.33
Solomon Islands	0	0	2	2	0	0	1	1	50.00
South Africa	0	2	2	4	0	0	0	0	0
Spain	4	2	3	9	0	0	0	0	0
Sri Lanka	1	0	3	4	1	0	0	1	25.00
St. Kitts & Nevis	6	15	53	74	2	4	13	19	25.68
Sweden	30	25	25	80	1	0	0	1	1.25
Switzerland	18	16	11	45	0	0	0	0	0
Syrian Arab Republic	0	0	1	1	0	0	0	0	0
Taiwan, China	97	81	78	256	9	6	7	22	8.59
Tanzania	2	1	2	5	0	0	0	0	0
Thailand	316	307	275	898	30	27	26	83	9.24
Togo	0	0	1	1	0	0	0	0	0
Tonga	14	15	14	43	0	1	1	2	4.65
Trinidad and Tobago	0	1	0	1	0	0	0	0	0
Tunisia	2	0	2	4	0	0	0	0	0
Turkey	59	35	42	136	7	1	3	11	8.09

Flag	Number of inspections				Number of detentions				3-year rolling average detention %
	2006	2007	2008	Total	2006	2007	2008	Total	
Tuvalu	192	221	192	605	24	49	29	102	16.86
Ukraine	4	9	2	15	0	2	1	3	20.00
United Arab Emirates (UAE)	7	4	6	17	2	0	0	2	11.76
United Kingdom (UK)	185	183	143	511	1	2	1	4	0.78
United States of America	62	46	45	153	0	0	1	1	0.65
Vanuatu	78	64	82	224	0	2	0	2	0.89
Viet Nam	331	350	475	1,156	40	28	58	126	10.90
Ship's registration withdrawn	2	4	0	6	2	0	0	2	33.33
Total	21,686	22,039	22,149	65,874	1,171	1,238	1,530	3,939	5.98

Figure 14: COMPARISON OF INSPECTIONS PER SHIP TYPE

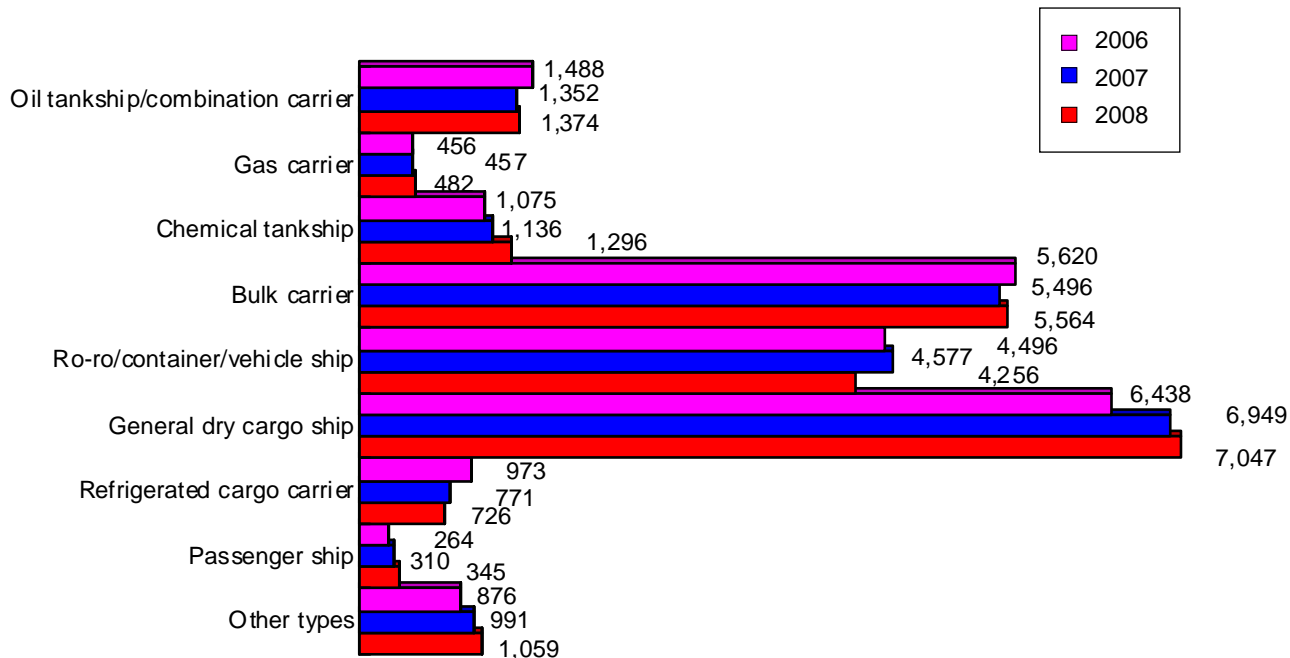


Figure 15: COMPARISON OF DETENTIONS PER SHIP TYPE

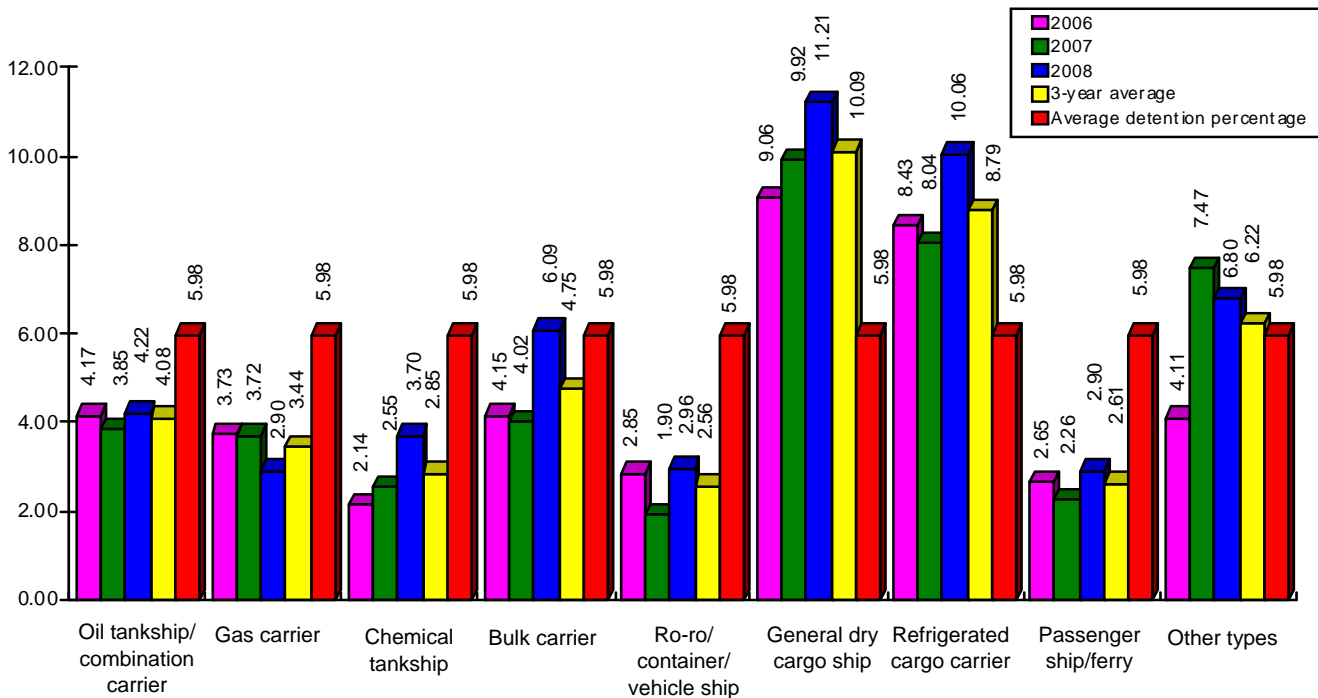
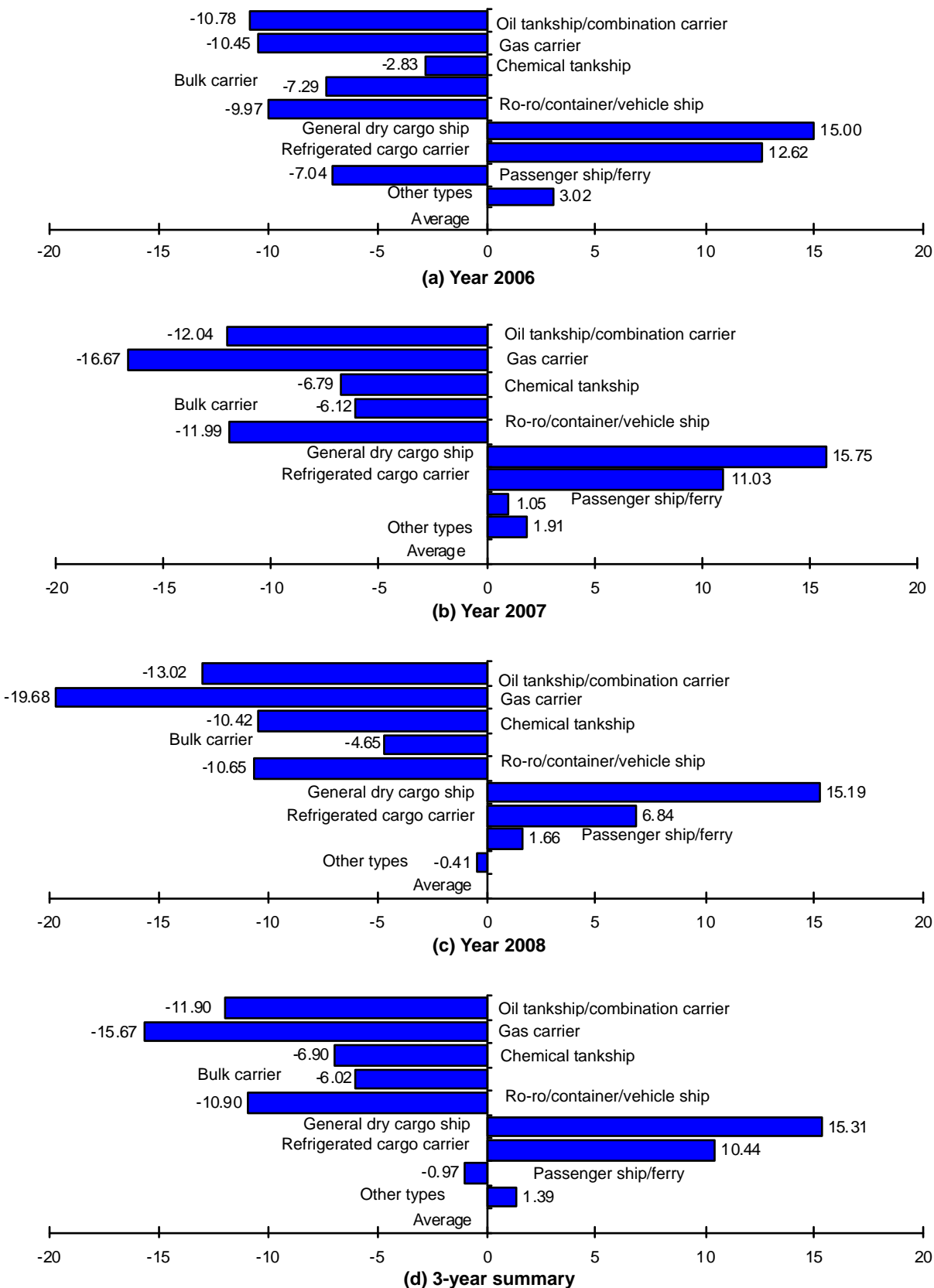


Table 9: INSPECTIONS AND DETENTIONS PER SHIP TYPE

Type of ship	Number of inspections				Number of detentions				Average detention percentage %
	2006	2007	2008	Total	2006	2007	2008	Total	
NLS tanker	43	60	54	157	3	1	4	8	5.10
Combination carrier	53	44	63	160	0	1	1	2	1.25
Oil tanker	1,392	1,248	1,257	3,897	59	50	53	162	4.16
Gas carrier	456	457	482	1,395	17	17	14	48	3.44
Chemical tanker	1,075	1,136	1,296	3,507	23	29	48	100	2.85
Bulk carrier	5,620	5,496	5,564	16,680	233	221	339	793	4.75
Vehicle carrier	658	729	752	2,139	17	17	20	54	2.52
Container ship	3,598	3,582	3,246	10,426	100	58	90	248	2.38
Ro-Ro cargo ship	240	266	258	764	11	12	16	39	5.10
General cargo/multi-purpose ship	6,438	6,949	7,047	20,434	583	689	790	2,062	10.09
Refrigerated cargo carrier	973	771	726	2,470	82	62	73	217	8.79
Woodchip carrier	224	217	230	671	4	3	4	11	1.64
Livestock carrier	43	41	43	127	2	4	2	8	6.30
Ro-Ro Passenger ship	70	76	96	242	3	1	7	11	4.55
Passenger ship	194	234	249	677	4	6	3	13	1.92
Factory ship	0	1	1	2	0	0	0	0	0
Heavy load carrier	54	52	48	154	1	3	2	6	3.90
Offshore service vessel	78	94	129	301	1	4	9	14	4.65
MODU & FPSO	7	7	6	20	0	0	0	0	0
High speed passenger craft	39	46	52	137	0	0	0	0	0
Special purpose ship	39	62	59	160	1	5	1	7	4.38
High speed cargo craft	1	2	1	4	0	1	0	1	25.00
Tugboat	179	225	239	643	10	40	35	85	13.22
Others	212	244	251	707	17	14	19	50	7.07
Total	21,686	22,039	22,149	65,874	1,171	1,238	1,530	3,939	5.98

Figure 16: COMPARISON OF INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE



* % 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 %
	2006	2007	2008	Total	2006	2007	2008	Total	
Oil tankship/combination carrier	1,488	1,352	1,374	4,214	863	749	770	2,382	56.53
Gas carrier	456	457	482	1,395	266	232	238	736	52.76
Chemical tankship	1,075	1,136	1,296	3,507	709	689	760	2,158	61.53
Bulk carrier	5,620	5,496	5,564	16,680	3,456	3,370	3,584	10,410	62.41
Ro-ro/container/vehicle ship	4,496	4,577	4,256	13,329	2,644	2,538	2,486	7,668	57.53
General dry cargo ship	6,438	6,949	7,047	20,434	5,394	5,781	5,937	17,112	83.74
Refrigerated cargo carrier	973	771	726	2,470	792	605	551	1,948	78.87
Passenger ship	264	310	345	919	163	213	244	620	67.46
Other types	876	991	1,059	2,926	629	687	727	2,043	69.82
Total	21,686	22,039	22,149	65,874	14,916	14,864	15,297	45,077	68.43

Table 11: INSPECTIONS AND DETENTIONS PER RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2006-2008	No. of overall detentions 2006-2008	No. of RO responsible detentions 2006-2008	3-year average detention percentage%	3-year average RO responsible detention percentage%	3-year average percentage of RO responsible detentions%
Alfa Register of Shipping	12	0	0	0	0	0
American Bureau of Shipping	5,324	162	12	3.04	0.23	7.41
Belize Maritime Bureau Inc.	653	69	11	10.57	1.68	15.94
Belize Register Corporation	10	1	0	10.00	0	0
Biro Klasifikasi Indonesia	346	87	10	25.14	2.89	11.49
Bulgarski Koraben Registar	4	1	0	25.00	0	0
Bureau Securitas	7	0	0	0	0	0
Bureau Veritas	5,170	266	21	5.15	0.41	7.89
Ceskoslovensky Lodin Register	7	0	0	0	0	0
China Classification Society	6,256	102	10	1.63	0.16	9.80
China Corporation Register of Shipping	1,159	121	19	10.44	1.64	15.70
Compania Nacional de Registro e Inspeccion de Naves	7	6	3	85.71	42.86	50.00
Croatian Register of Shipping	82	3	0	3.66	0	0
Cyprus Bureau of Shipping	8	0	0	0	0	0
Det Norske Veritas	7,048	234	27	3.32	0.38	11.54
Fidenavis SA	58	1	0	1.72	0	0
Germanischer Lloyd	6,022	207	14	3.44	0.23	6.76
Global Marine Bureau	3,193	538	85	16.85	2.66	15.80
Hellenic Register of Shipping	101	18	1	17.82	0.99	5.56
Honduras Bureau of Shipping	9	1	0	11.11	0	0
Honduras International Surveying and Inspection Bureau	10	3	2	30.00	20.00	66.67
INCLAMAR (Inspection y Classification Maritime, S. de. R.L.)	706	126	34	17.85	4.82	26.98
Indian Register of Shipping	290	19	1	6.55	0.34	5.26
Intermaritime Certification Services, S.A.	178	31	5	17.42	2.81	16.13
International Merchant Marine Registry of Belize	85	12	1	14.12	1.18	8.33
International Naval Surveys Bureau	109	18	2	16.51	1.83	11.11
International Register of Shipping	815	129	22	15.83	2.70	17.05
International Ship Classification	924	174	41	18.83	4.44	23.56
Isthmus Bureau of Shipping	1,721	215	28	12.49	1.63	13.02
Korea Classification Society (former Joson Classification Society)	548	89	27	16.24	4.93	30.34
Korea Ship Safety Technology Authority	54	4	1	7.41	1.85	25.00
Korean Register of Shipping	5,730	176	12	3.07	0.21	6.82
Lloyd's Register	7,732	303	28	3.92	0.36	9.24
Marconi International Marine Company Ltd.	1	0	0	0	0	0
Maritime Technical Systems and Services	291	45	12	15.46	4.12	26.67
Mongolia Ship Registry	61	15	4	24.59	6.56	26.67
National Cargo Bureau Inc.	7	1	0	14.29	0	0
National Shipping Adjusters Inc	7	1	1	14.29	14.29	100.00
Nippon Kaiji Kyokai	20,647	688	61	3.33	0.30	8.87
NV Unitas	2	0	0	0	0	0
Overseas Marine Certification Services	197	37	3	18.78	1.52	8.11
Panama Bureau of Shipping	252	11	1	4.37	0.40	9.09
Panama Maritime Documentation Services	575	74	7	12.87	1.22	9.46

Recognized organization (RO)	No. of overall inspections 2006-2008	No. of overall detentions 2006-2008	No. of RO responsible detentions 2006-2008	3-year average detention percentage	3-year average RO responsible detention percentage	3-year average percentage of RO responsible detentions%
Panama Maritime Surveyors Bureau Inc	503	90	10	17.89	1.99	11.11
Panama Register Corporation	326	33	3	10.12	0.92	9.09
Panama Shipping Certificate Inc.	11	1	0	9.09	0	0
Panama Shipping Registrar Inc.	466	97	17	20.82	3.65	17.53
Polski Rejestr Statkow	99	8	1	8.08	1.01	12.50
R.J. Del Pan	2	0	0	0	0	0
Register of Shipping (Albania)	2	0	0	0	0	0
Registro Cubano de Buques	2	0	0	0	0	0
Registro Internacional Naval S.A.	33	0	0	0	0	0
Registro Italiano Navale	820	63	5	7.68	0.61	7.94
Regjistri Laknori Shqiptar	3	1	0	33.33	0	0
RINAVE Portuguesa	10	0	0	0	0	0
Russian Maritime Register of Shipping	2,070	117	4	5.65	0.19	3.42
Russian River Register	5	0	0	0	0	0
Shipping Register of Ukraine	4	0	0	0	0	0
Sociedad Clasificadora de Colombia	2	0	0	0	0	0
Societe Generale de Surveillance	1	0	0	0	0	0
Turkish Lloyd	18	3	1	16.67	5.56	33.33
Union Bureau of Shipping	1,462	297	60	20.31	4.10	20.20
Universal Maritime Bureau	561	76	15	13.55	2.67	19.74
Universal Shipping Bureau	81	12	0	14.81	0	0
Viet Nam Register of Shipping	1,222	145	26	11.87	2.13	17.93
Other	2,172	344	73	15.84	3.36	21.22

See also the note in page 28.

Table 12: PERFORMANCE OF RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2006-2008	No. of RO responsible detentions 2006-2008	Low/medium Limit	Medium/high Limit	Excess factor	Performance level
INCLAMAR (Inspection y Classification Maritime, S. de. R.L.)	706	34	21	8	2.60	Very low
Korea Classification Society (former Joson Classification Society)	548	27	17	5	2.54	
International Ship Classification	924	41	26	11	2.40	
Union Bureau of Shipping	1,462	60	39	20	2.30	
Mongolia Ship Registry	61	4	4	0	1.48	Low
Maritime Technical Systems and Services	291	12	10	1	1.46	
Panama Shipping Registrar Inc.	466	17	15	4	1.38	
Global Marine Bureau	3,193	85	77	50	1.22	
International Register of Shipping	815	22	23	9	0.90	Medium
Biro Klasifikasi Indonesia	346	10	12	2	0.82	
Universal Maritime Bureau	561	15	17	5	0.82	
Intermaritime Certification Services, S.A.	178	5	7	0	0.70	
Viet Nam Register of Shipping	1,222	26	33	16	0.59	
Panama Maritime Surveyors Bureau Inc	503	10	16	4	0.49	
International Naval Surveys Bureau	109	2	5	0	0.47	
Overseas Marine Certification Services	197	3	8	0	0.37	
International Merchant Marine Registry of Belize	85	1	4	0	0.37	
Belize Maritime Bureau Inc.	653	11	19	7	0.34	
Polski Rejestr Statkow	99	1	5	0	0.32	
Hellenic Register of Shipping	101	1	5	0	0.32	
China Corporation Register of Shipping	1,159	19	32	15	0.25	
Isthmus Bureau of Shipping	1,721	28	44	24	0.18	
Panama Maritime Documentation Services	575	7	18	5	0.13	
Panama Register Corporation	326	3	11	2	0.12	
Panama Bureau of Shipping	253	1	9	1	0.01	
Indian Register of Shipping	290	1	10	1	-0.21	High
Registro Italiano Navale	820	5	23	9	-0.68	
Bureau Veritas	5,170	21	120	86	-1.46	
Det Norske Veritas	7,048	27	161	121	-1.52	

Recognized organization (RO)	No. of overall inspections 2006-2008	No. of RO responsible detentions 2006-2008	Low/medium Limit	Medium/high Limit	Excess factor	Performance level
Lloyd's Register	7,732	28	175	134	-1.55	
Russian Maritime Register of Shipping	2,070	4	52	30	-1.66	
Nippon Kaiji Kyokai	20,647	61	447	379	-1.66	
Germanischer Lloyd	6,022	14	139	102	-1.69	
American Bureau of Shipping	5,324	12	124	89	-1.70	
Korean Register of Shipping	5,730	12	133	97	-1.72	
China Classification Society	6,256	10	144	106	-1.79	

- 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

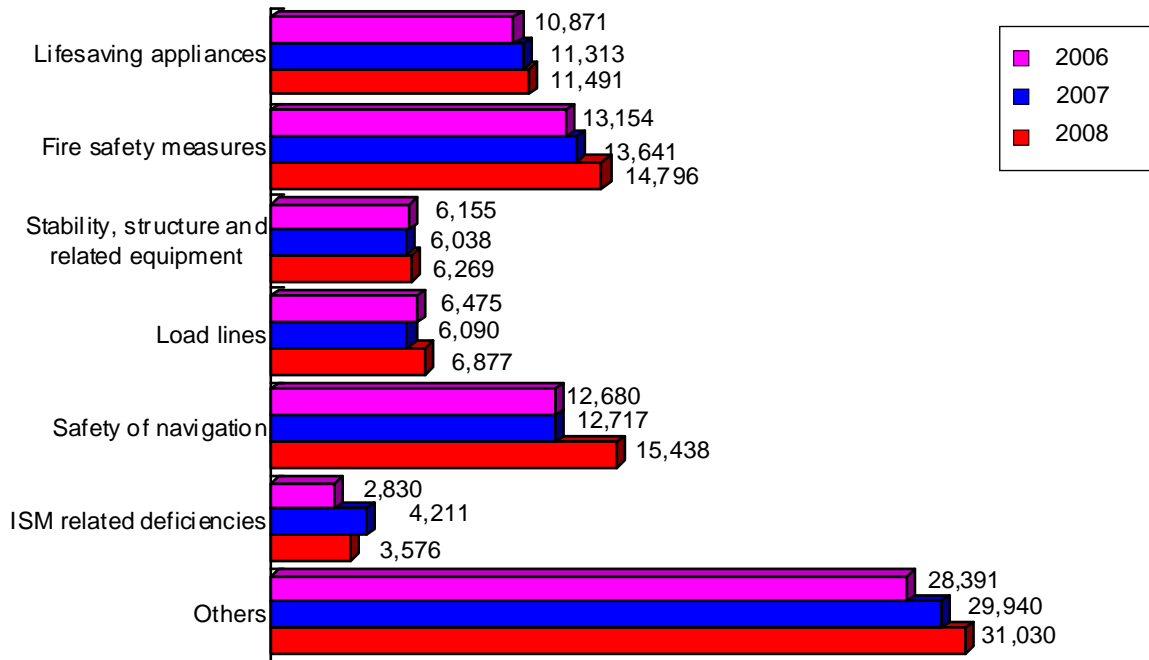
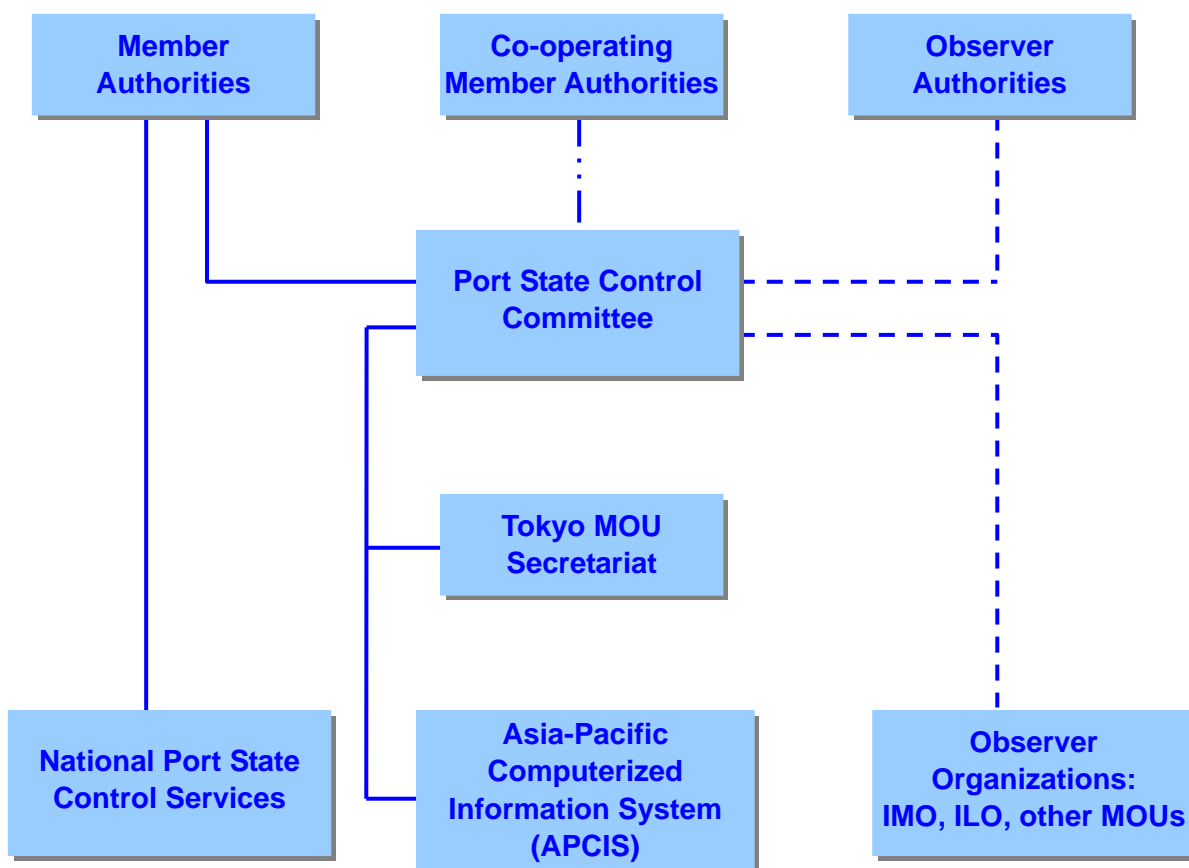


Table 13: COMPARISON OF DEFICIENCIES BY CATEGORIES

Nature of deficiency	Number of deficiencies		
	2006	2007	2008
Ship's certificates and documents	2,700	2,892	2,611
Stability, structure and related equipment	6,155	6,038	6,269
Propulsion and auxiliary machinery	3,801	4,428	5,185
Alarm signals	358	418	490
Fire safety measures	13,154	13,641	14,796
Oil, chemical tankers and gas carriers	236	264	213
Lifesaving appliances	10,871	11,313	11,491
Radiocommunications	3,066	3,213	3,527
Safety of navigation	12,680	12,717	15,438
Carriage of cargo and dangerous goods	555	575	537
ISM related deficiencies	2,830	4,211	3,576
SOLAS related operational deficiencies	3,186	3,805	4,076
Additional measures to enhance maritime safety	819	969	874
Bulk carriers-additional safety measures	319	311	310
Load lines	6,475	6,090	6,877
MARPOL-Annex I	5,423	5,657	5,505
MARPOL-Annex II	48	98	77
MARPOL-Annex III	13	21	26
MARPOL-Annex IV	136	118	340
MARPOL-Annex V	1,931	1,825	1,687
MARPOL-Annex VI	383	373	358
MARPOL related operational deficiencies	379	442	440
AFS Convention	-	-	31
Certification and watchkeeping for seafarers	2,237	2,175	1,817
Crew and accommodation (ILO 147)	417	319	413
Food and catering (ILO 147)	220	137	167
Working spaces (ILO 147)	731	581	756
Accident prevention (ILO 147)	636	586	746
Mooring arrangements (ILO 147)	709	653	747
Other deficiencies	88	80	97
Total	80,556	83,950	89,477
Maritime security related deficiencies	1,835	1,532	2,318
Grand total	82,391	85,482	91,795

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:

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

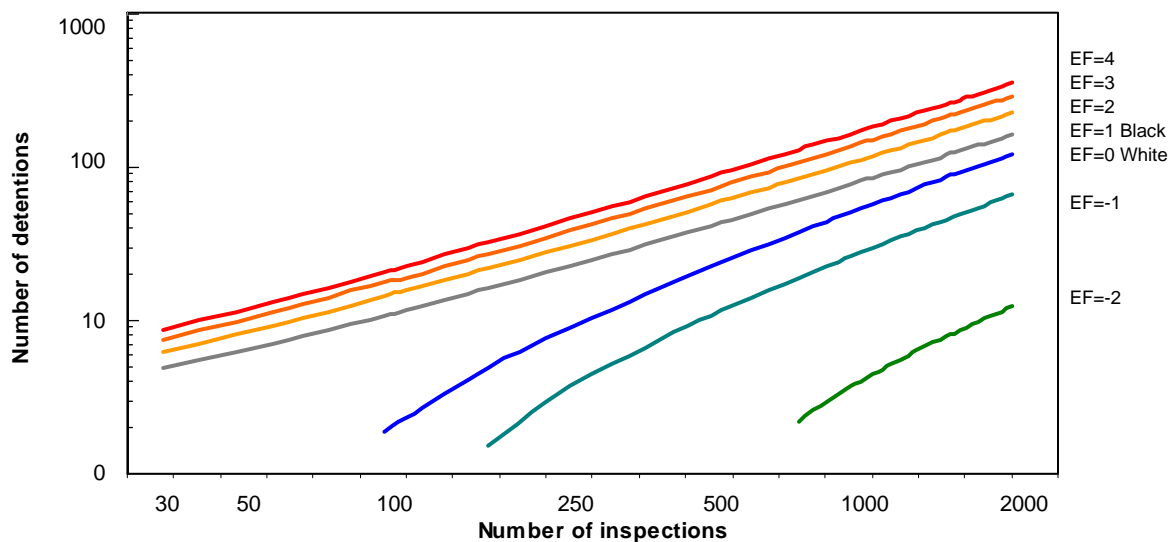
$$U_{white - to - grey} = N \cdot p - 0.5 - z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

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 Georgia were subject to 270 inspections of which 84 resulted in a detention. The "black to grey limit" is 26 detentions. The excess factor is 7.50.

N = total inspections

P = 7%

Q = 3%

Z = 1.645

How to determine the black to grey limit:

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

$$u_{black-to-grey} = 270 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{270 \cdot 0.07 \cdot 0.93}$$

$$u = 26$$

The excess factor is 7.50. 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 6.50, and the outcome has to be added to the normal value for 'p':

$$p + 6.50q = 0.07 + (6.50 \cdot 0.03) = 0.265$$

$$u_{excessfactor} = 270 \cdot 0.265 + 0.5 + 1.645 \cdot \sqrt{270 \cdot 0.265 \cdot 0.735}$$

$$u_{excessfactor} = 84$$

Example flag on Grey list:

Ships of Saint Vincent and the Grenadines were subject to 927 inspections, of which 73 resulted in a detention. The "black to grey limit" is 78 and the "grey to white limit" is 52. The excess factor is 0.81.

How to determine the black to grey limit:

$$u_{black-to-grey} = 927 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{927 \cdot 0.07 \cdot 0.93}$$

$$u_{black-to-grey} = 78$$

How to determine the grey to white limit:

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

$$u_{white-to-grey} = 927 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{927 \cdot 0.07 \cdot 0.93}$$

$$u_{white-to-grey} = 52$$

To determine the excess factor the following formula is used:

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

$$ef = (73 - 51.61) / (78.17 - 51.61)$$

$$ef = 0.81$$

Example flag on White list:

Ships of Germany were subject to 602 inspections of which 12 resulted in detention. The "grey to white limit" is 31 detentions. The excess factor is -1.26.

How to determine the grey to white limit:

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

$$u_{\text{white-to-grey}} = 602 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{602 \cdot 0.07 \cdot 0.93}$$

$$u_{\text{white-to-grey}} = 31$$

The excess factor is -1.26. 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 -1.26, and the outcome has to be added to the normal value for 'p':

$$p + (-1.26q) = 0.07 + (-1.26 \cdot 0.03) = 0.0322$$

$$u_{\text{excessfactor}} = 602 \cdot 0.0322 - 0.5 - 1.645 \cdot \sqrt{602 \cdot 0.0322 \cdot 0.9678}$$

$$u_{\text{excessfactor}} = 12$$

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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