### **ANNUAL REPORT**

## ON PORT STATE CONTROL IN THE ASIA-PACIFIC REGION

2005



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As of 3 June 2006, the Secretariat office will be moved to: 6-19-19 Shimbashi, Minato-ku, Tokyo, Japan 105-0004. Phone and fax numbers and e-mail address will remain unchanged.

### **FOREWORD**

We are pleased to present the Annual Report on Port State Control in the Asia-Pacific Region 2005.

Tokyo MOU, as one of the most active regional port State control regimes, continues to make unremitting efforts and take rigorous measures to enhance and improve PSC activities in the region. It is encouraging that number of detentions and detention percentage has continuously declined since 2003. Such a trend can be seen as the positive outcome of effective enforcement of port State control measures taken by the Tokyo MOU and as the good indication of improvement of condition of ships operating in the region.

This annual report highlights activities and developments of port State control in the Asia-Pacific region during the year for review. As usual, the report also provides tables and figures of statistics and analysis summarizing the results of port State inspections conducted by member Authorities in 2005.

For ensuring maritime safety, security and protection of the marine environment, it is very important that all parties involved in the shipping industry effectively carry out their responsibilities, improve their performance and fulfill their obligations for complying with all relevant and applicable international standards. Tokyo MOU will further improve and harmonize PSC activities in the region and continue to co-operate with parties concerned so as to eradicate operation of substandard ships in the region.

Young-sun Park
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 eleventh issue and covers port State control activities and developments in the year 2005.

The Memorandum was concluded in Tokyo on 1 December 1993 and has been signed by the following 18 maritime Authorities in the Asia-Pacific region: Australia, Canada, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, Philippines, Russian Federation, Singapore, Solomon Islands. Vietnam. Thailand. Vanuatu and The Memorandum came into effect on 1 April 1994.

In accordance with the provisions of the Memorandum, the Authorities which have signed formally accepted and the Memorandum or which have been accepted with unanimous consent of the Port State Control Committee would become 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, Philippines, 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; and
- the Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147).

### **REVIEW OF YEAR 2005**

Continuous development and achievement of port State control activities in the Asia-Pacific region demonstrated dedicated efforts and endeavours made by the eighteen member Authorities of the Tokyo MOU for elimination of operation of substandard ships in the region.

Tokyo MOU had taken a series of measures and initiatives to enhance and harmonize its activities further; encouraging and promoting better performance of members; reviewing and improving technical co-operation programmes; analyzing PSC inspection data statistics; and implementing and targeting system. monitoring ship These measures would enable the Tokyo MOU to keep in a good position and to maintain continuous development and achievement.

For inter-regional co-operation on port State control, Tokyo MOU had established good relationship with other MOUs, in particular the Paris MOU. Several concentrated inspection campaigns (CIC) have been conducted simultaneously, and both MOUs worked closely to follow up the issues identified at the joint Ministerial Conference on PSC of the Paris and Tokyo Memoranda that had been twice convened to 2005. Such up the Paris collaboration with MOU has benefited and promoted PSC activities of the two regions and set out good example to other regions.

The Tokyo MOU web-site, as the instant medium, provides general information on its activities and PSC inspection data on the Internet. As from 2003, PSC inspection database was made available on the Tokyo MOU web-site, which publishes results of PSC inspections conducted by the members on a real time basis. With this facility, flag States, recognized organizations (ROs), shipping companies and other interested parties can monitor performance of specific fleet or specific ships. In addition to PSC database, the latest text of the Memorandum, the Annual

Report, press releases and monthly detention lists are available on the web-site for view and downloading. Number of visitors to the Tokyo MOU web-site has been increasing continuously. The Tokyo MOU web-site can be found at www.tokyo-mou.org.

Tokyo MOU undertook а concentrated inspection campaign (CIC) on operational requirements from September to November 2005. The campaign targeted aspects of maintenance and operation of shipboard equipment and compliance of safety and pollution prevention procedures as required under SOLAS and MARPOL conventions. During the CIC period, a total of 5,040 inspections, involving 4,599 individual ships, were carried out by the member Authorities. There were 144 detentions made as result of serious operational deficiencies found. It have detected during the campaign that 8.1% of ships inspected lacked adequate maintenance or test of life saving appliances, 7.3% of ships failed to keep life saving equipment available for immediate use, 6.6% of ships did not implement effectively maintenance plan for fire protection system and the passage plans on 7.8% of ships inspected were found not satisfactory. Though the general outcome of the CIC is contented, continuous attention needs to be paid to the insufficient maintenance of life saving equipment and of fire protection system, which are the root causes of many detainable hardware deficiencies.

### THE PORT STATE CONTROL COMMITTEE

The fifteenth meeting of the Port State Control Committee was held from 7 to 10 November 2005 in Bangkok, Thailand. The meeting was hosted by the Marine Department of Thailand. The meeting was attended by representatives of the member Authorities of Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, the Russian Federation, Singapore, Vanuatu and Viet Nam, and observers from DPR Korea, Macao (China), the United States Coast Guard, IMO, and the Secretariats of Black Sea MOU, Indian Ocean MOU, Paris MOU and the Viña del Mar Agreement.

Since the chairman of the Committee elected at the previous meeting, Mr. Lim Ki-tack of Republic of Korea, resigned in June 2005, the Committee unanimously elected Mr. Park Young-sun, Director of Maritime Technology Division, Maritime Safety Management Bureau, Ministry of Maritime Affairs and Fisheries of Republic of Korea, as the new chairman who would take chair of the current and the next two meetings. The Committee expressed appreciation to Mr. Lim for his dedicated work done during the period of office.

The Committee considered the list of follow-up actions on matters emanating from the Ministerial Declaration "Strengthening the Circle of Responsibility" adopted at the Second Joint **Paris** MOU/Tokyo MOU Ministerial Conference on Port State Control, held on 2-3 November 2004 in Vancouver, Canada. The Committee decided to review the list during forthcoming meetings and monitor progress made thereon so as to give full effect to the matters determined by the Ministers.

The Committee noted publication of the revised Port State Control Manual. For the purpose of maintaining factual data and technical information contained in the Manual to be up-to-date and of simplifying amendment process, the Committee



The fifteenth Committee meeting, Bangkok, November 2005.

considered and approved the arrangement for periodical update/revision and the adjustment to the procedures for amendments of the Manual.

The Committee decided to embark the CIC on MARPOL Annex I during period of February – April 2006 concurrently with the Paris MOU. In response to the proposal by the Paris MOU, the Committee agreed to undertake a concentrated inspection campaign (CIC) on the ISM Code in 2007, jointly with the Paris MOU and the US Coast Guard. Further, the Committee also discussed possible subjects for CICs in 2008 and thereafter.

For the purpose of enhancement and improvement of port State control activities in the region, the Committee assigned an intersessional working group to analyze the statistics in order to identify areas of importance and trends of PSC for making recommendations for its consideration and decision. The group would study and analyze the statistics during intersessional period and provide findings and conclusions to the

forthcoming session of the Committee.

Taking into consideration that necessary modifications would be required to cope with the change of situation and to further enhance technical co-operation activities in the the Committee region, reviewed existing technical co-operation programmes and the revised approved integrated strategic plan for training and exchange of PSC officers to get more PSC officers and **Authorities** 

involved and to provide more flexibility and variety of programmes.

Moreover, the Committee also made discussions and decisions regarding the following:

- adoption of amendments to the Memorandum;
- review of membership status;
- publication of ship black list and targeting factor;
- matters concerning arrangements of flag States on ship registration, survey and certification;
- review and harmonization of PSC coding system; and
- approval of the agreement for obtaining inter-governmental organization (IGO) status at IMO.

Having led the Secretariat for eleven years, Mr. Yoshio Sasamura retired from the Secretary at the end of the fifteenth meeting. Many delegations at the meeting and the Committee in whole expressed deep gratitude and sincere appreciation to Mr. Sasamura for his remarkable contributions made to activities of the Tokyo MOU and his extraordinary accomplishment of the work as the MOU Secretary. The Committee approved the appointment of Mr. Mitsutoyo Okada as the Secretary to succeed Mr. Sasamura and endorsed appointment of Mr. Ikuo Nakazaki as the Deputy Secretary.

The sixteenth session of the Port State Control Committee will be held in Canada in September 2006.

### ASIA-PACIFIC COMPUTERIZED INFORMATION SYSTEM (APCIS)

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

Immediately prior to the fifteenth Committee meeting, the fourteenth meeting of the Regional Database Managers (DBM) was conducted on 4 – 5 November 2005 in Bangkok, Thailand. The session of DBM14 was chaired by Mr. Christopher Lindesay, Principal System Officer, Australian Maritime Safety Authority.

Among other things, the major issues deliberated and considered by the DBM

meeting include:

- operation of the APCIS system;
- development of training material on APCIS usage;
- arrangement and preparation for implementation of new version of APCIS;
- procedures for recording IMO company number and MMSI;
- detailed procedures for recording follow-up inspection results;
- detailed statistics on PSC; and
- information exchange with other MOUs.

The outcome of proceeding of the DBM meeting was reported to the Committee, together with recommendations and suggestions on the matters concerned.

### TRAINING AND SEMINARS FOR PORT STATE CONTROL OFFICERS

Tokyo MOU took advantage of and benefited a lot from the effective implementation of technical co-operation programmes. The regional profile of port State control officers and PSC capacity of the Authorities had been well improved and enhanced as the proof of success of development and implementation of extensive technical co-operation activities.

From 7 to 24 June 2005, ten PSC officers from the Authorities of Chile, China, Fiji, Indonesia, Republic of Korea, Malaysia, the Philippines, the Russian Federation, Thailand and Viet Nam gathered in Yokohama, Japan, for attending the fifteenth basic training course



Training course for PSC officers

for PSC officers. This training course was conducted with the assistance of the Shipbuilding Research Center (SRC) of Japan.

Same with the previous years, the course plan was devised based on the IMO model course

on port State control. trainees were provided with series of lectures and presentations, concerning port State control provisions, convention requirements and regulations, PSC inspection procedures and reporting. Experts from SRC, Nippon Kaiji Kyokai, National Maritime Research Institute of Japan, Ministry of Land, Infrastructure and Transport of Japan and the Secretariat gave lectures on the relevant subjects. As practical part of the training, on-board inspection exercises and the technical visit to a liferaft service station were organized.

The twelfth port State control officers seminar was held from 25 to 27 May 2005 in Macao, China, by the kind invitation of the Maritime Administration of Macao. The seminar was attended by port State control officers from the Authorities of Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Democratic People's Republic of Korea, Republic of Korea, Macao (China), Malaysia, the Philippines, Singapore,

Solomon Islands, the Russian Federation, Thailand and Vanuatu. In addition, the Black Sea and the Indian Ocean MOUs also sent observers to the seminar.

During the seminar, participants received a comprehensive presentation on control of



On-the-job training



The twelfth seminar for PSC officers

operational requirements and explanations on of inspection of scenario operational requirements. Further, participants acquired explanations and knowledge on correct and effective use of APCIS system and PSC on Annex VI of MARPOL 73/78. Participants were also provided with an update on recent development in IMO on regulations relating to maritime safety, security and pollution

prevention and activities of the Tokyo MOU. In addition, a case study session was conducted for the purpose of promotion of share of experiences and expertise among PSC officers and harmonization on PSC.

A further fellowship training course was organized during the period of 15 November - 2 December 2005 in Japan. A total of 20 PSC officers from the Authorities of Chile, China, Indonesia, Republic of Korea. Malaysia, the Philippines, the Russian Federation, Singapore, Thailand and Viet Nam participated in the training. Participants were

divided into groups and dispatched to local PSC offices around Japan where thev ioined in actual inspections with local PSC officers practical gaining skill expertise of PSC inspections. At the end of the course, participants were gathered to exchange their gaining and findings and discuss matters of interests together with local PSC officers.

In February 2005, a two-week expert mission training course was conducted in Port Klang, in responding to a request by the

Authority of Malaysia. Two experts designated from the Japanese Authority delivered lectures covering operational requirements, ISM Code, ISPS Code, MARPOL, Load Lines, STCW and ILO conventions. Supplementary to the lectures, practical on-board inspection simulations were also carried out under guidance and instruction of the experts.



Fellowship training for PSC officers



Fellowship training for PSC officers

In addition to the aforementioned activities, three PSC officer exchange missions were co-ordinated in 2005, i.e.: Japan received two PSC officers from Hong Kong (China) and New Zealand respectively and sent one officer to Canada for exchange. Currently, PSC officers exchange programme is implemented in a limited level, involving Authorities of Australia, Canada, Hong Kong (China), Japan and New Zealand.

The technical co-operation programmes have been implemented successfully and enjoyed good reputation. The Port State Control Committee and the Authorities have rendered continuous support and co-operation at every stage and the Nippon Foundation has kindly provided fund for all the technical co-operation activities.

### CO-OPERATION WITH OTHER REGIONAL PORT STATE CONTROL AGREEMENTS

From an international perspective, establishment of regional port State control co-operation regimes has been widely

accepted as an effective measure to combat substandard ships on a global basis. To date, there are nine regional PSC regimes (MOUs) established and operated around 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

As inter-regional collaboration on port State control, Tokyo MOU had obtained observer status from the Paris MOU and the Caribbean MOU and will apply for observer status at the Indian Ocean MOU. On the other hand, Tokyo MOU had granted observer status to the Paris MOU, the Indian Ocean MOU, the Viña del Mar Agreement and the Black Sea MOU.

For the purpose of promotion of global co-operation and harmonization on port State control, IMO took the initiative to consult with regional PSC regimes (MOUs) on obtaining inter-governmental organization (IGO) status so as to allow more effective presentation and more positive involvement by PSC regimes at IMO forum. At the fifteenth meeting in Bangkok, the Port State Control Committee considered and approved conclusion of an agreement with IMO on obtaining IGO status. Consequently, IMO approved granting IGO status to the Tokyo MOU and the other seven MOUs that had forwarded the request to IMO at the 24th session of the Assembly in November 2005. Participation by PSC regimes at IMO meetings would facilitate

deliberation on PSC related matters and benefit constructive interaction between flag and port States.

Tokyo MOU has established and maintained effective and close co-operation with the Paris MOU at both the administrative and the technical levels. Representatives of the two Secretariats present at Port State Control Committee meetings of each other. During period of review, several joint actions and efforts had been made by the two MOUs, namely:

- co-ordinating concentrated inspection campaigns on MARPOL Annex I and ISM Code;
- review of list of follow-up actions stemming from the joint ministerial conference;
- co-operation on further improvement and harmonization of PSC coding system;
- communicating and co-operating with each other on analysis of PSC statistics;
- correspondences on development of PSC guidelines for implementation of the new consolidated maritime labour convention; and
- continuous submission of updated list of flags targeted by the Paris MOU, Tokyo MOU and the United States Coast Guard to IMO.

At the technical level, with kind extension of invitation, one PSC officer from Hong Kong (China) attended the expert training on

maritime safety and security organized by the Paris MOU in February 2005. Another PSC officer nominated from China participated in the forty-first Paris MOU PSC seminar in December 2005.

### PORT STATE CONTROL UNDER THE TOKYO MOU, 2005

### **INSPECTIONS**

In 2005, 21,058 inspections, involving 11,430 individual ships, were carried out on ships registered under 99 flags. Though there is a slight decline in number of inspections but number of individual ships inspected has been increased, comparing with the figures in 2004. Figure 2 and Table 2 show the number of inspections carried out by the member Authorities of the Tokyo MOU. Out of 21,058 inspections, there were 14,421 inspections found ships with deficiencies. Since the total number of individual ships operating in the region was estimated at 16,270\*, the inspection rate in the region was approximately 70%\*\* in 2005 (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 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 2005, 1,097 ships registered under 58 flags

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

<sup>\*\*</sup> New method for calculation of inspection rate (number of individual ships inspected/number of individual ships visited%) was introduced from 2004.

were detained because of serious deficiencies found on board. The detention rate of ships inspected was about 5.21%. Compared with 1,393 detentions in 2004, the detentions decreased by 296 in number or 27% in percentage.

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



involved and detention rate was above the average regional rate. Figure 5 gives the detention rate by ship type.

Black-grey-white list (Table 7) was introduced 2002. which provides а assessment of performance of flags during three-year rolling period. The black-grey-white list for 2003-2005 is consisting of 60 flags, whose ships were involved in 30 or more inspections during the period. The black list is expanded to 18 flags with adding the new faces of Dominica and Georgia. It is again disappointing that those flags repeatedly appeared in the black list. The grey list includes 17 flags, 3 more than the previous year, and the white list shows 25 flags, almost the same as the last year.

### **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 74,668 deficiencies were recorded in 2005. 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 two major categories of deficiencies which were frequently discovered on ships. In 2005, 10,914 life-saving appliances related deficiencies and 12.054 fire safety measures deficiencies related were recorded. representing 31% of the total number of deficiencies.

Further, number of deficiencies relating to operational requirements, 4,048 SOLAS related operational deficiencies and 581 MARPOL related operational deficiencies, was increased considerably in 2005 as consequence of the CIC on operational requirements, comparing with 2,673 and 509 in last year.



### OVERVIEW OF PORT STATE CONTROL RESULTS 1995 – 2005

Figures 7-12 show the comparison of port State inspection results for 1995 - 2005. These figures indicate continuous improvements in the port State control activities in the region over the past nine years.

Total ships inspected: 11,430 Percentage: 70%

Figure 1: INSPECTION PERCENTAGE

Total individual ship visited: 16,270

New Zealand 509; 2.42%

Russian Federation 1,112; 5.28%

Malaysia 355; 1.69%

Philippines 422; 2%

Singapore 1,359; 6.45%

Thailand 149; 0.71%

Vanuatu 3; 0.01%

Vietnam 425; 2.02%

Chile 532; 2.53%

Indonesia 52; 0.25%

Figure 2: PORT STATE INSPECTIONS - CONTRIBUTION BY AUTHORITIES

Total inspections: 21,058

Hong Kong, China 500; 2.37%

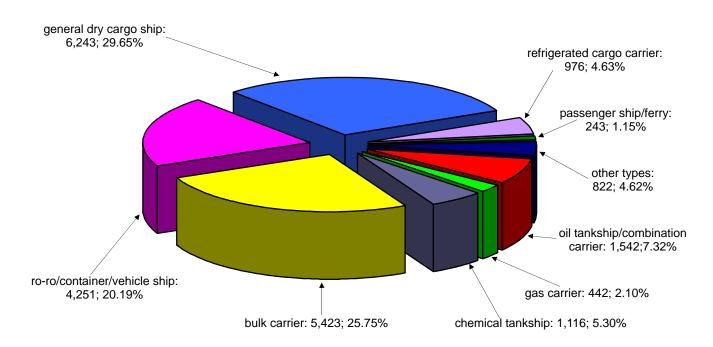
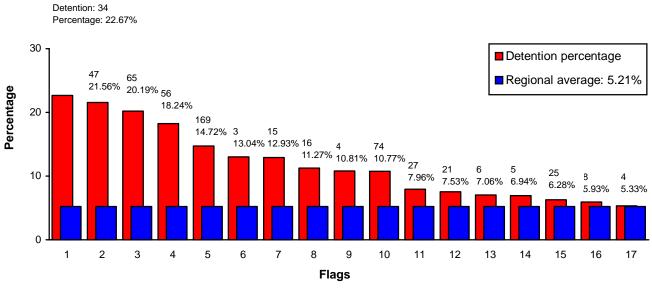


Figure 3: TYPE OF SHIP INSPECTED





### Flags:

- 1. Mongolia
- Cambodia
   Myanmar
- 13. India 17. Italy

- Indonesia
- 6. Georgia
- 10. Belize
- 14. Turkey
- B. Korea, Dem. People's Rep.
- 7. Taiwan, China
- 11. Thailand
- 15. Saint Vincent and the Grenadines
- 4. Viet Nam
- 8. Tuvalu
- 12. Malaysia
- 16. Isle of Man (UK)

Note: Flags listed above are those flags which ships 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

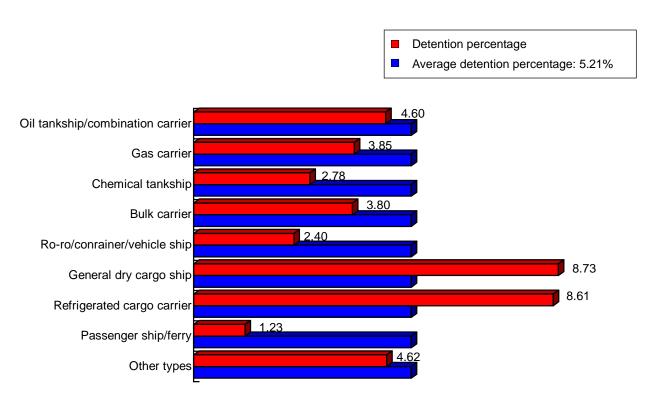
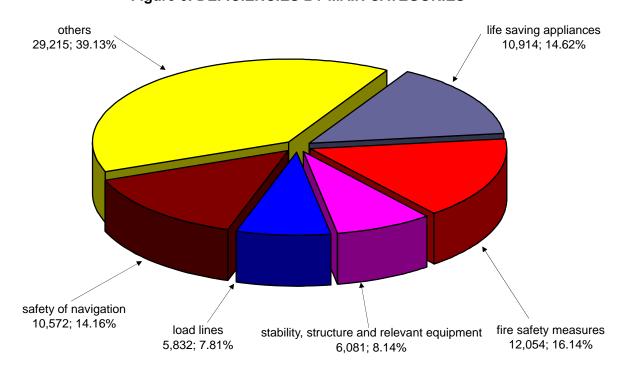


Figure 6: DEFICIENCIES BY MAIN CATEGORIES



### **OVERVIEW OF PORT STATE CONTROL RESULTS 1995 - 2005**

Figure 7: NO. OF INSPECTIONS

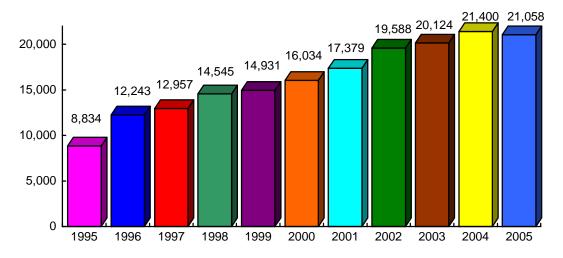
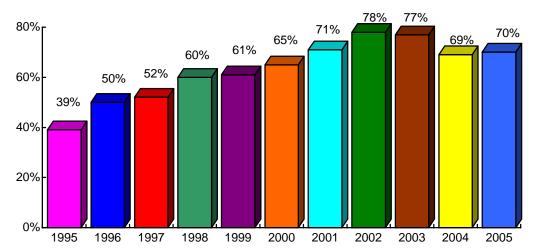


Figure 8: INSPECTION PERCENTAGE\*



\* Method for calculation of inspection rate was changed from 2004. See also the footnote in page 10.

Figure 9: NO. OF INSPECTIONS WITH DEFICIENCIES

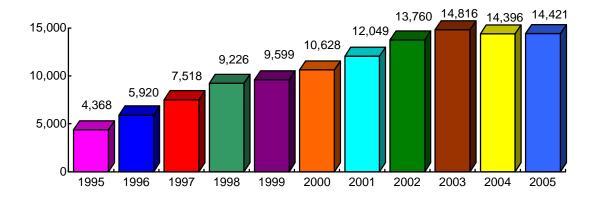


Figure 10: NO. OF DEFICIENCIES

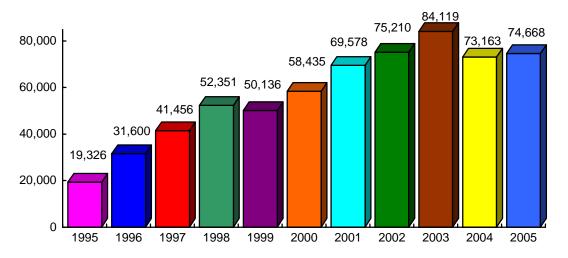


Figure 11: NO. OF DETENTIONS

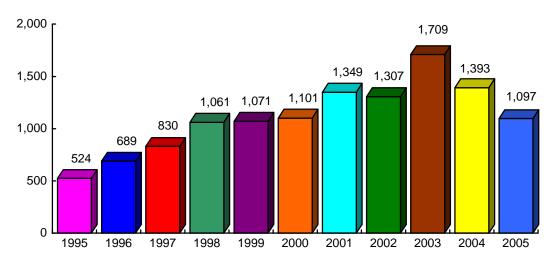
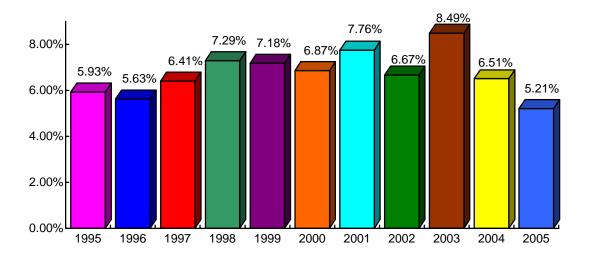


Figure 12: DETENTION PERCENTAGE



### **ANNEX 1**

# STATUS OF THE RELEVANT INSTRUMENTS

Table 1: STATUS OF THE RELEVANT INSTRUMENTS

(Date of deposit of instruments)

(As at 31 December 2005)

								(As a	(As at 31 December 2005)	nber 2005)
Authority	TONNAGE 69	LOAD LINE 66	LOAD LINE PROT 88	SOLAS 74	SOLAS PROT 78	SOLAS PROT 88	MARPOL 73/78	STCW 78	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	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	28/90/60	02/08/77	
China	08/04/80	05/10/73	03/02/95	04/01/80	17/12/82	03/02/95	01/07/83	08/06/81	04/01/80	,
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	ı
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	68/90/60	27/05/82	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	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	30/02/86	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	82/60/90	04/03/69		15/12/81		,	15/06/01	22/02/84	•	ı
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	98/90/90	21/09/71	18/08/99	16/03/81	01/06/84	10/08/99	01/11/90	01/05/88	29/04/77	ı
Thailand	11/06/96	30/12/92	•	18/12/84				19/06/97	62/80/90	
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	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	ı
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	ı
Macao, China	18/07/05			20/12/99	20/12/99	,	20/12/99	•	20/12/99	ı
Solomon Islands				30/06/04				01/06/94	12/03/82	ı
Entry into force date	18/07/1982	21/07/1968	03/05/2000	25/05/1980	01/05/1981	03/02/2000	02/10/1983	28/04/1984	15/07/1977	28/11/1981

<sup>\*</sup> Effective date of extension of instruments.
\*\* Although some Authorities have not raffled the

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 2005)

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	-
Canada	16/11/92	08/08/02	-	-	-
Chile	10/10/94	10/10/94	10/10/94	-	-
China	01/07/83	13/09/94	-	21/11/88	-
Fiji	-	-	-	-	-
Hong Kong, China*	11/04/85	07/03/95	-	27/03/96	-
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	-
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	08/10/00
Thailand	-	-	-	-	-
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	-	20/12/99	-
Solomon Islands	-	-	-	-	-
Entry into force date	02/10/1983	01/07/1992	27/09/2003	31/12/1988	19/05/2005

<sup>\*</sup> Effective date of extension of instruments.

### **ANNEX 2**

### PORT STATE INSPECTION STATISTICS

### **STATISTICS FOR 2005**

**Table 2: PORT STATE INSPECTIONS CARRIED OUT BY AUTHORITIES** 

Authority	No. of individual ships inspected	No. of inspections	No. of follow-up inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	No. of individual ships visited <sup>1)</sup>	Inspection rate (%) 2)	Detention percentage (%)
Australia	2,506	3,076	429	1,700	7,960	154	3,503	71.54	5.01
Canada <sup>3)</sup>	367	374	0	200	734	12	1,454	25.24	3.21
Chile	486	532	80	255	637	12	1,315	36.96	2.26
China	3,163	4,020	580	3,394	20,839	259	8,454	37.41	6.44
Fiji	0	0	0	0	0	0	123	0	0
Hong Kong, China	493	500	0	455	3,069	84	3,961	12.45	16.80
Indonesia	52	52	0	11	69	3	3,771	1.38	5.77
Japan	3,292	4,680	75	3,279	18,568	248	6,998	47.04	5.30
Republic of Korea	2,717	3,490	26	1,990	6,072	123	6,861	39.60	3.52
Malaysia	337	355	10	149	657	3	3,665	9.20	0.85
New Zealand	366	509	227	328	1,083	24	771	47.47	4.72
Papua New Guinea	0	0	0	0	0	0	282	0	0
Philippines	377	422	53	231	1,147	2	1,695	22.24	0.47
Russian Federation <sup>3)</sup>	719	1,112	698	894	5,732	66	850	84.59	5.94
Singapore	1,161	1,359	58	1,086	5,429	75	8,351	13.90	5.52
Thailand	128	149	65	113	430	2	2,212	5.79	1.34
Vanuatu	3	3	0	0	0	0	35	8.57	0
Vietnam	378	425	28	336	2,242	30	1,308	28.90	7.06
Total	11,430	21,058	2,329	14,421	74,668	1,097	Regional 16,270	Regional 70%	Regional 5.21%

LMIU data for 2005.

Method for calculation of inspection rate was changed from 2004. See also the footnote in page 10.

<sup>1)</sup> 2) 3) Data are only for the Pacific ports.

Table 2a: PORT STATE INSPECTIONS ON MARITME SECURITY

Authority	No. of inspections	No. of inspections with security related deficiencies	No. of secuirty related deficiencies	No. of security related detentions	Detention percentage (%)
Australia	3,076	23	26	0	0
Canada	374	0	0	0	0
Chile	532	19	20	1	0.19
China	4,020	349	405	7	0.17
Fiji	0	0	0	0	0
Hong Kong, China	500	45	60	7	1.40
Indonesia	52	0	0	0	0
Japan	4,680	435	532	2	0.04
Republic of Korea	3,490	401	481	5	0.14
Malaysia	355	26	30	0	0
New Zealand	509	20	22	0	0
Papua New Guinea	0	0	0	0	0
Philippines	422	2	2	0	0
Russian Federation	1,112	51	60	0	0
Singapore	1,359	515	564	1	0.07
Thailand	149	19	19	1	0.67
Vanuatu	3	0	0	0	0
Vietnam	425	10	11	1	0.24
Total	21,058	1,915	2,232	25	Regional 0.12%

Note: Security related data showing in the table are <u>excluded</u> from all other statistical tables and figures in this report.

**Table 3: PORT STATE INSPECTIONS PER FLAG** 

	No. of	No. of	No. of	No. of	Detention
Flag	inspections	inspections	deficiencies	detentions	percentage
		with deficiencies			%
Algeria	3	2	12	0	0
Antigua and Barbuda	301	189	673	12	3.99
Australia	12	8	20	0	0
Austria	6	6	24	0	0
Bahamas	641	360	1,411	28	4.37
Bahrain	1	0	, 0	0	0
Bangladesh	9	9	94	2	22.22
Barbados	8	6	23	1	12.50
Belgium	29	11	62	1	3.45
Belize	687	659	4,204	74	10.77
Bermuda (UK)	44	15	63	2	4.55
Bolivia	5	5	34	0	0
Brazil	2	2	11	0	0
Brunei Darussalam	2	0	0	0	0
Bulgaria	2	1	1	0	0
Cambodia	1,148	1,106	8,478	169	14.72
Canada	3	2	8	0	0
Cayman Islands (UK)	53	29	96	1	1.89
Chile	3	2	6	0	0
China	851	556	2,145	7	0.82
Colombia	1	1	7	0	0
Comoros	7	7	42	0	0
Croatia	23	15	55	1	4.35
Cyprus	575	336	1,474	21	3.65
Denmark	95	54	185	1	1.05
Dominica	16	16	116	3	18.75
Dominican Republic	1	1	10	0	0
Ecuador	1	0	0	0	0
Egypt	13	9	52	1	7.69
Equatorial Guinea	1	0	0	0	0
Ethiopia	5	4	16	0	0
France	47	23	62	1	2.13
Georgia	23	22	123	3	13.04
Germany	206	104	316	1	0.49
Gibraltar (UK)	25	13	60	1	4.00
Greece	314	161	567	3	0.96
Honduras	12	12	137	4	33.33
Hong Kong, China	1,196	691	2,911	21	1.76
India	85	56	266	6	7.06

	No. of	No. of	No. of	No. of	Detention
Flag	inspections	inspections	deficiencies	detentions	percentage
		with			%
		deficiencies			
Indonesia	218	206	1,950	47	21.56
Iran	80	61	276	3	3.75
Ireland	2	2	3	0	0
Isle of Man (UK)	135	63	213	8	5.93
Israel	35	23	77	0	0
Italy	75	44	185	4	5.33
Jamaica	2	2	20	1	50.00
Japan	141	92	328	0	0
Jordan	3	3	11	1	33.33
Korea, Democratic People's Republic	322	313	2,721	65	20.19
Korea, Republic of	953	747	3,608	5	0.52
Kuwait	16	8	50	0	0
Latvia	1	0	0	0	0
Liberia	1,073	623	2,541	32	2.98
Lithuania	1	0	0	0	0
Luxemburg	3	2	5	0	0
Malaysia	279	203	1,252	21	7.53
Maldives	11	11	61	1	9.09
Malta	421	261	1,127	14	3.33
Marshall Islands	368	217	777	10	2.72
Mongolia	150	142	1,287	34	22.67
Morocco	1	1	1	0	0
Myanmar	37	29	149	4	10.81
Netherlands	143	94	379	4	2.80
Netherlands Antilles	41	25	79	2	4.88
New Zealand	4	1	5	0	0
Norway	247	115	399	7	2.83
Pakistan	9	8	49	1	11.11
Panama	6,484	4,172	19,829	274	4.23
Papua New Guinea	15	15	138	1	6.67
Philippines	219	148	588	5	2.28
Portugal	2	1	1	0	0
Qatar	9	3	9	0	0
Russian Federation	508	426	1,836	17	3.35
Saint Vincent and the Grenadines	398	352	1,946	25	6.28
Samoa	2	2	4	1	50.00
Saudi Arabia	12	4	13	0	0
Seychelles	1	1	3	0	0
Sierra Leone	1	1	5	0	0
Singapore	806	465	2,119	20	2.48

Flag	No. of inspections	No. of inspections with deficiencies	No. of deficiencies	No. of detentions	Detention percentage %
Solomon Islands	1	1	7	0	0
Spain	3	1	1	0	0
Sri Lanka	5	5	43	1	20.00
St. Kitts & Nevis (UK)	2	2	11	0	0
Sweden	28	11	27	0	0
Switzerland	25	13	51	0	0
Taiwan, China	116	88	572	15	12.93
Tanzania	1	1	6	0	0
Thailand	339	296	2,007	27	7.96
Tonga	19	12	47	1	5.26
Tunisia	1	0	0	0	0
Turkey	72	47	196	5	6.94
Tuvalu	142	137	959	16	11.27
Ukraine	3	2	14	0	0
United Arab Emirates (UAE)	3	1	4	0	0
United Kingdom (UK)	172	69	229	2	1.16
United States of America	53	27	79	0	0
Vanuatu	80	51	194	2	2.50
Viet Nam	307	276	2,400	56	18.24
Yemen	1	1	2	0	0
Ship's registration withdrawn	1	1	11	1	100.00
Total	21,058	14,421	74,668	1,097	Regional 5.21

Table 4: PORT STATE INSPECTIONS PER SHIP TYPE

	No. of	No. of	No. of	No. of	Detention
Type of ship	inspections		deficiencies	detentions	
		with			%
		deficiencies			
Tanker, not otherwise specified	36	15	65	0	0
Combination carrier	74	43	172	0	0
Oil tanker	1,432	825	4,177	71	4.96
Gas carrier	442	281	1,167	17	3.85
Chemical tanker	1,116	751	2,989	31	2.78
Bulk carrier	5,423	3,293	15,196	206	3.80
Vehicle carrier	650	299	991	9	1.38
Container ship	3,373	1,973	7,825	88	2.61
Ro-Ro cargo ship	228	155	677	5	2.19
General cargo/multi-purpose ship	6,243	5,268	33,344	545	8.73
Refrigerated cargo carrier	976	798	4,706	84	8.61
Woodchip carrier	220	102	310	3	1.36
Livestock carrier	50	34	196	0	0
Ro-Ro passenger ship	47	37	161	0	0
Passenger ship	196	117	453	3	1.53
Heavy load carrier	43	24	62	2	5
Offshore service vessel	97	69	349	3	3.09
MODU & FPSO	8	6	31	0	0
High speed passenger craft	32	28	72	0	0
Special purpose ship	46	37	158	0	0
Tugboat	144	118	639	8	6
Others	182	148	928	22	12.09
Total	21,058	14,421	74,668	1,097	5.21

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	1	0	0	0	0	0
American Bureau of Shipping	1,824	55	4	3.02	0.22	7.27
Belize Maritime Bureau Inc.	261	25	6	9.58	2.30	24.00
Belize Register Corporation	2	0	0	0	0	0
Biro Klasifikasi Indonesia	143	33	6	23.08	4.20	18.18
Bulgarski Koraben Registar	3	1	0	33.33	0	0
Bureau Securitas	5	0	0	0	0	0
Bureau Veritas	1,660	92	16	5.54	0.96	17.39
Ceskoslovensky Lodin Register	3	0	0	0	0	0
China Classification Society	2,111	36	6	1.71	0.28	16.67
China Corporation Register of Shipping	426	56	14	13.15	3.29	25.00
Croatian Register of Shipping	40	3	1	7.50	2.50	33.33
Cyprus Bureau of Shipping	5	0	0	0	0	0
Det Norske Veritas	2,448	67	6	2.74	0.25	8.96
Fidenavis SA	2	0	0	0	0	
Germanischer Lloyd	1,931	62	8	3.21	0.41	12.90
Global Marine Bureau	685	110	25	16.06	3.65	22.73
Hellenic Register of Shipping	17	1	0	5.88	0	0
Honduras Bureau of Shipping	1	0	0	0	0	0
Honduras International Surveying and Inspection Bureau	10	2	0	20.00	0	0
INCLAMAR	157	20	5	12.74	3.18	25.00
Indian Register of Shipping	82	6	2	7.32	2.44	33.33
Inspection y Classification Maritime, S. de. R.L.	5	1	0	20.00	0	0
International Merchant Marine Registry of Belize	12	2	0	16.67	0	0
International Naval Surveys Bureau	28	4	0	14.29	0	0
International Register of Shipping	157	25	2	15.92	1.27	8.00
Isthmus Bureau of Shipping	477	44	5	9.22	1.05	11.36
Korea Classification Society (former Joson Classification Society)	250	49	24	19.60	9.60	48.98
Korean Register of Shipping	1,888	41	10	2.17	0.53	24.39
Lloyd's Register	2,757	106	12	3.84	0.44	11.32
Marconi International Marine Company Ltd.	1	0	0	0	0	0
Maritime Technical Systems and Services	73	8	4	10.96	5.48	50.00
Mongolia Ship Registry	32	7	3	21.88	9.38	42.86

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 Cargo Bureau Inc.	4	0	0	0	0	0
National Shipping Adjusters Inc	1	0	0	0	0	0
Nippon Kaiji Kyokai	7,003	199	29	2.84	0.41	14.57
Panama Bureau of Shipping	189	11	2	5.82	1.06	18.18
Panama Maritime Documentation Services	114	17	5	14.91	4.39	29.41
Panama Maritime Surveyors Bureau Inc	110	20	4	18.18	3.64	20.00
Panama Register Corporation	105	12	2	11.43	1.90	16.67
Panama Shipping Certificate Inc.	3	0	0	0	0	0
Panama Shipping Registrar Inc.	88	23	7	26.14	7.95	30.43
Polski Rejestr Statkow	43	8	4	18.60	9.30	50.00
R.J. Del Pan	6	0	0	0	0	0
Register of Shipping (Albania)	4	2	0	50.00	0	0
Register of Shipping (DPR Korea)	22	4	1	18.18	4.55	25.00
Registro Cubano de Buques	2	0	0	0	0	0
Registro Internacional Naval S.A.	5	0	0	0	0	0
Registro Italiano Navale	221	20	4	9.05	1.81	20.00
Regjistri Laknori Shqiptar	1	0	0	0	0	0
RINAVE Portuguesa	4	0	0	0	0	0
Russian Maritime Register of Shipping	787	38	1	4.83	0.13	2.63
Russian River Register	2	0	0	0	0	0
Shipping Register of Ukraine	8	0	0	0	0	0
Sociedad Classificadora de Colombia	1	0	0	0	0	0
Societe Generale de Surveillance	3	0	0	0	0	0
Turkish Lloyd	14	4	0	28.57	0	0
Viet Nam Register of Shipping	318	52	28	16.35	8.81	53.85
Class withdrawn	4	1	0	25.00	0	0
Other	2,129	269	37	12.64	1.74	13.75

Note: Number of overall inspections and detentions are calculated corresponding to each recognized organization (RO) that issued 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	2,197				
Stability, structure and related equipment	6,081				
Propulsion and auxiliary machinery	3,352				
Alarm signals	355				
Fire safety measures	12,054				
Oil, chemical tankers and gas carriers	210				
Lifesaving appliances	10,914				
Radiocommunications	3,123				
Safety of navigation	10,572				
Carriage of cargo and dangerous goods	459				
ISM related deficiencies	2,930				
SOLAS related operational deficiencies	4,048				
Additional measures to enhance maritime safety	530				
Bulk carriers-additional safety measures	130				
Load lines	5,832				
MARPOL-Annex I	4,304				
MARPOL-Annex II	42				
MARPOL-Annex III	10				
MARPOL-Annex IV	46				
MARPOL-Annex V	2,251				
MARPOL-Annex VI	274				
MARPOL related operational deficiencies	581				
Certification and watchkeeping for seafarers	1,825				
Crew and accommodation (ILO 147)	362				
Food and catering (ILO 147)	173				
Working spaces (ILO 147)	550				
Accident prevention (ILO 147)	580				
Mooring arrangements (ILO 147)	793				
Other deficiencies	90				
Total	74,668				

### **SUMMARY OF PORT STATE INSPECTION DATA 2003 – 2005**

Table 7: BLACK - GREY - WHITE LISTS \*

Flag	Inspections 2003-2005	Detentions 2003-2005	Black to Grey Limit	Grey to White Limit	Excess Factor				
BLACK LIST									
Korea, Democratic People's Republic 1,033 403 86 10.83									
Honduras					9.80				
Mongolia	56 25 8 405 126 37		9.60 7.78						
Bolivia	63	23	8		7.76 7.52				
Indonesia	676	23 171	59		6.19				
Dominica	39	12	6		5.04				
Cambodia	3,170	621	246		4.81				
Viet Nam	736	133	63		3.93				
Belize	2,261	348	179		3.39				
Bangladesh	32	7	5		2.39				
Tuvalu	199	, 29	20		2.24				
Papua New Guinea	40	8	6		2.24				
Taiwan, China	390	51	36		2.14				
Egypt	51	9	7		1.94				
Georgia	32	6	5		1.64				
Myanmar	123	16	14		1.50				
Tonga	74	10	9		1.25				
Thailand	832	77	71		1.23				
Transita		REY LIST			1120				
Saint Vincent and the Grenadines	1,247	92	103	72	0.65				
Turkey	228	18	23	9	0.65				
Malaysia	944	67	79	53	0.53				
Iran	215	15	22	8	0.50				
Pakistan	36	2	6	0	0.41				
Croatia	68	4	9	1	0.40				
India	305	19	29	14	0.35				
Belgium	44	2	6	0	0.34				
Gibraltar (UK)	64	3	8	1	0.31				
Netherlands Antilles	121	5	14	3	0.16				
Malta	1,465	91	119	86	0.15				
Italy	203	9	21	8	0.10				
Kuwait	57	1	8	0	0.09				
Saudi Arabia	38	0	6	0	0.07				

Flag	Inspections 2003-2005	Detentions 2003-2005	Black to Grey Limit	Grey to White Limit	Excess Factor				
Cayman Islands (UK)	158	6	17	5	0.06				
Bermuda (UK)	144	5	16	5	0.04				
Russian Federation	1,558	93	126	92	0.03				
WHITE LIST									
Isle of Man (UK)	376	17		18	-0.07				
Vanuatu	221	8		9	-0.14				
Cyprus	2,035	111		123	-0.21				
Japan	440	17		21	-0.40				
Antigua and Barbuda	819	36		45	-0.40				
Netherlands	396	14		19	-0.49				
Panama	19,369	935		1,297	-0.64				
Switzerland	70	0		1	-0.69				
Philippines	789	28		43	-0.71				
France	141	2		4	-0.78				
Bahamas	1,909	72		115	-0.81				
Singapore	2,307	87		141	-0.83				
Sweden	84	0		2	-0.94				
Marshall Islands	956	29		53	-0.95				
Norway	773	22		42	-0.97				
Greece	1,072	31		61	-1.03				
Liberia	3,407	111		213	-1.06				
Israel	97	0		2	-1.15				
Germany	468	9		23	-1.21				
United States of America	150	1		5	-1.22				
Denmark	313	4		14	-1.35				
United Kingdom (UK)	452	7		22	-1.37				
Hong Kong, China	3,225	51		201	-1.67				
China	2,654	37		164	-1.73				
Korea, Republic of	2,578	23		159	-1.91				

Note: Flags listed above are those of ships which were involved in 30 or more port State inspections over the 3-year period.

p=7%

z<sub>95%</sub>=1.645

q=3%

<sup>\*</sup> See explanatory note on page 44.

**Table 8: INSPECTIONS AND DETENTIONS PER FLAG** 

Flag	Number of inspections				Number of detentions				3-year rolling
	2003	2004	2005	Total	2003	2004	2005	Total	average detention %
Algeria	1	4	3	8	0	1	0	1	12.50
Antigua and Barbuda	201	317	301	819	9	15	12	36	4.40
Australia	6	10	12	28	0	0	0	0	0
Austria	4	5	6	15	0	2	0	2	13.33
Bahamas	624	644	641	1,909	23	21	28	72	3.77
Bahrain	4	2	1	7	1	0	0	1	14.29
Bangladesh	11	12	9	32	3	2	2	7	21.88
Barbados	10	4	8	22	0	0	1	1	4.55
Belgium	1	14	29	44	0	1	1	2	4.55
Belize	821	753	687	2,261	156	118	74	348	15.39
Bermuda (UK)	50	50	44	144	2	1	2	5	3.47
Bolivia	40	18	5	63	18	5	0	23	36.51
Brazil	9	15	2	26	1	2	0	3	11.54
Brunei Darussalam	1	3	2	6	0	0	0	0	0
Bulgaria	0	0	2	2	0	0	0	0	0
Cambodia	989	1,033	1,148	3,170	263	189	169	621	19.59
Canada	0	0	3	3	0	0	0	0	0
Cayman Islands (UK)	47	58	53	158	3	2	1	6	3.80
Chile	4	2	3	9	0	0	0	0	0
China	904	899	851	2,654	15	15	7	37	1.39
Colombia	0	0	1	1	0	0	0	0	0
Comoros	3	9	7	19	0	2	0	2	10.53
Cook Islands	3	0	0	3	0	0	0	0	0
Croatia	16	29	23	68	2	1	1	4	5.88
Cyprus	738	722	575	2,035	52	38	21	111	5.45
Denmark	98	120	95	313	0	3	1	4	1.28
Dominica	7	16	16	39	2	7	3	12	30.77
Dominican Republic	0	0	1	1	0	0	0	0	0
Ecuador	0	0	1	1	0	0	0	0	0
Egypt	24	14	13	51	6	2	1	9	17.65
Equatorial Guinea	0	0	1	1	0	0	0	0	0
Eritrea	0	1	0	1	0	0	0	0	0
Ethiopia	1	3	5	9	0	0	0	0	0
Fiji	3	0	0	3	0	0	0	0	0
France	45	50	47	142	0	1	1	2	1.41

	Nu	mber of	inspectio	ons	Nu	3-year			
Flag	2003	2004	2005	Total	2003	2004	2005	Total	rolling average detention %
Georgia	3	6	23	32	1	2	3	6	18.75
Germany	105	157	206	468	5	3	1	9	1.92
Gibraltar (UK)	20	19	25	64	0	2	1	3	4.69
Greece	371	387	314	1,072	19	9	3	31	2.89
Honduras	25	19	12	56	14	7	4	25	44.64
Hong Kong, China	873	1,156	1,196	3,225	17	13	21	51	1.58
Hungary	0	1	0	1	0	0	0	0	0
India	109	111	85	305	8	5	6	19	6.23
Indonesia	233	225	218	676	61	63	47	171	25.30
Iran	60	75	80	215	7	5	3	15	6.98
Ireland	0	2	2	4	0	0	0	0	0
Isle of Man (UK)	108	133	135	376	5	4	8	17	4.52
Israel	29	33	35	97	0	0	0	0	0
Italy	71	57	75	203	2	3	4	9	4.43
Jamaica	0	1	2	3	0	0	1	1	33.33
Japan	146	153	141	440	11	6	0	17	3.86
Jordan	2	0	3	5	1	0	1	2	40.00
Kiribati	0	1	0	1	0	0	0	0	0
Korea, Democratic People's Republic	349	362	322	1,033	203	135	65	403	39.01
Korea, Republic of	773	852	953	2,578	16	2	5	23	0.89
Kuwait	17	24	16	57	1	0	0	1	1.75
Kyrgyzstan	0	1	0	1	0	0	0	0	0
Lao, People's Democratic Republic	4	0	0	4	1	0	0	1	25.00
Latvia	3	0	1	4	0	0	0	0	0
Lebanon	1	4	0	5	0	2	0	2	40.00
Liberia	1,117	1,217	1,073	3,407	35	44	32	111	3.26
Lithuania	4	0	1	5	0	0	0	0	0
Luxemburg	8	4	3	15	0	0	0	0	0
Malaysia	308	357	279	944	25	21	21	67	7.10
Maldives	12	5	11	28	1	1	1	3	10.71
Malta	492	552	421	1,465	33	44	14	91	6.21
Marshall Islands	271	317	368	956	7	12	10	29	3.03
Mexico	1	0	0	1	0	0	0	0	0
Micronesia	0	1	0	1	0	1	0	1	100.00
Mongolia	99	156	150	405	48	44	34	126	31.11
Morocco	3	0	1	4	0	0	0	0	0

	Nu	mber of	inspectio	ons	Nu	ımber of	detentio	ns	3-year
Flag	2003	2004	2005	Total	2003	2004	2005	Total	rolling average detention %
Myanmar	37	49	37	123	7	5	4	16	13.01
Netherlands	126	127	143	396	6	4	4	14	3.54
Netherlands Antilles	41	39	41	121	2	1	2	5	4.13
New Zealand	2	6	4	12	0	0	0	0	0
Norway	273	253	247	773	10	5	7	22	2.85
Pakistan	15	12	9	36	1	0	1	2	5.56
Panama	6,389	6,496	6,484	19,369	369	292	274	935	4.83
Papua New Guinea	11	14	15	40	3	4	1	8	20.00
Philippines	291	279	219	789	14	9	5	28	3.55
Poland	1	0	0	1	1	0	0	1	100.00
Portugal	5	5	2	12	1	1	0	2	16.67
Qatar	8	4	9	21	2	0	0	2	9.52
Romania	1	0	0	1	0	0	0	0	0
Russian Federation	529	521	508	1,558	37	39	17	93	5.97
Saint Vincent and the Grenadines	428	421	398	1,247	38	29	25	92	7.38
Samoa	3	1	2	6	1	0	1	2	33.33
Saudi Arabia	15	11	12	38	0	0	0	0	0
Senegal	1	0	0	1	1	0	0	1	100.00
Seychelles	2	1	1	4	1	0	0	1	25.00
Sierra Leone	1	2	1	4	1	1	0	2	50.00
Singapore	740	761	806	2,307	36	31	20	87	3.77
Solomon Islands	0	0	1	1	0	0	0	0	0
South Africa	2	1	0	3	0	0	0	0	0
Spain	4	3	3	10	1	0	0	1	10.00
Sri Lanka	0	5	5	10	0	2	1	3	30.00
St. Kitts & Nevis (UK)	0	0	2	2	0	0	0	0	0
Sweden	30	26	28	84	0	0	0	0	0
Switzerland	21	24	25	70	0	0	0	0	0
Syrian Arab Republic	2	0	0	2	0	0	0	0	0
Taiwan, China	151	123	116	390	24	12	15	51	13.08
Tanzania	4	2	1	7	0	0	0	0	0
Thailand	199	294	339	832	17	33	27	77	9.25
Togo	1	0	0	1	1	0	0	1	100.00
Tonga	27	28	19	74	7	2	1	10	13.51
Trinidad and Tobago	0	1	0	1	0	0	0	0	0
Tunisia	0	0	1	1	0	0	0	0	0

	Nu	ımber of	inspectio	ons	Nu	3-year			
Flag	2003	2004	2005	Total	2003	2004	2005	Total	rolling average detention %
					_	_	_		
Turkey	65	91	72	228	5	8	5	18	7.89
Tuvalu	6	51	142	199	1	12	16	29	14.57
Ukraine	4	4	3	11	1	0	0	1	9.09
United Arab Emirates (UAE)	4	6	3	13	1	1	0	2	15.38
United Kingdom (UK)	105	175	172	452	2	3	2	7	1.55
United States of America	44	53	53	150	0	1	0	1	0.67
Vanuatu	69	72	80	221	2	4	2	8	3.62
Viet Nam	185	244	307	736	39	38	56	133	18.07
Yemen	0	0	1	1	0	0	0	0	0
Ship's registration withdrawn	0	0	1	1	0	0	1	1	100.00
Total	20,124	21,400	21,058	62,582	1,709	1,393	1,097	4,199	6.71

Figure 13: COMPARISON OF INSPECTIONS PER SHIP TYPE

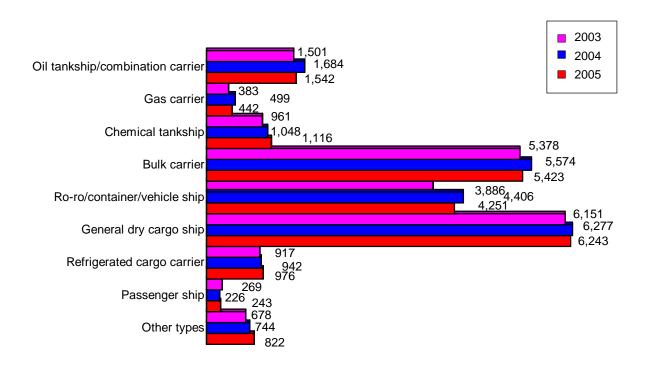


Figure 14: COMPARISON OF DETENTIONS PER SHIP TYPE

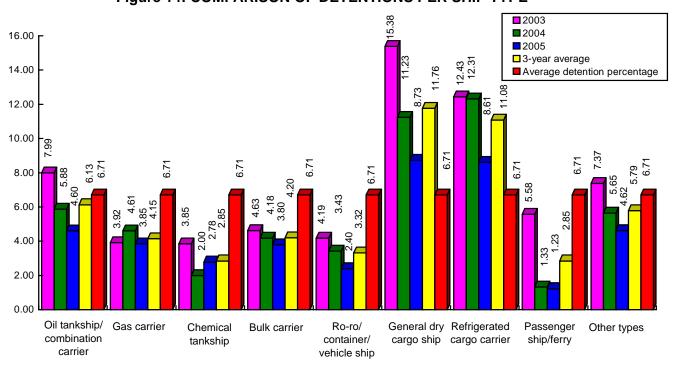


Table 9: INSPECTIONS AND DETENTIONS PER SHIP TYPE

	Nu	umber of	inspectio	ns	N	Number of detentions				
Type of ship	2003	2004	2005	Total	2003	2004	2005	Total	detention percentage %	
Tankan not otherwise an edited	41	40	200	400	4	2	0	2	2.50	
Tanker, not otherwise specified  Combination carrier	134	43 116	36 74	120 324	1 4	2 10	0	3 14	2.50 4.32	
	_						0			
Oil tanker	1,326	1,525	1,432	4,283	115	87	71	273	6.37	
Gas carrier	383	499	442	1,324	15	23	17	55	4.15	
Chemical tanker	961	1,048	1,116	3,125	37	21	31	89	2.85	
Bulk carrier	5,378	5,574	5,423	16,375	249	233	206	688	4.20	
Vehicle carrier	516	561	650	1,727	15	14	9	38	2.20	
Container ship	3,186	3,624	3,373	10,183	141	127	88	356	3.50	
Ro-Ro cargo ship	184	221	228	633	7	10	5	22	3.48	
General cargo/multi-purpose ship	6,151	6,277	6,243	18,671	946	705	545	2,196	11.76	
Refrigerated cargo carrier	917	942	976	2,835	114	116	84	314	11.08	
Woodchip carrier	208	213	220	641	8	6	3	17	2.65	
Livestock carrier	71	66	50	187	4	4	0	8	4.28	
Ro-Ro Passenger ship	54	55	47	156	5	0	0	5	3.21	
Passenger ship	215	171	196	582	10	3	3	16	2.75	
Factory ship	2	3	0	5	1	0	0	1	20.00	
Heavy load carrier	43	47	43	133	3	4	2	9	6.77	
Offshore service vessel	71	73	97	241	3	3	3	9	3.73	
MODU & FPSO	4	1	8	13	1	0	0	1	7.69	
High speed passenger craft	43	25	32	100	0	2	0	2	2.00	
Special purpose ship	30	43	46	119	3	1	0	4	3.36	
Tugboat	79	116	144	339	8	7	8	23	6.78	
Others	127	157	182	466	19	15	22	56	12.02	
Total	20,124	21,400	21,058	62,582	1,709	1,393	1,097	4,199	6.71	

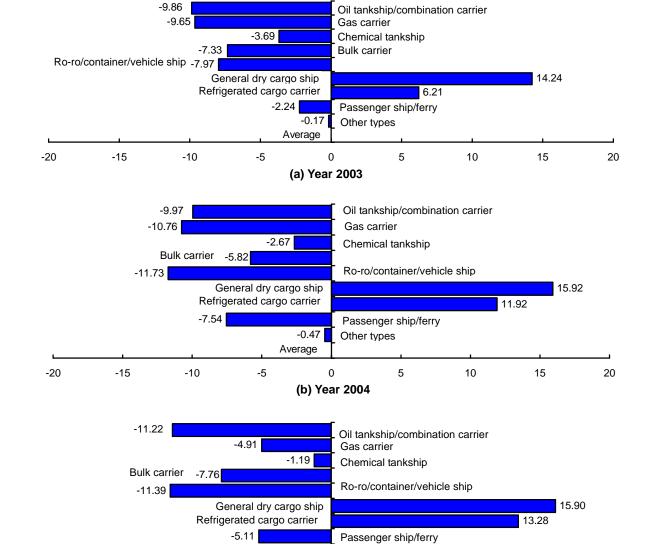


Figure 15: COMPARISON OF INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE

-20

-20

-15

-15

-10

-8.69

Passenger ship/ferry -4.54

-10

Bulk carrier -6.92

-10.38

-10.52

-0.16

0

(d) 3-year summary

Average

Other types

-5

-2.52

General dry cargo ship

Refrigerated cargo carrier

-5

Average

0.38

Gas carrier

Other types

Chemical tankship

(c) Year 2005

5

Oil tankship/combination carrier

Ro-ro/container/vehicle ship

5

10

10.56

10

15

15.41

15

20

20

<sup>\* %</sup> over [+] or under [-] average

Table 10: INSPECTIONS WITH DEFICIENCIES PER SHIP TYPE

	Number of inspections				N	3-year average			
Type of ship	2003	2004	2005	Total	2003	2004	2005	Total	percentage %
Oil tankship/combination carrier	1,501	1,684	1,542	4,727	957	965	883	2,805	59.34
Gas carrier	383	499	442	1,324	245	282	281	808	61.03
Chemical tankship	961	1,048	1,116	3,125	672	677	751	2,100	67.20
Bulk carrier	5,378	5,574	5,423	16,375	3,565	3,425	3,293	10,283	62.80
Ro-ro/container/vehicle ship	3,886	4,406	4,251	12,543	2,551	2,447	2,427	7,425	59.20
General dry cargo ship	6,151	6,277	6,243	18,671	5,404	5,222	5,268	15,894	85.13
Refrigerated cargo carrier	917	942	976	2,835	732	746	798	2,276	80.28
Passenger ship	269	226	243	738	192	135	154	481	65.18
Other types	678	744	822	2,244	498	497	566	1,561	69.56
Total	20,124	21,400	21,058	62,582	14,816	14,396	14,421	43,633	69.72

Table 11: INSPECTIONS AND DETENTIONS PER RECOGNIZED ORGANIZATION

Recognized organization (RO)	No. of overall inspections 2003-2005	No. of overall detentions 2003-2005	No. of RO responsible detentions 2003-2005	3-year avergae 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	5,627	222	20	3.95	0.36	9.01
Belize Maritime Bureau Inc.	262	25	6	9.54	2.29	24.00
Belize Register Corporation	2	0	0	0	0	0
Biro Klasifikasi Indonesia	457	125	24	27.35	5.25	19.20
Bulgarski Koraben Registar	11	1	0	9.09	0	0
Bureau Securitas	16	0	0	0	0	0
Bureau Veritas	4,938	306	43	6.20	0.87	14.05
Ceskoslovensky Lodin Register	6	0	0	0	0	0
China Classification Society	6,321	141	33	2.23	0.52	23.40
China Corporation Register of Shipping	1,270	186	49	14.65	3.86	26.34
Croatian Register of Shipping	124	13	2	10.48	1.61	15.38
Cyprus Bureau of Shipping	15	0	0	0	0	0
Det Norske Veritas	7,624	260	25	3.41	0.33	9.62
Fidenavis SA	11	0	0	0	0	0
Germanischer Lloyd	5,697	237	22	4.16	0.39	9.28
Global Marine Bureau	686	110	25	16.03	3.64	22.73
Hellenic Register of Shipping	61	6	0	9.84	0	0
Honduras Bureau of Shipping	1	0	0	0	0	0
Honduras International Surveying and Inspection	46	12	5	26.09	10.87	41.67
Bureau	0.40		44			
INCLAMAR	342	48	11	14.04	3.22	22.92
Indian Register of Shipping	280	19	6	6.79	2.14	31.58
Inspection y Classification Maritime, S. de. R.L.	5	1	0	20.00	0	0
International Merchant Marine Registry of Belize	12	2	0	16.67	0	0
International Naval Surveys Bureau	65	11	1	16.92	1.54	9.09
International Register of Shipping	340	76	9	22.35	2.65	11.84
Isthmus Bureau of Shipping	1,630	246	55	15.09	3.37	22.36
Korea Classification Society (former Joson Classification Society)	253	51	25	20.16	9.88	49.02
Korean Register of Shipping	5,542	148	27	2.67	0.49	18.24
Lloyd's Register	8,288	413	71	4.98	0.86	17.19
Marconi International Marine Company Ltd.	2	0	0	0	0	0
Maritime Technical Systems and Services	73	8	4	10.96	5.48	50.00
Mongolia Ship Registry	32	7	3	21.88	9.38	42.86
National Cargo Bureau Inc.	50	2	0	4.00	0	0
National Shipping Adjusters Inc	3	1	0	33.33	0	0
Nippon Kaiji Kyokai	21,279	816	132	3.83	0.62	16.18
NV Unitas	5	0	0	0	0	0
Panama Bureau of Shipping	626	44	10	7.03	1.60	22.73
Panama Maritime Documentation Services	114	17	5	14.91	4.39	29.41
Panama Maritime Surveyors Bureau Inc	238	37	7	15.55	2.94	18.92
Panama Register Corporation	254	28	6	11.02	2.36	21.43
Panama Shipping Certificate Inc.	3	0	0	0	0	0
Panama Shipping Registrar Inc.	88	23	7	26.14	7.95	30.43
Polski Rejestr Statkow	107	14	5	13.08	4.67	35.71
TI OISKI NOJESII OIAIKOW						

Recognized organization (RO)	No. of overall inspections 2003-2005	No. of overall detentions 2003-2005	No. of RO responsible detentions 2003-2005	3-year avergae detention percentage%	3-year average RO responsible detention percentage%	3-year average percentage of RO responsible detentions%
Register of Shipping (Albania)	24	7	0	29.17	0	0
Register of Shipping (DPR Korea)	190	99	67	52.11	35.26	67.68
Registro Cubano de Buques	4	0	0	0	0	0
Registro Internacional Naval S.A.	5	0	0	0	0	0
Registro Italiano Navale	641	47	9	7.33	1.40	19.15
Regjistri Laknori Shqiptar	1	0	0	0	0	0
RINAVE Portuguesa	14	0	0	0	0	0
Romanian Naval Register	4	0	0	0	0	0
Russian Maritime Register of Shipping	2,450	203	14	8.29	0.57	6.90
Russian River Register	7	1	0	14.29	0	0
Seefartsaht Helsinki	5	0	0	0	0	0
Shipping Register of Ukraine	8	0	0	0	0	0
Sociedad Classificadora de Colombia	3	2	0	66.67	0	0
Societe Generale de Surveillance	6	0	0	0	0	0
Turkish Lloyd	41	10	1	24.39	2.44	10.00
Viet Nam Register of Shipping	725	131	55	18.07	7.59	41.98
Class withdrawn	4	1	0	25.00	0	0
Other	7,812	1,474	358	18.87	4.58	24.29

See also the note in page 27.

Figure 16: COMPARISON OF NUMBER OF DEFICIENCIES BY MAIN CATEGORIES

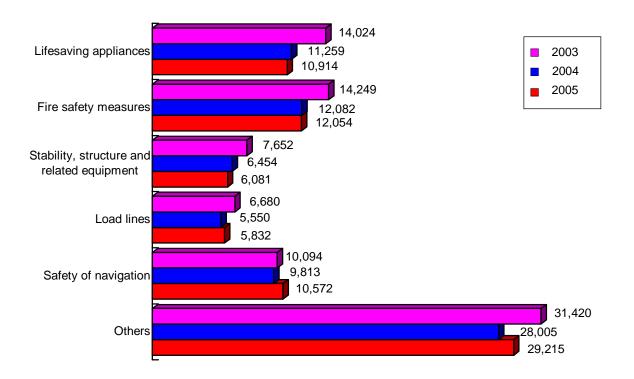
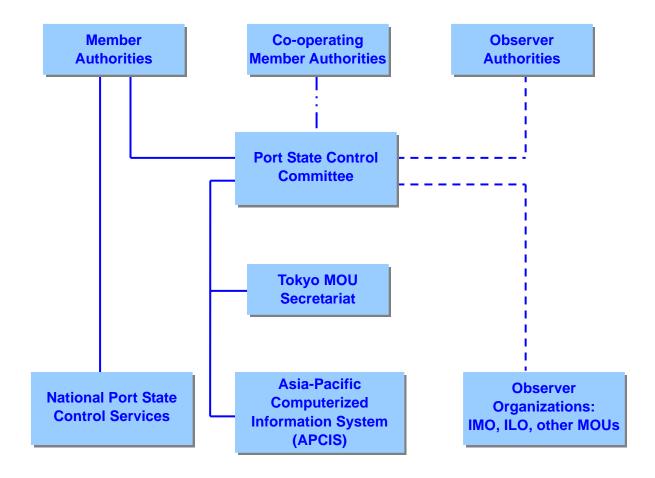


Table 12: COMPARISON OF DEFICIENCIES BY CATEGORIES

	Nun	nber of deficienc	eies
Nature of deficiency	2003	2004	2005
Ship's certificates and documents	2,834	2,504	2,197
Stability, structure and related equipment	2,654 7,652	2,30 <del>4</del> 6,454	6,081
Propulsion and auxiliary machinery	3,389	3,124	3,352
Alarm signals	3,369 245	3,12 <del>4</del> 276	355
Fire safety measures	14,249	12,082	12,054
Oil, chemical tankers and gas carriers	294	309	210
Lifesaving appliances	14,024	11,259	10,914
Radiocommunications	3,241	3,053	3,123
Safety of navigation	10,094	9,813	10,572
Carriage of cargo and dangerous goods	666	550	459
ISM related deficiencies	3,441	2,803	2,930
SOLAS related operational deficiencies	2,930	2,673	4,048
Additional measures to enhance maritime safety	-	325	530
Bulk carriers-additional safety measures	66	54	130
Load lines	6,680	5,550	5,832
MARPOL-Annex I	5,958	5,056	4,304
MARPOL-Annex II	71	58	42
MARPOL-Annex III	8	11	10
MARPOL-Annex IV	0	0	46
MARPOL-Annex V	2,458	2,039	2,251
MARPOL-Annex VI	-	-	274
MARPOL related operational deficiencies	647	509	581
Certification and watchkeeping for seafarers	2,676	2,185	1,825
Crew and accommodation (ILO 147)	423	481	362
Food and catering (ILO 147)	152	137	173
Working spaces (ILO 147)	380	366	550
Accident prevention (ILO 147)	627	587	580
Mooring arrangements (ILO 147)	813	802	793
Other deficiencies	101	103	90
Total	84,119	73,163	74,668

# **ANNEX 3**

# ORGANIZATIONAL STRUCTURE OF THE TOKYO MOU



## **EXPLANATORY NOTE ON THE BLACK – GREY – WHITE LISTS**

The Port State Control Committee adopted the new method for assessment of performance of flags which is the same as that is used by the Paris MOU. 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:

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

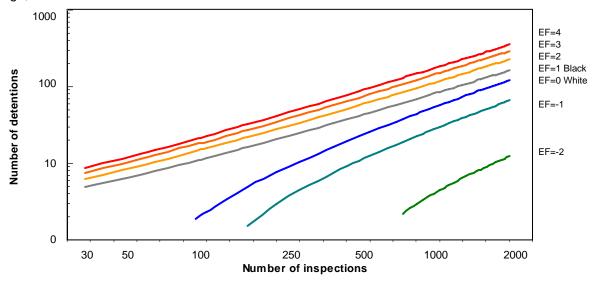
$$u_{white-to-grey} = N \cdot p - 0.5 - z \cdot \sqrt{N \cdot p \cdot (1-p)}$$

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 vardstick 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 Honduras were subject to 56 inspections of which 25 resulted in a detention. The "black to grey limit" is 8 detentions. The excess factor is 9.80.

N = total inspections

P = 7%

Q= 3%

Z = 1.645

How to determine the black to grey limit:

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

$$u_{black-to-grey} = 56 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{56 \cdot 0.07 \cdot 0.93}$$

$$u = 8$$

The excess factor is 9.80. 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 8.80, and the outcome has to be added to the normal value for 'p':

$$p + 8.80q = 0.07 + (8.80 \cdot 0.03) = 0.334$$

$$u_{excessfactor} = 56 \cdot 0.334 + 0.5 + 1.645 \cdot \sqrt{56 \cdot 0.334 \cdot 0.666}$$

$$u_{excessfactor} = 25$$

#### **Example flag on Grey list:**

Ships of Saint Vincent and the Grenadines were subject to 1,247 inspections, of which 92 resulted in a detention. The "black to grey limit" is 103 and the "grey to white limit" is 72. The excess factor is 0.65.

How to determine the black to grey limit:

$$u_{black - to - grey} = 1,247 \cdot 0.07 + 0.5 + 1.645 \cdot \sqrt{1,247 \cdot 0.07 \cdot 0.93}$$

$$u_{black-to-grey} = 103$$

How to determine the grey to white limit:

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

$$u_{\text{white - to - grey}} = 1,247 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{1,247 \cdot 0.07 \cdot 0.93}$$

$$u_{white-to-grey} = 72$$

To determine the excess factor the following formula is used:

*ef* = (Detentions – white to grey limit)/(grey to black limit – white to grey limit)

$$ef = (92-71.97)/(102.61-71.97)$$

$$ef = 0.65$$

#### **Example flag on White list:**

Ships of Liberia were subject to 3,407 inspections of which 111 resulted in detention. The "grey to white limit" is 213 detentions. The excess factor is -1.06.

How to determine the grey to white limit:

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

$$u_{\text{white - to - grey}} = 3,407 \cdot 0.07 - 0.5 - 1.645 \cdot \sqrt{3,407 \cdot 0.07 \cdot 0.93}$$

$$u_{white-to-grey} = 213$$

The excess factor is -1.06. 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 -1.06, and the outcome has to be added to the normal value for 'p':

$$p + (-1.06q) = 0.07 + (-1.06 \cdot 0.03) = 0.0382$$

$$u_{excessfactor} = 3,407 \cdot 0.0382 - 0.5 - 1.645 \cdot \sqrt{3,407 \cdot 0.0382 \cdot 0.9618}$$

$$u_{excessfactor} = 111$$

# **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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