PORT STATE CONTROL Making headway







BLACK LIST

GREY LIST

Annual report

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Paris MoU chairman's statement 2008



Following the celebrations for our 25th Anniversary in 2007 the year 2008 again confirmed that the Paris Memorandum of Understanding, Paris MoU, is as necessary today as it was twenty-five years ago.

Unfortunately, there continues to be a number of sub-standard ships operating in our region. However, with the continuing progress being made and in partnership with both international and national regulators as well as the industry and seafarer groupings we are increasingly successful in improving maritime safety outcomes.

The past year has proven to be very busy and significant progress was made on the development of the New Inspection Regime, NIR, and the accompanying New Information System now named "THETIS". The 41st Port State Control Committee was held in Loutraki, Greece and during that meeting the Committee made several significant decisions, which will chart our course for the medium to long-term future. In this Annual Report for 2008 you can read about these achievements of the Paris MoU as well as review the statistics we produce. The statistics give details of the outputs of our Member State Authorities in terms of inspections carried out and ships inspected as well as details of deficiencies and detentions. I would encourage readers to visit our website at www.parismou.org where information on our activities as well as details of our inspections can be found

During the year the general principles of our training scheme for Port State Control Officers was developed, this scheme sets common and consistent standards, providing training to PSCOs and the continued updating of technical knowledge. The Paris MoU continued to develop actions in response to the 2nd Joint Paris/Tokyo MoU Ministerial Conference, held in Vancouver in 2004 and gave high importance to Concentrated Inspection Campaigns (CICs).

Our co-operation with the European Commission and EMSA has been very important, as we have worked together in a parallel process of developing the New Inspection regime. This co-operation has ensured that there is coherence between the developments at the EU level and at the Paris MoU and I would like to thank all involved.

It has been a successful year for us in the Paris MoU and I would like to thank all of our Member States for their contribution and support during the year and I would especially like to thank all of our Port State Control Officers and Administrators for their excellent work throughout the year. We are very fortunate in having a dedicated Secretariat, which has supported us so well during the year. I would thank them as well as thanking the Department of Information Systems, SDSI, of the French Maritime Administration who have developed and hosted our information systems during the year.

Brian Hogan

Statement by the General-Secretary



Continuous training will become top priority

In the early days of the Memorandum, now over 25 years ago, the professional skills required from a port State control inspector were mostly limited to sea going experience and training for flag State surveys.

Although harmonization has been an objective since 1982, in day-to-day practise the inspection was mostly left to the "professional judgement" of the inspector.

With more maritime Administrations joining the Memorandum and new international Conventions entering into force, the need to train and harmonize increased.

The role of the Port State Control Officer has become much more complex and the skills required nowadays are of a totally different order. Apart from being a technical professional, the PSCO now also needs to assess the management and often complex operations on board ships. The decisions to be taken at the conclusion of an inspection can be far reaching. To detain or even ban a ship is a step not lightly taken. To convey such a message to the master of a ship will require good communicational skills.

In order to train and develop the skills of PSCOs the Paris MoU has agreed on the introduction of a professional development scheme for all persons involved in the inspection of ships. Parts of the scheme are various training courses, both on a national basis and on a regional basis. Every 5 years each PSCO has to demonstrate that he or she meets the requirements of training and experience, in order to qualify for revalidation.

Together with the European Maritime Safety Agency the Paris MoU is developing distant learning programmes, which will support the contact training programmes.

Substantial resources are invested every year to enhance training and harmonization. Participants from other PSC regions are also invited to share in the expertise that has been developed. In particular this sharing of experience and the use of best practises is considered to be of great benefit.

Only by investing in the skills of the men and women performing port State control inspections, the Paris MoU can ensure that inspections are carried out in a professional manner. This is what the industry may expect from port State control. For good ships this should result in less of an inspection burden. Poor performers will find that with the introduction of the New Inspection Regime in 2011 it will become increasingly difficult to operate in this region.

Richard W.J. Schiferli



The average detention percentage appears to have stabilized over the past four years at around 5%. A serious matter: in 1 out of every 20 inspections a ship is not allowed to proceed to sea.

More worrying is an increasing trend in the number of deficiencies between 2005 and 2008 of 34%. This implies that on average the condition of ships is deteriorating rapidly.

Nearly 60% of inspections result in 6 deficiencies on average and 458 inspections revealed more than 20 deficiencies in 2008.

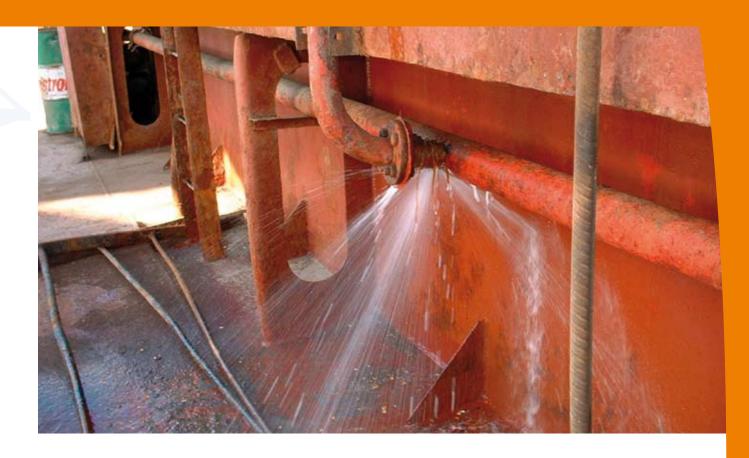
The 2008 "Black Grey and White List" only underscores this development with more flags in the very high risk and high-risk categories. With the global economic recession gaining momentum at the end of 2008 the prospects for 2009 are worrying. Commercial shipping operators, as in other industries, are seeking to reduce costs. If wrong choices are made this could impact on the safety of shipping. There is some concern that a relaxation in the regulatory regime by some flag States and some recognised organizations could impact negatively on shipping.

In reviewing the 2008 figures it appears that ships older than 15 years account for 75% of all deficiencies. There is a concern that with the economic downturn that ships working lives

will be extended which could result in greater levels of deficiencies with a resulting decrease in safety.

The New Inspection Regime project of the Paris MoU approaching to its final stage of development received political support (from Europe) and the Paris MoU starts concentrating on putting the details into place. While low-risk ships will be rewarded with a 24 to 36 month inspection interval, the highrisk ships will be subject to a more rigorous inspection regime with an inspection every 6 months. Banning measures will be extended to all ship types and apply to flags on the "Black List" and "Grey List". This should have an effect on a large number of ships, which manage to continue trading in the area after multiple detentions. They will no longer be welcome in Paris MoU ports after 2011.

The 27 members of the agreement have carried out 24,647 inspections in 2008. The number of detentions has dropped slightly from 1,250 in 2007 to 1,220 in 2008. Over the period 2006-2008 ships flying a "black listed flag" have the highest detention rate.



With 16,070 inspections and 1,906 detentions they score a detention rate of 11.86 %. For ships flying a "grey listed flag" the detention rate is 6.30% (3,319 inspections, 209 detentions) and ships flying a "white listed flag" 3% (49,330 inspections and 1,478 detentions).

In 2008 a total of 19 ships were banned. From these ships 18 were flying a "black listed flag" at the time of the banning.

While detention percentages of most ship types have decreased in 2008, the record for gas carriers and tankers has increased. An area of concern, which needs to be closely monitored.

Certain areas of deficiencies also show a concerning increase compared with 2007:

- Safety of navigation (29.19%)
- MARPOL Annex IV, V, VI (17,12%)
- Security (22.71%)
- Equipment and machinery (19,48%)
- Stability and structure (19.41%)
- Working and living conditions (17,67%)

Between the 1st of September and 30th of November 2008 a Concentrated Inspection Campaign (CIC) on "Safety of Navigation" was carried out. Port State control focussed on compliance with SOLAS Chapter V requirements. The results from this campaign show that one out of every five inspections revealed navigation deficiencies during the CIC

A total of 5,809 inspections have been carried out on 5,470 ships. Several ships were inspected more than once.

During the campaign 1,872 "Safety of Navigation" related deficiencies were recorded. 81 inspections (1.39%) resulted in a detention where one or more SOLAS Chapter V detainable deficiencies were found. The most commonly found detainable deficiencies were related to "Charts", "Nautical Publications" and "Voyage Data Recorder".

Once a year the Port State Control Committee, which is the executive body of the Paris MoU, meets in one of the Member States. The Committee considers policy matters concerning regional enforcement of port State control, reviews the work of the Technical Evaluation Group and task forces and decides on administrative procedures.

The task forces, of which 9 were active in 2008, are each assigned a specific work programme to investigate improvement of operational, technical and administrative port State control procedures. Reports of the task forces are submitted to the Technical Evaluation Group (TEG) at which all Paris MoU members and observers are represented. The evaluation of the TEG is submitted to the Committee for final consideration and decision-making.

The MoU Advisory Board advises the Port State Control Committee on matters of a political and strategic nature, and provides direction to the task forces and Secretariat between meetings of the Committee. The Board meets several times a year and in 2008 was composed of participants from Canada, the Russian Federation, the Netherlands, Sweden and the European Commission.

Port State Control Committee

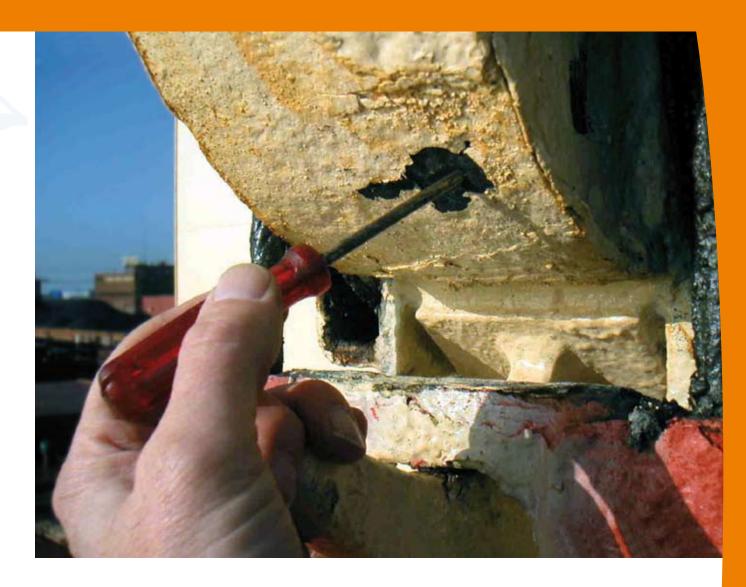
The Port State Control Committee held its 41st meeting in Loutraki, Greece on 19-23 May 2008. The MoU has 27 member States and the Committee made significant progress in filling in further details of the new inspection regime, which is expected to enter into force in 2011.

The Committee also discussed progress made on the development of a new information system. The European Maritime Safety Agency (EMSA), in co-operation with the Paris MoU, will manage the development of this new information system.

One of the main items on the agenda was the proposal for a common training programme for Port State Control Officers. The general principles of setting common and consistent standards, providing continuing training to Port State Control Officers and the updating of technical knowledge were embraced. A number of initiatives will be financed and developed jointly by the member States, Paris MoU Secretariat and European Maritime Safety Agency.

The Committee thanked EMSA for the development of "Rule check" which is an electronic tool for PSCOs to check the application of legislation. This electronic tool was successfully delivered early in 2008 to all PSCOs.

The Committee continued to take actions in response to the 2nd Joint Ministerial



Conference of the Paris and Tokyo MoUs held in Vancouver in 2004. It gave high importance to Concentrated Inspection Campaigns and scheduled a CIC on Safety of Navigation from September to November 2008. The campaign was carried out jointly with the Tokyo MoU.

In addition the Committee considered a number of options for further joint CICs with the Tokyo MoU in 2009 and beyond. A CIC on lifeboat launching arrangements, including the testing and maintenance of "on-load" release mechanisms for lifeboats and rescue boats and the awareness of the crew of the dangers of launching and recovering lifeboats will be carried out during 2009.

The report of the CIC on the ISM Code carried out in September, October and November 2007 was presented to PSCC41. The results will be presented to the IMO in 2009.

Technical Evaluation Group

The Technical Evaluation Group convened in March in The Hague, the Netherlands, and in November 2008 in Lisbon, Portugal. Several task forces submitted reports to the TEG for evaluation before submission to the Port State Control Committee.

Issues considered by the TEG included:

- Development of a new inspection regime
- Enhancement of the SIReNaC information system
- Evaluation of Paris MoU statistics
- Evaluation of the CIC on ISM (2007) and revision of the guidelines on ISM
- Development of a new training policy
- Development of guidelines for campaigns on
- Safety of Navigation (2008) and Ship Loading and Stability (2010)
- Development of guidelines for Ballast Water Management

- Development of new PSC guidelines on operational drills.
- Development of guidelines for thickness measurements on ships not covered by ESP and CAS

Port State Control Training initiatives

The Paris MoU will continue to invest in the training and development of Port State Control Officers in order to establish a higher degree of harmonisation and standardisation in inspections throughout the region.

The Secretariat organises three different training programmes for Port State Control Officers:

- Seminars (twice a year)
- Expert training (twice a year)
- Specialized training (once a year)

The Seminars are open to members, cooperating members and observers. The agenda is more topical and deals with current issues such as inspection campaigns and new requirements.

Expert and Specialized Training aims to promote a high degree of professional knowledge and harmonisation of more complex port State control issues and procedures. These 5-day training sessions are concluded with an assessment and certification.

The Paris MoU is also assisting the EMSA in the preparation and delivery of New Entrant and Refresher Programmes for PSCOs from throughout the region.

46th PSC Seminar

The 46th Port State Control Seminar was held on 10 – 12 June 2008 in Quebec Canada. Port State Control Officers from the Paris MoU attended the Seminar, as well as participants from the Tokyo MoU, Black Sea MoU and USCG. The Seminar covered the latest developments within the Paris MoU. The main topics of discussion were developments with regard to the new inspection regime, the guidelines for the Convention on Ballast Water Management, the CIC on navigation including presentations on Electronic Chart Display and Information System (ECDIS) and the Voyage Data Recorder (VDR).

47th PSC Seminar

The 47th Port State Control Seminar was held on 9-11 December 2008 in Opatija, Croatia. Port State Control Officers from the Paris MoU attended the Seminar, as well as participants from the Black Sea MoU and the Mediterranean MoU.

Apart from new developments in the MoU, and at EMSA the Seminar discussed the introduction of the Anti-Fouling on Ships (AFS) convention, guidelines on the implementation of the Bunker Convention and PSC implementation in Croatia.

Expert and Specialized Training

For the Expert Training the central themes are "The Human Element" and "Safety and Environment". The theme of the Specialized Training will change every year. In 2008 this training dealt with Bulk Cargoes and the problems PSC Officers may encounter.



Both training programmes are intended for experienced Port State Control Officers. Using that experience, the participants can work together to establish a higher degree of harmonisation and standardisation of their inspection practice. Lecturers for the training programmes are recruited from the maritime Administrations of the member States, international organizations, and educational institutions and from the maritime industry. For the training programmes in 2008 the United Kingdom, the Russian Federation, the Netherlands, as well as Lloyds Register, shipping companies, suppliers and others, provided lecturers.

The 5th Expert Training "Safety and Environment"

The fifth Expert Training programme was held in The Hague in February 2008. Participants from member States and the Black Sea MoU took part in the programme. Important issues during this training were the IMDG Code, Load Lines, life saving appliances and oil filtering equipment.

The 2nd Specialized Training on Bulk Cargoes

In April 2008 the second Specialized training on Bulk Cargoes was held in Gijon Spain. The programme was developed in co-operation with the Spanish Maritime Authority and the Centro Jovellanos in Gijon. Participants from members States and the Black Sea MoU took part in this training.

The lecturers covered a broad range of subjects. Different types of bulk cargoes were discussed with the focus on aspects to be taken into account during a port State control inspection.

New Entrant and Refresher Programmes

These programmes are a crucial part of the overall training package being developed for Paris MOU PSCOs. The five-day seminars use detailed inspection scenarios to focus on PSC procedures, from the first selection of a ship through to the completion of the PSCOs report. 183 participants attended the two New Entrant and the two Refresher Seminars held in Lisbon in 2008.

Distance Learning Programme

In 2008 the DLP module on the Paris MoU Procedures was completed.

The development of the third phase of the DLP programme has been taken up by EMSA.

Review Panel

Flag States or recognized organizations, acting on behalf of flag States, that cannot resolve a dispute concerning a detention with the port State may submit their case for review. The Review Panel is composed of representatives of four different MoU Authorities, on a rotating basis, plus the Secretariat.

For the year 2008 the Secretariat received 9 requests for review. This is 0,74% of the total amount of detentions within the Paris MoU region.

In 3 cases the Review Panel concluded that the port State decision to detain was not justified and the port State should reconsider its decision. In all cases the port States deleted the detentions.

In 4 cases the panel concluded that the port State did not need to reconsider its decision. In 2 cases the port State reconsidered the detention prior to the panels review.

Quality management

In 2008 the Paris MoU Secretariat started the process to develop and implement the ISO2001:2008 quality management system (QMS) for the activities and products of the Secretariat. It is expected that this QMS will be fully implemented in January 2010. It will help the Secretariat to accomplish its mission:

Supporting the Member States, in all respects, to ensure effective operation of the Paris Memorandum on Port State Control.

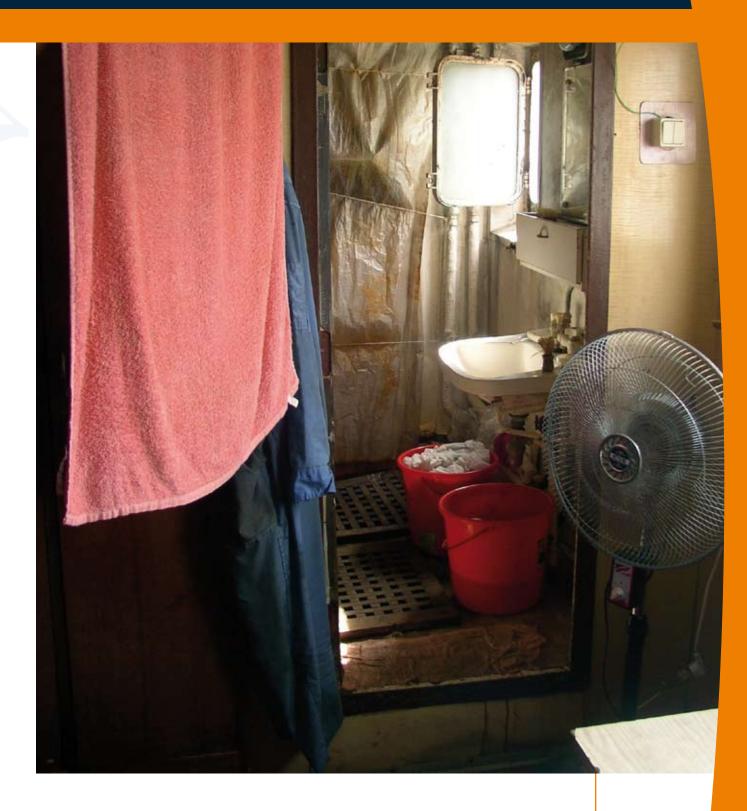
Paris MoU on the Internet

The Paris MoU Internet site has continued to enjoy an increasing demand from a variety of visitors. In particular from flag and port States, government agencies, charterers, insurers and classification societies, who are able to monitor their performance and the performance of others on a continuous basis. Ships which are currently under detention are entered in a listing by the port State. Port State control inspections can be accessed live and provide the visitor with more detailed information.

The regular publication of ships "Caught in the Net" has highlighted particularly serious detentions. These are described in detail and supported with photographs to make the general public aware of unsafe ships that have been caught by port State control.

During 2008 details were published of:

- the m/v Olga registered in Antigua-Barbuda and detained in Denmark;
- the m/v Captain Blue registered in DPR Korea and detained in Greece;
- the m/v Sea Bridge registered in DPR Mongolia and detained in Poland;
- the m/v Sunlight-Bey registered in Lebanon and detained in Spain;
- the m/v Carib Vision registered in Liberia and detained in Canada;
- the m/v EEC Atlantic registered in Panama and detained in Germany.



The annual award for the best contribution to the "Caught in the Net" has been presented to Poland.

Other information of interest such as the monthly list of detentions, the annual report, the statistics of the "Blue Book" and news items can be downloaded from the website, which is found at www.parismou.org.



At the end of 2008 a global recession developed with serious consequences for global shipping. The cancellation of new ships and attention to reductions in shipping costs, for example in maintenance and training, may have an effect on the results in Port State Control as well in coming years.

Performance of Recognized Organizations

For several years the Committee has closely monitored the performance of classification societies acting as recognized organizations for flag States. A table indicating a performance ranking, based on similar principles to the table for flag States has been published for several years. When comparing the performance with results published by the Paris MoU over the past years, the ranking in the list is unlikely to lead to many surprises.

On the other hand, the list may provide an incentive, as it does for flag States, to compete for higher quality.

Among the best performing recognized organizations were:

- Det Norske Veritas (Norway) (DNVC)
- Germanischer Lloyd (Germany) (GL)
- Registro Italiano Navale (Italy) (RINA)

The lowest performing organizations were:

- Register of Shipping (Albania) (RSA)
- Korea Classification Society (DPR Korea) (KCS)
- Bulgarski Koraben Registar (BKR)

New Inspection Regime

The Committee decided 3 years ago on a fundamental review of its inspection regime. These principles have to be translated into practical implementation. The inspection regime will also take into account a "fair

sharing" principle where, under certain conditions, the inspection burden can be shared among the members.

For the EU members of the Paris MoU, the inspection regime has been translated in a new Directive, part of the "3rd Maritime Safety Package". This package was finalized at the end of 2008. The new inspection regime will enter into force on 1 January 2011.

Another consequence of the new inspection regime will be the introduction of a new information system. The development of the new information system started in the second half of 2008.

Concentrated inspection campaigns

Several Concentrated Inspection Campaigns have been held in the Paris MoU Region over the past years. The campaigns focus on a particular area of compliance with international regulations with the aim of gathering information and enforcing the level of compliance. Each campaign is prepared by experts and identifies a number of specific items for inspection. Experience shows that they serve to draw attention to the chosen area of compliance.

Safety of Navigation, SOLAS Chapter V In the period from 1 September to 30

November a total of 6,331 inspections were carried out within the Paris MoU on 5,470 ships;



however, CIC questionnaires were not completed for 522 of these inspections. The number of inspections that are included in the analysis for this report are therefore 5,809. Although the majority of ships were only inspected once, several ships were inspected more than once.

During this campaign the 27 member State authorities focussed on compliance with SOLAS Chapter V requirements on inspected ships. A matter of serious concern is that 1 out of every 5 inspections showed navigation deficiencies during the CIC. In total 1,872 "Safety of Navigation" related deficiencies were recorded during the inspections.
81 inspections (1.39%) resulted in a detention where one or more SOLAS Chapter V detainable deficiencies were found. Most commonly found detainable deficiencies were related to "Charts", "Nautical Publications" and "Voyage Data Recorder".

Of the flag States with more then 10 inspections during the CIC the flag States with the highest safety of navigation related detentions percentage were Albania (22.2%), Egypt (18.2%), Syrian Arabic Republic (12.5%) and Sierra Leone (11.1%).

General dry cargo ships accounted for 39% of the inspections (8.5% of such inspections lead

to a detention), followed by bulk carriers 16% of inspections (3.33% of the inspections lead to a detention) and chemical tankers 8% of inspections (2.25% lead to a detention).

The objective of the CIC was to provide indications as to the industry's level of compliance with the revised SOLAS Chapter V Safety of Navigation requirements that came into force on 1 July 2002. The results of the CIC, which reveal that almost one-third of all the detentions resulting from the campaign were CIC-topic related, provides good indication that the industry has not effectively implemented the revised SOLAS Chapter V requirements to an acceptable level.

Campaigns 2009, 2010 and 2011

For 2009 it has been decided to join the Tokyo MoU in a Concentrated Inspection Campaign, which will focus on life saving launching arrangements. The purpose of this CIC is twofold – to increase awareness of lifeboat related safety issues and to gather information on maintenance.

For 2010 the Committee agreed that there will a CIC campaign on damage stability of tank ships.

For 2011 the Committee agreed that there will a CIC campaign on Structural safety and the International convention on Load Lines.

Co-operation with other organizations

The strength of regional regimes of port State control, which are bound by geographical circumstances and interests, is widely recognised. Nine regional MoUs have been established. The Committee has expressed concern that Members who have not made efforts to exercise effective control over their own fleet dominate some of these MoUs. Several flag States belonging to regional MoUs appear on the "Black List" of the Paris MoU. In order to provide technical co-operation to these new MoUs, they may apply for associate or observer status.



In 2008 the Port State Control Committee decided positively on observer status for the Mediterranean MoU and the Riyadh MoU, as well as the Black Sea MoU. Representatives from these memoranda may participate in Paris MoU meetings, including Committee meetings.

Five regional agreements have official observer status to the Paris MoU: the Tokyo MoU, Caribbean MoU, Mediterranean MoU, Black Sea MoU and Riyadh MoU. The United States Coast Guard is also an observer at Paris MoU meetings.

The International Labour Organization and the International Maritime Organization have participated in the meetings of the Paris MoU on a regular basis since 1982. In 2006 the Paris MoU obtained official status at the IMO as an Inter Governmental Organization. A delegation of the MoU



participated in the 16th session of the Sub-Committee on Flag State Implementation in June 2008.

The 2007 Annual Report, including inspection data, an analysis of 2007 statistics, a combined list of flags targeted by the Paris MoU, Tokyo MoU and USCG and a summary of the actions from the 2004 Ministerial Conference were submitted to the Sub-Committee on Flag State Implementation (FSI). The figures have generated good discussion on how several flag States have implemented measures to improve their records. The Paris MoU welcomed the decision of FSI to continue this dialogue at the next session in 2009.

In September 2008 the Paris MoU also participated as an observer in the ILO Meeting of Experts to adopt guidelines for Port State Control Officers carrying out inspections under the Maritime Labour Convention 2006.

In the following pages the facts and figures of 2008 are listed. The figures show a steadily increase in the number of inspections, inspected ships and deficiencies. The number of detentions though has been reduced slightly.

Inspections

With a total number of 24,647 inspections performed in 2008 the inspection figures showed an increase of 7.74% compared to the figures of 2007. Each individual ship was inspected an average of 1.5 times per year, a rate which has changed little since 1999 (figure 1 and 2).

The overall inspection effort, which is the ratio of the number of inspections to the number of individual ship calls in Members' ports was 31.59%. With the exception of Estonia, all member States reached the 25% inspection effort commitment of the Memorandum (figure 6). In 2007 Romania and Bulgaria were accepted as new members in the Paris MoU region. Their contribution to the overall inspections efforts is shown in figure 7 and figure 8.

Deficiencies

For the third year in a row the number of deficiencies has increased. In 2006 the number of deficiencies recorded was 66,142, in 2007 74,713 deficiencies were recorded. In 2008 this number increased to a total of 83,751 deficiencies. Compared to 2007 this is an increase of deficiencies of 12.10% (figure 3).

In 58% of all inspections performed, one or more deficiencies were recorded. In 2007 this figure was 56.4%.

The average number of deficiencies per inspection also increased from 3.27% in 2007 to 3.40% in 2008. In summary, the overall increase in deficiencies reflects in more deficiencies per inspection. Also the Concentrated Inspections Campaign on Navigation does have an influence on the number of deficiencies recorded.

Detentions

Some deficiencies are clearly hazardous to safety, health or the environment and the ship is detained until they are rectified. Detention rates are expressed as a percentage of the number of inspections, rather than the number of individual ships inspected to take account of the fact that some ships are detained more than once a year.

Compared to 2007, the number of detentions has slightly decreased from 1,250 to 1,220 detentions. The average detention rate this year is 4.95% (figure 5). Unfortunately the 2008 detention figure is still higher than the historically low figure of 2005, which showed a number of 994 detentions. Overall, the last decade shows a trend towards a decrease in detentions.

"Black, Grey and White List"

The "Black, Grey and White List" presents the full spectrum, from quality flags to flags



with a poor performance that are considered high or very high risk. It is based on the total number of inspections and detentions over a 3-year rolling period for flags with at least 30 inspections in the period.

On the "Black, Grey and White list" a total number of 83 flags are listed: 21 on the "Black list", 21 on the "Grey list", and 41 on the "White list". In 2007 the total number of flags listed counted up to 80 flags, namely 19 on the "Black List", 23 on the "Grey List" and 38 on the "White List".

In last year's annual report it was stated that the quality of flags was decreasing. Considering the number of flags on this year's "Black list", namely 21, as opposed to 19 in 2007, one could assume that the figures for 2008 demonstrate a further trend towards lower quality. Indeed, the number of flags on the "Black list" which are indicated as medium risk, (- 2 flags compared to 2007) has decreased and the number of flags in the medium to high risk (+2) and high risk (+1) and very high risk (+1) have increased compared to 2007. Considering these facts it could be concluded that the severity of the black list is increasing.

Most flags that were considered very high risk in previous years remain so in 2008. The poorest performing flags are still DPR Korea, Bolivia and Albania. New on the list are the flags of Libyan Arab Jamahiriya (very high risk) and the Republic of Moldova and Dominica (medium risk).

Flags with an average performance are shown on the "Grey List". Their appearance on this list may act as an incentive to improve and move to the "White List". At the same time flags at the lower end of the "Grey List" should be careful not to neglect control over their ships and risk ending up on the "Black List" next year.

On this year's grey list a total number of 21 flags is recorded. Last year the grey list recorded 19 flags. New on the grey list are the flags Islamic Republic of Iran and the United States of America, both were listed on the "White list" in 2007.

The "White List" represents quality flags with a consistently low detention record. Compared to last year, the number of flags on the white list has increased by 3 flags to a total number of 41 flags. New on the list white list are Lithuania, Turkey and Japan. All three flags were listed on the "Grey list" in 2007.

Bermuda (United Kingdom) has been placed highest on the list in terms of performance. With an excess factor of -1.93 this flag has

Facts and figures 2008

performed even better than last year's number one France which then had an excess factor of –1.81. The next in line of the best performing flags in 2008 are France (-1.87) and the United Kingdom (-1.68).

Ship type

In 2007 general dry cargo ships were responsible for the largest detention rate of all ship types in that year. Again in 2008 the detention rate of general dry cargo ships is higher than the detention rate of other ship types. General dry cargo ships have a detention rate of 7.29%. Ship types like bulk carriers and chemical tankers have a lower detention rate of 4.61% and 3.19% respectively. Some other ship types have even lower detention rates (table 7).

Performance of Recognized Organizations
To calculate the performance of the recognized organizations (RO), the same formula to calculate the excess factor of the flags is used. A minimum number of 60 inspections per RO is needed before the performance is taken into account for the list. In 2008 27 RO's are recorded on the performance list.

In 2008 the poorest performing organization on the list is Albania Register of Shipping. With an excess factor of 3.31 this organization performed even worse than last year's poorest performing RO, Korea Classification Society, which then had an excess factor of 2.75.

As in 2007, Det Norske Veritas is the best performing organization on the list. With an excess factor of -1.77 this organization performed almost as well as last year.

Compared to last year's performance level, a small shift in RO performance in 2008 can be noticed. This year more organizations have been placed on the very low and medium part of the list and less organizations have been placed on the high and low performing part of the list (figure 17). It could be concluded that the average performance of the RO's has decreased in 2008.

Details of the responsibility of recognized organizations for detainable deficiencies have been published since 1999. When one or more

detainable deficiencies are attributed to a recognized organization in accordance with the criteria it is recorded and the RO is informed. Out of 1,220 detentions recorded in 2008, 174 or 14.26% were considered RO related which is a relatively small increase compared to the 12.3% of the previous year.

Except for Hellenic Register of Shipping (Greece), medium performance, all EU recognized RO's have been placed on the "high" performance list in 2008.

Refusal of access of ships

A total of 19 ships were banned from the Paris MoU region in 2008 because: they failed to call at an agreed repair yard (10), multiple detentions (7) or because of no valid ISM code certificate (2). Except for one banning of a ship flying the flag of Turkey, all bannings were applied to ships flying a black listed flag. By the end of 2008 the ban had been lifted on 4 of these ships after verification that all deficiencies had been rectified. A number of ships remain banned from previous years (figure 18).

Deficiencies per major category

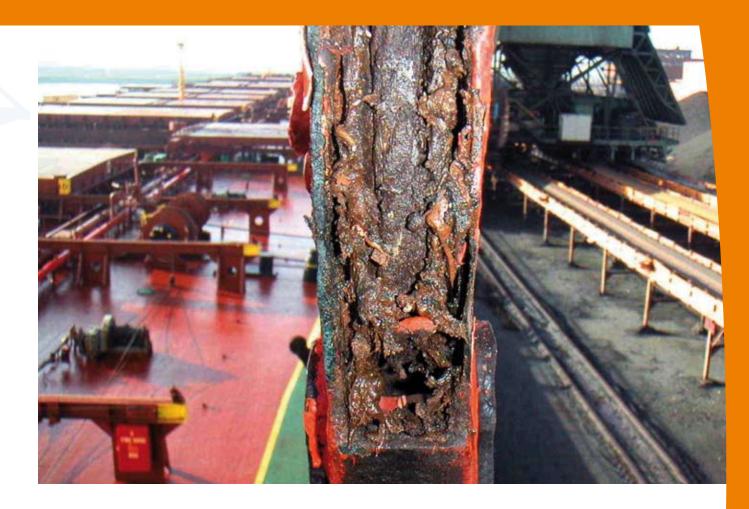
In 2008 a total of 83,3751 deficiencies were recorded during port State control inspections, an increase of approximately 12% on the number of 74,713 recorded in 2007.

The number of deficiencies in vital areas such as equipment and machinery, and safety and fire appliances accounted for about 45% of the total number of deficiencies.

Other areas where major deficiencies are found are in the areas of ship and cargo operations (12.15%), working and living conditions (11.71%), stability and structure (13.62%) and certificates (10.54%) The trends in those major key areas are clarified below. More detailed information may be found in the statistical Annexes to this report.

Certification of crew

Deficiencies in compliance with the standards for training, certification and watch keeping for seafarers indicated an increase of 7.84% from 3,098 in 2007 to 3,341 in 2008.



Equipment and machinery

Given the 2008 Concentrated Inspection Campaign on Navigation, the deficiencies in that area showed an increase of almost 30%, from 7,875 in 2007 to 10,174 deficiencies in 2008.

Safety and fire appliances

In 2007 deficiencies in vital safety areas such as life saving appliances, fire fighting equipment, alarm signals, structural safety, accounted for about 20% of the total number of deficiencies. The number of deficiencies in these areas increased almost 7% from 15,998 in 2007 to 17,112 in 2008.

Marine pollution and environment

Deficiencies in the areas "MARPOL73/78 Annex IV, V and VI", "MARPOL related operational deficiencies", "gas and chemical carriers" and "cargoes" showed an increase of 20.62%, compared to 2007. But deficiencies found in the areas "MARPOL I, II and III" showed a decrease of – 2.62% (table 8).

Working and living conditions

Major categories of deficiencies related to working and living conditions are 'crew and accommodation', 'food and catering', 'working spaces' and 'accident prevention' under the ILO 147 Conventions. Deficiencies in these areas increased by 17.67% from 8,348 in 2007 to 9,823 in 2008.

Operational

Operational deficiencies excluding MARPOL related operational deficiencies showed a small increase of 8.34% from 2,544 deficiencies in 2007 to 2,756 in 2008.

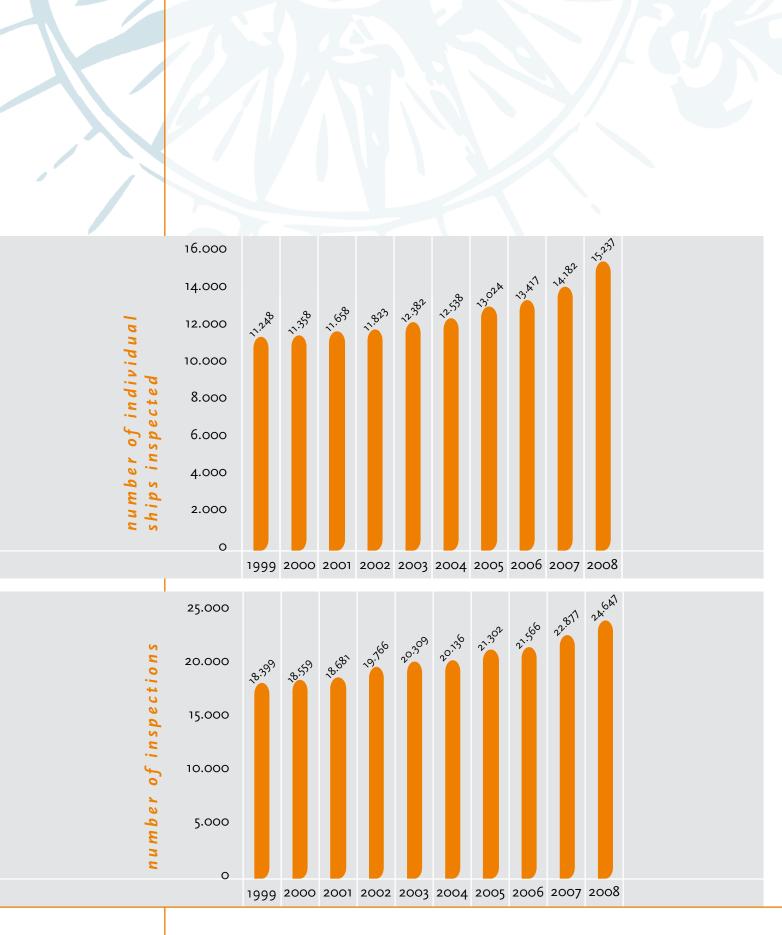
Management

The International Safety Management Code came into force for certain categories of ships from July 1998, and was extended to other ships in July 2002. In 2007 the figures showed a significant increase of 50.9% in deficiencies in this category, due to the CIC on ISM in the last months of 2007. In contrast to 2007, this year's figures even showed a decrease of -0.34%, from 4,657 in 2007 to 4,641 in 2008.



STATISTICAL ANNEXES annual report 2008

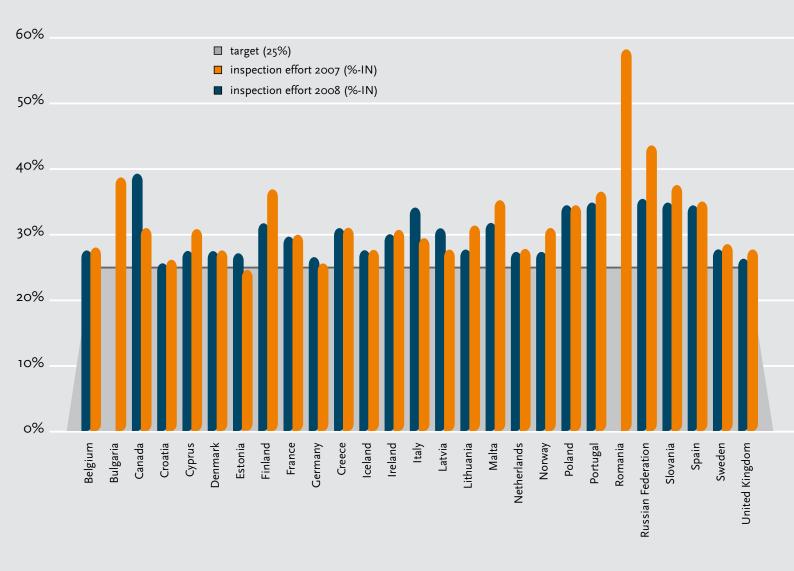
Basic port state control figures



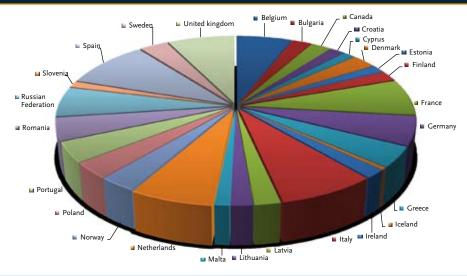


Inspection efforts - 1

inspection efforts of members compared to target



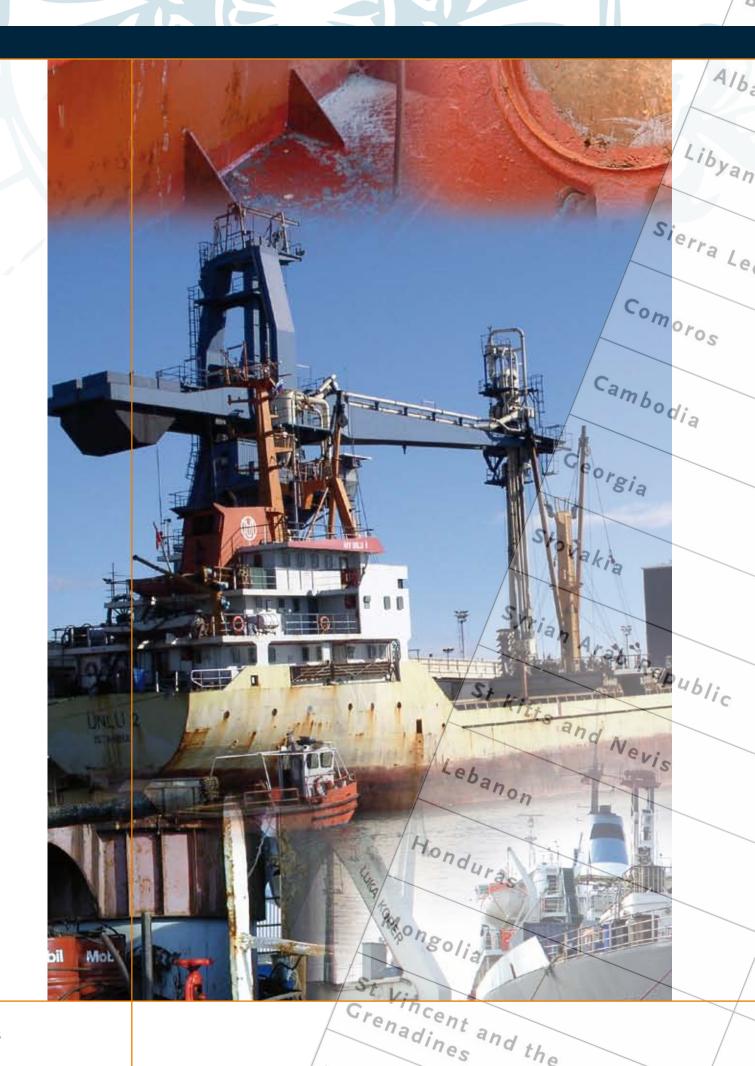
Inspection efforts - 2



MOU port States' individual contribution to the total amount of inspections										
MOU port State	Individual Ships Calls	Inspections	Inspections with deficiencies	Detentions	Detents with RO related deficiencies	%-Insp. with deficiencies	% Detained	% Individual Ships inspected (25% commitment)	% Inspection of MOU total	
Belgium	5246	1481	843	70	17	56,92	4,73	28,23	6,01	
Bulgaria	1362	528	397	30	5	75,19	5,68	38,77	2,14	
Canada ¹	1739	553	208	23	7	37,61	4,16	31,80	2,24	
Croatia	1490	401	289	33	4	72,07	8,23	26,91	1,63	
Cyprus	1059	329	212	55	4	64,44	16,72	31,07	1,33	
Denmark	2436	659	314	23	2	47,65	3,49	27,05	2,67	
Estonia	1571	383	125	4	0	32,64	1,04	24,38	1,55	
Finland	1332	492	138	3	0	28,05	0,61	36,94	2,00	
France	5889	1780	1087	91	5	61,07	5,11	30,23	7,22	
Germany	5427	1403	784	47	6	55,88	3,35	25,85	5,69	
Greece	3075	1003	439	45	12	43,77	4,49	32,62	4,07	
Iceland	382	103	33	1	o	32,04	0,97	26,28	0,42	
Ireland	1390	435	202	30	4	46,44	6,90	31,29	1,76	
Italy	6567	1929	1270	212	30	65,84	10,99	29,37	7,83	
Latvia	1864	515	229	5	o	44,47	0,97	27,63	2,09	
Lithuania	1406	441	325	9	o	73,70	2,04	31,37	1,79	
Malta	817	294	223	21	4	75,85	7,14	35,99	1,19	
Netherlands	5820	1633	873	41	2	53,46	2,51	28,06	6,63	
Norway	2343	734	269	22	4	36,65	3,00	31,33	2,98	
Poland	2343	789	447	33	1	56,65	4,18	33,67	3,20	
Portugal	2684	986	529	39	8	53,65	3,96	36,74	4,00	
Romania	1907	1101	811	31	3	73,66	2,82	57,73	4,47	
Russian Fed. ²	3325	1470	953	54	7	64,83	3,67	44,21	5,96	
Slovenia	779	298	113	53	14	37,92	17,79	38,25	1,21	
Spain	6608	2324	1620	165	24	69,71	7,10	35,17	9,43	
Sweden	2686	763	262	9	0	34,34	1,18	28,41	3,10	
United Kingdom	6478	1820	1327	71	11	72,91	3,90	28,10	7,38	
Total	78025	24647	14322	1220	174	58,11	4,95	31,59	100,00	

¹ Only East coast of Canada

² Excluding Black Sea Ports (Novorossiysk, Sochi and Tuapse)



Black list

DPR

O/ivia

			/			
	Flag	Inspections	Deten- tions 2006-2008	Black to Grey limit	Grey to White limit	Excess Factor
	Black list					
bla	Korea, DPR	204	73	21		8,75
/ 9	Bolivia	37	14	6		6,94
	Albania	284	72	27	very	5,73
	Libyan Arab Jamahiriya	30	10	5	high risk	5,24
	Sierra Leone	345	73	32		4,55
	Comoros	505	99	45		4,26
_	Cambodia	727	128	63		3,78
	Georgia	885	150	75	high risk	3,64
	Slovakia	317	55	30		3,33
	Syrian Arab Republic	227	39	23		3,09
	St Kitts and Nevis	306	50	29		3,00
1	Lebanon	96	18	11		2,88
	Honduras	68	13	9		2,64
1	Mongolia	53	10	7	to high	2,30
	St Vincent and the Grenadines	2355	265	186	risk	2,07
	Egypt	137	20	15		2,00
	Moldova, Republic of	92	14	11		1,87
	Belize	609	62	53		1,42
	Panama	8043	667	601	medium risk	1,27
	Ukraine	575	55	51		1,22
	Dominica	175	19	18		1,11

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2006.20



Algeri Grey list

			/				
erbaija	Flag	Inspections	Deten- tions 2006-2008	Black to Grey limit	Grey to White limit	Excess Factor	
	Grey list						
cco	Jamaica	56	7	8	0	0,92	_
	Algeria	119	12	13	3	0,86	,
a	Azerbaijan	115	11	13	3	0,79	
ands	Morocco	156	13	17	5	0,68	
	Cook Islands	86	7	10	2	0,61	
	Bulgaria	323	24	31	15	0,59	7
	Saudi Arabia	54	4	7	0	0,53	
	Tunisia	56	4	8	0	0,51	
	Dominican Republic	31	2	5	0	0,47	
	Taiwan, China	33	2	5	0	0,45	
	Korea, Republic of	214	14	22	8	0,43	/
	Malaysia	96	5	11	2	0,31	
	Austria	31	1	5	0	0,29	
	Croatia	196	11	20	7	0,29	
	Faroe Islands	117	6	13	3	0,28	
	Antilles, Netherlands	714	44	62	38	0,24	
	Thailand	213	11	22	8	0,20	
	United States of America	157	7	17	5	0,15	1
	Latvia	158	7	17	5	0,15	
1	Iran, Islamic Republic of	201	9	21	8	0,11	
	Poland	193	8	20	7	0,06	

8008



White list

uwait

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tar

			30	1	
Flag	Inspec- tions 2006-2008	Deten- tions 2006-2008	Black to Grey limit	Grey to White limit	Exce Fact
White list		I	I	<u>I</u>	
Vanuatu	133	4	15	4	0,0
Israel	30	0	5	0	0,0
Kuwait	30	0	5	0	0,0
Qatar	33	0	5	0	0,0
Lithuania	244	10	24	10	0,0
Turkey	2039	123	162	123	0,0
Switzerland	75	1	9	1	-0,0
Estonia	166	5	18	6	-0,
Japan	58	0	8	0	-0,3
Switzerland Estonia Japan Philippines Russian Federation	187	5	19	7	-0,4
Russian Federation	2550	125	200	157	-0,4
Cayman Islands, UK	366	13	34	17	-0,2
Barbados	434	16	40	21	-0,2
Spain	262	8	26	11	-0,4
Malta	4923	232	375	315	-0,5
Portugal	506	14	45	25	-0,8
Cyprus	2726	100	213	168	-0,8
India	157	2	17	5	-0,
Gibraltar, UK	1058	33	88	60	-0,9
Belgium	203	3	21	8	-1,0
Antigua and Barbuda	4851	170	369	310	-1,
Liberia	3848	124	296	243	-1,0
Ireland	151	1	16	5	-1,:
Norway	2523	68	198	155	-1,:
Bahamas	3688	98	284	232	-1,:
Marshall Islands	1852	43	148	111	-1,
Singapore	1129	23	94	64	-1,
Hong Kong, China	1214	25	100	70	-1,
Greece	1546	33	125	91	-1,
Netherlands	3096	68	241	193	-1,4
Man, Isle of, UK	914	16	77	51	-1,2
Italy	1309	24	107	76	-1,4
Sweden	1018	15	85	57	-1,
Denmark	1295	20	106	75	-1,
Finland	614	7	54	32	-1,0
Luxembourg	155	0	17	5	-1,6
Germany	1236	17	102	71	-1,
China	246	1	24	10	-1,0
United Kingdom	1820	26	146	109	-1,0
France Bermuda, UK	356	1	33	17	-1,8
Bermuda, UK	289	0	28	13	-1,
	-	1			

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Inspections, detentions and deficiencies 2008

Flag	Inspections	Detentions	Inspections with deficiencies	Individual Ships	Inspection % with deficiencies	Detention %
Albania	91	19	71	30	78,02	20,88
Algeria	39	5	31	19	79,49	12,82
Angola	1	0	1	1	100,00	0,00
Antigua and Barbuda	1731	58	990	837	57,19	3,35
Antilles, Netherlands	218	10	37	113	62,84	4,59
Argentina	1	0	1	1	100,00	0,00
Austria	7	0	5	4	71,43	0,00
Azerbaijan	42	4	29	25	69,05	9,52
Bahamas	1238	26	675	774	54,52	2,10
Bahrain	7	0	2	5	28,57	0,00
Barbados	172	6	101	90	58,72	3,49
Belgium	79	0	40	54	50,63	0,00
Belize	198	13	143	114	72,22	6,57
Bermuda, UK	82	0	31	65	37,80	0,00
Bolivia	6	1	5	4	83,33	16,67
Brazil	1	0	1	1	100,00	0,00
Bulgaria	119	7	90	60	75,63	5,88
Cambodia	311	62	276	157	88,75	19,94
Canada	5	0	3	4	60,00	0,00
Cayman Islands, UK	105	2	48	75	45,71	1,90
Chile	2	0	1	1	50,00	0,00
China	71	0	31	62	43,66	0,00
Comoros	189	32	159	95	84,13	16,93
Cook Islands	47	5	38	24	80,85	10,64
Croatia	73	2	35	49	47,95	2,74
Cyprus	931	31	517	531	55,53	3,33
Denmark	440	5	203	274	46,14	1,14
Dominica	68	8	55	28	80,88	11,76
Dominican Republic	12	0	9	5	75,00	0,00
Egypt	36	6	26	23	72,22	16,67

Flag	Inspections	Detentions	Inspections with deficiencies	Individual Ships	Inspection % with deficiencies	Detention %
Eritrea	2	1	2	1	100,00	50,00
Estonia	42	0	19	27	45,24	0,00
Faroe Islands	42	3	26	22	61,90	7,14
Finland	214	1	115	122	53,74	0,47
France	121	0	57	91	47,11	0,00
Georgia	279	46	239	128	85,66	16,49
Germany	403	6	186	273	46,15	1,49
Gibraltar, UK	405	10	201	203	49,63	2,47
Greece	506	9	219	395	43,28	1,78
Guina	1	0	1	1	100,00	0,00
Honduras	20	3	13	13	65,00	15,00
Hong Kong, China	428	10	190	359	44,39	2,34
India	60	1	26	48	43,33	1,67
Indonesia	6	1	6	4	100,00	16,67
Iran, Islamic Republic of	51	1	35	43	68,63	1,96
Ireland	57	0	24	28	42,11	0,00
Israel	11	0	6	7	54,55	0,00
Italy	465	7	221	328	47,53	1,51
Jamaica	16	0	11	14	68,75	0,00
Japan	23	0	8	16	34,78	0,00
Kazakhstan	4	0	2	4	50,00	0,00
Kiribati	1	0	1	1	100,00	0,00
Korea, DPR	24	12	22	17	91,67	50,00
Korea, Republic of	93	5	65	73	69,89	5,38
Kuwait	12	0	5	10	41,67	0,00
Latvia	63	3	44	30	69,84	4,76
Lebanon	24	7	20	20	83,33	29,17
Liberia	1462	53	791	1064	54,10	3,63
Libyan Arab Jamahiriya	11	3	10	7	90,91	27,27
Lithuania	77	2	48	45	62,34	2,60

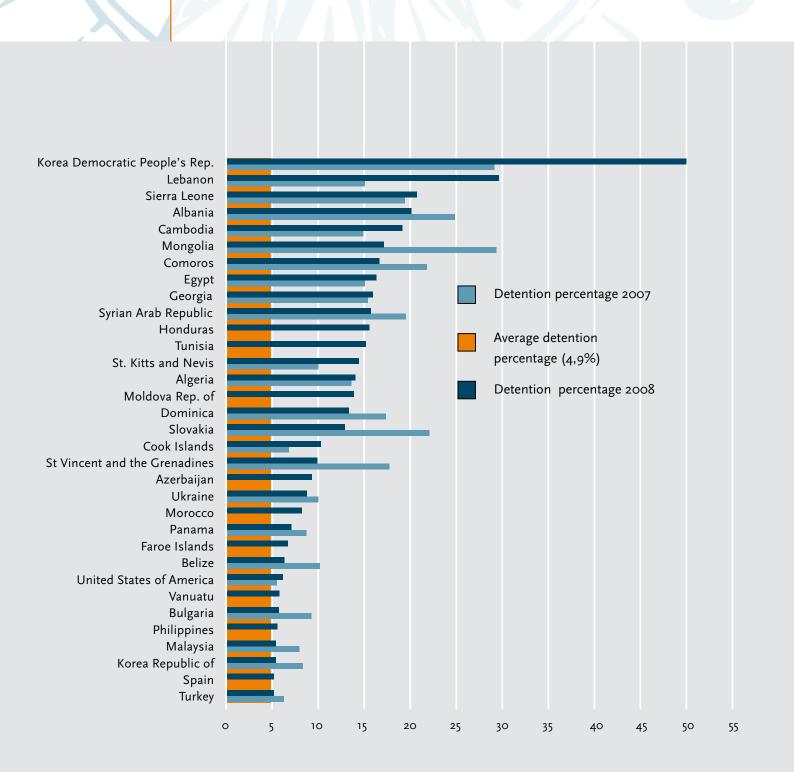
Inspections, detentions and deficiencies 2008

Flag	Inspections	Detentions	Inspections with deficiencies	Individual Ships	Inspection % with deficiencies	Detention %
Luxembourg	57	0	30	34	52,63	0,00
Malaysia	36	2	20	28	55,56	5,56
Maldives	2	0	2	1	100,00	0,00
Malta	1843	76	1101	1126	59,74	4,12
Man Isle of, UK	266	4	106	175	39,85	1,50
Marshall Islands	707	18	340	524	48,09	2,55
Mexico	1	0	1	1	100,00	0,00
Moldova Rep, of	67	8	61	41	91,04	11,94
Mongolia	23	4	22	11	95,65	17,39
Morocco	57	5	51	30	89,47	8,77
Myanmar	6	o	4	2	66,67	0,00
Netherlands	1155	23	514	626	44,50	1,99
Norway	808	15	423	518	52,35	1,86
Pakistan	5	2	5	4	100,00	40,00
Panama	2985	228	1839	1976	61,61	7,64
Philippines	69	4	42	51	60,87	5,80
Poland	69	2	47	40	68,12	2,90
Portugal	174	3	90	98	51,72	1,72
Qatar	12	0	3	10	25,00	0,00
Romania	5	1	3	4	60,00	20,00
Russian Federation	786	31	495	484	62,98	3,94
Sao Tome and Principe	2	2	2	2	100,00	100,00
Saudi Arabia	19	2	11	15	57,89	10,53
Seychelles	6	0	0	4	0,00	0,00
Sierra Leone	216	47	197	108	91,20	21,76
Singapore	449	13	205	339	45,66	2,90
Slovakia	113	13	96	50	84,96	11,50
Slovenia	3	1	2	3	66,67	33,33
Spain	96	5	49	57	51,04	5,21

Flag	Inspections	Detentions	Inspections with deficiencies	Individual Ships	Inspection % with deficiencies	Detention %
Sri Lanka	3	0	3	1	100,00	0,00
St. Kitts and Nevis	173	24	142	89	82,08	13,87
St. Vincent and the Grenadines	765	79	571	350	74,64	10,33
Sweden	354	5	152	216	42,94	1,41
Switzerland	26	0	16	22	61,54	0,00
Syrian Arab Republic	103	16	90	48	87,38	15,53
Taiwan, China	9	1	8	6	88,89	11,11
Thailand	67	2	44	44	65,67	2,99
Togo	17	4	16	12	94,12	23,53
Tonga	1	0	1	1	100,00	0,00
Tunisia	21	3	18	7	85,71	14,29
Turkey	774	40	503	472	64,99	5,17
Tuvalu	12	2	10	8	83,33	16,67
Ukraine	195	18	163	118	83,59	9,23
United Arab Emirates	8	0	5	7	62,50	0,00
United Kingdom	689	10	348	465	50,51	1,45
United States of America	49	3	32	41	65,31	6,12
Uruguay	1	1	1	1	100,00	100,00
Vanuatu	51	3	30	34	58,82	5,88
Venezuela	4	1	3	4	75,00	25,00
Viet Nam	10	2	7	9	70,00	20,00

2008 detentions per flag State, exceeding average

- Only flags with 20 and more port State control inspections in 2008 are recorded and with a detention percentage exceeding the average percentage of 4,9% in this table and graph
- The orange area in the graph represents the 2008 average detention percentage (4,9%)



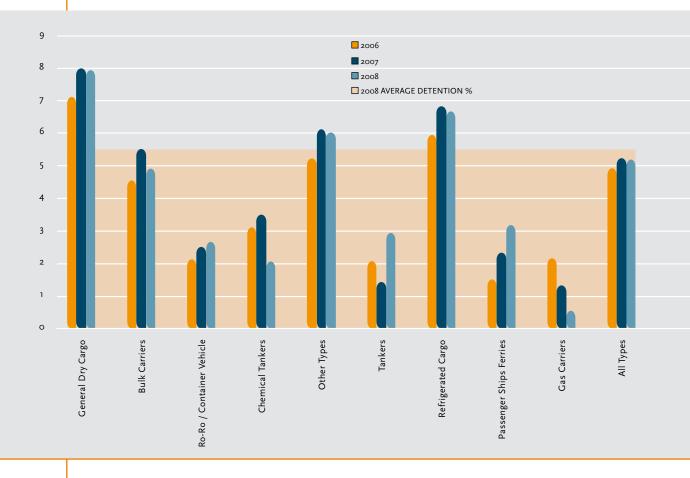
percentage

Flag	Inspections	Detentions	Detentions % 2008	Excess of average 2008	Detentions % 2007	Excess of average 2007
Albania	91	19	20,88	16,00	25,00	19,54
Algeria	39	5	12,82	7,94	11,76	6,30
Azerbaijan	42	4	9,52	4,64	0,00	-5,46
Belize	198	13	6,57	1,69	12,04	6,58
Bulgaria	119	7	5,88	1,00	10,20	4,74
Cambodia	311	62	19,94	15,06	15,60	10,14
Comoros	189	32	16,93	12,05	22,45	16,99
Cook Island	47	5	10,64	5,76	6,67	1,21
Dominica	68	8	11,76	6,88	15,79	10,33
Egypt	36	6	16,67	11,79	14,55	9,09
Faroe Islands	42	3	7,14	2,26	0,00	-5,46
Georgia	279	46	16,49	11,61	15,69	10,23
Honduras	20	3	15,00	10,12	0,00	-5,46
Korea Democratic People's Rep.	24	12	50,00	45,12	28,79	23,33
Korea Republic of	93	5	5,38	0,50	8,45	2,99
Lebanon	24	7	29,17	24,29	15,15	9,69
Malaysia	36	2	5,56	0,68	7,69	2,23
Moldova Rep. of	67	8	11,94	7,06	0,00	-5,46
Mongolia	23	4	17,39	12,51	28,57	23,11
Morocco	57	5	8,77	3,89	0,00	-5,46
Panama	2985	228	7,64	2,76	8,79	3,33
Philippines	69	4	5,80	0,92	0,00	-5,46
Sierra Leone	216	47	21,76	16,88	19,81	14,35
Slovakia	113	13	11,50	6,62	23,30	17,84
Spain	96	5	5,21	0,33	0,00	-5,46
St Vincent and the Grenadines	765	79	10,33	5,45	11,07	5,61
St. Kitts and Nevis	173	24	13,87	8,99	16,67	11,21
Syrian Arab Republic	103	16	15,53	10,65	19,74	14,28
Tunisia	21	3	14,29	9,41	0,00	-5,46
Turkey	774	40	5,17	0,29	6,12	0,66
Ukraine	195	18	9,23	4,35	10,50	5,04
United States of America	49	3	6,12	1,24	5,56	0,10
Vanuatu	51	3	5,88	1,00	0,00	-5,46

Inspections and detentions

PER SHIP TYPE

Ship type	Inspections	Inspections with deficiencies	% of inspections with deficiencies	Individual ships	Detentions	Detention % 2008	Detention % 2007	Detention % 2006	+/- average detention %
Bulk Carriers	3684	2258	61,29	2718	170	4,61	5,55	4,98	-0,32
Chemical Tankers	2102	987	46,96	1332	67	3,19	3,54	2,18	-1,74
Gas Carriers	505	247	48,91	349	12	2,38	1,49	0,67	-2,56
General Dry Cargo	9851	6478	65,76	5070	718	7,29	8,06	7,99	2,36
Other Types	1102	648	58,80	868	60	5,44	6,30	6,16	0,51
Passenger Ships Ferries	1014	596	58,78	567	17	1,68	2,39	3,35	-3,26
Refrigerated Cargo	742	559	75,34	494	44	5,93	6,83	6,70	1,00
Ro-Ro / Container Vehicle	3625	1731	47,75	2450	81	2,23	2,60	2,71	-2,70
Tankers / Comb. Carriers	1990	788	39,60	1501	45	2,26	1,52	2,95	-2,67



Major categorie of deficiencies 2006 - 2008

Certificates			2006		20	2007		08
Certificates	Def. Main Group	Category of deficiencies	Def	Def%	Def	Def%	Def	Def%
Ship's certificates and documents 4198 6.3% 5152 6.9% 5458 6.55%		Crew certificates	2684	4,1%	3098	4,1%	3341	3,99%
Mooring arrangements	Certificates	Ship's certificates and documents	4198	6,3%	5152	6,9%	5458	6,55%
Equipment and Machinery Radio communications 2724 4,1% 3040 4,1% 3009 3,59% Safety of navigation 7570 11,4% 7875 10,5% 10174 12,148 Total Equipment and Machinery 16307 24,7% 17,416 23,3% 20809 24,83* Management ISM related deficiencies 3087 4,7% 4657 6,2% 4641 5,54% Alarm signals 488 0,7% 532 0,7% 608 0,73% Safety and Fire Appliances Fire safety measures Bill 12,9% 9319 12,5% 10039 11,98* Courity Maritime security 735 1,1% 775 1,0% 951 1,13% Total Safety and Fire Appliances Security Maritime security 735 1,1% 775 1,0% 951 1,13% Total Safety and Fire Appliances Gargoes Gas and chemical carriers Ship and Cargo Operations MARPOL - annex II MARPOL - an	Total Certificates		6882	10,4%	8250	11,0%	8826	10,54%
Radio communications 2724 4.1% 3040 4.1% 3009 3,59% 536ty of navigation 7570 11,4% 7875 10,5% 10174 12,14% 17012 Equipment and Machinery 16307 24,7% 17416 23,3% 20809 24,83		Mooring arrangements	936	1,4%	1122	1,5%	1343	1,6%
Radio communications 2724 4,1% 3040 4,1% 3009 3,59% Safety of navigation 7570 11,4% 7875 10,5% 10174 12,14% 10307 24,7% 17416 23,3% 20809 24,83 20809 24,83 24,7% 4657 6,2% 4641 5,54% 4657 6,2% 4641 5,54% 4657 6,2% 4641 5,54% 4657 6,2% 4641 5,54% 4657 6,2% 4641 5,54% 4657 6,2% 4641 5,54% 488 0,7% 532 0,7% 608 0,73% 532 0,7% 608 0,73% 532 0,7% 608 0,73% 532 0,7% 6465 7,77% 608 0,73% 60617 9,1% 6147 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 6465 7,77% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 64617 8,2% 6465 7,77% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 775 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 951 1,13% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0% 1,0		Propulsion and auxiliary mach.	5077	7,7%	5379	7,2%	6283	7,5%
Total Equipment and Machinery 16307 24,7% 17,416 23,3% 20809 24,83	Equipment and Machinery	Radio communications	2724	4,1%	3040	4,1%	3009	3,59%
Management ISM related deficiencies 3087 4,7% 4657 6,2% 4641 5,54%		Safety of navigation	7570	11,4%	7875	10,5%	10174	12,14%
Total Management	Total Equipment and Machinery		16307	24,7%	17416	23,3%	20809	24,83%
Alarm signals	Management	ISM related deficiencies	3087	4,7%	4657	6,2%	4641	5,54%
Safety and Fire Appliances	Total Management		3087	4,7%	4657	6,2%	4641	5,54%
Life saving appliances 6017 9,1% 6147 8,2% 6465 7,71%		Alarm signals	488	0,7%	532	0,7%	608	0,73%
Total Safety and Fire Appliances	Safety and Fire Appliances	Fire safety measures	8511	12,9%	9319	12,5%	10039	11,98%
Total Security Maritime security 735 1,1% 775 1,0% 951 1,13% 951 1,13% 1,13% 951 1,13% 1,13% 951 1,13% 1,13		Life saving appliances	6017	9,1%	6147	8,2%	6465	7,71%
Total Security 735 1,1% 775 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 951 1,13% 755 1,0% 753 1,0% 291 0,35% 755 1,2% 750 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2% 1,2%	Total Safety and Fire Appliances		15016	22,7%	15998	21,4%	17112	20,42%
Cargoes 567 0,9% 593 0,8% 689 0,82%	Security	Maritime security	735	1,1%	775	1,0%	951	1,13%
Cas and chemical carriers 192 0,3% 226 0,3% 291 0,35%	Total Security		735	1,1%	775	1,0%	951	1,13%
MARPOL - annex 4601 7,0% 5097 6,8% 5034 6,01% MARPOL - annex 1		Gargoes	567	0,9%	593	0,8%	689	0,82%
MARPOL - annex II		Gas and chemical carriers	192	0,3%	226	0,3%	291	0,35%
MARPOL - annex III 13 0,0% 11 0,0% 0 0,0%		MARPOL - annex I	4601	7,0%	5097	6,8%	5034	6,01%
MARPOL - annex IV 39 0,1% 46 0,1% 149 0,18%		MARPOL - annex II	68	0,1%	162	0,2%	98	0,12%
MARPOL - annex IV MARPOL - annex V 640 1,0% 743 1,0% 790 0,94% MARPOL - annex VI MARPOL - annex VI MARPOL related operational deficiencies Operational deficiencies 2135 3,2% 2544 3,4% 2756 3,29% Total Ship and Cargo Operations 8468 12,8% 9710 13,0% 10175 12,15% Stability and Structure Bulks carriers 171 0,3% 270 0,4% 328 0,39% Stability and Structure Load lines Structural safety 5183 7,8% 5875 7,9% 6882 8,21% Total Stability and Structure Accident prevention (ILO147) 1369 2,1% 1559 2,1% 1829 2,18% Working and Living Conditions Food and catering Working spaces 1075 10,8% 8348 11,2% 9823 11,71%	Shin and Carra Onerstians	MARPOL - annex III	13	0,0%	11	0,0%	o	0,0%
MARPOL - annex VI 92 0,1% 163 0,2% 176 0,21% 176 0,21% 176 0,21% 176 0,21% 176 0,21% 176 0,21% 176 0,21% 176 0,21% 176 0,22% 176 0,23% 176 0,23%	Ship and Cargo Operations	MARPOL - annex IV	39	0,1%	46	0,1%	149	0,18%
MARPOL related operational deficiencies 121 0,2% 125 0,2% 192 0,23%		MARPOL - annex V	640	1,0%	743	1,0%	790	0,94%
Total Ship and Cargo Operations 8468 12,8% 9710 13,0% 10175 12,15%		MARPOL - annex VI	92	0,1%	163	0,2%	176	0,21%
Stability and Structure Bulks carriers 171 0,3% 270 0,4% 328 0,39%		MARPOL related operational deficiencies	121	0,2%	125	0,2%	192	0,23%
Stability and Structure Load lines 3118 4,7% 3414 4,6% 4204 5,02%		Operational deficiencies	2135	3,2%	2544	3,4%	2756	3,29%
Stability and Structure	Total Ship and Cargo Operations		8468	12,8%	9710	13,0%	10175	12,15%
Structural safety 5183 7,8% 5875 7,9% 6882 8,21%		Bulks carriers	171	0,3%	270	0,4%	328	0,39%
Total Stability and Structure 8472 12,8% 9559 12,8% 11414 13,625 Accident prevention (ILO147) 1369 2,1% 1559 2,1% 1829 2,18% Accommodation 1684 2,5% 1943 2,6% 2366 2,82% Food and catering 1673 2,5% 1886 2,5% 1989 2,37% Working spaces 2449 3,7% 2960 4,0% 3639 4,34% Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,71%	Stability and Structure	Load lines	3118	4,7%	3414	4,6%	4204	5,02%
Accident prevention (ILO147) 1369 2,1% 1559 2,1% 1829 2,18% Accommodation 1684 2,5% 1943 2,6% 2366 2,82% Food and catering 1673 2,5% 1886 2,5% 1989 2,37% Working spaces 2449 3,7% 2960 4,0% 3639 4,34% Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,71%		Structural safety	5183	7,8%	5875	7,9%	6882	8,21%
Working and Living Conditions Accommodation 1684 2,5% 1943 2,6% 2366 2,82% Food and catering 1673 2,5% 1886 2,5% 1989 2,37% Working spaces 2449 3,7% 2960 4,0% 3639 4,34% Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,71%	Total Stability and Structure		8472	12,8%	9559	12,8%	11414	13,62%
Working and Living Conditions Food and catering 1673 2,5% 1886 2,5% 1989 2,37% Working spaces 2449 3,7% 2960 4,0% 3639 4,34% Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,71%		Accident prevention (ILO147)	1369	2,1%	1559	2,1%	1829	2,18%
Food and catering 1673 2,5% 1886 2,5% 1989 2,37% Working spaces 2449 3,7% 2960 4,0% 3639 4,34% Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,71%	Working and Living Conditions	Accommodation	1684	2,5%	1943	2,6%	2366	2,82%
Total Working and Living Conditions 7175 10,8% 8348 11,2% 9823 11,719	working and Living Conditions	Food and catering	1673	2,5%	1886	2,5%	1989	2,37%
		Working spaces	2449	3,7%	2960	4,0%	3639	4,34%
End Total 66142 74713 82751	Total Working and Living Condition	ons	7175	10,8%	8348	11,2%	9823	11,71%
1 717 3 373	End Total		66142		74713		83751	

Detentions of ships with RO related detainable deficiencies per Recognized Organization

(CASES IN WHICH MORE THAN 10 INSPECTIONS ARE INVOLVED)

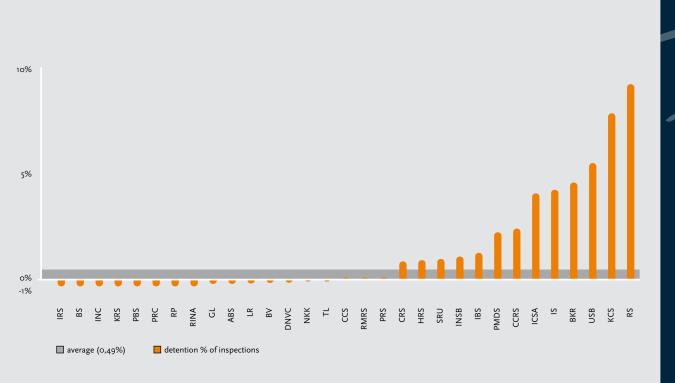
Recognized organization*		Total number of inspections	Number of individual ships inspected	Total number of detentions	Detention-% of total number of inspections	+/- Percentage of Average (0,49%)	Detention-% of individual ships	+/- Percentage of Average
American Bureau of Shipping (USA)	ABS	1972	1485	4	0,20	-0,29	0,27	-0,52
Bulgarski Koraben Registar	BKR	119	64	6	5,04	4,55	9,38	8,58
Bureau Securitas	BS	11	8	0	0,00	-0,49	0,00	-0,79
Bureau Veritas (France)	BV	4498	2653	11	0,24	-0,25	0,41	-0,38
China Classification Society	ccs	354	281	2	0,56	0,07	0,71	-0,08
China Corporation Register of Shipping	CCRS	34	26	1	2,94	2,45	3,85	3,05
Croatian Register of Shipping	CRS	110	68	2	1,82	1,33	2,94	2,15
Det Norske Veritas	DNVC	4703	3164	13	0,28	-0,22	0,41	-0,38
Germanischer Lloyd	GL	5526	3032	10	0,18	-0,31	0,33	-0,46
Hellenic Register of Shipping (Greece)	HRS	320	160	6	1,88	1,38	3,75	2,96
INCLAMAR (Cyprus)	INC	69	28	0	0,00	-0,49	0,00	-0,79
Indian Register of Shipping	IRS	65	52	0	0,00	-0,49	0,00	-0,79
Intermaritime Certification Service. S.A.	ICSA	22	17	1	4,55	4,05	5,88	5,09
International Naval Surveys Bureau (Greece)	INSB	386	179	8	2,07	1,58	4,47	3,68
International Register of Shipping (USA)	IS	574	277	27	4,70	4,21	9,75	8,96
Isthmus Bureau of Shipping (Panama)	IBS	179	84	4	2,23	1,74	4,76	3,97
Korea Classification Society (Korea DPR) ¹	ксѕ	12	8	1	8,33	7,84	12,50	11,71
Korean Register of Shipping	KRS	300	236	0	0,00	-0,49	0,00	-0,79
Lloyd's Register (UK)	LR	5302	3393	12	0,23	-0,27	0,35	-0,44
Nippon Kaiji Kyokai	NKK	2327	1753	10	0,43	-0,06	0,57	-0,22
Panama Bureau of Shipping	PBS	11	7	o	0,00	-0,49	0,00	-0,79
Panama Maritime Doc. Services	PMDS	71	32	2	2,82	2,32	6,25	5,46
Panama Register Corporation	PRC	60	45	0	0,00	-0,49	0,00	-0,79
Polski Rejestr Statkow	PRS	344	189	2	0,58	0,09	1,06	0,27
RINAVE Portuguesa	RP	24	13	0	0,00	-0,50	0,00	-0,79
Register of Shipping (Albania)	RS	87	29	8	9,20	8,70	27,59	26,79
Registro Italiano Navale	RINA	1129	709	0	0,00	-0,49	0,00	-0,79
Russian Maritime Register of Shipping	RMRS	2602	1424	15	0,58	0,08	1,05	0,26
Shipping Register of Ukraine	SRU	204	133	4	1,96	1,47	3,01	2,22
Turkish Lloyd	TL	590	343	3	0,51	0,02	0,87	0,08
Universal Shipping Bureau	USB	92	51	6	6,52	6,03	11,76	10,97

^{*} Where a country is shown after a Recognized Organization this indicates its location and not necessarily any connection with the maritime administration of that country.

¹ formerly Register of Shipping

Detentions of ships with RO related detainable deficiencies per Recognized Organization

(CASES IN WHICH MORE THAN 10 INSPECTIONS ARE INVOLVED, SEE TABLE ON PAGE 42)



Recognized Organization performance table (2006-2008)

Recognized organization*		Inspections	Detentions	Low/ medium limit	Medium/ high limit	Excess factor	Performance level
Register of Shipping (Albania)	RSA	277	18	10	1	3,31	
Korea Classification Society (Korea DPR) ¹	KCS	124	9	6	0	2,97	
Bulgarski Koraben Registar	BKR	268	15	10	1	2,55	Very low
International Register of Shipping (USA)	IS	1243	55	33	16	2,53	
Shipping Register of Ukraine	SRU	560	21	17	5	1,57	Low
Panama Maritime Documentation Services	PMDS	190	7	7	0	0.94	
Isthmus Bureau of Shipping (Panama)	IBS	372	9	12	2	0,66	
INCLAMAR (Cyprus)	INC	204	5	8	0	0,62	
International Naval Surveys Bureau (Greece)	INSB	900	17	25	11	0,43	Medium
Hellenic Register of Shipping (Greece)	HRS	888	16	25	10	0,38	меашт
China Corporation Register of Shipping	CCRS	97	1	5	0	0,33	
Panama Register Corporation	PRC	175	2	7	0	0,29	
Croation Register of Shipping	CRS	321	4	11	2	0,24	
Indian Register of Shipping	IRS	172	0	7	0	0,00	
RINAVE Portuguesa	RP	75	0	4	0	0,00	
Korean Register of Shipping (Korea Rep. of)	KRS	713	5	21	8	-0,49	
Polski Rejestr Statkow	PRS	1034	8	29	13	-0,58	
China Classification Society	ccs	1024	4	28	13	-1,10	
Russian Maritime Register of Shipping	RMRS	7769	48	176	135	-1,23	
Nippon Kaiji Kyokai	NKK	6558	27	150	112	-1,47	High
Burau Veritas (France)	BV	11897	43	264	212	-1,57	riigii
Turkish Lloyd	TL	1497	3	39	21	-1,59	
Lloyd's Register (UK)	LR	14748	51	323	266	-1,60	
American Bureau of Shipping (USA)	ABS	5454	13	127	92	-1,68	
Registro Italiano Navale	RINA	3127	5	76	49	-1,75	
Germanischer Lloyd	GL	14962	31	328	271	-1,76	
Det Norske Veritas	DNVC	13278	26	293	239	-1,77	

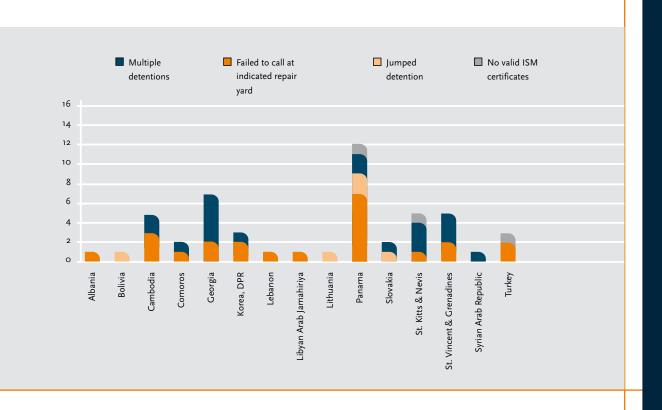
In this table only Recognized Organizations that had more than 60 inspections are taken into account. The formula used is identical to the one used for the Black Grey and White list. However, the values for P and Q are adjusted to P=0.02 and Q=0.01

^{*} Where a country is shown after a Recognized Organization this indicates its location and not necessarily any connection with the maritime administration of that country

¹ formerly Register of Shipping

Refusal of access (banning) per flag state 2006 - 2008

Flag	Failed to call at indicated repair yard	Jumped detention	Multiple detentions	No valid ISM certificates	Total Banned ships
Albania	1				1
Bolivia		1			1
Cambodia	3		2		5
Comoros	1		1		2
Georgia	2		5		7
Korea DPR	2		1		3
Lebanon	1				1
Libyan Arab Jamahiriya	1				1
Lithuania		1			1
Panama	7	2	2	1	12
Slovakia		1	1		2
St. Kitts and Nevis	1		3	1	5
St. Vincent and the Grenadines	2		3		5
Syrian Arab Republic			1		1
Turkey	2			1	3
Totals	23	5	19	3	50



Explanatory note - Black, Grey and White list

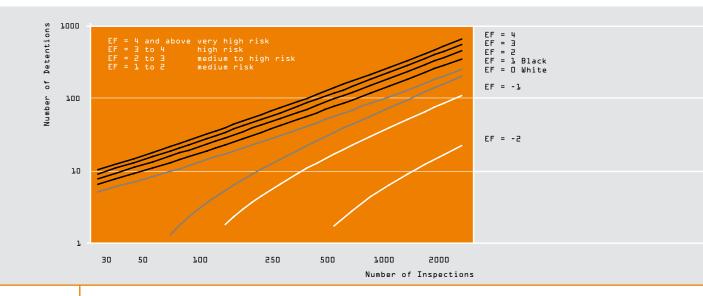
The new normative listing of Flags provides an independent categorization that has been prepared on the basis of Paris MoU port State inspection results. Compared to the calculation method of previous year. this system has the advantage of providing an excess percentage that is significant and also reviewing the number of inspections and detentions over a 3-year period at the same time. based on binomial calculus.

The performance of each Flag is calculated using a standard formula for statistical calculations in which certain values have been fixed in accordance with agreed Paris MoU policy. 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:

$$\begin{aligned} u_{black_to_grey} &= N \cdot p + 0.5 + z \sqrt{(N \cdot p \cdot (1-p))} \\ u_{white_to_grey} &= N \cdot p - 0.5 - z \sqrt{(N \cdot p \cdot (1-p))} \end{aligned}$$

In the formula "N" is the number of inspections, "p" is the allowable detention limit (yardstick), set to 7% by the Paris 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 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 is positioned between the two, the Flag 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.as the 'black to grey' or the 'grey to white' limit.

Example flag on Black list:

Ships of Flag A were subject to 108 inspections of which 25 resulted in a detention. The "black to grey limit" is 12 detentions. The excess factor is 4,26

N= total inspections

P = 7%

Q = 3%

Z = 1.645

How to determine the black to grey limit:

$$\mu_{blacktogrey} = N \cdot p + 0.5 + z \sqrt{N \cdot p \cdot (1 - p)}$$

$$\mu_{blacktogrey} = 108 \cdot 0.07 + 0.5 + 1.645 \sqrt{108 \cdot 0.07 \cdot 0.93}$$

$$\mu_{blacktogrey} = 12$$

The excess factor is 4,26. 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 3,26 and the outcome has to be added to the normal value for 'p':

$$p + 3,26q = 0,07 + (3,26 \cdot 0,03) = 0,1678$$

$$\mu_{\text{excessfactor}} = 108 \cdot 0.1678 + 0.5 + 1.645\sqrt{108 \cdot 0.1678 \cdot 0.8322}$$

 $\mu_{excess factor} = 25$

Example flag on Grey list:

Ships of Flag B were subject to 141 inspections, of which 10 resulted in a detention. The 'black to grey limit" is 15 and the "grey to white limit" is 4. The excess factor is 0.51.

How to determine the black to grey limit:

$$\mu_{blacktogrey} = 141 \cdot 0.07 + 0.5 + 1.645\sqrt{141 \cdot 0.07 \cdot 0.93}$$

$$\mu_{blactogrey} = 15$$

How to determine the grey to white limit:

$$\mu_{\text{greytowhite}} = N \cdot p - 0.5 - z \sqrt{N} \cdot p \cdot (1 - p)$$

$$\mu_{\text{greytowhite}} = 141 \cdot 0.07 - 0.5 - 1.645 \sqrt{141 \cdot 0.07 \cdot 0.93}$$

$$\mu_{greytowhite} = 4$$

To determine the excess factor the following formula is used:

ef = Detentions - grey to white limit / grey to
black limit - grey to white limit

$$ef = (10-4)/(15-4)$$

$$ef = 0.51$$

Example flag on White list:

Ships of Flag C were subject to 297 inspections of which 11 resulted in detention. The "grey to white limit" is 13 detentions. The excess factor is -0.28.

How to determine the grey to white limit:

$$\mu_{greytowhite} = N \cdot p - 0.5 - z \sqrt{N \cdot p(1-p)}$$

$$u_{\text{greytowhite}} = 297 \cdot 0.07 - 0.5 - 1.645 \sqrt{297 \cdot 0.07 \cdot 0.93}$$

$$\mu_{greytowhite} = 13$$

The excess factor is -0.28 This means that 'p' has to be adjusted in the formula. The grey to white limit has an excess factor of 0, so to determine the new value for 'p', 'q' has to be multiplied with -0.28, and the outcome has to be added to the normal value for 'p':

$$p + (-0.28q) = 0.07 + (-0.28 \cdot 0.03) = 0.084$$

$$\mu_{\text{excessfactor}} = 297 \cdot 0.084 - 0.5 - 1.645\sqrt{297 \cdot 0.084 \cdot 0.9916}$$

$$\mu_{excessfactor} = 11$$

Secretariat Paris Memorandum of Understanding on Port State Control



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Website

The Paris MoU maintains a website which can be found at www.parismou.org. The site contains information on operation of the Paris MoU and a database of inspection results.

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