





# A n n u a l R e p o r t 2 0 0 3

The Paris Memorandum of Understanding on Port State Control



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**1. Executive summary** While the number of ships inspected has shown a steady increase over the past 2 years, the number of detained ships indicates a positive downward trend. It is perhaps too early to report that substandard ship owners are no longer trading to the Paris MOU region, but the zero-tolerance approach of the Paris MOU is beginning to show results. Measures implemented in July of 2003 will make it increasingly difficult for “rust buckets” to operate in the region.

The amendments of the port State control Directive from the European Commission contained in the so-called “Erika I package” have been implemented by all Paris MOU members, thereby extending their scope across the Atlantic and along the Russian coast line. A 3 tier approach has made it much more difficult for substandard ships to operate from ports in the region:

- The enhanced targeting criteria enable port States to give priority to ships with a higher risk profile. Ships with a good safety record

are less likely to be inspected every 6 months.

- Expanded inspections for certain ship types and ships with a high target factor have revealed more defects, which otherwise perhaps would go unnoticed.
- The risk of a Paris MOU wide refusal of access (banning) after multiple detentions, is already shown to be an effective deterrent.

Although fewer ships have been detained, the number of deficiencies has slightly increased

over the past years. This may indicate that while the overall picture shows signs of improvement, the persistent substandard ship is still out there.

Owner, flag State and, when delegated, the classification society, form the "Triangle of Compliance". If all parties are quality minded there is a strong bond and the involvement of port State control should be minimal.

On the other hand the objectives may be focussed only on profits, at the expense of a safety culture. For these entrepreneurs there is no room for complacency. In fact, it will prompt even more determined efforts to root out the remaining owners that show no willingness to abide by international standards.

The role of the classification societies in this drive for improvement will be significant.

Following up on concerns raised last year, the Paris MOU has now adopted a performance ranking of the classification societies. After international recognition of the Black-White-Grey list for flag States, a performance listing of "class", when acting on behalf of the flag, is considered a logical step towards further transparency of port State control results. The list will be published in the statistical Blue Book for 2003.

When flags have delegated their statutory responsibilities to class, both parties should be held accountable for the safety records of the ships. Inspection figures show that this mix of responsibilities does not seem to work for Albania, Honduras, Comoros and several others. Even the seemingly good reputation of some IACS classification societies is at stake here.

Last but not least, the black list for 2003 shows little change compared with the previous year. Open registers like Sao Tome and Principe and Tonga are still in the "top-5". An interesting newcomer this year is Comoros in 6th place amidst other high risk flags.

The Paris MOU has voiced repeated concerns over implementation of ISM systems on board. Deficiencies since 2001 have nearly tripled.

This in combination with more than twice as many SOLAS related operational deficiencies is an indication that major incidents are waiting to happen.

With the inability for some owners to implement a safety management system on board their ships, it is questionable if the new requirements for security will lead to better results after 1 July 2004.





## 2. Paris MOU developments

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 11 were active in 2003, 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 2003 was composed of participants from Croatia, Denmark, Italy, Poland, the United Kingdom and the European Commission.

### Port State Control Committee

The Port State Control Committee (PSCC) held its 36th meeting in Dubrovnik, Croatia on 12-15 May 2003.

Maritime security, expanded inspections and new membership dominated the agenda of this meeting. The MOU has started planning for the introduction of the International Ship and Port Facility Security Code (ISPS) which takes effect 1 July 2004. Proposals defining the role of Port State Control Officers in security checks are to be submitted to IMO as a template for a harmonised approach. A MOU task force, working

closely with USCG, will develop more detailed guidelines. Expanded inspection for older oil tankers, chemical and gas carriers, bulk carriers and passenger ships became mandatory from 22 July 2003. On tankers these inspections will include checks of at least one ballast tank. Recognising the safety and operational constraints, the MOU have agreed to review the guidelines used during its campaign on tankers following the sinking of ERIKA, and explore the options for closer cooperation with class and owners in completing these checks.

Canada, a member of both the Paris and Tokyo MOUs, confirmed its plans to hold a 2nd Joint Ministerial Conference in 2004 in a move that will strengthen further the partnership between the two PSC regions.

Following the success of an initial trial the Committee decided to make the Review Panel on detentions a permanent feature. In another move to improve transparency information on a detained ship will be made available on the MOU's website as soon as possible after the ship is detained.

The MOU has introduced tough rules to target high risk ships. Ships from flags on the Black List will be banned after 2 or 3 detentions. Ships with a Target Factor greater than 50 will be inspected after a month from the last inspection in the Paris MOU. Continuing its successful programme of Concentrated Inspection Campaigns the Committee announced that it will follow the campaign on cruise liners with a campaign

on seafarers living and working conditions (ILO) in Autumn 2004 and one on GMDSS in 2005.

### **Technical Evaluation Group**

The Technical Evaluation Group (TEG) convened in November 2003. Several task forces submitted reports to the TEG for evaluation before submission to the Port State Control Committee.

Issues considered by TEG included:

- development of a new SIRENaC information system
- preparations for a Concentrated Inspection Campaign on working and living conditions in 2004
- implementation and control of the ISPS Code related to security measures on board ships.
- strengthening guidelines for refusing ships access to MOU ports
- development of a Paris MOU reward system
- review of inspections at ports and anchorages
- evaluation of statistics
- development of a new software system to check statutory requirements for ships
- development of guidelines for inspection of ballast tanks
- review of principles for publication of information

### **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 harmonization and standardization in inspections throughout the region.

The Secretariat is organizing 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, co-operating members and observers. The agenda is more topical and deals with current issues (i.e. inspection campaigns, new requirements).

The Expert and Specialized Training aims to promote a high degree of professional knowledge and harmonization of more complex PSC issues and procedures. These 5 day training sessions are concluded with an examination and certification.

### **36th PSC Seminar**

The 36th Port State Control Seminar of the Paris MOU was held in Nesbru (Oslo), Norway on 23-25 April 2003. The Seminar was attended by Port State Control Officers from the Paris MOU, as well as participants from Estonia, Latvia, Lithuania, Slovenia and the Tokyo MOU. The seminar covered the latest developments in the Paris MOU, including the legal and technical implications of the entry into force of MARPOL Annex IV. Furthermore, PSCOs were familiarized with changes relating to the 25th Amendment to the Paris MOU, focusing on inspection procedures and requirements related to the new Relevant Instruments – the Protocol 1996 to ILO 147 and the Protocol 1992 to the Civil Liability Convention. Information was given on the use of Risk analysis and evaluations by Recognized Organizations.

### **37th PSC Seminar**

The 37th PSC Seminar was held on 14-16 October 2003, in Genoa, Italy. It was attended by Port State Control Officers from the Paris MOU, as well as participants from the EC, Tokyo MOU, Cyprus, Estonia, Latvia, Lithuania, Malta. Participants were informed of the latest developments regarding PSC in the Paris MOU and EU. The seminar was dedicated to Working and Living conditions in preparation for the Concentrated Inspection Campaign which is scheduled to take place from 1st October to 31st December 2004.

Furthermore an introduction to the ISPS Code was given, highlighting the PSC elements.

### **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. This year it was "Inspection of Tankers". Both training programmes are intended for experienced PSC officers. Using that experience the participants can work together to establish a higher degree of harmonization and standardization of their inspection practise. Lecturers for the training programmes are recruited from the maritime Administrations of the member States, international organizations, educational institutions and from the maritime industry. For the training programmes in 2003 lecturers came from the member States UK, the Netherlands, Germany, Denmark and the ILO, IMO, ITF, OCIMF, several oil companies, NKK and others.

In 2003 the development of a distance learning programme gained new momentum. Together with an experienced company from the field of maritime training, Videotel, a range of modules will be produced over the coming years that will cover the complete Paris MOU inspection procedures and the relevant conventions. The Paris MOU received generous support from the ITF to make the development of the first four modules possible.

#### **The 2nd Expert Training: Safety and Environment**

The second Expert Training programme was held in The Hague in April 2003. Participants from all member States took part in the programme. Important issues during this training were: the IMDG code, Load Lines, GDMSS and Oily water separators.

#### **The 3rd Expert Training: The Human Element**

In December 2003 the third Expert Training programme was held in The Hague with the Human Element as the central theme. Participants from member States as well as from the co-operating members took part in this training. The issues discussed during the training session were: the ILO and STCW conventions, Intercultural Communication and Operational Control.

#### **The 1st Specialized Training on the Inspection**

**of Tankers** The first Specialized training programme was conducted in June 2003 in Hemel Hempstead in the United Kingdom. The training programme was adapted from OCIMF training material to the specific needs of Port State Control. Important contributions to the training were made by experts from BP, Shell and other representatives from the oil industry.

#### **Review Panel**

After a trial period of 2 years, the Review Panel became a permanent feature in 2003. Flag States or classification societies 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 3 different MOU Authorities on a rotating basis plus the Secretariat. In 2003 the Secretariat received 6 official requests for review.

Each case was administrated by the Secretariat and submitted to MOU members for review. Different members for each case. In three cases the Review Panel considered the complaint justified and requested the port State to reconsider its judgement. As evidence of good cooperation

nearly all requests were honoured and the flag or classification society was informed accordingly. On one occasion the port State did not concur with the findings of the panel.

#### **SIReNaC information system**

In 2003 the new SIReNaC 2000 (S2K) was introduced, designed by the French Departement des Systèmes d'Information (DSI). The new system makes full use of internet technology and an ORACLE database architecture. In the future Port State Control Officers will be able to access the system for interrogation and updating by means of portable PCs and cellular phones. It will also provide more accurate descriptions of inspection results and include a range of new data. A Task Force was instructed to oversee the further development and implementation of the new system.

#### **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. In 2003 a new feature was added to the site showing ships which are currently under detention. Previously the information on detained ships was not made public until after the detention was lifted. The regular publication of the "Rustbucket" 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 2003 the flow of new cases appeared to dry up. The only "ships of shame" published were the m/v SAMARRINA 5 (detained by Italy) and m/v LAILA QUEEN (detained by Italy). The annual award for the best contribution to the "Rustbucket" has been presented to Italy.

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](http://www.parismou.org)".

At the end of 2003 a project was started for a complete reconstruction of the website, allowing for more user-friendly access and several new functionalities. The inspections database will also undergo a major modification, including more details on inspections and better search facilities. The new site is expected to go live in March 2004.



### 3. Looking at 2004

Although the overall situation appears to be improving slightly in terms of detentions, port State control results for 2003 indicate that efforts need to be enhanced to obtain a substantial reduction in the number of substandard ships visiting the region.

Actions agreed by the Committee during its 36th session (2003) and 37th session (2004) are in the process of being implemented.

#### Security requirements for ships

The introduction of the International Ship and Port facility Security Code has caused unprecedented waves in the maritime world. All parties involved have to abide by an extremely short implementation period and port State control is expected to play a major role in controlling the implementation.

The Port State Control Committee has assigned a special task force to prepare guidelines for control of the new SOLAS requirements, recognizing that there are limits to what can be expected within the "traditional" role of port State control. The Committee has adopted the guidelines and agreed that a Harmonized Verification Programme will start on 1 July 2004 to verify compliance with the Code. In case of clear grounds the competent security authority will be informed and further action will be taken, if required. To support harmonization within the region, an Expert Training programme has been developed to assist member States in training their port State control officers.

#### High Level Forum

Harmonization and standardization are important issues to improve the inspection regime and transparency towards the industry. Training programmes to enhance these are in place. But more needs to be done. To further improve relations with the industry and explore possible partnerships, a High Level Forum will be organized early October 2004. Senior decision makers of organizations and companies will be invited. The conference will be held in The Hague.

#### Concentrated Inspection Campaign

Supported by statistical evidence it appears that crew working and living conditions are often an area where ship owners tend to cut corners. Management companies, with often European roots, register ships under exotic flags, certified by shady classification societies. Several crewing agencies are prepared to provide a "mix-and-match" crew that is forced to work under poor working and living conditions. Under such circumstances no one can expect a safety culture on board these ships. These conditions were found during a CIC in 1997 and provide good reason to continue the fight for better working and living conditions. In particular to take into account the working and resting hours for the crew as required by ILO convention NO.180, which has become a relevant instrument through the Protocol of Convention No. 147. The CIC will involve roughly 5,000 inspections and will start on 1st October 2004 for a period of 3 months.



### Performance of classification societies

The Committee has closely monitored the performance of classification societies. The 2002 edition of the Blue Book included a table covering 3 years of performance for the first time.

As a logical step forward the Committee has adopted a performance ranking, according to the same principles as the table for flag States. 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 the same incentive as it does for flag States to compete for higher quality.

Among the best performing classification societies were:

- Germanischer Lloyd
- Det Norske Veritas
- Bureau Veritas (France)

The lowest performing societies were:

- Register of Shipping (Albania)
- Intern. Register of Shipping (U.S.A.)
- Intern. Naval Surveys Bureau (Greece)

The complete list will be published in the 2003 Blue Book.

In 2004 the criteria to assess the responsibility of classification societies for detainable deficiencies have been further harmonized with the Tokyo MOU and the US Coast Guard. This will promote global acceptance of the results and provide a better basis for comparisons.

### Ships of Quality

The Paris MOU reward system, which was announced in last year's report, has suffered some delay due to other priorities. Criteria for award will take account of:

- the flag of the ship, which should appear on the White List;
- whether an IMO self assessment form has been submitted to the MOU;
- the performance record of its classification society;
- the PSC history of the ship.

The potential reward for operators of quality ships is a reduction in the inspection burden, which at the same time will enable port State control Authorities to direct their resources more effectively. It is anticipated that the reward system will start in January 2005.

### New amendments to the MOU

The 25th amendment entered into force on 22 July 2003 in order to bring the Paris MOU in line with the latest changes of the EC Directive on Port State Control (Erika I Package).

In view of the security requirements for ships stemming from the ISPS code and SOLAS amendments, the Committee unanimously adopted the 26th amendment to the MOU, which will enter into force on 1 July 2004. These amendments provide the basis for Port State Control Officers to include security aspects in their inspections. More details can be found on the Paris MOU website.

### 2nd Joint Ministerial Conference

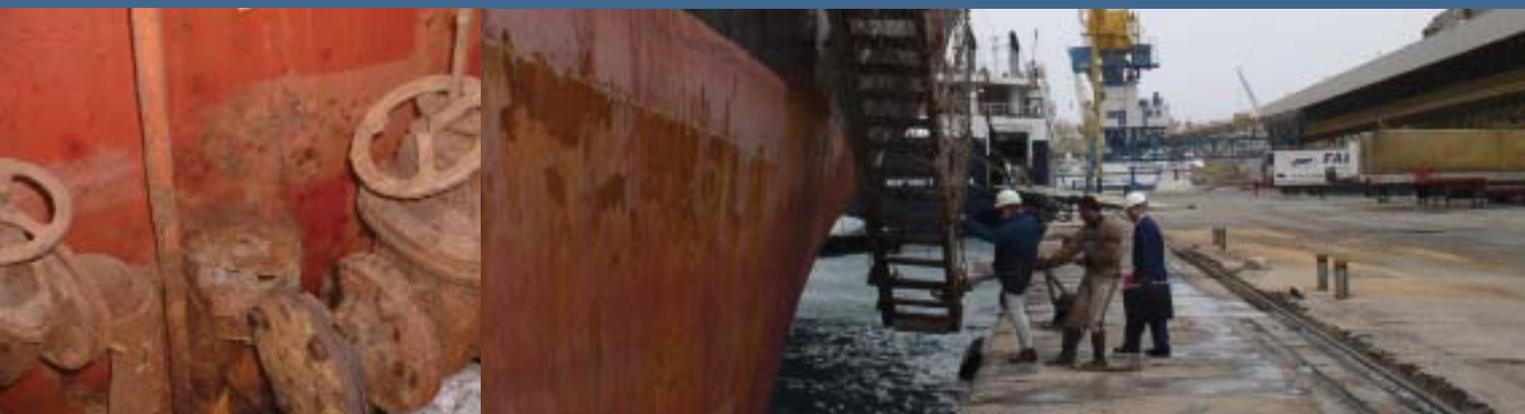
At the invitation of the Canadian Minister of Transport, Ministers of member States of the Paris and Tokyo MOU will participate in the 2nd Joint Ministerial Conference on Port State Control.

The Conference will be held in Vancouver on 2-3 November 2004.

The conference will aim to address all responsible parties on their particular role regarding maritime safety. The ministers are also expected to strengthen their collective commitment to the eventual elimination of substandard shipping.



**4. Looking ahead** The Port State Control Committee is already looking ahead in order to anticipate new developments and to take concerted and harmonised actions. Such actions need to enhance the effectiveness of the region in combating substandard shipping.



The Paris MOU Advisory Board (MAB) has considered several policy issues of a political or strategic nature and will submit proposals to the Committee in 2005 for consideration.

#### **Concentrated inspection campaigns**

For 2005 the Concentrated Inspection Campaign (CIC) will address the requirements of the Global Maritime Distress and Safety System. Although the requirements have been in force for some years, it appears that equipment failures, false distresses and unfamiliarity of the operators give reason for concern.

For 2006 it has been decided that the CIC will focus on the requirements of MARPOL 73/78, Annex 1, prevention of pollution by oil.

#### **Review of 25% commitment**

The Paris MOU Committee at its 2004 meeting in Copenhagen agreed on a fundamental review of its inspection regime. The port State control region is aiming to enhance its fight against substandard shipping by adopting a more risk based approach while at the same time reducing the burden on good operators.

Changes under consideration include a move towards full coverage of ships entering the region rather than the current commitment of each member to inspect 25%. Periods between inspections would depend on the risk profile of an individual vessel. The review will also consider extending the current provisions for banning tankers, bulk carriers and passenger ships to general cargo ships which independent research has shown to present a disproportionate risk, particularly to their crews.





**5. 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.

The Concentrated Inspection Campaign (CIC) in 2003 was dedicated to operational compliance on board passenger ships and took place from 1 May to 31 July, covering most of the cruise season in Europe and Canada.

It was decided to prepare a careful plan for the inspection campaign in order to inspect each ship only once during the CIC. When information on the ships' schedules and routes was available, a detailed inspection plan was prepared for each Paris MOU member State. In November 2002 a very successful training seminar was held in Helsinki, Finland. The Finnish Maritime Authority invited the Port State Control Officers (PSCOs) on board the passenger ship "Cinderella", where practical and theoretical exercises were held. This gave the PSCOs the opportunity to observe and comment on operational drills carried out with the help of the crew on board the "Cinderella". Being on board a ship with close to 2,000 passengers made clear that the crew must act effectively and quickly in an emergency situation.

During the campaign PSCOs were assisted by specifically prepared guidelines to evaluate the results of operational drills. In 3 months 147 inspections were carried out. The ships selected for inspection were boarded upon arrival by a team of PSCOs, who witnessed

emergency drills. The exercises focused on fire and abandon ship drills, including coordination on the bridge. As far as possible, all responsible crewmembers were expected to be available during the operational inspection.

Deficiencies were found on 69 ships, and the inspections revealed two ships with operational deficiencies that were so serious that they resulted in a detention. On board the 69 ships with deficiencies, operational deficiencies were found on 41 ships. A substantial number of deficiencies found in connection with fire drills, were related to incomplete fire fighting equipment and operation of fire doors and fire dampers.

In almost all cases, the deficiencies found in connection with abandon ship drills were related to the fact that most cruise ship crews were not as effective as should be expected in the preparation of lifeboats and liferaft davits.

During the inspections, the PSCOs checked that all crewmembers could communicate with each other and that those allocated to the care of passengers had been properly trained. Other aspects of emergency preparedness, such as the testing of emergency lighting, alarms, fire doors, pumps and radio equipment, were included in the inspection within the limits of the ship's stay in port.

## 6. Membership of the Paris MOU

In preparation for prospective new members of the Paris MOU, the Port State Control Committee has adopted criteria for co-operating status for non-member States and observer status for newly developed PSC regions.



Specific criteria, including a self-evaluation exercise, have to be met before co-operating status can be granted. Regional agreements seeking observer status must demonstrate that their member Authorities have an acceptable overall flag State record and have a similar approach in terms of commitment and goals to that of the Paris MOU.

In 2000 the Committee decided unanimously that Slovenia should be granted co-operating status. After a visit by a Monitoring Team the results of the visit, including recommendations, were considered and adopted by the Committee. Following a Fact Finding Mission composed of Germany, Italy, the European Commission and the Secretariat, the 36th meeting of the Committee decided unanimously that Slovenia could join the Memorandum as a full member on 22 July 2003.

Prospective EU members, Cyprus, Lithuania and Malta requested the Committee to consider their applications to join the MOU as co-operating members.

On the basis of a self evaluation the maritime Authorities of these countries were accepted. Monitoring teams have since visited these countries to assess their progress towards meeting full membership criteria and will submit a report, including recommendations, to the Committee.

In 2003 a Fact finding Mission has visited Estonia to verify if all recommendations agreed by the Committee were implemented. The mission consisted of representatives of Finland, Portugal, the European Commission and the Secretariat. After Latvia was granted co-operative status in 2002, a Monitoring Team consisting of Belgium, Denmark, the European Commission and the Secretariat visited to make an assessment based in the Self Evaluation. During the 36th Committee meeting several recommendations were made in view of the Paris MOU qualitative criteria.





**7. 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. Eight regional MOUs have been established. The Committee has expressed concern that some of these MOUs are dominated by Members who have not made efforts to exercise effective control over their own fleet. Many flag States belonging to regional MOUs appear on the Black List of the Paris MOU.

Two regional agreements have obtained official observer status to the Paris MOU: The Tokyo MOU and the Caribbean MOU. The United States Coast Guard is also an observer at Paris MOU meetings. This co-operation on an administrative level will help to ensure that port State control efforts remain compatible as far as is practicable.

The Mediterranean and Black Sea MOUs have applied for observer status and would need to meet new Paris MOU criteria adopted in 2002 (see section 6) in order to co-operate on a technical and administrative basis. The 37th meeting of the Port State Control Committee will decide on this application in May 2004.

The International Labour Organization and the International Maritime Organization have participated

in the meetings of the Paris MOU on a regular basis. In 2004 the IMO will organize the 3rd workshop for the Secretariats and database managers of regional agreements on port State control. Participants from all 8 regional agreements are expected to attend the workshop, as well as representatives from their Members.

The 2002 Annual Report including inspection data has been submitted to the Sub-Committee on Flag State Implementation (FSI) by Croatia, Denmark, Poland and the United Kingdom. Hopefully the figures will generate discussion on how several flag States intend to implement measures to improve their records. The Paris MOU would welcome such a dialogue in the interest of safety and the protection of the marine environment.



**8. Facts and figures** During 2003, 20,309 inspections were carried out in the Paris MOU region on 12,382 foreign ships registered in 105 different flag States. The number of inspections is slightly higher (2.7%) than the inspection figure for 2002 (19,766). This trend of increasing inspections has continued since 1996 (16,070).

The number of individual ships inspected in 2003, (12,382), increased by 559 compared with the number inspected in 2002 (11,823). The increase also started in 1996 (10,256) and gives, overall, a rise of 20.7%.

The overall inspection rate in the region was 30.1% in 2003, compared with 28.9% in 2002, 28.8% in 2001 and 28.6% in 2000. Iceland, the Netherlands and Portugal did not reach the 25% inspection commitment of the Memorandum. A chart showing the individual efforts of Paris MOU members is included in the statistical annexes to this Annual Report.

#### **Detentions**

Detention rates are expressed as a percentage of the number of inspections, rather than the number of individual ships inspected to take into account that many ships are detained more than once during any one year. The number of ships detained in 2003 for deficiencies clearly hazardous to safety, health or the environment amounted to 1,428. It compares with the number of 1,577 detained in 2002, 1,699 in 2001, and 1,764 in 2000. The significant decrease of 143 (9.1%) ships compared with 2002, has reduced the average detention percentage to 7.05% in 2003, compared with 7.98% in 2002, 9.09% in 2001 and 9.50% in 2000. This positive development over a 4-year period is an encouraging sign that more sub-standard ships are avoiding the region.

#### **"Black, Grey and White list"**

In the 1999 Annual Report the traditional "black list" of flags was replaced by a "Black, Grey and White List". The tables are still based on performance over a

3-year rolling period but now show the full spectrum between quality flags and flags with a poor performance which are considered a high or very high risk. The Black List is composed of 26 flag States, 1 more than last year. The White List includes 29 flag States, 3 more than last year. A "hard core" of flag States reappear on the "Black List". Most flags that were considered "very high risk" in 2002 remain so in 2003. The poorest performing flags are still Albania, Sao Tome & Principe, North Korea, Tonga and Bolivia. The flag of Comoros has managed to jump to 6th place in the "very high risk" sector. Iran has moved from the "Grey List" to the "Black List".

On a more positive note: Tunisia has moved back from the "Black List" to the "Grey List" and will hopefully maintain this trend.

The "White List" represents quality flags with a consistently low detention record. The United Kingdom, Sweden, Isle of Man, Ireland and Germany are placed highest in terms of performance. Moving up rapidly is the United States of America, from 17th to 8th place. Switzerland has moved down to the "Grey List". New to the "White List" are Portugal, Thailand, Vanuatu and Saudi Arabia.

Flag States 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.

There are signs that several flags appearing on the "White List" now use their ranking to advertise themselves as quality registers and are making efforts to reach a higher ranking the following year. From the figures it may be concluded that since the "Grey List" is getting smaller and the "White List" is increasing more than the "Black List" there is a movement towards quality flags. Supported by the lower detention percentage, this is a positive development.

### **Ship types**

Looking at detentions by ship type over several years, it is noted that general dry cargo ships and bulk carriers still account for over 77% of all detentions.

Most ship types indicate a slowly decreasing trend in detentions. Passenger ships have shown a substantial improvement compared with last year. On the other hand the detention percentage of tankers has increased, although it is too early to speak of a trend.

Statistical annexes to this report show the detention percentage for each ship type in 2003, 2002 and 2001.

### **Banning of ships**

A total of 35 ships were banned from the Paris MOU region in 2003, because they failed to call at an agreed repair yard (17), jumped detention (2), were not certified in accordance with the ISM Code (4) or because of multiple detentions (12). By the end of 2003 the ban had been lifted on 15 of these ships after verification that all deficiencies had been rectified. A number of ships remain banned from previous years. An up-to-date list of banned ships can be found on the internet site of the Paris MOU on Port State Control. A new table and statistic related to banning has been included in this year's report.

### **Performance of classification societies**

Details of the responsibility of classification societies for detainable deficiencies have been published since 1999. When one or more detainable deficiencies are attributed to a classification society in accordance with the criteria it is recorded and class is informed. Out of 1,428 detentions recorded in 2003, 12% (173) were considered class related, a remarkable improvement when compared with 2002 (20%). When considering the rate of class related detentions

as a percentage of inspections in 2003, Register of Shipping (Albania) 17.0%, Inclamar (Cyprus) 9.4%, International Naval Surveys Bureau (Greece) 7.8%, International Register of Shipping (U.S.A.) 5.8% and Hellenic Register of Shipping (Greece) 4.5%, scored highest as indicated in Model 2 in the Statistical Annex.

### **Deficiencies**

A total of 71,928 deficiencies were recorded during port State control inspections in 2003, an increase (4.1%) on the number of 69,079 recorded in 2002 (68,756 in 2001).

With some exceptions, ships older than 15 years show substantially more deficiencies than ships of less than 5 years.

The trends in key safety areas are shown below. More detailed information may be found in the statistical publication of the Paris MOU, the 2003 Blue Book.

### **Safety**

In 2003, deficiencies in vital safety areas such as life saving appliances, fire fighting equipment, safety in general and navigation accounted for 47% of the total number of deficiencies.

Deficiencies in these areas are fairly stable between 33,598 in 2003 to 33,242 in 2002.

Older ships ( $\geq 15$  years) show 27,512 deficiencies, compared to younger ships ( $< 5$  years) with 1,183 deficiencies, a rate 23 times higher.

### **Marine environment**

MARPOL73/78 Annex I, II, III and V deficiencies have decreased by 10%, from 5,930 in 2001 to 5,309 in 2003. Again a positive trend when compared with previous years.

In 2003 older ships ( $\geq 15$  years) show 4,077 deficiencies, compared to younger ships ( $< 5$  years) with 266 deficiencies, a deficiency rate 15 times higher.

### **Working and living conditions**

Major categories related to working and living conditions are "crew and accommodation", "food and catering", "working places" and "accident prevention". Deficiencies in these areas increased by 29%, from 5,278 in 2001 to 6,800 in 2003.

In 2003 older ships ( $\geq 15$  years) show 5,937 deficien-



cies, compared to younger ships (> 5 years) with 149 deficiencies, a deficiency rate 40 times higher.

#### **Certification of crew**

Compliance with the standards for training, certification and watch keeping for seafarers indicated an increase of 152%, from 1,302 in 2001 to 3,284 in 2003.

Older ships ( $\geq 15$  years) show 2,626 deficiencies in 2003, compared to younger ships (< 5 years) with 182 deficiencies, a deficiency rate 14 times higher.

#### **Operational**

Operational deficiencies have steadily increased from 1,718 in 2001 to 2,876 deficiencies in 2003 (67%). A trend that is observed over the past years with growing concern.

In 2003 older ships ( $\geq 15$  years) show 2,267 deficiencies, compared to younger ships (< 5 years) with 132 deficiencies, a rate 17 times higher.

#### **Management**

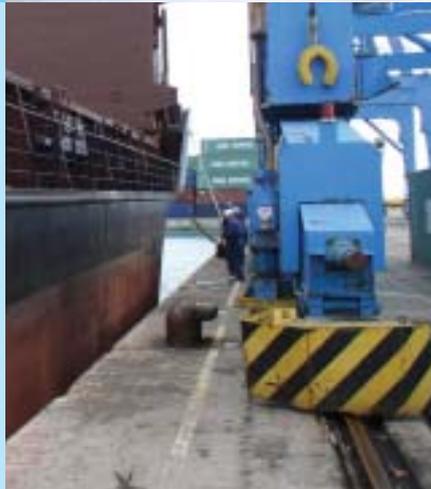
The International Safety Management Code came into force for certain categories of ships from July

1998, and was extended to other ships in July 2002. In the year under review 3,539 (major) non-conformities were recorded, an increase of 186% when compared with the 2001 results. This trend which has continued for some years should be alarming since it provides a clear indication that management systems are not working for certain ships.

Older ships ( $\geq 15$  years) show 2,919 (major) non-conformities, compared to younger ships (< 5 years) with 146 (major) non-conformities, a rate 20 times higher. Most prominent are older general dry cargo ships and bulk carriers with 2,150 non-conformities, 74% of the total (2,919).

Older general dry cargo ships ( $\geq 15$  years) show 1,574 (major) non-conformities, which score a non-conformity rate 27 times higher than younger ships (< 5 years) with 59 (major) non-conformities. Older bulk carriers ( $\geq 15$  years) show 576 (major) non-conformities, which score a non-conformity rate 21 times higher than younger ships (< 5 years) with 28 (major) non-conformities.

Other ship types of over 15 years show lower rates, although ISM compliance of older tankers and passenger ships should be closely monitored.



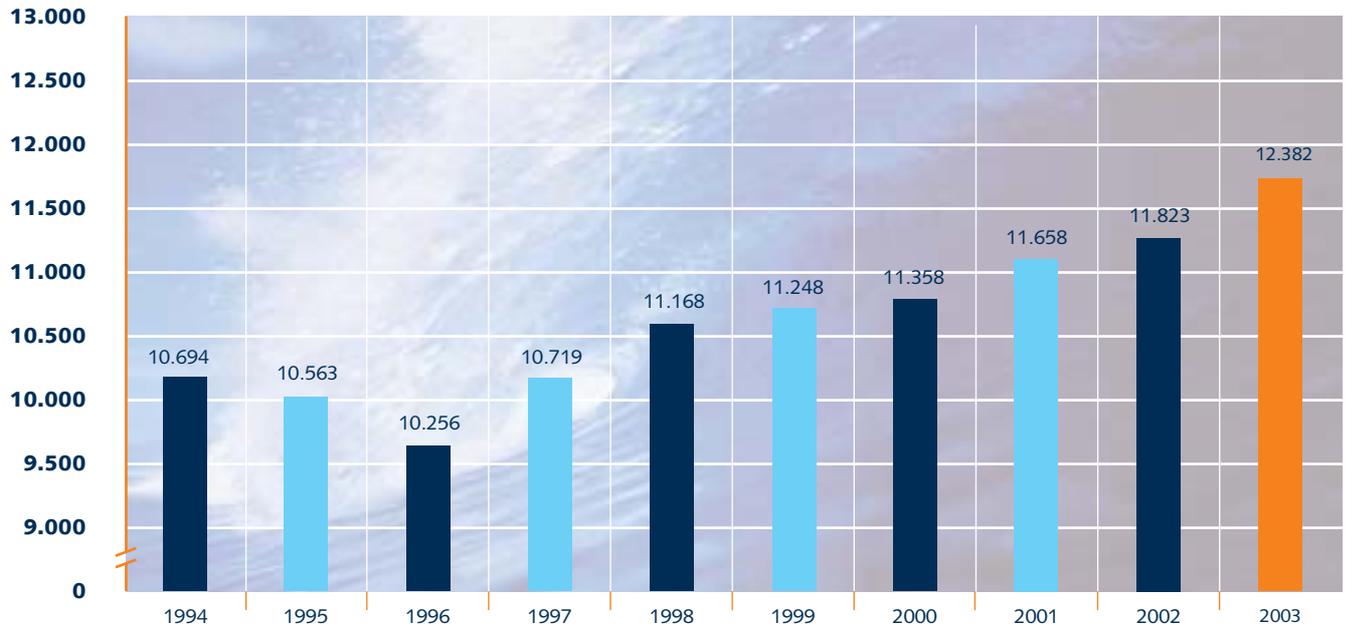
# A n n u a l R e p o r t 2 0 0 3

Statistical Annexes to the 2003 Annual report

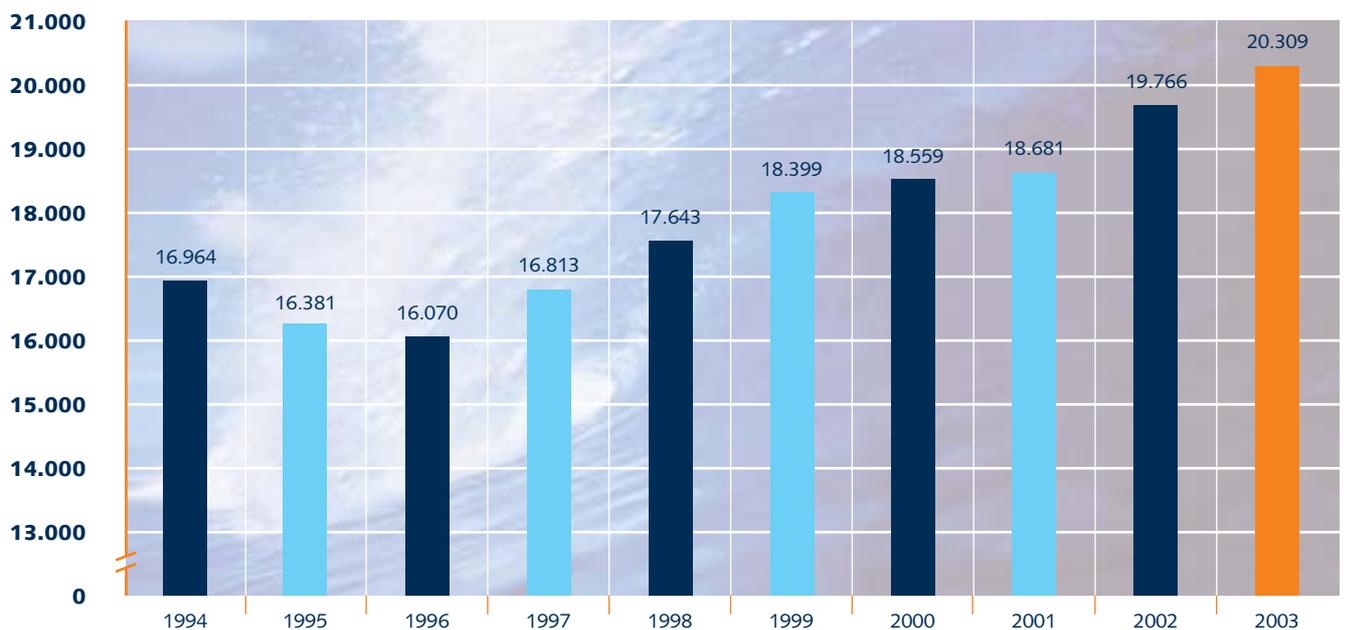


## Basic port State control figures 2003 - 1

### number of individual ships inspected

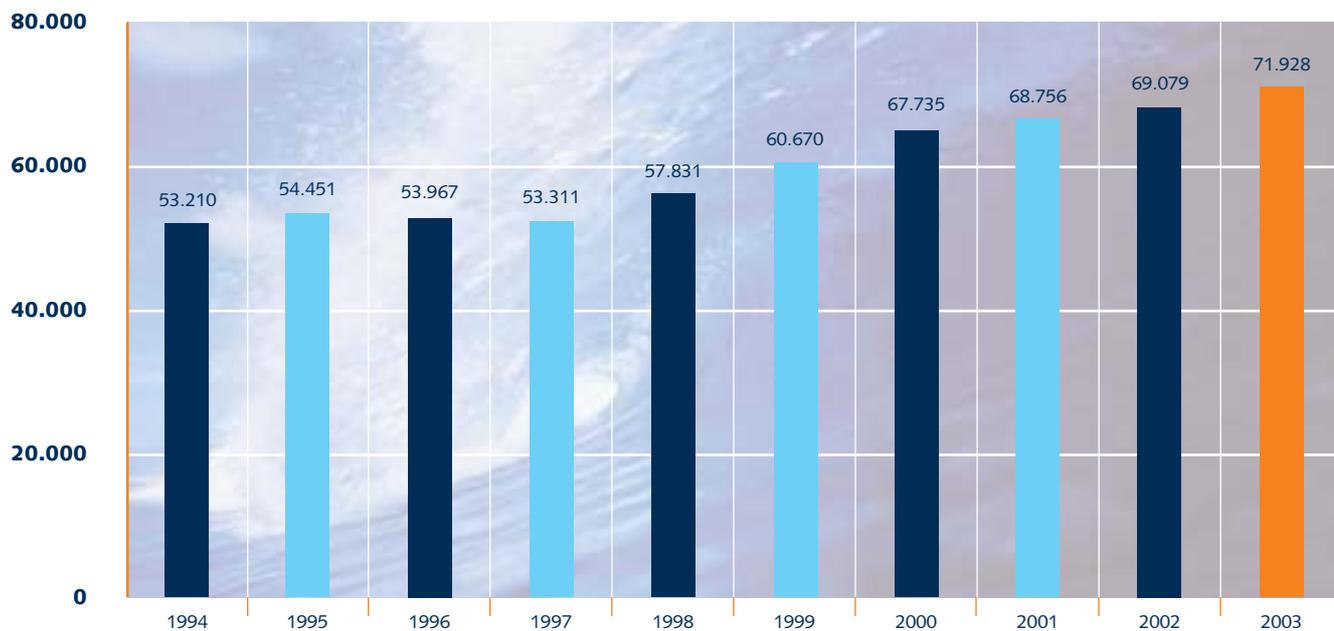


### number of inspections

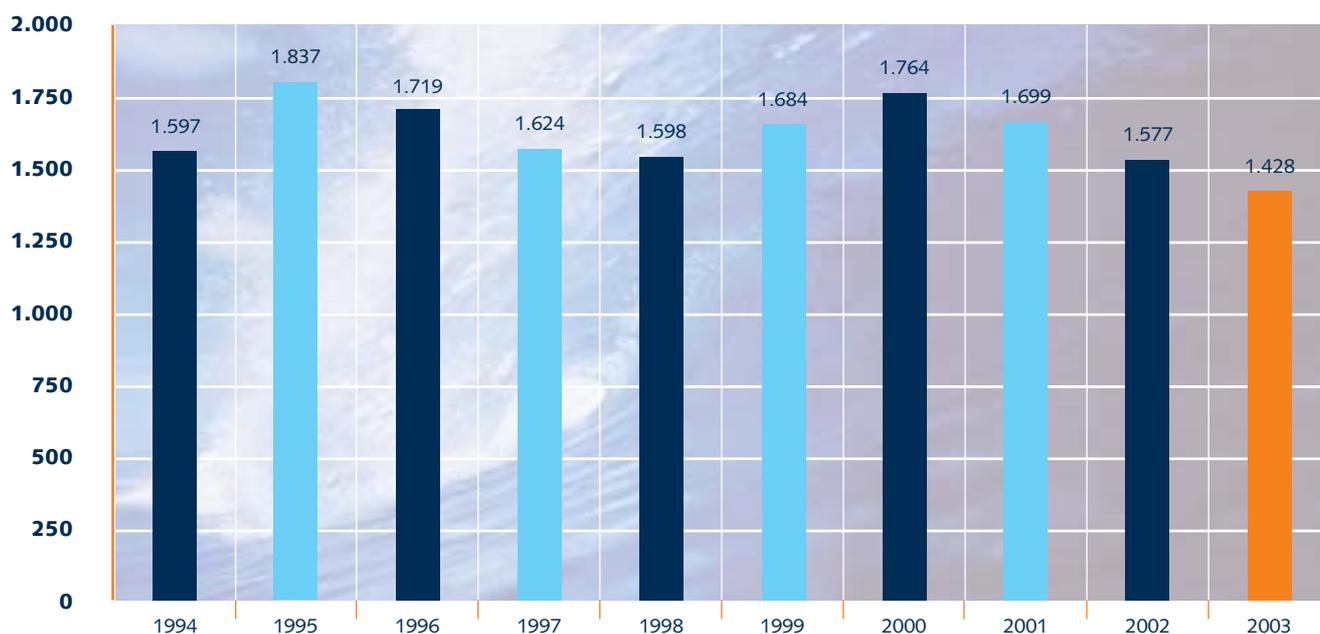


### Basic port State control figures 2003 - 2

number of deficiencies observed

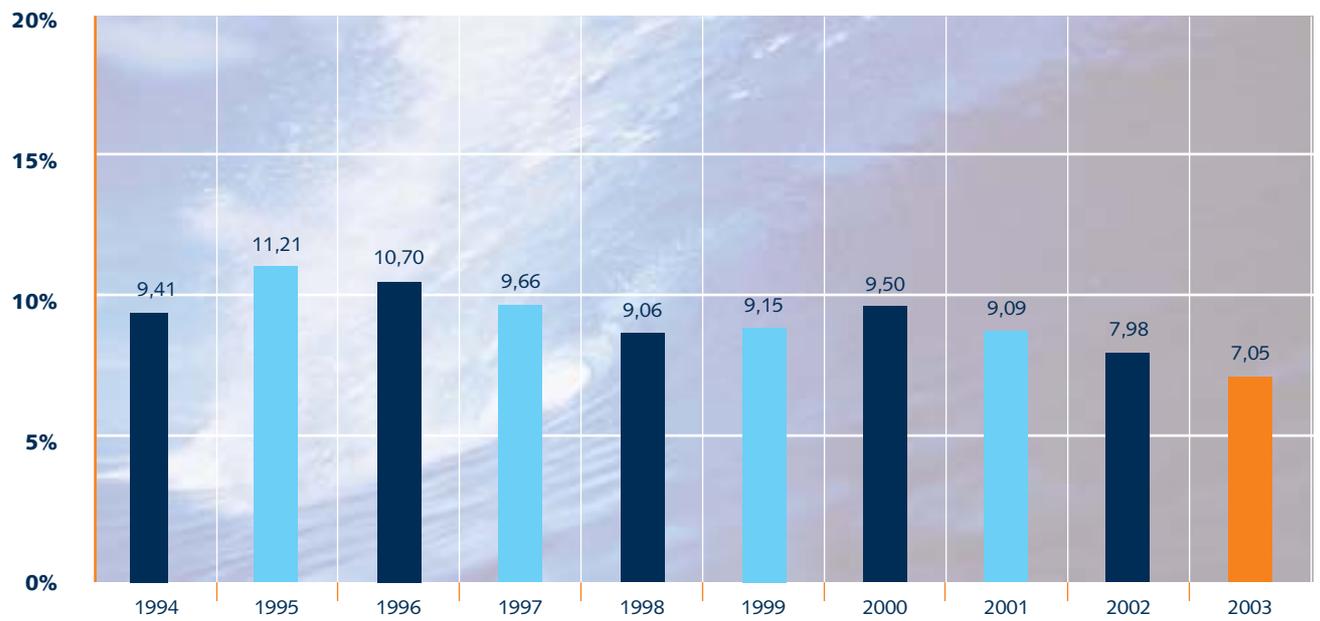


number of detentions



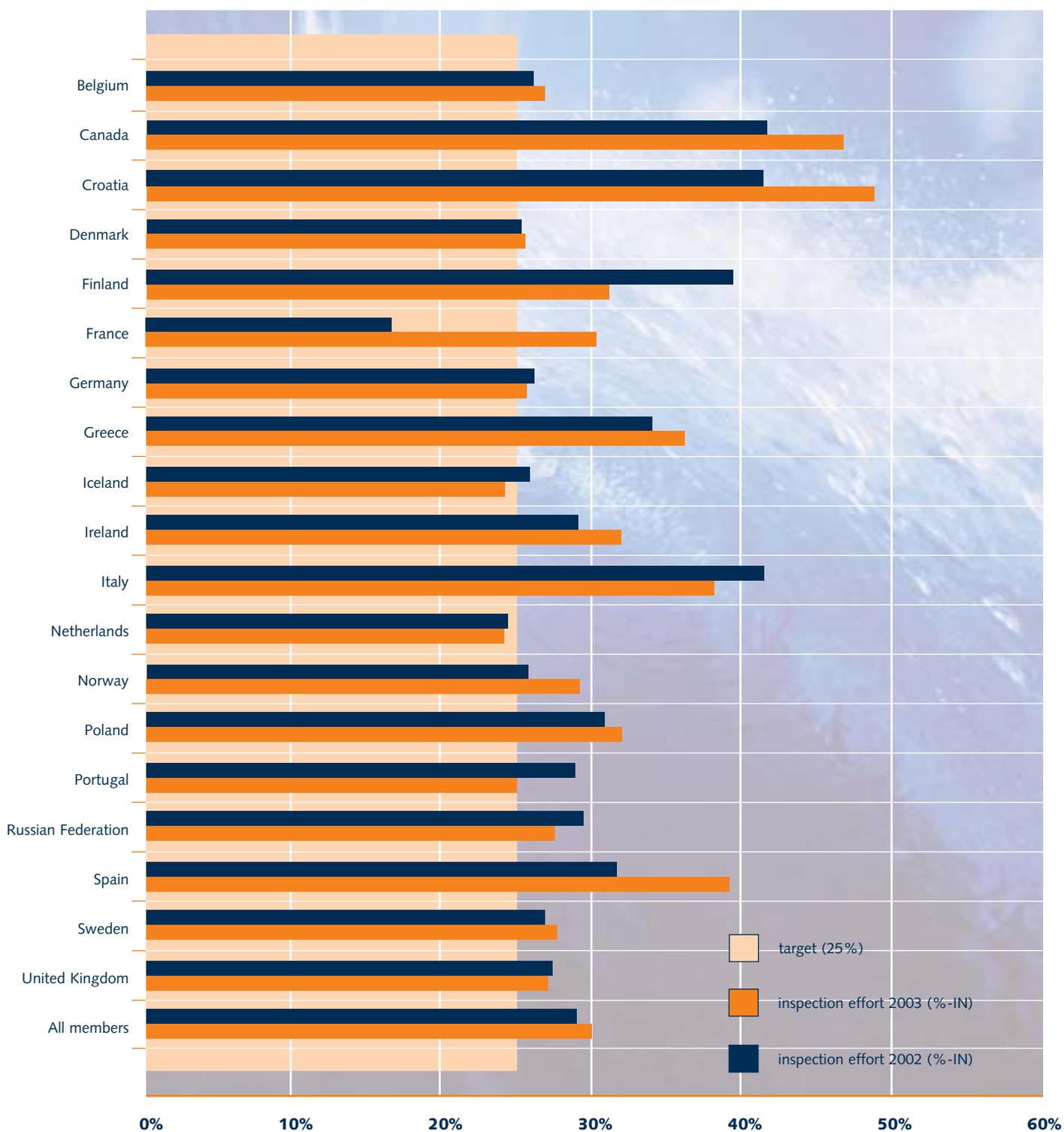
## Basic port State control figures 2003 - 3

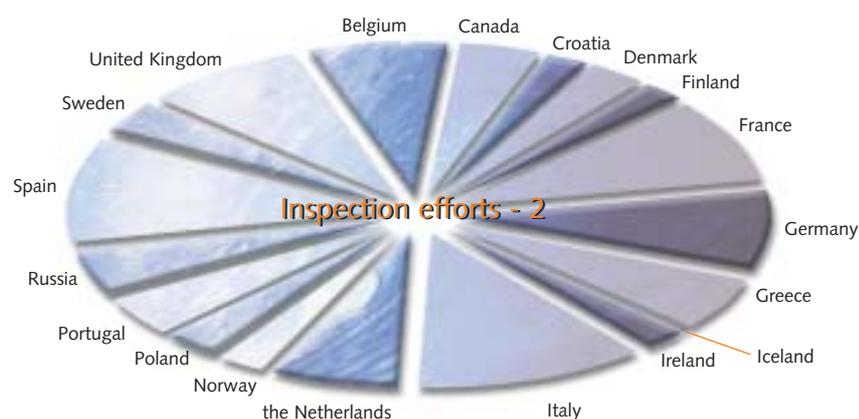
detentions in % of inspections



## Inspection efforts - 1

### Inspection efforts of members compared to target





### Mou port States' individual contribution to the total amount of inspections

MOU port State	Estimated Ship calls	Inspections			Detentions		Detentions with Class related deficiencies		% Insp. with deficiencies	% Detained	% Inspected Ship calls (25% commitment)	% Inspection of MOU total
		Inspections	with deficiencies	Detentions	with Class related deficiencies	% Insp. with deficiencies						
Belgium	5551	1486	533	78	20	35,87	5,25	26,77	7,23			
Canada <sup>1</sup>	1760	831	262	37	6	31,53	4,45	47,22	4,05			
Croatia	964	470	266	24	5	56,60	5,11	48,76	2,29			
Denmark	2400	608	216	20	1	35,53	3,29	25,33	2,96			
Finland	1414	451	139	9	1	30,82	2,00	31,90	2,20			
France	5792	1746	951	95	10	54,47	5,44	30,15	8,50			
Germany	6770	1761	812	70	7	46,11	3,98	26,02	8,56			
Greece	3156	1144	668	160	8	58,39	13,99	36,25	5,57			
Iceland	323	77	30	2	0	38,96	2,60	23,84	0,37			
Ireland	1323	421	290	32	1	68,88	7,60	31,82	2,05			
Italy	6446	2461	1584	357	32	64,36	14,51	38,18	11,98			
Netherlands, the	5620	1352	758	78	10	56,07	5,77	24,10	6,58			
Norway	1800	523	184	17	5	35,18	3,25	29,06	2,55			
Poland	1914	620	365	22	3	58,87	3,55	32,39	3,02			
Portugal	3415	852	626	64	12	73,47	7,51	24,95	4,15			
Russian Federation <sup>2</sup>	3447	949	669	21	0	70,50	2,21	27,53	4,62			
Slovenia <sup>3</sup>		127	59	22	6	46,46	17,32		0,62			
Spain	5594	2203	1464	198	16	66,45	8,99	39,38	10,73			
Sweden	2776	768	291	7	0	37,89	0,91	27,67	3,74			
United Kingdom	6286	1693	1218	116	23	71,94	6,85	26,93	8,24			

<sup>1</sup> Only East coast of Canada <sup>2</sup> Excluding Black Sea ports (Novorossiysk, Sochi and Tuapse) as from 01 December 2002 <sup>3</sup> Full member since 22 July 2003

## Black - Grey - White lists

	Inspections 2001 - 2003	Detentions 2001 - 2003	Black to Grey Limit	Excess Factor
Albania	191	92	20	12,68
Sao Tome & Principe	72	32	9	10,18
Korea, Democratic People's Rep.	102	43	12	9,98
Tonga	139	56	15	9,78
Bolivia	78	32	10	9,24
Comoros	77	27	10	7,39
Lebanon	218	66	22	7,07
Honduras	219	65	22	6,89
Algeria	204	56	21	6,14
Georgia	378	96	35	5,92
Cambodia	989	224	83	5,50
Turkey	2463	503	194	5,03
Syrian Arab Republic	340	66	32	4,00
St Vincent & the Grenadines	2484	417	195	3,86
Romania	186	35	19	3,44
Morocco	197	33	20	2,87
Belize	368	52	34	2,43
Ukraine	703	93	61	2,40
Egypt	182	27	19	2,26
Panama	5552	489	420	1,40
India	171	20	18	1,33
Bulgaria	284	30	27	1,26
Iran, Islamic Republic of	214	23	22	1,18
Cyprus	3792	300	292	1,07
Malta	4696	364	358	1,04
Libyan Arab Jamahiriya	31	5	5	1,00

Black list

very high  
risk

high risk

medium  
to

high risk

medium  
risk

	<b>Inspections 2001 - 2003</b>	<b>Detentions 2001 - 2003</b>	<b>Black to Grey Limit</b>	<b>Grey to White Limit</b>	<b>Excess Factor</b>
Tunisia	43	6	6	0	0,96
Estonia	277	25	27	12	0,87
Brazil	41	5	6	0	0,83
Croatia	177	16	18	6	0,80
Tuvalu	43	4	6	0	0,65
Korea, Republic of	109	9	13	3	0,64
Taiwan	46	4	7	0	0,62
Faroe Islands	48	4	7	0	0,59
Kuwait	36	3	6	0	0,58
Lithuania	386	27	36	18	0,50
Azerbaijan	129	8	14	4	0,40
Russian Federation	2476	168	195	152	0,38
United Arab Emirates	40	2	6	0	0,37
Latvia	47	2	7	0	0,31
Ethiopia	33	1	5	0	0,27
Austria	57	2	8	0	0,23
Spain	240	13	24	10	0,23
Cayman Islands	358	19	34	17	0,14
Malaysia	165	7	17	6	0,11
Poland	166	7	18	6	0,11
Philippines	202	9	21	8	0,10
Barbados	270	13	26	12	0,10
Gibraltar	416	21	38	20	0,05
Switzerland	65	1	8	1	0,04

# Grey list

	Inspections 2001 - 2003	Detentions 2001 - 2003	Black to Grey Limit	Grey to White Limit	Excess Factor
Portugal	629	30	55	33	-0,18
Israel	54	0	7	0	-0,22
Thailand	107	2	12	3	-0,29
Antigua and Barbuda	3914	213	301	247	-0,31
Vanuatu	132	3	15	4	-0,32
Saudi Arabia	58	0	8	0	-0,36
Bermuda	206	6	21	8	-0,40
Greece	1524	73	124	90	-0,40
Marshall Islands	680	28	59	36	-0,46
Singapore	640	26	56	34	-0,46
Antilles, Netherlands	496	19	45	25	-0,46
Italy	848	36	72	47	-0,47
Bahamas	3272	149	254	205	-0,60
France	259	7	25	11	-0,62
China	267	7	26	11	-0,67
Japan	70	0	9	1	-0,69
Luxembourg	196	4	20	7	-0,74
Denmark	1305	49	107	76	-0,75
Hong Kong, China	623	19	55	33	-0,84
Norway	2616	97	205	161	-0,87
Liberia	2736	91	214	169	-1,01
United States of America	137	1	15	4	-1,09
Finland	498	10	45	25	-1,20
Netherlands	2984	84	232	185	-1,21
Germany	1247	27	103	72	-1,35
Ireland	171	1	18	6	-1,37
Man, Isle of	634	11	55	33	-1,38
Sweden	887	16	75	49	-1,43
United Kingdom	1079	19	90	61	-1,48

## Inspections, detentions and deficiencies 2003

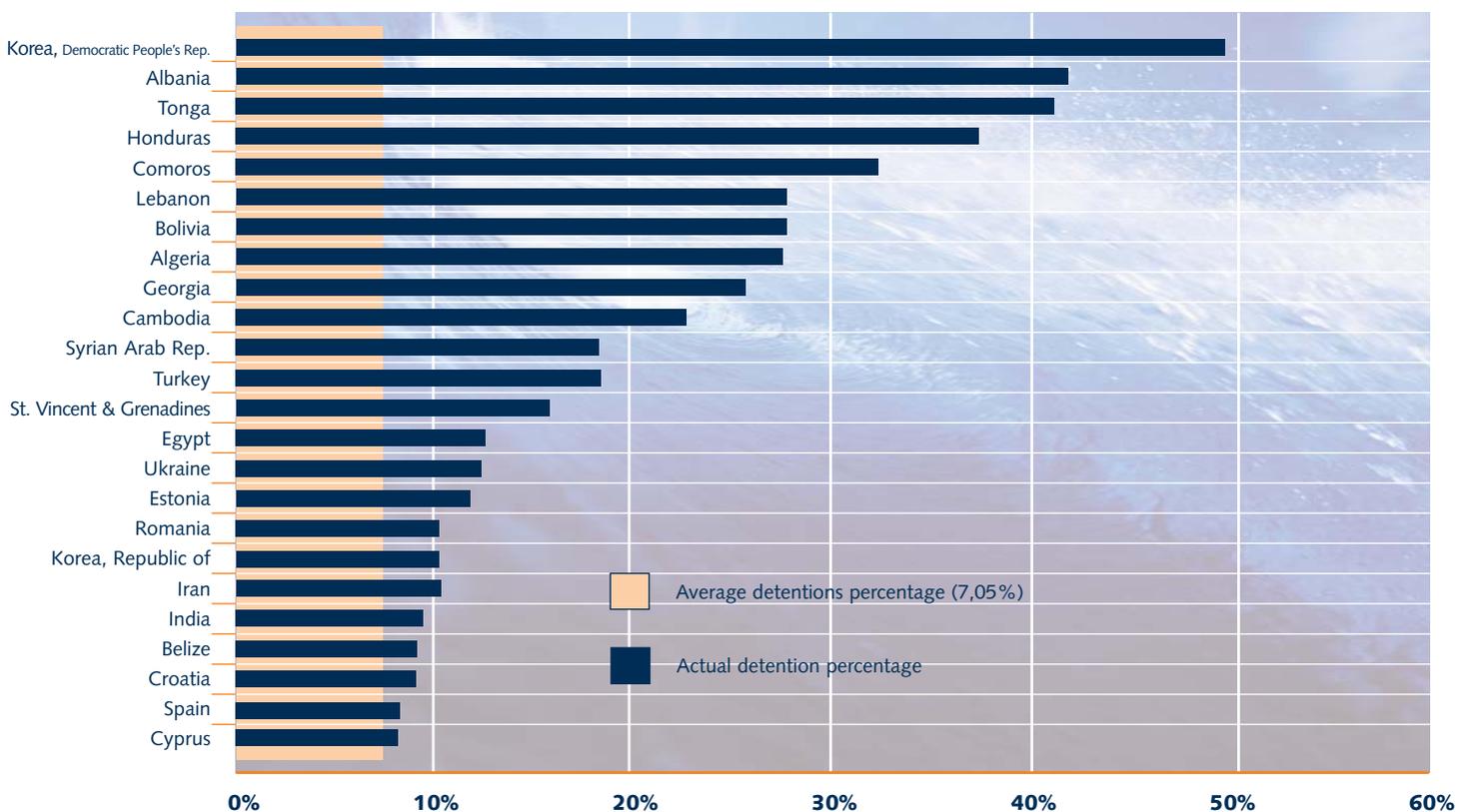
	Inspections	Detentions	Inspections with deficiencies	Detentions-%	Inspection-% with deficiencies
Albania	100	42	90	42,00	90,00
Algeria	80	21	70	26,25	87,50
Angola	1	1	1	100,00	100,00
Antigua and Barbuda	1414	69	785	4,88	55,52
Antilles, Netherlands	202	9	112	4,46	55,45
Austria	7	0	2	0,00	28,57
Azerbaijan	40	1	23	2,50	57,50
Bahamas	1131	45	559	3,98	49,43
Bahrain	5	0	1	0,00	20,00
Bangladesh	2	2	2	100,00	100,00
Barbados	88	6	50	6,82	56,82
Belgium	10	1	8	10,00	80,00
Belize	143	14	106	9,79	74,13
Bermuda	73	1	23	1,37	31,51
Bolivia	38	10	36	26,32	94,74
Brazil	15	2	9	13,33	60,00
Bulgaria	88	5	67	5,68	76,14a
Cambodia	311	70	265	22,51	85,21
Canada	6	0	4	0,00	66,67
Cayman Islands	138	3	55	2,17	39,86
China	89	3	47	3,37	52,81
Comoros	49	15	44	30,61	89,80
Cook Islands	2	1	2	50,00	100,00
Croatia	66	6	48	9,09	72,73
Cyprus	1202	89	705	7,40	58,65
Denmark	460	16	215	3,48	46,74
Dominica	1	0	0	0,00	0,00
Egypt	52	7	38	13,46	73,08
Equatorial Guinea	1	0	1	0,00	100,00
Estonia	87	11	55	12,64	63,22
Ethiopia	8	0	7	0,00	87,50
Faroe Islands	17	2	11	11,76	64,71
Finland	166	2	76	1,20	45,78
France	81	0	30	0,00	37,04
Georgia	191	49	153	25,65	80,10
Germany	346	7	125	2,02	36,13

	Inspections	Detentions	Inspections with deficiencies	Detentions-%	Inspection-% with deficiencies
Gibraltar	181	5	75	2,76	41,44
Greece	545	25	242	4,59	44,40
Honduras	69	24	56	34,78	81,16
Honk Kong, China	273	9	125	3,30	45,79
Hungary	7	0	5	0,00	71,43
Iceland	1	0	0	0,00	0,00
India	39	4	28	10,26	71,79
Iran, Islamic Republic of	64	7	42	10,94	65,63
Ireland	52	1	24	1,92	46,15
Israel	18	0	0	0,00	0,00
Italy	333	14	161	4,20	48,35
Jamaica	4	0	3	0,00	75,00
Japan	20	0	11	0,00	55,00
Jordan	1	1	1	100,00	100,00
Korea, Democratic People's Rep.	65	32	60	49,23	92,31
Korea, Republic of	45	5	19	11,11	42,22
Kuwait	9	0	3	0,00	33,33
Latvia	11	0	8	0,00	72,73
Lebanon	64	17	53	26,56	82,81
Liberia	968	32	424	3,31	43,80
Libyan Arab Jamahiriya	3	0	2	0,00	66,67
Lithuania	128	9	88	7,03	68,75
Luxembourg	66	1	24	1,52	36,36
Malaysia	58	2	29	3,45	50,00
Malta	1456	91	868	6,25	59,62
Man, Isle of	251	5	102	1,99	40,64
Marshall Islands	296	11	121	3,72	40,88
Mexico	1	0	1	0,00	100,00
Moldova, Rep. of	2	0	2	0,00	100,00
Mongolia	9	0	7	0,00	77,78
Morocco	55	2	44	3,64	80,00
Myanmar	7	0	2	0,00	28,57
Netherlands	1007	22	418	2,18	41,51
New Zealand	1	0	1	0,00	100,00
Nigeria	2	1	2	50,00	100,00
Norway	918	32	436	3,49	47,49

	<b>Inspections</b>	<b>Detentions</b>	<b>Inspections with deficiencies</b>	<b>Detentions-%</b>	<b>Inspection-% with deficiencies</b>
Pakistan	4	0	3	0,00	75,00
Panama	2003	140	1129	6,99	56,37
Philippines	82	3	43	3,66	52,44
Poland	59	3	37	5,08	62,71
Portugal	184	2	94	1,09	51,09
Qatar	9	0	1	0,00	11,11
Register Withdrawn	2	2	2	100,00	100,00
Romania	63	7	44	11,11	69,84
Russian Federation	818	46	437	5,62	53,42
Sao Tome & Principe	3	0	1	0,00	33,33
Saudi Arabia	16	0	3	0,00	18,75
Seychelles	3	0	2	0,00	66,67
Singapore	240	8	104	3,33	43,33
Slovakia	7	4	7	57,14	100,00
South Africa	1	0	1	0,00	100,00
Spain	105	8	55	7,62	52,38
Sri Lanka	2	1	1	50,00	50,00
St Vincent & Grenadines	883	137	626	15,52	70,89
Sweden	323	5	133	1,55	41,18
Switzerland	28	1	11	3,57	39,29
Syrian Arab Republic	80	14	60	17,5	75,00
Taiwan	11	1	7	9,09	63,64
Thailand	36	1	25	2,78	69,44
Togo	1	1	1	100,00	100,00
Tonga	36	15	33	41,67	91,67
Tunesia	19	0	14	0,00	73,68
Turkey	749	131	565	17,49	75,43
Turkmenistan	2	0	2	0,00	100,00
Tuvalu	6	0	5	0,00	83,33
Ukraine	203	27	155	13,3	76,35
United Arab Emirates	12	1	6	8,33	50,00
United Kingdom	483	11	215	2,28	44,51
United States of America	55	0	17	0,00	30,91
Vanuatu	47	0	18	0,00	38,30

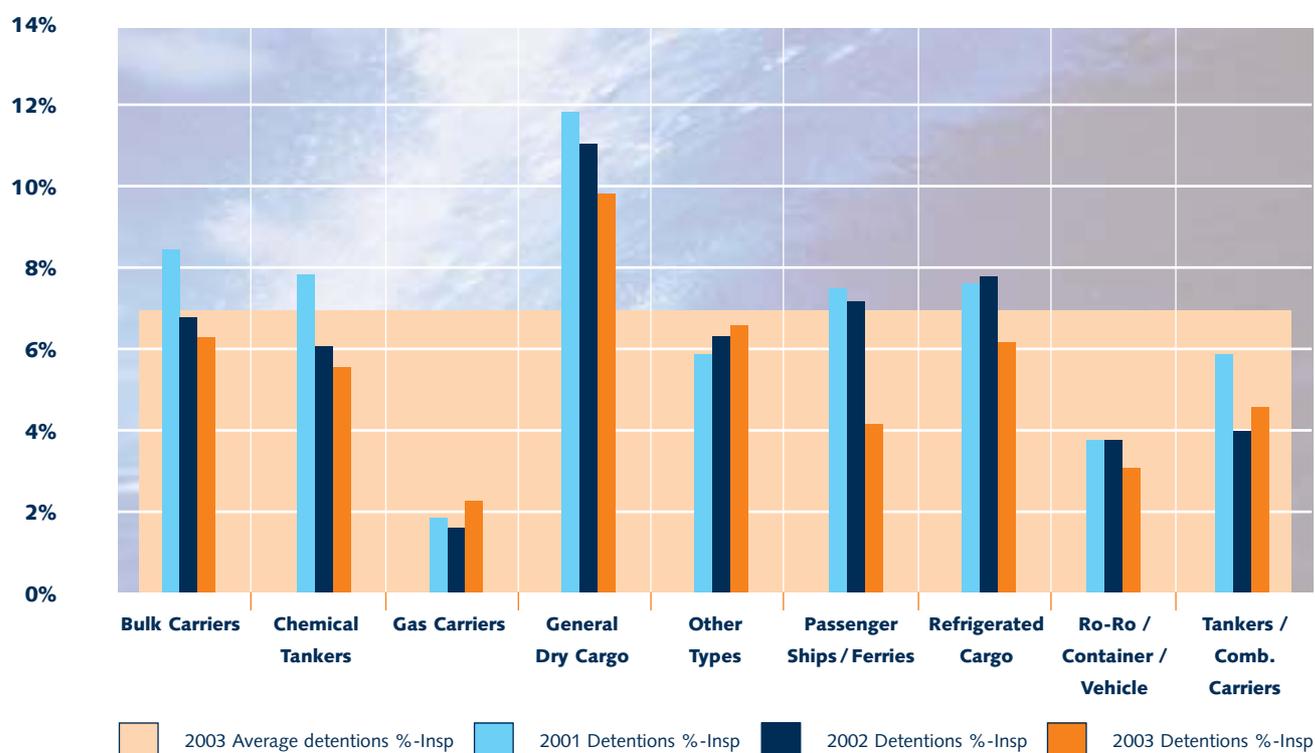
## 2003 detentions per flag State, exceeding average percentage

- Only flags with more than 20 port State control inspections in 2003 are recorded in this table and the graph on the next page
- The light area at the bottom of the graph represents the 2003 average detention percentage (7,05%)



Flag	Inspections	Detentions	Detentions-%	Excess of average
Korea, Democratic People's Rep.	65	32	49,23	42,18
Albania	100	42	42,00	34,95
Tonga	36	15	41,67	34,62
Honduras	69	24	34,78	27,73
Comoros	49	15	30,61	23,56
Lebanon	64	17	26,56	19,51
Bolivia	38	10	26,32	19,27
Algeria	80	21	26,25	19,20
Georgia	191	49	25,65	18,60
Cambodia	311	70	22,51	15,46
Syrian Arab Rep.	80	14	17,50	10,45
Turkey	749	131	17,49	10,44
St. Vincent & Grenadines	883	137	15,52	8,47
Egypt	52	7	13,46	6,41
Ukraine	203	27	13,30	6,25
Estonia	87	11	12,64	5,59
Korea, Republic of	45	5	11,11	4,06
Romania	63	7	11,11	4,06
Iran	64	7	10,94	3,89
India	39	4	10,26	3,21
Belize	143	14	9,79	2,74
Croatia	66	6	9,09	2,04
Spain	105	8	7,62	0,57
Cyprus	1202	89	7,40	0,35

## 2003 detentions % of inspections per ship type



## Inspections and detentions per ship type

Ship type	Inspections	Inspections with deficiencies	% of Inspections with deficiencies	Individual ships	Detentions	Detention % 2003	Detention % 2003	Detention % 2003	+/- average detention %
Bulk Carriers	3507	2110	60,17	2417	227	6,47	6,73	8,67	-0,58
Chemical Tankers	709	351	49,51	433	39	5,5	6,08	7,66	-1,55
Gas Carriers	391	153	39,13	284	9	2,3	1,40	1,84	-4,75
General Dry Cargo	9060	5497	60,67	4879	875	9,66	10,96	11,77	2,61
Other Types	603	345	57,21	476	40	6,63	6,30	5,94	-0,42
Passenger Ships / Ferries	673	397	58,99	425	28	4,16	7,17	7,50	-2,89
Refrigerated Cargo	367	225	61,31	265	23	6,27	7,75	7,66	-0,78
Ro-Ro / Container / Vehicle	2637	1120	42,47	1778	80	3,03	3,62	3,63	-4,02
Tankers / Comb. Carriers	2362	971	41,11	1606	110	4,66	4,03	5,96	-2,39
<b>All types</b>	<b>20309</b>	<b>11169</b>	<b>55,00</b>	<b>12563</b>	<b>1431</b>	<b>7,05</b>	<b>7,98</b>	<b>9,09</b>	

\* Follow up inspections not included in this table

## Major categories of deficiencies in relation to inspections/ships

	NUMBER OF DEFICIENCIES			DEF. IN % OF TOTAL NUMBER			ratio of def. to inspections x 100			ratio of def. to indiv. ships x 100		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Ship's certificates and documents	3581	3369	3410	5,2	4,88	4,74	19,2	17,04	16,79	30,7	28,50	27,54
Training certification and watchkeeping for seafarers	1302	5522	3284	1,9	7,99	4,57	7,0	27,94	16,17	11,2	46,71	26,52
Crew and Accommodation (ILO 147)	2113	1853	2133	3,1	2,68	2,97	11,3	9,37	10,50	18,1	15,67	17,23
Accident prevention (ILO 147)	1586	1429	114	2,3	2,07	0,16	8,5	7,23	0,56	13,6	12,09	0,92
Food and catering (ILO 147)	876	664	1149	1,3	0,96	1,60	4,7	3,36	5,66	7,5	5,62	9,28
Working space (ILO 147)	703	602	3404	1,0	0,87	4,73	3,8	3,05	16,76	6,0	5,09	27,49
Mooring arrangements (ILO 147)	1109	1060	1130	1,6	1,53	1,57	5,9	5,36	5,56	9,5	8,97	9,13
Safety in general	8951	9306	6794	13,0	13,47	9,45	47,9	47,08	33,45	76,8	78,71	54,87
Safety of navigation	8315	6769	7536	12,1	9,80	10,48	44,5	34,25	37,11	71,3	57,25	60,86
Fire Safety measures	8547	8158	10862	12,4	11,81	15,10	45,8	41,27	53,48	73,3	69,00	87,72
Life saving appliances	10516	9009	8406	15,3	13,04	11,69	56,3	45,58	41,39	90,2	76,20	67,89
Alarm - signals	326	301	476	0,5	0,44	0,66	1,7	1,52	2,34	2,8	2,55	3,84
Radio communication	2703	2421	2160	3,9	3,50	3,00	14,5	12,25	10,64	23,2	20,48	17,44
Bulk carriers - Additional safety measures	50	51	121	0,1	0,07	0,17	0,3	0,26	0,60	0,4	0,43	0,98
Gas and chemical carriers	151	202	190	0,2	0,29	0,26	0,8	1,02	0,94	1,3	1,71	1,53
Carriage of cargo and dangerous goods	1323	1028	741	1,9	1,49	1,03	7,1	5,20	3,65	11,3	8,69	5,98
Load lines	3906	3507	3747	5,7	5,08	5,21	20,9	17,74	18,45	33,5	29,66	30,26
Propulsion & aux machinery	3713	3606	4547	5,4	5,22	6,32	19,9	18,24	22,39	31,8	30,50	36,72
SOLAS related operational deficiencies	1262	1353	2865	1,8	1,96	3,98	6,8	6,85	14,11	10,8	11,44	23,14
ISM related deficiencies	1239	3210	3539	1,8	4,65	4,92	6,6	16,24	17,43	10,6	27,15	28,58
MARPOL - annex I	5116	4421	4502	7,4	6,40	6,26	27,4	22,37	22,17	43,9	37,39	36,36
MARPOL - annex II	43	64	97	0,1	0,09	0,13	0,2	0,32	0,48	0,4	0,54	0,78
MARPOL - annex III	13	21	14	0,0	0,03	0,02	0,1	0,11	0,07	0,1	0,18	0,11
MARPOL - annex V	758	701	696	1,1	1,01	0,97	4,1	3,55	3,43	6,5	5,93	5,62
MARPOL related operational deficiencies	456	341	11	0,7	0,49	0,02	2,45	1,73	0,05	3,9	2,88	0,09
Other def. clearly hazardous safety	33	48	0	0,1	0,07	0,00	0,2	0,24	0,00	0,3	0,41	0,00
Other def. not clearly hazardous	65	63	0	0,1	0,09	0,00	0,3	0,32	0,00	0,6	0,53	0,00

## Model 1 Detentions with class related detainable deficiencies in% of total number of detentions per Classification Society

Classification Society <sup>4</sup>	Total number of detentions	Detentions class related deficiencies	Number of individual ships	Percentage detentions with class related deficiencies	+/- Percentage average
Other (Class Not Specified)	36	8	33	22,22	10,12
American Bureau of Shipping ABS	87	8	83	9,20	-2,91
Bulgarski Koraben Registar BKR	13	1	10	7,69	-4,41
Bureau Veritas (France) BV	193	16	178	8,29	-3,82
China Classification Society CCS	10	3	10	30,00	17,89
China Corporation Register of Shipping CCRS	6	1	5	16,67	4,56
Croatia Register of Shipping CRS	19	0	15	0,00	-12,11
Det Norske Veritas (Norway) DNVC	120	18	114	15,00	2,89
Germanischer Lloyd GL	209	19	180	9,09	-3,02
Hellenic Register of Shipping (Greece) HRS	37	8	33	21,62	9,52
Honduras Inter. Naval Surve. and Insp. Bur. HINSIB	3	2	3	66,67	54,56
Inclamar (Cyprus) INC	9	3	7	33,33	21,23
Indian Register of Shipping IRS	3	0	3	0,00	-12,11
International Naval Surveys Bureau (Greece) INSB	33	7	28	21,21	9,11
International Register of Shipping (USA) IS	22	5	22	22,73	10,68
Isthmus Bureau of Shipping (Panama) IBS	3	0	2	0,00	-12,11
Korean Register of Shipping (South Korea) KRS	8	1	6	12,5	0,39
Lloyd's Register of Shipping (U.K.) LRS	181	22	161	12,15	0,05
Nippon Kaiji Kyokai (Japan) NKK	81	14	76	17,28	5,18
Panama Maritime Documentation Services PMDS	5	1	4	20,00	7,89
Polski Rejestr Statkow (Poland) PRS	51	5	43	9,80	-2,3
Register of Shipping (Albania) RS	24	9	17	37,50	25,39
Register of Shipping (North Korea)	4	1	4	25,00	12,89
Registro Cubano De Buques (Cuba) RCB	2	1	2	50,00	37,89
Registro Italiano Navale (Italy) RINA	35	3	30	8,57	-3,53
RINAVE Portuguesa (Portugal) RP	2	0	1	0,00	-12,11
Romanian Naval Register RNR	10	0	10	0,00	-12,11
Russian Maritime Register of Shipping RMRS	159	14	139	8,81	-3,3
Russian River Register RR	12	1	12	8,33	-3,77
Shipping Register of Ukraine SRU	3	0	3	0,00	-12,11
Turkisch Lloyd (Turkey) TL	49	2	42	4,08	-8,02

<sup>4</sup> Where a country is shown after a classification society this indicates its location and not necessarily any connection with the maritime administration of that country.

<sup>5</sup> The information contained in the statistical material of Models 1-4 concerning classification societies were collected during the calendar year 2003 on the basis of provisional criteria for the assessment of class responsibility. Due to updating anomalies the figures may include a small margin of error. This margin is not greater than 1,5 percent to either side.

## Model 2 Detentions of ships with class related detainable deficiencies per Classification Society

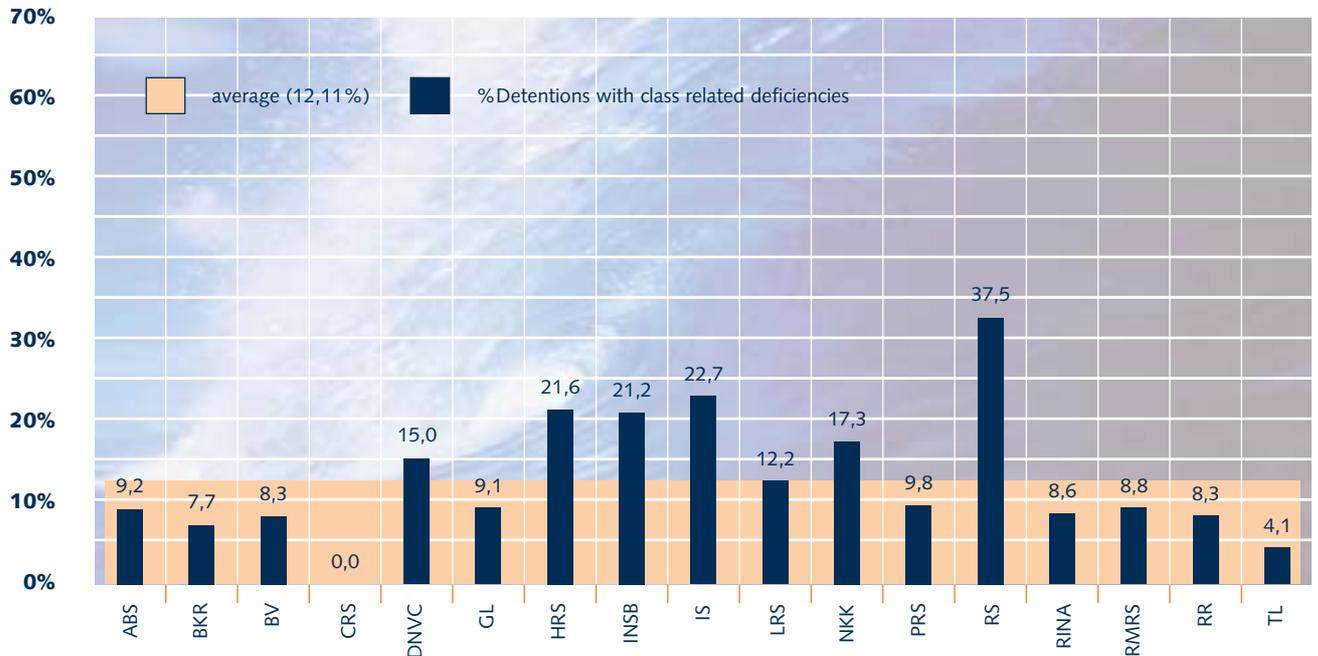
(Cases in which more than 10 detentions are involved)

Classification Society <sup>5</sup>	Total number of inspections	Number of individual ships inspected	Total number of detentions	Detentions-% of total number of inspections	+/- Percentage of Average	Detentions-% of individual ships inspected	+/- Percentage of Average
Other (Class Not Specified)	81	70	8	9,88	9,03	11,43	10,09
American Bureau of Shipping ABS	1440	1012	8	0,56	-0,29	0,79	-0,55
Bulgarski Koraben Registrar BKR	109	65	1	0,92	0,07	1,54	0,20
Bureau Veritas (France) BV	2809	1705	16	0,57	-0,28	0,94	-0,40
China Classification Society CCS	177	140	3	1,69	0,85	2,14	0,81
China Corporation Register of Shipping CCRS	26	19	1	3,85	3,00	5,26	3,93
Croatian Register of Shipping CRS	102	67	0	0,00	-0,85	0,00	-1,34
Det Norske Veritas (Norway) DNV	2722	1826	18	0,66	-0,18	0,99	-0,35
Germanischer Lloyd GL	3963	2248	19	0,48	-0,36	0,85	-0,49
Hellenic Register of Shipping (Greece) HRS	178	96	8	4,49	3,65	8,33	7,00
Inclamar (Cyprus) INC	32	16	3	9,38	8,53	18,75	17,41
Indian Register of Shipping IRS	25	21	0	0,00	-0,85	0,00	-1,34
International Naval Surveys Bureau (Greece) INSB	90	57	7	7,78	6,93	12,28	10,94
International Register of Shipping (USA) IS	87	68	5	5,75	4,90	7,35	6,01
Korean Register of Shipping (South Korea) KRS	149	107	1	0,67	-0,17	0,93	-0,40
Lloyd's Register of Shipping (U.K.) LRS	3580	2290	22	0,61	-0,23	0,96	-0,38
Nippon Kaiji Kyokai (Japan) NKK	1656	1214	14	0,85	0,00	1,15	-0,18
Polski Rejestr Statkow (Poland) PRS	424	192	5	1,18	0,33	2,60	1,27
Register of Shipping (Albania) RS	53	28	9	16,98	16,14	32,14	30,81
Registro Italiano Navale (Italy) RINA	574	384	3	0,52	-0,32	0,78	-0,55
RINAVE Portuguesa (Portugal) RP	30	23	0	0,00	-0,85	0,00	-1,34
Romanian Naval Register RNR	36	27	0	0,00	-0,85	0,00	-1,34
Russian Maritime Register of Shipping RMRS	1740	1033	14	0,80	-0,04	1,36	0,02
Russian River Register RR	116	84	1	0,86	-0,02	1,19	-0,15
Shipping Register of Ukraine SRU	28	23	0	0,00	-0,85	0,00	-1,34
Turkisch Lloyd (Turkey) TL	208	112	2	0,96	0,12	1,79	0,45

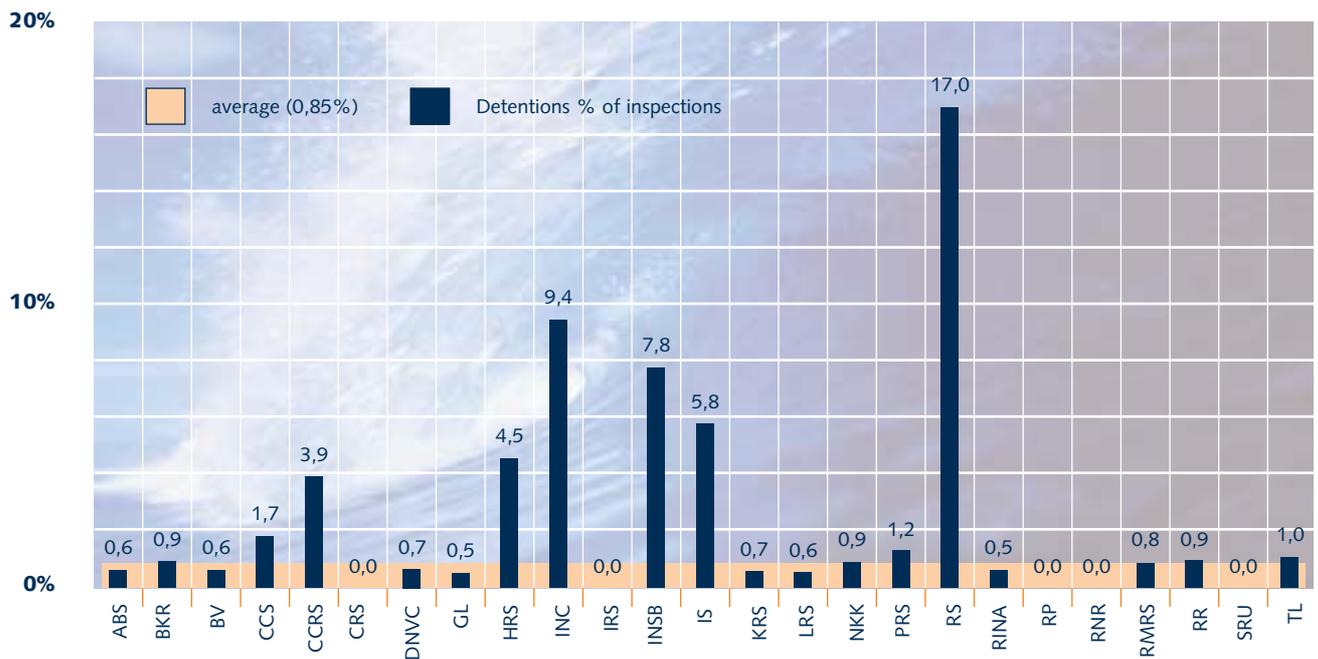
<sup>5</sup> Where a country is shown after a classification society this indicates its location and not necessarily any connection with the maritime administration of that country.

## Model 1 detentions with class related detainable deficiencies in% of total number of detentions per Classification Society

(Cases in which more than 10 detentions are involved, see table on page 34)



## Model 2 detentions of ships with class related detainable deficiencies per Classification Society



(Cases in which more than 10 inspections are involved, see table on page 35)

## Model 3 Number of detentions per Classification Society

(individual ships with class related detainable deficiencies)

### NUMBER OF SHIPS WITH CLASS RELATED DETAINABLE DEFICIENCIES

Classification Society <sup>6</sup>	detained once	detained twice	detained thrice
American Bureau of Shipping	8		
Bulgarski Koraben Registar	1		
Bureau Veritas (France)	16		
China Classification Society	3		
China Corporation Register of Shipping	1		
Det Norske Veritas (Norway)	18		
Germanischer Lloyd	19		
Hellenic Register of Shipping (Greece)	8		
Honduras Inter. Naval Surveys and Insp. Bur.	2		
Inclamar (Cyprus)	1	1	
International Naval Surveys Bureau (Greece)	4		1
International Register of Shipping (USA)	5		
Korean Register of Shipping (South Korea)	1		
Lloyd's Register of Shipping (U.K.)	22		
Nippon Kaiji Kyokai (Japan)	12	1	
Panama Maritime Documentation Services	1		
Polski Rejestr Statkow (poland)	5		
Register of Shipping (Albania)	6		1
Register of Shipping (North Korea)	1		
Registro Cubano De Buques (Cuba)	1		
Rigistro Italiano Navale (Italy)	3		
Russian Maritime Register of Shipping	14		
Russian River Register	1		
Turkisch Lloyd (Turkey)	2		
Other (Class Not Specified)	8		

<sup>6</sup> Where a country is shown after a classification society this indicates its location and not necessarily any connection with the maritime administration of that country.

## Model 4 Detentions of ships with class related detainable deficiencies per flag State

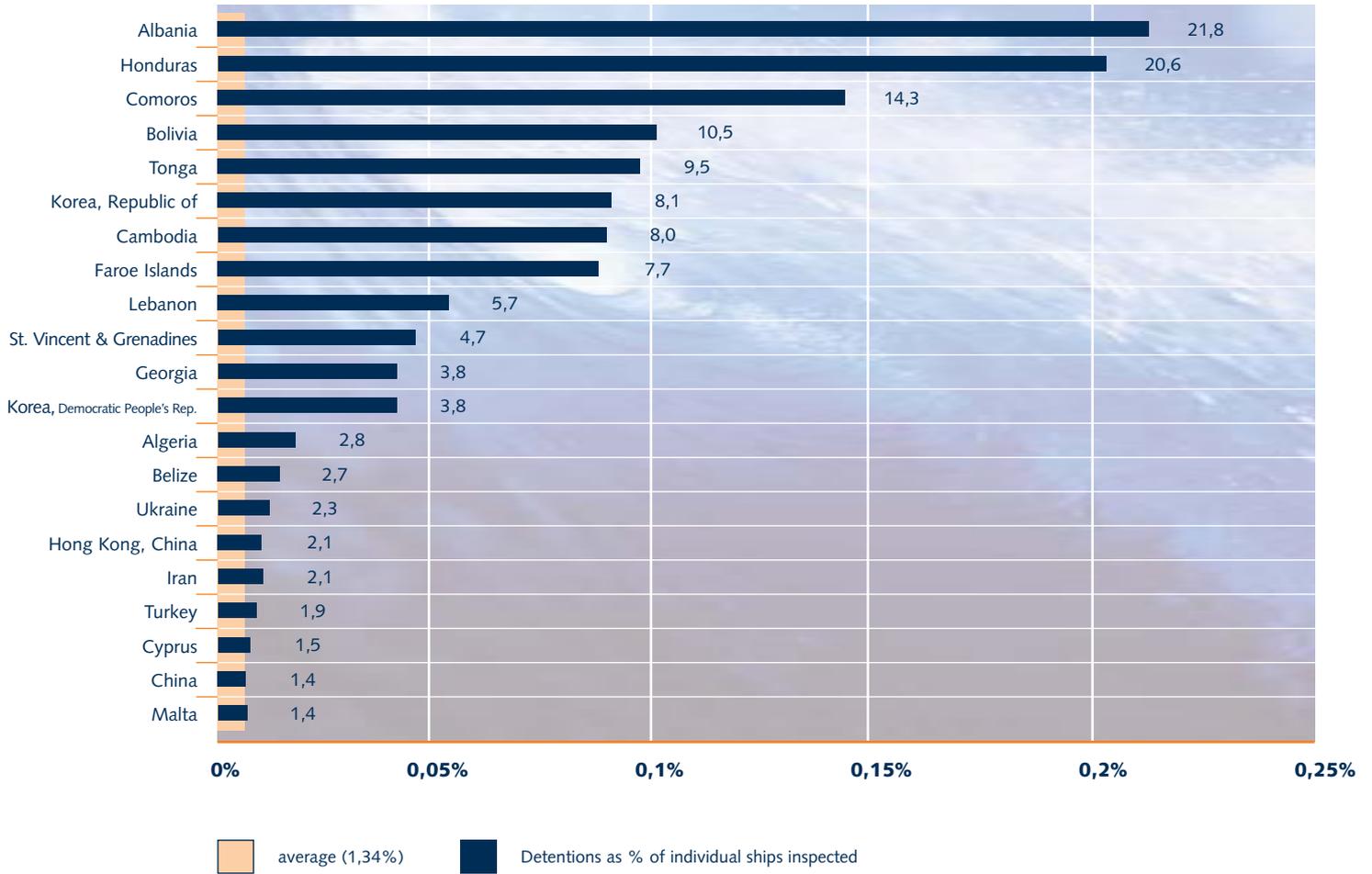
	Number of individual ships inspected	Number of ships detained (ships with class related deficiencies)	Detentions as % of individual ships inspected	+/- Percentage of average
Albania	55	12	21,82	20,48
Algeria	36	1	2,78	1,44
Antigua and Barbuda	713	3	0,42	-0,92
Antilles, Netherlands	123	0	0,00	-1,34
Austria	4	0	0,00	-1,34
Azerbaijan	24	0	0,00	-1,34
Bahamas	726	4	0,55	-0,79
Bahrain	4	0	0,00	-1,34
Bangladesh	2	2	100,00	98,66
Barbados	54	0	0,00	-1,34
Belgium	9	0	0,00	-1,34
Belize	74	2	2,70	1,37
Bermuda	58	0	0,00	-1,34
Bolivia	19	2	10,53	9,19
Brazil	8	0	0,00	-1,34
Bulgaria	52	0	0,00	-1,34
Cambodia	163	13	7,98	6,64
Canada	5	0	0,00	-1,34
Cayman Islands	93	0	0,00	-1,34
China	70	1	1,43	0,09
Comoros	28	4	14,29	12,95
Cook Islands	2	0	0,00	-1,34
Croatia	56	0	0,00	-1,34
Cyprus	736	11	1,49	0,16
Denmark	277	1	0,36	-0,97
Dominica	1	0	0,00	-1,34
Egypt	28	0	0,00	-1,34
Estonia	46	1	2,17	0,84
Ethiopia	6	0	0,00	-1,34
Faroe Islands	13	1	7,69	6,36
Finland	100	0	0,00	-1,34
France	64	0	0,00	-1,34
Georgia	106	4	3,77	2,44
Germany	238	1	0,42	-0,92
Gibraltar	108	0	0,00	-1,34
Greece	413	3	0,73	-0,61

	Number of individual ships inspected	Number of ships detained (ships with class related deficiencies)	Detentions as % of individual ships inspected	+/- Percentage of average
Honduras	34	7	20,59	19,25
Honk Kong, China	234	5	2,14	0,80
Hungary	2	0	0,00	-1,34
India	39	0	0,00	-1,34
Iran, Islamic Republic of	47	1	2,13	0,79
Ireland	31	0	0,00	-1,34
Israel	12	0	0,00	-1,34
Italy	270	0	0,00	-1,34
Jamaica	3	0	0,00	-1,34
Japan	17	0	0,00	-1,34
Jordan	1	0	0,00	-1,34
Korea, Democratic People's Rep.	53	2	3,77	2,44
Korea, Republic of	37	3	8,11	6,77
Kuwait	7	0	0,00	-1,34
Latvia	8	0	0,00	-1,34
Lebanon	35	2	5,71	4,38
Liberia	702	4	0,57	-0,77
Libyan Arab Jamahiriya	2	0	0,00	-1,34
Lithuania	63	0	0,00	-1,34
Luxembourg	42	0	0,00	-1,34
Malaysia	47	0	0,00	-1,34
Malta	942	13	1,38	0,04
Man, Isle of	168	1	0,60	-0,74
Marshall Islands	198	1	0,51	-0,83
Mexico	1	0	0,00	-1,34
Moldova Rep. of	1	0	0,00	-1,34
Mongolia	7	0	0,00	-1,34
Morocco	30	0	0,00	-1,34
Myanmar	4	0	0,00	-1,34
Netherlands	571	0	0,00	-1,34
Nigeria	1	0	0,00	-1,34
Norway	595	8	1,34	0,01
Pakistan	4	0	0,00	-1,34
Panama	1440	19	1,32	-0,02
Philippines	57	0	0,00	-1,34
Poland	29	0	0,00	-1,34

	<b>Number of individual ships inspected</b>	<b>Number of ships detained</b> (ships with class related deficiencies)	<b>Detentions as % of individual ships inspected</b>	<b>+/- Percentage of average</b>
Portugal	97	0	0,00	-1,34
Qatar	6	0	0,00	-1,34
Romania	32	0	0,00	-1,34
Russian Federation	532	3	0,56	-0,77
Sao Tome & Principe	2	0	0,00	-1,34
Saudi Arabia	10	0	0,00	-1,34
Seychelles	2	0	0,00	-1,34
Singapore	184	1	0,54	-0,79
Slovakia	4	1	25,00	23,66
South Africa	1	0	0,00	-1,34
Spain	64	0	0,00	-1,34
Sri Lanka	1	0	0,00	-1,34
St Vincent & Grenadines	470	22	4,68	3,34
Sweden	207	0	0,00	-1,34
Switzerland	18	0	0,00	-1,34
Syrian Arab Republic	46	0	0,00	-1,34
Taiwan	10	0	0,00	-1,34
Thailand	28	0	0,00	-1,34
Tonga	21	2	9,52	8,19
Tunesia	9	0	0,00	-1,34
Turkey	413	8	1,94	0,60
Turkmanistan	2	0	0,00	-1,34
Tuvalu	3	0	0,00	-1,34
Ukraine	132	3	2,27	0,94
United Arab Emirates	8	0	0,00	-1,34
United Kingdom	316	0	0,00	-1,34
United States of America	49	0	0,00	-1,34
Vanuatu	32	0	0,00	-1,34

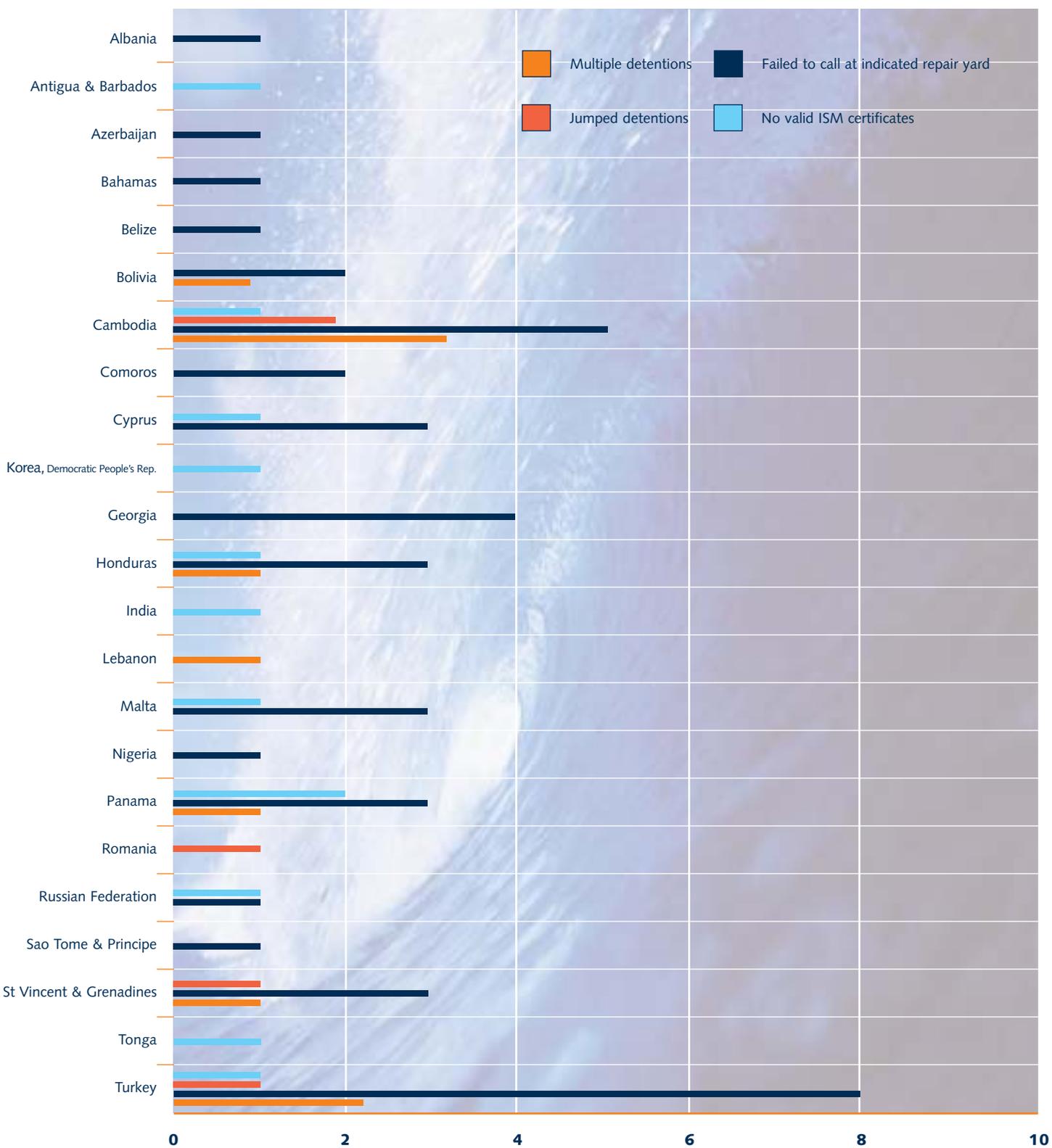
### Model 4 Detentions of ships with class related detainable deficiencies per flag State above average

(Cases in which more than 10 inspections are inspected)



## Refusal of access (banning) and reasons per flag State 2001 - 2003

Flag	Banned ships	No Valid ISM certification	Jumped detention	Failed to call at indicated repair yard	Multiple detentions
Albania	1			1	
Antigua & Barbados	1	1			
Azerbaijan	1			1	
Bahamas	1			1	
Belize	1			1	
Bolivia	3			2	1
Cambodia	11	1	2	5	3
Comoros	2			2	
Cyprus	4	1		3	1
Korea, Democratic People's Rep.	1	1			
Georgia	4			4	
Honduras	5	1		3	1
India	1	1			
Lebanon	1				1
Malta	4	1		3	
Nigeria	1			1	
Panama	6	2		3	1
Romania	1		1		
Russian Federation	2	1		1	
Sao Tome & Principe	1			1	
St Vincent & Grenadines	6		1	3	2
Tonga	1	1			
Turkey	13	1	1	8	3
<b>Totals</b>	<b>72</b>	<b>12</b>	<b>5</b>	<b>43</b>	<b>12</b>



## Explanation note - Black, Grey and White lists

The new normative listing of flag States 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 State 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:

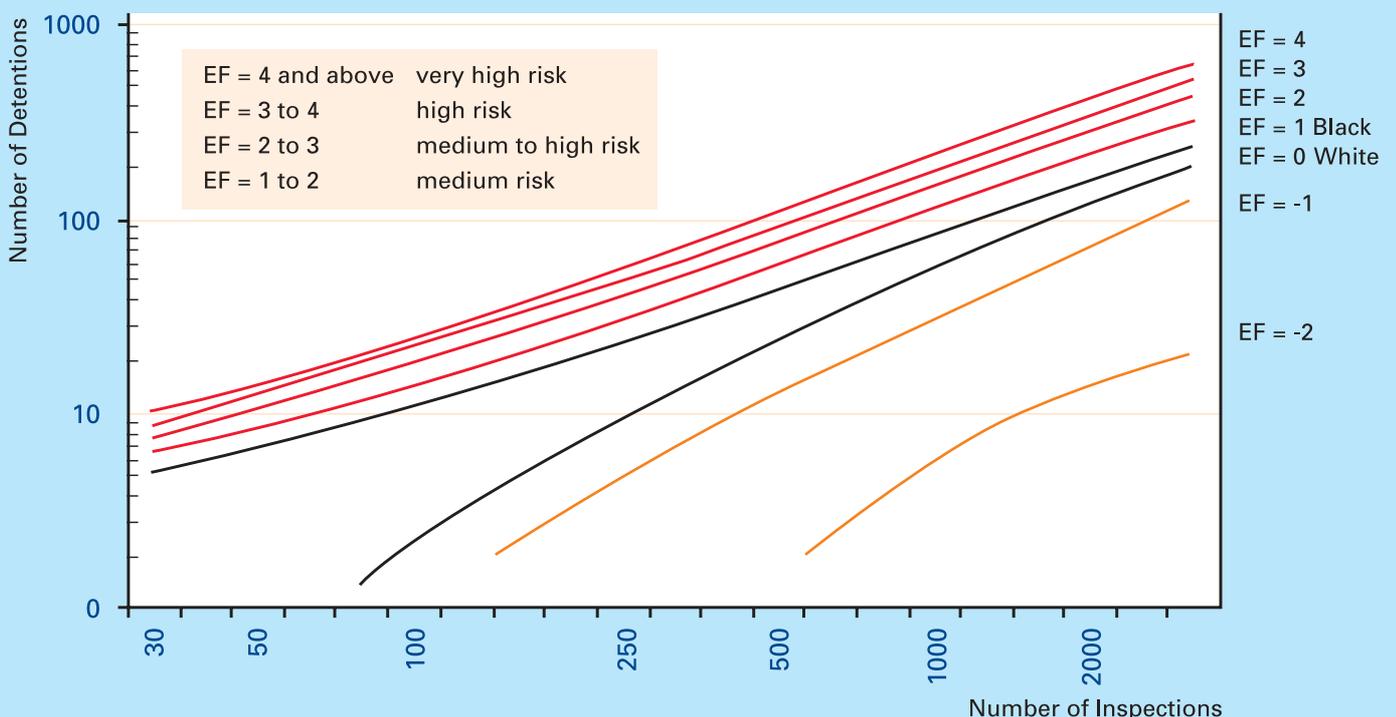
$$u_{black-to-grey} = N \cdot p + 0.5 + z\sqrt{N \cdot p \cdot (1-p)}$$

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

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 State is positioned between the two, the flag State will find itself on the grey list. The formula is applicable for sample sizes of 30 or more inspections over a 3-year period.

To sort results on the black or white list, simply alter the target and repeat the calculation. Flags which are still significantly above this second target, are worse than the flags which are not. This process can be repeated, to create as many refinements as desired. (Of course the maximum detention rate remains 100%!) To make the flags' performance comparable, the excess factor (EF) is introduced. Each incremental



or decremental step corresponds with one whole EF-point of difference. Thus the excess factor EF is an indication for the number of times the yardstick has to be altered and recalculated. Once the excess factor is determined for all flags, the flags can be ordered by EF. The excess factor can be found in the last column the black, grey or white list. The target (yardstick) has been set on 7% and the size of the increment and decrement on 3%.

The Black/Grey/White lists have been calculated in accordance with the above principles. The graphical representation of the system, below, is showing the direct relations between the number of inspected ships and the number of detentions. Both axis have a logarithmic character. as the 'black to grey' or the 'grey to white' limit.

**Example flag on Black list:**

Ships of Turkey were subject to 2463 inspections of which 503 resulted in a detention . The "black to grey limit" is 194 detentions. The excess factor is 5,03

- N= total inspections
- P = 7%
- Q =3%
- Z = 1.645

How to determine the black to grey limit:

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

$$u_{blackto\ grey} = 2463 \cdot 0.07 + 0.5 + 1.645\sqrt{2463 \cdot 0.07 \cdot 0.93}$$

$$u_{blackto\ grey} = 194$$

The excess factor is 5,03. 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 4,03, and the outcome has to be added to the normal value for 'p' :  $p + 4.03q = 0.07 + (4.03 \cdot 0.03) = 0.1909$

$$u_{excessfactor} = 2463 \cdot 0.1909 + 0.5$$

$$+ 1.645\sqrt{2463 \cdot 0.1909 \cdot 0.8091}$$

$$u_{excessfactor} = 503$$

**Example flag on Grey list:**

Ships of Malaysia were subject to 165 inspections, of which 7 resulted in a detention. The ' black to grey limit" is 17 and the " grey to white limit" is 6. The excess factor is 0.11. How to determine the black to grey limit::

$$u_{blackto\ grey} = 165 \cdot 0.07 + 0.5 + 1.645\sqrt{165 \cdot 0.07 \cdot 0.93}$$

$$u_{blackto\ grey} = 17$$

How to determine the grey to white limit:

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

$$u_{greyto\ white} = 165 \cdot 0.07 - 0.5 - 1.645\sqrt{165 \cdot 0.07 \cdot 0.93}$$

$$u_{greyto\ white} = 6$$

To determine the excess factor the following formula is used:

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

$$ef = (7 - 6)/(17 - 6)$$

$$ef = (7 - 6)/(17 - 6)$$

**Example flag on White list:**

Ships of France were subject to 259 inspections of which 7 resulted in detention. The "grey to white limit" is 11 detentions. The excess factor is -0,62. How to determine the grey to white limit:

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

$$u_{greyto\ white} = 259 \cdot 0.07 - 0.5 - 1.645\sqrt{259 \cdot 0.07 \cdot 0.93}$$

$$u_{greyto\ white} = 11$$

The excess factor is - 0,62 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 -0,62, and the outcome has to be added to the normal value for 'p' :

$$p + (-0.62q) = 0.07 + (-0.62 \cdot 0.03) = 0.051$$

$$u_{excessfactor} = 259 \cdot 0.051 - 0.5$$

$$- 1.645\sqrt{259 \cdot 0.051 \cdot 0.949}$$

$$u_{excessfactor} = 7$$



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The Paris MOU maintains a web site which can be found at [www.parismou.org](http://www.parismou.org). The site contains information on operation of the Paris MOU and a database of inspection results.

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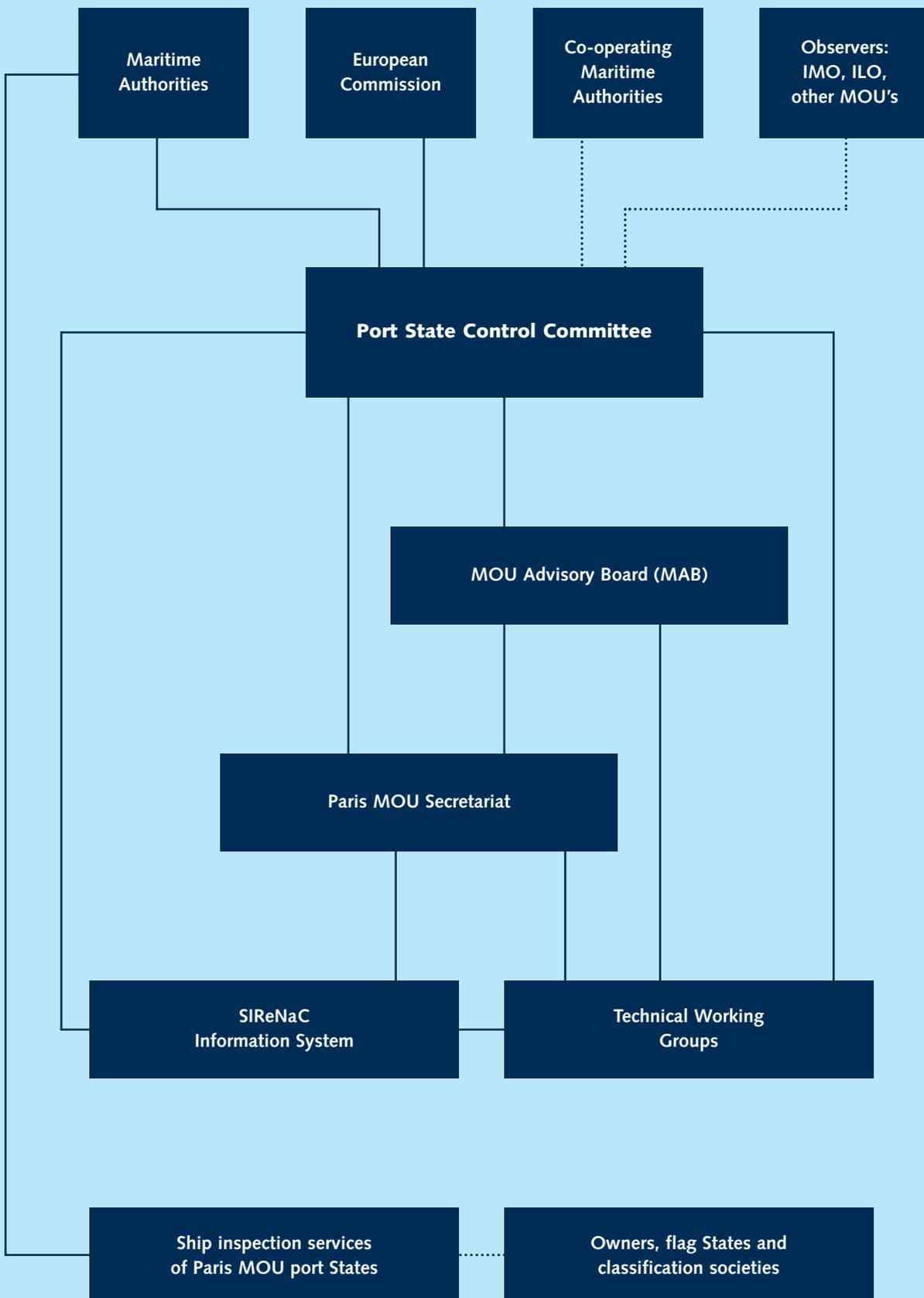
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## Paris MOU fact sheet - organizational structure









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