Introduction

The responsibilities to ensure that vessels comply with the provisions of the relevant regulations rest upon the owners, masters, the Flag states and the Classification societies.

Unfortunately, some flag States, for various reasons, fail to fulfil their internationally-agreed commitments and, consequently, some vessels are sailing the world’s seas in unsafe condition, threatening the lives of all those on board as well as the marine environment.

Port State Control is a system of harmonized inspection-procedures designed to target sub-standard vessels with the main objective being their eventual elimination.

This process was swiftly accelerated by an impressive shipping accident.

In March 1978 the grounding of the supertanker “Amoco Cadiz” off the coast of Brittany (France) resulted in a massive oil spill, causing a strong political and public outcry in Europe, calling for more stringent regulations with regard to the safety of shipping.

This pressure resulted in a more comprehensive Memorandum of Understanding signed in Paris in 1982 (known as Paris MOU) which covered:

- Safety of life at sea;
- Prevention of pollution by vessels;
- Living and working conditions on board ships.
Basic principle of PSC

- The prime responsibility for the compliance with the requirements laid down in the international maritime conventions lies with the ship-owner/operator; responsibility for ensuring such compliance remains with the flag State;
- The member-countries agree to inspect a given percentage of their estimated number of individual foreign merchant vessels entering their ports;
- As a general rule, ships will not be inspected within six months of a previous inspection in a MOU port, unless there are “clear grounds” for inspection (see “Selection of ships for inspections”);
- All possible efforts are made to avoid unduly detaining or delaying a vessel;
- Inspections are generally unannounced.

Legal background

The international maritime conventions mentioned in the previous section, referred to as the “relevant instruments”, are as follows:

- *International Convention for the Prevention of Pollution from Ships, 1973*, as modified by the Protocol of 1978, as amended (MARPOL 73/78);
- *International Convention on Standards of Training, Certification and Watch keeping for Seafarers 1978*, as amended (STCW 78);
- *Convention on the International Regulations for Preventing Collision at Sea 1972*, as amended (COLREG 72);
- *International Convention on Tonnage Measurement of Ships 1969* (TONNAGE 1969);
Boarding procedures

Port State Control is carried out by a Port State Control Officer (PSCO). The PSCO is a properly qualified person, authorised to carry out Port State Control inspections in accordance with MOU regulations by the maritime authority of the port State and acts under its responsibility.

All PSCOs carry an identity card, issued by their maritime authorities.

PSC Inspector will board a vessel without announcement and check primarily the ship’s documents for completeness and validity.

If there are any grounds to believe that the ship is substantially not in compliance with the International Conventions, the inspectors will carry out an "expanded inspection" of the ship’s condition and the required equipment.

The master will receive an official inspection report consisting of Form A and B.

Form A lists the vessel’s details and the validity of the relevant certificates. Form B shows the list of "deficiencies" found, together with the action code which describes a time frame for rectification for each deficiency.

If there are "clear grounds" that the vessel represents a hazard to safety and/or to environment, the PSCO has the right to detain the ship in port until the respective deficiencies have been rectified and re-surveyed. The PSC authority will either re-survey by its own inspectors or ask for a survey report from the Classification surveyor to verify the rectification.

Selection of vessels for inspection

Every day a number of ships will be selected for a port State control inspection. To facilitate such selection, a computer database is consulted by PSCOs for data on ships particulars and for the reports of previous inspections.

Ships to be considered for priority inspections are:

- Ships that have been reported by pilots or port authorities of having deficiencies which may jeopardize their safe operation;
- Ships carrying dangerous or polluting goods, which have failed to report all relevant information to the Authority of the port and coastal State;
- Ships that have been the subject of a report or notification by another Authority;
- Ships that have been the subject of a report by the master, a crew member, or any person with a legitimate interest in the safe operation, shipboard living and working conditions or the prevention of pollution;
- Ships that have been:
- involved in a collision, grounding or stranding, on their way to the port;
- accused of an illegal violation of the provisions on discharge of harmful substances;
- manoeuvred in an erratic or unsafe manner whereby routing measures, adopted by the IMO, or safe navigation practices and procedures have not been followed;
- operated in such a way as to pose a danger to persons, property or the environment;
- Ships, which have been suspended from their Classification society for safety reasons during the preceding six months.

As far as complaints received from masters or crew members, the PSC authority receiving such complaints has the obligation not to disclose the source of information. In this way, masters or crew members will not face the risk of reprisal.

**PSC inspection procedures**

A port State control inspection on board will normally start with verification of the following certificates and documents, in accordance with the provisions of the just mentioned "relevant instrument":

- Oil record book, part 1 and 2 (if relevant);
- Record of construction and equipment;
- International tonnage certificate (1969);
- Minimum safe manning document;
- Certificates of competency;
- International certificates of fitness for the carriage of liquefied gas in bulk or dangerous chemical in bulk (if relevant)
- Medical certificates (see ILO Convention 73);
- Stability information;
- Cargo record book (if relevant);
- Safety management certificate and copy of the document of compliance (issued in accordance with ISM Code);
- High speed craft safety certificate and permit to operate;
- If appropriate, class certificates as to the ship’s hull strength and machinery installations;
- Survey reports files in case of bulk carriers or oil tankers;
- Muster list, fire control plan, and for passenger ships, a damage control plan, a decision support system for the master;
- Ship’s log book with respect to the records of tests and drills and the log for records of inspection and maintenance of life-saving appliances;

- Reports of previous PSC inspections;

- Cargo securing manual (if relevant)

- Loading and unloading plan for bulk carriers;

- Garbage record book.

In addition, the PSCO conducts a general inspection of several areas on board to verify that the conditions of the ship complies with those required by the various certificates. If valid certificates or documents are not on board, or if there are “clear grounds” to believe that a ship, its equipment or its crew does not substantially meet the requirements of a relevant conventions, a “more detailed inspection” will be carried out.

If the ship is found to comply, the PSCO will issue a “clean inspection report” (Form A) to the master of the ship. Next, the data of the ship and the inspection result will be recorded on the central computer database.

Grounds for a more detailed inspection

“Clear grounds” for a more detailed inspection are:

- Vessels whose statutory certificates on the vessel’s construction or equipment, issued in accordance with the conventions, and the classification certificates have been issued by an organization which is not recognized by the authority;

- Ships that have deficiencies to be rectified in the next port;
- Ships that have deficiencies to be rectified within 14 days;
- Ships flying the flag of a non-Party to a relevant instrument;
- Ships that are in a category for which “expanded inspection” has been decided, i.e.: oil tankers older than 20 years, bulk carriers older than 12 years, gas and chemical carriers older than 10 years, and passenger ships;

- During examination of the certificates and documents inaccuracies have been revealed or the documents have not been properly kept updated;

- Indications that the crew members are unable to communicate with each other, or that the ship is unable to communicate with shore- based authorities;

- Evidence of cargo and other operations not being conducted safely or in accordance with IMO guidelines;
- Failure of the master of an oil tanker to produce the record of the oil discharge monitoring and control system for the last ballast voyage;

- Absence of an up to date muster list, or crew members not aware of their duties in the event of fire or an order to abandon ship;

- The emissions of false alerts not followed by proper cancellation procedures;
- The absence of principal equipment or arrangements required by the conventions;
Evidence from the PSCO’s general impression and observations that there are serious hull and structural deteriorations or deficiencies that may jeopardize the structural, watertight or weather tight integrity of the vessel;

- Excessively unsanitary conditions on board the vessel;
- Information or evidence that the master or crew is not familiar with essential shipboard operation relating to the safety of the vessel or the prevention of pollution, or that such operations have not been carried out.

**Deficiencies, detention and rectification**

When deficiencies are found during the inspection, the nature of the deficiencies and the corresponding actions taken are filled in on the inspection report (see action Code).

In principle, all deficiencies must be rectified before departure of the vessel. It is up to the professional judgement of the PSCO to decide that he/she has to board the ship on a second occasion, to check personally if all deficiencies have indeed been rectified.

The following are the main criteria for the detention of a vessel:

- A vessel which is unsafe to proceed to sea will be detained upon the first inspection, irrespective of the time the vessel is scheduled to stay in port;
- The deficiencies on a vessel are so serious that they will have to be rectified before the ship sails.

In case deficiencies are clearly hazardous to safety, health or the environment, the maritime authorities will ensure that the hazards is rectified before the vessel is allowed to proceed to sea.

For this purpose they will either detain the vessel or issue a formal prohibition of a vessel to continue an operation. The flag State and the classification society will be immediately notified.

On the conclusion of an inspection, the master of the vessel will be provided with a document, which will indicate the results of the inspection and details of any action required to be taken.

**Action codes**

Each deficiency is commonly given a in a codified form in the inspection report, called “action code”.

The descriptions of all codes for “action taken” can be found on the reverse side of Form B of the inspection report.

The action codes most frequently used are:

- 10  deficiency rectified
- 15  to be rectified at the next port of call;
- 16  to be rectified within 14 days;
- 17  master instructed to rectify deficiency before departure;
Regional PSC agreements

In several regions around the world, coastal countries have signed an agreement, “Memorandum of Understanding on Port State Control, often abridged “MOU on PSC”. At present there are the following Regional Agreement on PSC:

- **Paris MOU** for the European Region signed in 1982, whose members are: Belgium, Canada, Croatia, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russian Federation, Spain, Sweden, U.K.

- **The Acuerdo de Viña del Mar** (Latin America Agreement), signed in Viña del Mar (Chile) in 1992, whose members are: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Mexico, Panama, Peru, Uruguay, Venezuela;

- **Tokyo MOU** for the Asian Region signed in 1993, whose members are: Australia, Canada, China, Fiji, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, Philippines, Russian Federation, Singapore, Solomon Islands, Thailand, Vanuatu, Vietnam, Hong Kong;

- **Caribbean MOU** for the Caribbean Region signed in 1996 in Barbados;

- **Mediterranean MOU** for the Southern Mediterranean Region signed in 1997 in Valletta and comprising: Algeria, Cyprus, Egypt, Israel, Jordan, Malta, Lebanon, Morocco, Tunisia, Turkey, Palestinian Authority;

- **Indian Ocean MOU** signed in 1998 in Pretoria and comprising: Djibouti, Eritrea, Ethiopia, India, Iran, Kenya, Maldives, Mauritius, Mozambique, Seychelles, South Africa, Sri Lanka, Sudan, Tanzania, Yemen;

- **West and Central Africa MOU** signed in Abuja (Nigeria) in 1999, whose members are: Benin, Cape Verde, Congo, Ivory Coast, Gabon, Gambia, Ghana, Guinea, Liberia, Mauritania, Namibia, Nigeria, Senegal, Sierra Leone, South Africa, Togo.

Two more regional agreements have been developed:

- **Persian Gulf Region**, comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates;

- **Black Sea Area**, comprising Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine.

In the United States PSC is carried out by US Coast Guard.

**Information exchange**
Whether deficiencies are found or not, all details from each inspection report are entered in an advanced central computer database, which for the Paris MOU region is located in Saint Malo, France.

This database can be accessed by PSC authorities in the Paris MOU region, for consulting inspection files, inserting new inspection reports or using the electronic mail facility.

A monthly list of detentions is published on the Paris MOU website. This list contains, amongst others, the ship name, the owner, the Classification society and the port and date of detention.

Fast developing databases and internet technology have made it necessary to replace the information system, SIRENAC F which has been in operation since 1998.

The new system, operational since January 2003, takes account of amendments in PSC policy such as targeting of ships, new inspection procedures and measuring performance of classification societies.

It will make full use of Internet technology and of an ORACLE database architecture. This will enable PSCO’s to access the system for interrogation and updating by means of portable PC’s and cellular phones.

It will also provide more accurate descriptions of inspection results and include a range of new data.

THE NEW INSPECTION REGIME (NIR) OF THE PARIS MEMORANDUM OF UNDESTANDING (PMoU)

The present PSC regime has been replaced by “The New Inspection Regime” (NIR) of the Paris Memorandum of Understanding (PMoU) which has entered into force on January 1st, 2011.

The new target of full coverage

One of the main consequences of introducing the NIR is that PMoU will change its target of inspecting 25% of individual ships calling at each member State, to a shared commitment for full coverage of inspecting all ships visiting ports and anchorages in the PMoU region.

Ship Risk Profile

The Target Factor will be replaced by the Ship Risk Profile. According to the Ship Risk Profile vessels will be classified as Low Risk Ships (LRS) and High Risk Ships (HRS). If a vessel is neither Low Risk nor High Risk it will be classified as a Standard Risk Ship (SRS). The Ship Risk Profile will be based on the following criteria, using details of inspections in the PMoU area in the last 3 years:

- type of ship
- age of ship
- performance of the flag of the ship (including undertaking Voluntary IMO Member State Audit Scheme (VIMSAS))
- performance of the recognised organisation(s)
- performance of the company responsible for the ISM management
- number of deficiencies
- number of detentions.
**Company performance**
A new parameter in the PMoU is provided by the company performance criteria for calculating the Ship Risk Profile. For this purpose, the PMoU has established a formula taking into account any deficiencies and detentions in the last 36 months of the company’s fleet, based on the IMO company number. This is compared to the average of all the vessels inspected in the PMoU to measure the performance level. Companies will be ranked into very low, low, medium and high. Any Refusal of Access (Ban) will have a negative impact on the company’s ranking.

**Inspection Categories**
The NIR includes two categories of inspection, a **periodic** and an **additional** inspection. Periodic inspections are performed on the basis of the time window. Additional inspections are carried out by overriding or unexpected factors depending on the severity of the occurrence.

**Time Window**
This is established in accordance with the Ship Risk Profile as follows:
- **HRS**: between 5-6 months after the last inspection in the PMoU region
- **SRS**: between 10-12 months after the last inspection in the PMoU region
- **LRS**: between 24-36 months after the last inspection in the PMoU region.

The time span for the next periodic inspection re-starts after any inspection.

**Selection Scheme**
A ship will become **Priority I**, if the time window has passed. The ship will be selected for a periodic inspection. When the time window opens a ship becomes **Priority II**. The ship can then be selected for a periodic inspection. If an overriding factor is logged against a ship it becomes Priority I irrespective of the time window and the ship will be selected for inspection. If an unexpected factor is logged against a ship it becomes Priority II irrespective of the time window and the ship can be selected for inspection. Before the window opens for any risk profile and no overriding or unexpected factors are logged, the ship has no priority status and the member States are not obliged to carry out an inspection on such a ship but if deemed appropriate they may choose to do so.

**Inspection types**
The PMoU will not change the inspection types but will extend the expanded inspection to all types of ships. In case of a periodic inspection each ship with an HRS profile and each bulk carrier, chemical tanker, gas carrier, oil tanker or passenger ship older than 12 years must be subject to an **expanded inspection**. Each ship with an SRS and LRS profile that does not fall within one of the above mentioned ship types, will be subject to an **initial inspection** or, if clear grounds are established, to a **more detailed inspection**.

Any additional inspection will at least be a more detailed inspection. If the ship has an HRS profile or is one of the above mentioned ship types, the member State may decide to carry out an expanded inspection. As far as the results of all inspections from mid 2009 are concerned, they will count towards the application of the new requirements.

**Refusal of access (banning)**
The PMoU will enlarge banning for multiple detentions from certain ship types to all types of ship and extend the flag from the black to the grey listed ones. The banning criteria for the first and second ban will be amended as follows:

- If the ship flies a black listed flag it will be banned after more than 2 detentions in the last 36 months
- If the ship flies a grey listed flag it will be banned after 2 or more detentions in the last 24 months.
Any subsequent detention after the second banning will lead to a ban, irrespective of the flag. Moreover, a time period until the banning can be lifted will be introduced as follows:

- 3 months after the first ban
- 12 months after the second ban
- 24 months after the third ban
- permanent ban.

To lift the third ban more stringent conditions will be applied which must be fulfilled before a 24 month period has elapsed.

**Reporting obligations**

With the NIR, the PMoU has widened the arrival notifications. The former regime already had a 72 hour pre arrival (ETA72) message in place. This regarded only a few types of ships and only if they were eligible for an expanded inspection. The ETA72 will encompass all ships with an HRS profile and also every bulk carrier, chemical tanker, gas carrier, oil tanker and passenger ship that is older than 12 years and is eligible for an expanded inspection. Eligibility for expanded inspection can be found on www.parismou.org after 1 January 2011. All ships must also provide a pre arrival notification 24 hours in advance (ETA24).

Both the ETA72 and ETA24 notifications are compulsory for vessels and will be reported to the Port State according to their national arrangements.

A new feature of NIR is that it will be required to report the notification of the **actual time of arrival** (ATA) and the **actual time of departure** (ATD) for all ships calling at all ports and anchorages in the PMoU region.

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**Port State Control- The future**

The prospect of global port State control, with exchange of information and harmonization of procedures and training, has even more exciting implications.

As more and more statistics and data are gathered and exchanged by the different PSC Secretariats, that will result in a huge increase in knowledge about sub-standard shipping.

This knowledge is not only useful in itself, but will also provide the maritime community with the opportunity to better analyse the causes of incidents and casualties and ascertain, more accurately than ever before, how they can be prevented from occurring again.

Using the information that is available as a result of regional cooperation on PSC, we can work towards a change in attitude within the shipping industry, where a long tradition of secrecy has too often resulted in problems being hidden and ignored rather than revealed and solved.

The development of PSC gives us the possibility to change that culture and replace secrecy with **transparency** and **openness**.

Although the efforts to improve flag State performance remain a top priority, effective regional agreements, including harmonized inspection and detention procedures, internationally approved qualifications of inspectors and transparency through increased information within regions and inter-regionally, will play an essential role for both flag and Port State responsibilities.
References

The Paris Memorandum of Understanding on Ports State Control, official text

Germanischer Lloyd- Ship Safety Division


Paris MoU New Inspection Regime