

Changing the rules of inspections carried out by Port State Control (PSC)

Profil oceny statku w świetle nowych przepisów inspekcji PSC

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Abstract

This article contains an analysis of the new inspection regime introduced 01/01/2011 by Port State Control affiliated to the Paris Memorandum of Understanding. Discusses the reasons for its creation, and presents its characteristics.

Słowa kluczowe: PSC, inspekcje, profil oceny statku, THETIS, NIR

Abstrakt

Artykuł zawiera analizę nowego systemu inspekcji statków wprowadzonego 01.01.2011 r. przez Inspektorów Państwa Portu (*Port State Control*) zrzeszonych w Komitecie Paryskim (*Paris Memorandum of Understanding*). Omówiono przyczyny jego powstania oraz przedstawiono charakterystykę. Przeprowadzono również analizę spodziewanych skutków jego stosowania.

Introduction

At the end of 2008 appeared, and in 2009, developed into a serious recession and that brings negative consequences for the global maritime economy. Canceled many orders for new ships, and sought to reduce the costs of operating the existing fleet. Restrictions on expenditures, both for current operations, as well as the training of crews can adversely affect the inspection results in the coming years by the Port State Control. In May 2009, the 42nd meeting of the Paris (Paris Memorandum of Understanding), was adopted by the new modified system for the inspection of ships – NIR (New Inspection Regime), which replaces the existing one on 01/01/2010 [1, 2].

This article contains an attempt to analyze the reasons for such a radical change of inspection's system [3] of the vessels and effects which carries its introduction. Studies were made on the basis of material available on the website because it is the

fastest and often the only source of information on new regulations.

Reasons for the introduction of new system

Summary of statistical data on inspections conducted between 2005–2009 in the area of responsibility of the association of Paris MoU indicates deteriorating vessels (Table 1).

According to statistical data contained in table 1 indicate that the vessels are inspected with almost constant frequency. This quantity is the average size ranging from 1.607 in 2006 to 1.64 for a single ship in 2009.

While the number of deficiencies identified by the inspection is growing steadily in the range from 62 434 in 2005 to a maximum of 85 751 in 2008. In 2009 there was a decrease, which can be explained by the fact that the crisis has hit the fastest vessels of the oldest, whose operating costs were the highest. At the same time a factor determining

Table 1. Results of inspections carried out by PSC in 2005–2009. Own study based on [1]

Tabela 1. Zestawienie wyników inspekcji przeprowadzonych w latach 2005–2009. Opracowanie własne na podst. [1]

Results of inspections in each year	2005	2006	2007	2008	2009
Number of inspections	21 302	21 566	22 877	24 647	24 210
Number of individual ships inspected	13 024	13 417	14 182	15 237	14 765
Factor determining the number of inspections per vessel	1.636	1.607	1.616	1.621	1.64
Number of deficiencies found	62 434	66 142	74 713	85 751	72 195
Factor determining the number of deficiencies found in a single vessel	4.79	4.93	5.27	5.63	4.89
Number of detention of vessels	1033	1216	1306	1261	1067
Factor determining the number of statistical ship detentions	0.079	0.091	0.092	0.083	0.072

the number of deficiencies per vessel is inspected shows a clear upward trend from 4.79 in 2005 to 5.63 in 2008. Number of detention reached its peak in 2007. Detentions are clearly hazardous to safety, health or the environment when a ship is detained in port until they are rectified.

Analyzing the data presented may be noted that the overall condition of the fleet is falling. Is detected by an increasing number of detentions. And although the most severe, which result in the arrest in the port of waning, it still is more than in 2005. At the same time clearly increases the number of inspections per one ship sailing in the region of responsibility of the Committee Paris MoU. This results in a direct increase in load time crews of ships.

In analyzing more detailed data, you will notice that the number of inspections carried out does not affect the level of training of the crews (Table 2).

Table 2. Summary of identified weaknesses in specific areas, while PSC inspections in 2007–2008. Own study based on [1]

Tabela 2. Zestawienie niedociągnięć w poszczególnych dziedzinach w latach 2007–2008. Oprac. własne na podst. [1]

Specific categories of deficiencies	2007	2008	Diff.
Total number of deficiencies	74 713	85 751	12.87%
Compliance with Standards of Training, Certification and Watchkeeping	3098	3341	7.84%
Equipment and machinery	7875	10174	30%
Safety and fire appliances	15 998	17 112	7%
Working and living conditions	8348	9823	17.67%
Operational excluding MARPOL	2544	2756	8.34%
ISM	4657	4641	-0.34%

For example, comparing 2007 and 2008 in several individual categories is clearly noticeable increase in deficiencies (of 2009 figures were unavailable). The following categories include the key categories and are globally about 45% of all deficiencies.

Characteristics of the system introduced

The deteriorating condition of the vessels was the basis for united action by all parties of the Paris MoU. A new typing method for inspection of ships – NIR. It was decided to extend the range of factors influencing the opinion. These data have forced the State affiliated to the Paris MoU for action. A new typing method for inspection of ships. It was decided to extend the range of factors influencing the opinion of the board. With the introduction of the New Inspection Regime quality ships will be rewarded with less inspections. High-risk ships will be subject to more in-depth and more frequent inspections. The targeting of ships will be made based on a Ship Risk. By using this profile ships are categorized as high, standard or low risk ships:

- High Risk Ships (HRS) will be subject to an inspection interval of 6 months,
- Standard Risk Ships (SRS) will be rewarded with an inspection range between 10–12 months,
- Low Risk Ships (LRS) will be rewarded with an inspection interval between 24–36 months of the last inspection.

The New Inspection Regime will be accompanied by a new inspection system, THETIS (The Hybrid European Targeting and Inspection System) [4], which will replace the existing Sirenac Database. A new element in Thetis will be the recording of Port call information. Port call information is important for the planning of inspections and resources by the Member States. Designing effective database is crucial for the implementation of the new system, which results from the current revision of the PSC Directive (95/21/UE as amended). The system will be used throughout the EU, all countries affiliated in Paris MoU, and to include Canada and the Russian Federation.

THETIS system will be equipped with the interface (the Community's Safes Net) to communicate with other entities related to maritime safety in order to exchange data and to obtain a complete picture of the inspector. THETIS indicates these vessels, which should be checked in the first place and will submit results of all monitoring bodies in the European Community and the associate in Paris MoU. Results of inspections will be available via a publicly accessible website [1].

The new system will take account of information gathered directly by the ship, as well as the company that owns the ship. Data on the ship are included in the factor "Ship Risk Profile" and about the company – "Company Performance Indicator". In accordance with the agreed new system for assessment of vessels shall be taken into account the generic and details in the last 36 months.

Generic Parameters:

- Type of ship,
- Age of ship,
- Performance of the flag of the ship,
- Performance of the recognized organization(s),
- Performance of the company responsible for the ISM management.

Details in the last 36 months:

- At least one inspection?
- All inspections with 5 or less deficiencies?
- Number of detentions.

Analiza of general information

An analysis of general information need for their inclusion in compliance with the new system.

Type of ship

Comparing data from 2008 can be said that different types of ships are kept in a different conditions (Table 3).

Table 3. The amounts of deficiencies and detentions of different types of ships during PSC inspections in 2008. Own study based on [5]

Tabela 3. Zestawienie liczby niedociągnięć i zatrzymań różnych typów statków w 2008 roku. Oprac. własne na podst. [5]

Ship type	Inspec-tions	% of inspections with deficiencies	% of inspections with detention
Bulk Carriers	3684	61.29	4.61
Tankers	1990	39.6	2.95
Gas Carriers	505	48.91	2.38
General Dry Cargo	9851	65.76	7.29
Ro-Ro	3625	47.75	2.23
Passenger Ships	1014	58.78	1.68
Reffers	742	75.34	6.83

Clearly the trend to keep tankers at the highest technical level and management, at the same time, statistical, worst level maintenance reefers and general dry cargo.

Age of ship

Limit will be 12 years. This is due to the current regulations, recommended to vessels whose keel

was placed earlier than 12 years ago, is subject to expanded inspection.

Performance of the flag of the ship

Analysis of data relating to a few countries raising their flag vessels proves to vary the quality of the fleet registered under a flag (Table 4).

Table 4. Number of detention boarding of ships to the PSC in 2008, for different flag. Own study based on [5]

Tabela 4. Liczba zatrzymań statków pod różnymi banderami w 2008 roku. Oprac. własne na podst. [5]

Data from 2008	Number of inspections	Number of detention	% of inspections with detention
Germany	403	6	1.49
Gibraltar, UK	405	10	2.47
Cambodia	311	62	10.14
Georgia	279	46	16.49
Panama	2985	228	7.64
Sierra Leone	216	47	21.76
Denmark	440	5	1.14

The analysis includes examples of countries which conducted numerous inspections. It can be seen very large differences in the condition of ships flying the flag variety. This fact will be taken into account in estimating "Ship Risk Profile". Each country is assigned to one of three lists: a white, gray and black. List, on which the flag State, is created based on the number of detentions during the past three years. Criterion limit of normal is 7%. Further limits the list are designated by increasing the permissible limit of 3%. List of countries qualified for each category is always created for a period of three years and published at the end of the calendar year.

Performance of the recognized organization(s)

The next element of the profile will take into account information about the Classification Society of the vessel.

If Classification Society has passed the Voluntary EMO Member State Audit?

Whether the classification society is recognized by the Paris MoU (Paris Memorandum of Understanding) and to what extent?

To know please contact the flag Classification Society.

If the Classification Society is EU recognized according to Directive 2009/15/EC?

Information about the classification society, please visit the website of the European Maritime Safety Agency (EMSA) [5].

The need to include information on the quality of supervision by the Classification Societies is

clear from the analysis of the effectiveness of their supervision (Table 5). The following table shows a very clear difference in the results of inspections carried out on ships under different.

Table 5. Summary results of PSC inspections, in 2008, the ships controlled by the various Classification Societies. Own study based on [5]

Tabela 5. Wyniki inspekcji z 2008 r. statków nadzorowanych przez różne Towarzystwa Klasyfikacyjne. Oprac. własne na podst. [5]

Classification Society	Number of inspections	Number of detention	% of inspections with detention
Register of Shipping (Albania)	87	8	9.20
Shipping Register of Ukraina	204	4	1.96
Polski Rejestr Statków	344	2	0.58
Bułgarski Koraben Register	119	6	5.04
Det Norske Veritas	4703	13	0.28
Germanischer Lloyd	5526	10	0.18
Lloyd's Register (UK)	5302	12	0.23

Comparing the data can be observed a big difference in the quality of supervision by the various Classification Societies. Top detentions reached 0.18% among the surveillance fleet, and even the worst 9.2%.

Performance of the company responsible for the ISM management

The final component that affects the value of "Ship Risk Profile" will assess whether the company meets the requirements of the ISM [3].

The company performance is a benchmarking approach where the ratios detentions vs. inspections and deficiencies vs. inspections for all ships in the company's fleet are compared with those of other companies which have ships calling the Paris MoU Region. The company performance is a new requirement which will be introduced by the implementation of the New Inspection Regime. A preliminary calculator is available on [5].

The Company Performance Calculator evaluates the performance of ISM Companies referred in the Directive 2009/16/EC on Port State Control Annex 1, Part 1.1 points (e) (i) and (ii).

Summary

In conclusion, the new system will qualify for the inspection of individual vessels is not based on the current target rate (TF – Target Factor), but based on the Ship Risk Profile (SRP).

As a novelty, for the first time included the results of the Company in relation to the requirements of the ISM Code. Will create a "rank" ship-owners of enterprises in four different classes: "above average", "average", "low" and "very low". Will be incorporated into historical events, both negative: the deficiency, detention, but also positive: the smooth inspections of the ship and fleet operator. Spectrum has been increased by factors that will affect the frequency of inspection of the vessel.

Transparency of criteria, insight, their availability and the daily update of THETIS allow crews to improve and avoid mistakes and find themselves in a situation in which they have their ship. At the same time there will be able to reward through less frequent inspections.

Through insight and connection with others in order to avoid the system several times to control these same elements through various entities and excessive number of inspections at ports where it is particularly extensive maritime administration It is very important when it is systematically limited number of crews at the same time a large workload.

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