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POLSKI REJESTR STATKÓW PARTICIPATION IN EU PROGRAMS DEVELOPMENT AND ISSUES OF ENVIRONMENTALLY FRIENDLY VESSEL RECYCLING

Key words

EU framework programs, green ship recycling, convention, inventory, hazardous materials.

Summary

The paper reviews ideas of EU Framework Programmes and offers information about Polski Rejestr Statków S.A. (PRS) participation in EU projects. The paper reviews the background to the adoption of the International Maritime Organisation (IMO) Assembly Resolution A.981(24) on the development of a mandatory instrument for minimising environmental and safety risks from ship recycling and shows the roles of the International Maritime Organisation, International Labour Organisation and the Basel Convention on ship recycling matters. The paper introduces the development of inventories of hazardous materials for new and existing ships, the surveying regime to be established under the new Convention, how the Convention will deal with the issue of the decontamination of ships with hazardous materials, the envisaged inclusion of domestic ships, the provisions for reporting to competent authorities and the related issue of prior informed consent.

Introduction

Since the start of the First European Union Framework Program on research and development (R&D) in 1984, initiatives connected with the organisation of multidisciplinary research and co-operation between science and industry have been gaining in significance.

The European Union creates a favourable environment for international co-operation on various projects. Involvement in these initiatives is becoming a must, because it guarantees access to new technologies and stimulates joint undertakings necessary for developing a knowledge-based economy [6].

1. PRS participation in EU projects

Polski Rejestr Statków actively participates in EU R&D projects, *inter alia*, under Framework Programs, co-operating in international project consortia. Under the Fifth Framework Programme PRS the following programs are involved:

1. Research project “Detection and discrimination of corrosion attack on ships (tankers) with acoustic emission (AE)”.
2. “Safety and Reliability of Industrial Products, Systems and Structures SAFERELNET ” – program, under the theme “Promoting competition and sustainable growth”.

Near the end of the year 2005, PRS joined the HISMAR project “Hull Identification System for Marine Autonomous Robotics”, covered by the Sixth Framework Programme.

In the years 2004–2005, Polski Rejestr Statków was also involved in the EUREKA Initiative, initiated in 1985 by European industry and economy in response to the threat of economic domination by countries from other parts of the world. EUREKA supports the competitiveness of European countries through international collaboration in creating links and networks of innovation aiming at increasing modernity and productivity of European industry. Under the EUREKA Initiative, PRS participated in the project “E! 2968 – Ecological Dock – Environmental Friendly Floating Docks”. Its objective is preventing environmental pollution from floating docks both newly built and in service.

2. European community PRS recognition

On September 29, 2006 Polski Rejestr Statków was granted limited recognition by the European Community. It marks an important milestone in PRS development by providing official grounds for services rendered on behalf of EU Members States Maritime Administrations. The pursuit of ever-higher standards of safety and quality is and will remain the primary goal of PRS and will contribute to the achievement of EU and international standards.

3. The EU 7th framework programs – environmental friendly (green) ship recycling concept

Existing ship's recycling regulations are not sufficient. This is reflected in the bad condition of environment and workers' accident statistics in countries such as Bangladesh, Pakistan, India, China etc.

In the opinion of Polski Rejestr Statków, the decision of the European Union to develop policy and recycling standards for ships by creating new programs based on the Seventh Framework Programme started a new era of development in the European and international ship's recycling industry. Such an approach should ensure that the safety, ecological and management levels for environmentally friendly ship recycling are achieved when appropriate design, constructions and survey satisfy class rules and industry standards.

There are four main keystones in the European Green Ship Recycling Concept:

1. Ship recycling is an integral part of the life cycle management of ships.
2. Ships have to be recycled at the end of their life in a responsible way.
3. New ships should be designed in such a way that they can be recycled easily.
4. A long term solutions for the ship recycling industry has to be based on an international legal framework, according to the IMO, ILO, Basel Convention etc.

4. Background to the development of the new international convention

The issue of ship recycling was first brought to the attention of the IMO Marine Environment Protection Committee (MEPC) at the 42nd Session in 1998; and at the following sessions of the Committee, it was generally agreed that IMO had an important role to play in ship recycling, including preparation of a ship before recycling commences, and a co-ordinating role towards the International Labour Organisation (ILO) and the Basel Convention (BC) in recycling matters [1, 2, 3, 4].

In July 2005 at 53rd session, MEPC agreed that IMO should develop a new mandatory instrument on ship recycling, with a view to providing legally binding and globally applicable regulations for international shipping and for recycling facilities. Subsequently on 1 December 2005, the 24th session of the Assembly adopted resolution A.981(24) on: New Legally Binding Instrument on Ship Recycling. With this resolution, MEPC was requested to develop a mandatory instrument with its adoption time 2008–2009.

This new instrument will regulate the following:

- The design, construction, operation and preparation of ships for environmentally friendly recycling, without decreasing their safety;

- The operation of ship recycling facilities in a safe and environmentally friendly manner;
- The establishment of an appropriate enforcement mechanism for ship recycling (certification/reporting requirements).

Work is now at an advanced stage, and MEPC 55 (9-13 July 2007) formally agreed to request the IMO Council to allocate a five-day international conference in 2008–2009 to adopt the new Convention.

5. ILO/IMO/BC co-operation

IMO co-operates with the ILO and the Basel Convention on issues relating to ship recycling, and the establishment by the three Organisations of the Joint ILO/IMO/BC Working Group on Ship Scrapping is evidence of this co-operation at the international level [4].

6. Structure of the new convention

The new Convention on ship recycling will include the following:

- Regulations for the design, construction, operation and preparation of ships so as to facilitate safe and environmentally friendly recycling but without compromising their safety and operational efficiency;
- Regulations for the operation of ship recycling facilities in a safe and environmentally friendly manner; and
- Regulations for the establishment of an appropriate enforcement mechanism for ship recycling.

The Convention's preamble is followed by the Articles that define higher level requirements. Presently, there are 21 Articles in the draft Convention. These are followed by the Annex to the Convention which contains regulations concerning requirements for ships, on design, construction, operation and maintenance, preparation for ship recycling, surveys and certification, requirements for recycling facilities, reporting requirements, the list of hazardous materials controlled by the Convention, and standard formats for relevant certificates.

7. Guidelines

The Annex and the appendices of the Convention necessitates the development of certain guidelines providing further specification and establishing uniform procedures for a number of technical issues arising from the provisions of the Convention. The following is the provisional list of guidelines for the ship recycling Convention:

General (guidelines for communication of information);

Guidelines for ships (guidelines for the development of Inventory of hazardous materials, the submission of a proposal to control hazardous materials, surveys and certification, inspection of ships, establishing gas-free-for-hot-work conditions);

Guidelines for ship recycling yards (authorisation of ship recycling yards, safe and environmentally friendly ship recycling, development of Ship Recycling Plan).

8. Elements and mechanisms of control and enforcement

The following control elements have been introduced in the draft Convention on ship recycling:

- An inventory of hazardous materials, specific to each ship, and an associated International Certificate for a Ship Inventory of Hazardous Materials;
- A list of hazardous materials whose installation or use in ships is prohibited or restricted in shipyards, ship repair yards, and ships of Parties to the Convention, is provided as an appendix to the Convention;
- A new surveying regime, presently envisaging an initial survey to verify the inventory of hazardous materials, surveys during the life of the ship, and a final survey prior to recycling;
- The introduction of the “Recycling Plan,” developed by the recycling yard to specify the manner each ship will be recycled, depending on its particulars and its inventory;
- The introduction of the International Ready for Recycling Certificate, to be issued to the ship following its final survey verifying ship related statements on the Recycling Plan;
- The authorisation of recycling facilities by their States, in accordance with the requirements of the Convention;
- A Statement of Completion of Ship Recycling, issued by the recycling facility and reporting the completion of recycling of an individual ship to the recycling State authorities and to the flag Administration.

The above elements are put together in the Convention so as to build control and enforcement mechanisms for its effective implementation throughout the life of a ship, while avoiding, as far as possible, unnecessary increases in the administrative burden to Parties, to the shipping industry and to recycling facilities. Requirements are also set for the establishment of sanctions under the national law of Parties and Auditing implementation: a system for auditing the implementation of the Convention is included in the draft Convention.

9. Issues under discussion

Inventory – new and existing ships

The objective of the inventory of hazardous materials is to provide specific information on the location and quantities of potentially hazardous materials on board each ship, so as to protect the health and safety of workers and also to prevent environmental pollution at the recycling facilities.

Inventories will consist of three Parts:

- Part I: Materials contained in structures and equipment of the ship;
- Part II: Operationally generated wastes; and
- Part III: Stores.

For new ships, it is intended that the shipbuilder will prepare Part I of the inventory, mostly based on a collection of a large number of declarations made by the individual suppliers in the shipbuilding supply chain.

The development of inventories of hazardous materials for existing ships, on the other hand, is much more of a challenge because of the following three issues: (1) the difficulty of defining the necessary level of accuracy for the quantities of hazardous materials and the associated difficulty of collecting sufficiently accurate information based mostly on surveying findings; (2) issues on the safety of personnel involved in surveys of hazardous materials; and (3) the timing for the provision of the inventory of existing ships.

Surveying

Presently, the draft Convention makes provisions for the following surveys:

- One initial survey for new ships an initial survey would take place before the ship enters service, while for existing ships the survey would take place before the inventory is issued;
- Periodical surveys on the basis of a five yearly cycle, verifying continuing compliance with the Convention and ensuring that any relevant alterations are reflected on the inventory;
- Additional surveys that the ship owner may request to take place at his option after alterations to the structure, machinery or equipment of the ship; and
- One final survey prior to the ship being taken out of service, so that all three Parts of the inventory are completed and checked.

The above surveys may be conducted by officers of the flag Administration or by surveyors nominated by the Administration or by surveyors of a Recognised Organisation.

Pre-cleaning

The issue of pre-cleaning (i.e. decontamination prior to recycling) had been a divisive one, with some stakeholders promoting requirements for pre-cleaning in a developed country prior to arrival at a recycling yard in a developing country. Other stakeholders have claimed that pre-cleaning has to take place at the facility where the ship is due to be recycled, because decontamination inevitably results to the loss of seaworthiness and therefore to the ship's inability to sail safely to a different location for its actual demolition. If a ship contains materials which are not within the capability of a recycling yard, then the ship owner's choice would be either to select another yard suitably authorised, or to organise pre-cleaning of all materials which are outside the selected yard's capabilities.

In this respect, it is noted that the underlying philosophy of the IMO Convention is to establish common standards for all ship recycling operations, without distinction as to which part of the world they take place, or the economic situation of the country in which they are carried out. The new Convention will therefore establish a global regulatory regime for the safe and environmentally friendly recycling of ships.

The threshold 500 GT

At 55th MEPC session agreed to establish a threshold of 500 gross tons in Article 3 of the draft Convention on ship recycling. According to Lloyd's Register Fair Play in 2005, there were 47,258 merchant ships of 500 GT and over in the world fleet [5].

Application of the Convention to domestic ships

Domestically trading ships should not be excluded from the application of the Convention, as this could create a loophole for some ships to avoid the requirements of the Convention. On the other hand, it has been stressed that some countries have thousands of domestic and inland vessels that, if covered by the Convention, would impose a very heavy workload to the Administration (approval of inventories of hazardous materials, surveys, and certification). It has been proposed that the Convention should exclude domestic trading ships that are recycled domestically. This issue has not been resolved as yet.

10. Schedule for the development of the convention

MEPC 55, in October 2006, agreed to establish an international Correspondence Group and also an international Working Group for the period prior to MEPC 56, in order to expedite the development of the draft Convention and its guidelines. MEPC 56 (9–13 July 2007) will receive the report of the intersessional Working Group and will also establish, during its session, a Working Group to continue the development of the draft Convention and will also decide whether it is necessary to establish a further intersessional Correspondence Group.

Conclusions

Ship recycling contributes to sustainable development and is the environmentally friendly way of disposing of virtually every part of ships. However, the reported status of working practices and environmental standards in recycling facilities often leaves much to be desired. Such growing concerns about environmental safety, health and welfare matters in the ship recycling industry have resulted in a growing belief that an international instrument to regulate the ship recycling process is urgently needed.

The practice in the maritime industry in dealing with vessels at the end of their useful lives has been to sell them for scrap on the international market. However, the dismantling of vessels in many developing countries is often not performed with due regard to accepted environmental, health and safety standards. Having become aware of the need to reduce risks related to ship recycling, as well as the need to secure the smooth withdrawal of ships that have reached the end of their operating lives, the IMO, the ILO and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal have taken action to develop a realistic and effective solution to the problem of ship recycling.

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Reviewer:
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Udział polskiego rejestru statków w programach Unii Europejskiej dla powstania i rozwoju przyjaznego środowisku recyklingu statków

Słowa kluczowe

Programy ramowe Unii Europejskiej, ekologiczny recykling statków, konwencja, inwentarz materiałów, substancje niebezpieczne.

Streszczenie

W referacie omówiono udział Polskiego Rejestru Statków w Programach ramowych UE, dążących m.in. do powstania nowoczesnej polityki proekologicznego recyklingu statków w Europie i na świecie. Referat opisuje podstawy przyjęcia przez Międzynarodową Organizację Morską (IMO) rezolucji stanowiącej o konieczności powstania konwencji zajmującej się zminimalizowaniem ryzyka ekologicznego i bezpieczeństwa podczas recyklingu statków. Opisano prace IMO, która aktualnie we współpracy z Międzynarodową Organizacją Pracy i Państwami będącymi Stronami Konwencji Bazylejskiej tworzy projekt ww. konwencji. W referacie opisano podstawy tej konwencji, a także podkreślono konieczność powstawania statkowych inwentarzy materiałów niebezpiecznych użytych do budowy i wyposażenia statków oraz związanych z ich eksploatacją, jako narzędzia będącego informacyjną bazą materiałową dla ekologicznego i bezpiecznego recyklingu statków po zakończeniu ich eksploatacji.

