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Working Paper

Subject: EMSA Workshop on Ship Recycling – Lisbon, 24 April 2007

1. Introduction

The aim of this workshop is to provide an opportunity for EEA Member States to discuss and exchange views on the **draft Convention on the Safe and Environmentally Sound Recycling of Ships** that is being developed in IMO, in view of the upcoming IMO meetings (IMO Intersessional Working Group, May 2007, and IMO MEPC56, July 2007) and to stimulate a discussion on current developments regarding the issue of the dismantling of ships. The objective of this working paper is two-fold: first, it seeks to provide the necessary background information and guidance for participants in the workshop and second it aims to assist in the preparation of an EU coordinated view regarding the draft Convention.

2. Information on Ship Recycling

2.1. Background

Each year, up to 600 vessels of over 2,000 dead weight tons are dismantled worldwide. A peak is expected in 2010 when around 800 single-hull tankers will have to be phased out.

Ship recycling contributes to sustainable development from an economic point of view, with virtually every part of the hull, machinery, equipment, fittings and furniture being re-used. However, while the principle of recycling is a sound one, there are growing concerns over health, welfare of workers in the ship recycling yards, as well as environmental pollution: nowadays at least two thirds of these ships are dismantled on beaches and river banks on the Indian sub-continent (mainly in Bangladesh). The conditions of ship breaking facilities in these countries have been criticised by environmental and human rights organisations and the media. None of these sites has containment to prevent pollution of soil and water. Most older vessels contain large amounts of hazardous materials, such as asbestos, oils and oil sludge, PCBs and heavy metals. In the coming ten years, an estimated 5.5 million tonnes of hazardous materials will end up in dismantling yards. Health and safety conditions are critical. It is estimated that thousands workers contract irreversible diseases from handling and inhaling toxic substances and the fatal accident rate is high.

2.2. The draft international convention on the safe and environmentally sound recycling of ships

Since 2005, the International Maritime Organisation has been working towards a binding international regime for clean ship dismantling. This is a continuation of the work already undertaken in this area, and which resulted in the IMO Guidelines on ship recycling in December 2003 (Resolution A.962(23)).

A draft Convention on the safe and environmentally sound recycling of ships is currently being negotiated in the organisation's Marine Environment Protection Committee for adoption by a diplomatic conference in 2008/2009, to enter into force some years later.

In accordance with IMO Assembly Resolution A.981(24), the new legally binding instrument will provide regulations for:

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

The draft Convention as it stands now has 21 Articles, as well as an Annex which contains regulations divided in four chapters. Chapter 1 contains general provisions. Chapter 2 contains requirements for ships, divided into three parts: Part A on design, construction, operation and maintenance of ships, Part B on preparation for ship recycling, and Part C on surveys and certification. Chapter 3 contains requirements for recycling facilities, while Chapter 4 contains reporting requirements. Presently there are seven appendices: the first one being particularly important as it provides the list of hazardous materials which are controlled by the Convention, while the other appendices provides standard formats for relevant certificates and other documents.

The following Guidelines are being developed: Guidelines for the Inventory of Hazardous Materials, Guidelines for Survey and Certification, Guidelines for Inspection of Ships, Guidelines for the Authorization of Ship Recycling Facilities, Guidelines for the Safe and Environmentally Sound Ship Recycling, and Guidelines for the Development of a Ship Recycling Plan.

2.3. Work of IMO, ILO and Basel Convention:

The three UN organisations, IMO, ILO and Basel Convention (UNEP), have all developed their own set of guidelines on the subject of ship recycling. A joint Working Group on ship scrapping was set up in 2005, to provide a platform for consultation, coordination and cooperation in relation to their work programmes and activities with regard to ship recycling issues. However it was not intended as a forum for joint developments of the IMO Convention on ship recycling. In October 2006, MEPC 55 discussed the possibility for a third session to be hosted by ILO, and concluded that it will be in a position to consider the need for such a meeting at its next session in July 2007.

Reference documents:

- *IMO Guidelines on Ship Recycling (Resolution A.962(23));*

- *ILO Guidelines on Safety and Health in Shipbreaking;*
- *Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships (Basel Convention).*
- *JWG Report: comparison of the technical Guidelines of the three organisations*

2.4. Draft IMO Convention – Issues for discussion:

2.4.1. Survey and certification

The draft Convention sets out a number of mandatory requirements for ships with a view to avoiding hazardous materials in new ships and removing them from existing ships during their period of operation. Each new ship shall have on board an Inventory of Hazardous Materials (Regulation 5). 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 to prevent environmental pollution at the recycling facilities. The Inventory shall be specific to each ship and shall at least:

- identify hazardous materials, their location and approximate quantities;
- consist of Part I: materials contained in the ship's structure and equipment;
- clarify that the ship does not contain any materials which are prohibited under regulation 4.

Prior to recycling the Inventory shall, in addition to Part I, incorporate Part II for operationally generated wastes, and Part III for stores.

The provisions for the inventory for hazardous materials for existing ships have not yet been fully agreed, due to the following concerns: 1. difficulty of defining the necessary level of accuracy for the quantities of hazardous materials and the difficulty of collecting sufficiently accurate information based on surveying findings, which may give rise to liability issues. 2. safety of personnel involved in surveys of hazardous materials; and 3. timing for the provision of the inventory of existing ships: the current draft requires for existing ships that a survey be held within 5 years after entry into force of the Convention. As this is considered burdensome and unnecessary by some parties, alternative text was inserted in regulation 5(2) that for existing ships a survey to produce the inventory should take place no later than immediately prior to recycling.

The inventory is supplemented by a survey and certification regime (Article 5 and Regulations 11-15). At present, the draft Convention provides 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, which the shipowner 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 Recycling Plan is examined and checked against the inventory, and the Ready for Recycling Certificate is issued.

An International Ready for Recycling Certificate has to be issued to the ship following its final survey verifying ship related statements on the Recycling Plan (Regulation 10).

It has been argued that the proposed surveying system for the purpose of checking the inventory of hazardous materials is unnecessarily cumbersome, particularly when considering that the inventory is only required at the end of a ship's life. On the other side it has been acknowledged that keeping the inventory up to date throughout the ship's life is important to guarantee safe and environmentally sound recycling at the end of the life cycle of the ship.

Reference documents:

- *Guidelines for the development of the Inventory of hazardous materials (JPN/DE proposal submitted to MEPC55).*

2.4.2. Authorisation and environmental management of ship recycling facilities

Chapter 3 of the draft Convention lays down the requirements for ship recycling facilities.

The most important provisions for ship recycling facilities in the draft Convention are:

1. Mandatory development of a Ship Recycling Plan: the plan shall be developed by the recycling yard to specify in which manner each ship will be dismantled, depending on its particulars and the Inventory. It shall take into account the non-binding Guidelines developed by IMO (Regulation 9);
2. Authorization of recycling facilities by the Recycling States in accordance with the requirements of the Convention (Regulation 17).
3. Preparation of a Recycling Facility Management Plan by the recycling facility. This Plan shall include: 1. a policy to ensure workers' safety and the protection of human health and the environment, 2. a system for ensuring implementation of the requirements set out in the Convention, the achievement of the goals of the company's policy and the continuous improvement of procedures and standards; 3. identification of roles and responsibilities, 4. a training programme, 5. an emergency preparedness and response plan, 6. a system for monitoring performance, and 7. a system for record keeping (Regulation 19).
4. Statement of Completion of Ship Recycling, to be issued by the recycling facility and the reporting of completion of recycling to the Recycling State as well as to the flag Administration of the recycled ship (Regulation 26).

The issue of **pre-cleaning**: under the draft Convention prior removal of hazardous materials may not be required if the recycling facility chosen is fully authorized to manage the type or amount of hazardous materials contained in the ship. The draft Convention seeks to match the individual ship's requirements and the capabilities of the recycling yard by means of a Recycling Plan and International Ready for Recycling

Certificate. However, there is still a need to clarify that, in case the final recycling facility is not capable of managing certain hazardous materials, the owner of the end-of-life ship must select another yard or remove the materials for safe disposal or recovery beforehand.

Reference documents:

- *Guidelines for the safe and environmentally sound recycling of ships (JPN – proposal for MEPC56);*
- *Guideline for Authorisation and Environmental Management of Ship Recycling Facilities (DK proposal for MEPC56);*
- *Guidelines for the Development of the Ship Recycling Facility Management Plan (US proposal for MEPC56)*

2.4.3. Reporting, control and enforcement

The draft Ship Recycling Convention contains several provisions which establish a comprehensive system of control mechanisms. The main mechanisms can be categorized as follows (some of the provisions will relate to information already provided in the previous paragraphs);

- A Party and its ships: Inventory, Survey and Certification: Regulations 4-5, and Regulations 11-15;
- A Party and other Parties' ships: Port State Control rights: Articles 8-11;
- A Party and its recycling facilities: Authorization regime for ship recycling facilities: Regulation 17; it should be noted that the authorization is the sole competence of the Parties themselves, which will retain full responsibility for the authorizations issued. It has been argued that this may weaken the control over sub standard facilities which are found to be non-compliant with the requirements of the Convention.
- Communication and exchange of information: Article 7, and Regulation 17;
- Reporting at the end of life: the Flag State has the control at the time of issuing the International Ready for Recycling Certificate (which has to include a Ship Recycling Plan), while the Recycling State may prior to ship recycling prohibit the start of the recycling activity. Thereafter, a tacit agreement is utilized whereby if the Recycling State has no objection within a certain period of time, the recycling of the ship may start. A written consent is thus not used in the draft Convention. Whereas some have argued for introduction of the requirement for **prior informed consent** in the Convention, others objected, indicating that this may lead to persistent commercial disputes due to an element of uncertainty in the sale and purchase contract.
- Detection of Violations: Requirements for detection and investigation of alleged violations, as well as sanctions: Articles 9-10;
- Compliance mechanism/Auditing implementation: at present, the Convention in Article 13bis provides for two options:

- I. an auditing scheme established by IMO, which will assess whether: 1. appropriate implementing legislation is in place; 2. there is an enforcement system in place; 3. mechanisms and controls are in place for the delegation of authority to a recognised organization; 4. the survey, certification and authorization system is in place; or
- II. To develop and set up a non-compliance mechanism.

The future reporting requirements, in particular whether **state-to-state notification** should be necessary as under Basel Convention, and the type of **compliance mechanism** to strengthen implementation of the Convention are some of the controversial issues to be discussed at the Working Group meetings, as well as issues assessing the level of control and enforcement.

"Equivalent level of control": In the context of the Basel Convention, the key issue under discussion is whether the proposed Ship Recycling Convention will ensure an equivalent level of control and enforcement as under the Basel Convention. The 8th COP on 1 December 2006 reiterated this demand. The EU Council in its conclusions of 21 November 2006 emphasized that *"ships that are waste will continue to fall under the EU Waste Shipment Regulation as long as there is no internationally binding and effective legal instrument, which while addressing any special characteristics of ships, guarantees an equivalent level of control and enforceability as established under the Basel Convention"*. The Council also underlined that the future IMO Ship Recycling Convention should *"generate real changes in the conditions under which end-of-life ships are dismantled, so as to protect workers and the environment from the adverse impacts of hazardous waste and dangerous working practices."*

2.5 Questions to be discussed at the workshop:

1. Should the survey for producing an inventory of hazardous materials for *existing ships* be held within 5 [10] years after the entry into force of the Convention, or rather "no later than prior to recycling" (at the same time as the final survey)?
2. Is it feasible to produce a sufficiently accurate inventory of hazardous materials for *existing ships*, considering the difficulties in defining the exact quantities of hazardous materials on board the ship as well in collecting sufficient information based on surveying findings?
3. Is the proposed surveying system for the purpose of checking the inventory of hazardous materials too cumbersome, or is it absolutely mandatory to keep the inventory up to date throughout the ship's life in order to guarantee safe and environmentally sound recycling?
4. In addition to the exchange of information on the ship recycling facilities that have been authorized by a Party, should there be an inspection of recycling facilities (similar to the inspection of ships as foreseen in article 8) or would this run counter to the principle of sovereignty of the Parties?
5. What other mechanisms could be put in place in order to strengthen the authorization regime for ship recycling facilities.

6. Should the ship recycling plan describe the planned method of pre-cleaning / prior removal of hazardous materials to the maximum extent possible without causing or spreading contamination to any other areas inside and outside the vessel?
7. Should an environmental baseline on pollution prevention be introduced in the general requirements for the operation of ship recycling facilities (Chapter 3, Regulation 18)?
8. In order to ensure full implementation of the draft Convention which mechanism would be preferred: an auditing scheme or rather a non-compliance mechanism, or both?
9. Should a requirement for prior informed (written) consent be introduced in the draft Convention, or would this lead to persistent commercial disputes and render the draft Convention commercially unviable?
10. Should a system of state-to-state notification be introduced in the draft Convention, to complement the control mechanisms as currently proposed?
11. Does the draft Convention provide for an equivalent level of control as defined in the context of the Basel Convention?

EMSA, Unit E (Implementation of EU maritime legislation), April 2007

Sources:

- *Report of the IMO Intersessional Correspondence Group on Ship Recycling – submitted by the Coordinator (Sveinung Oftedal) to MEPC56 on 13 April 200*
- *Developments and Issues on Recycling of Ships (December 2006) – Dr Nikos Mikelis, IMO;*
- *Draft Report “Ship Dismantling and Precleaning of Ships” (COWI / DHI)– European Commission – DG ENV;*