

THE DISMANTLING OF END-OF-LIFE SHIPS:
THE HONG KONG CONVENTION FOR THE SAFE
AND ENVIRONMENTALLY SOUND RECYCLING OF SHIPS

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1. SHIP-BREAKING ACTIVITIES: ENVIRONMENTAL AND HUMAN RIGHTS IMPACTS

Ships come to the end of their operational life after about thirty years; end-of-life vessels are usually sold and dismantled to recover steel, which constitutes the largest part of a ship's structure, and other valuable components that can be reused or recycled. Ship-dismantling, also referred to as ship-breaking or ship-recycling, includes a wide range of activities, from removing all gears and equipment to cutting down the ship's infrastructure. If it is carried out in an environmentally sound and safe manner, ship-breaking represents a sustainable method of disposing of end-of-life vessels; it brings economic and environmental benefits by providing employment opportunities and enabling ninety-five per cent of a ship to be reused or recycled. Nevertheless, ship-breaking also constitutes a hazardous and potentially highly toxic activity. Indeed, ships contain large amounts of toxic and hazardous substances and materials that may produce long-term adverse effects on the natural environment and cause death or illness to human beings. In particular, ships built before the mid-1980s contain substances that are restricted or banned today, such as asbestos, PCBs and heavy metals.

Nowadays, about ninety per cent of end-of-life vessels are dismantled in Bangladesh, India, Pakistan and China. In South Asian countries, operating costs are extremely low because of inexpensive labour and, more importantly, because of inexistent or unenforced labour and environmental standards. Thanks to large intertidal zone areas where high tide allows the vessels to be beached under their own power, ships are often dismantled directly on beaches ("beaching"), without any containment to prevent the pollution of soil, air and marine and freshwater resources. Nor do recycling yards have the technology needed to ensure the environmentally sound and safe management and disposal of hazardous wastes and materials. A recent report published by the United Nations Environment Programme (UNEP) includes the ship-breaking activities in Bangladesh, India and Pakistan among the major land-based sources of marine pollution in the South Asian region.¹

The current methods of ship-breaking in most South Asian facilities not only have severe adverse effects on the environment, but also adversely affect the enjoy-

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¹ UNEP, *Marine Litter: A Global Challenge*, Nairobi, 2009, available at: <<http://www.unep.org>>.

ment of workers' human rights and that of the surrounding communities relying on agriculture and fishing for their subsistence. This situation has caught the attention of the Special Rapporteurs of the Human Rights Council "on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights". In several reports, while analyzing new trends in illicit traffic and dumping of toxic and dangerous products and wastes, the Special Rapporteur, Ms. Fatma-Zohra Uohachi Vesely, observed that prohibiting the disposal of toxic wastes in developing countries has led corporations to ship by-products to developing countries for "recycling". However, "waste trade for recycling is either 'sham recycling' where wastes are not really recycled but simply burned or dumped or 'dirty recycling' which involves polluting operations".² She identified various forms of trade in hazardous wastes for "dirty recycling", including the export of ships for recycling operations. The second Special Rapporteur, Mr. Okechukwu Ibeanu, devoted the second part of his last annual report (2009) to this issue. The document explains how the conditions prevailing in many ship-breaking yards in the world risk adversely affecting the enjoyment of several human rights, including the right to life, the right to the highest attainable standard of physical and mental health and the right to safe and healthy working conditions.³

Concerns about the actual status of ship-recycling activities have increased by virtue of the awareness that ship-dismantling is a growing industry and a highly competitive business. Worldwide, about five hundred end-of-life ships of five hundred gross tonnage (GT) are broken up and recycled annually.⁴ This situation will worsen on account of the number of ships going out of service following the global phase-out of single hull oil tankers, which will result in thousands of ships being

² Commission on Human Rights, "Economic, Social and Cultural Rights, Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Right", Report submitted by Ms. Fatma-Zohra Uohachi Vesely, Special Rapporteur, in accordance with Commission Resolution 2003/20 (E/CN.4/2004/46), 15 December 2003, para. 22. See also the Reports: E/CN.4/1997/17, E/CN.4/2000/55, E/CN.4/2005/44.

³ Human Rights Council, Report of the Special Rapporteur on the "Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights", O. Ibeanu (A/HRC/12/26), 15 July 2009. See also Human Rights Council, Resolution 12/18 on the "Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights" (A/HRC/RES/12/18), 12 October 2009; and Human Rights Council, Report of the Special Rapporteur on the "Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights", O. Ibeanu (A/HRC/15/22), 5 July 2010, where the Special Rapporteur includes ship-breaking among the "suggested areas of continued focus".

⁴ According to the Cotzias Shipping Group statistics, in 2009, the total number of ships scrapped reached 1368 units and it was 1255 units in 2010 (in 2008 the total number was 402 while in 2007 it was 208). See N. Cotzias Shipping Group, *Economic Outlook*, January 2011, pp. 28-29, available at: <http://www.cotzias.gr/main_company.html>. For further information, see MIKELIS, "A Statistical Overview of Ship Recycling", in *International Symposium on Maritime Safety, Security and Environmental Protection*, Athens, 2007, available at: <<http://www.imo.org>>.

dismantled over the next years.⁵ Furthermore, stiff competition among the major ship-breaking nations, all developing countries, discourages any technical or regulatory improvement, giving rise to a global “race to the bottom”.⁶

At global and regional levels, many initiatives have been under way in recent years to achieve a sustainable ship-dismantling industry that safeguards its employees and protects the environment, while recognizing the vital role this industry plays in the economy of certain countries. Several international organizations and mechanisms, environmental and human rights NGOs and industry associations are participating in the debate and contributing to the creation of an evolving body of norms and guidelines, gradually making it clear that the global dimension and complexity of the matter require enhanced cooperation among all the States in-

⁵ See COWI/EC, Report “Oil Tanker Phase Out and the Ship Scrapping Industry. Study on the Implications of the Accelerated Phase-Out Scheme of Single Hull Tankers”, 2004. According to the study commissioned by the Commission of the European Union (EU), there is a lack of green scrapping capacity for ships, either in the EU or elsewhere, and its development will only be possible if legal and economic incentives are created. The analysis of the situation in Europe was deepened in the EC Green Paper on “Better Ship Dismantling” (COM (2007) 269), which explains how the dismantling capacity in the EU has been reduced in the last twenty years to a marginal level. There is a multitude of minor facilities able to dismantle small vessels but only Belgium, Italy and the Netherlands have a limited capacity to scrap larger ships. Further, among the members of the Organisation for Economic Co-operation and Development (OECD), Turkey is the only country with the capacity to scrap larger amounts of tonnage (p. 6). The documents are available at: <<http://ec.europa.eu/environment/waste/ships/>>. See also Greenpeace International, *Destination Unknown: European Single Hull Oil Tankers: No Place To Go*, December 2004, available at: <<http://www.greenpeace.org/international/>>.

⁶ BHATTACHARJEE, “From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back”, Trade, Law and Development, 2009, pp. 193-230, p. 202. The author provides the example of India as occupying the largest market-share for years and now facing stiff competition from other South Asian countries (Bangladesh and Pakistan). In India, ship-breakers complain that their business grew to a lesser extent after the restrictions imposed by the Supreme Court of India in the case *Research Foundation for Science, Technology and Natural Resource Policy v. Union of India*, Writ Petition (civil) No. 657 of 1995, Order of 14 October 2003 and Order of 6 September 2007, available at: <<http://www.basel.int/ships/relevcaselaw.html>>. In China, a major ship-breaking nation since the 1960s, the introduction of environmental and safety law has made the industry less profitable. However, according to some recent analysis, in 2009, China has made a remarkable return to the market of ship-dismantling and registered a record influx of vessels originating from Chinese as well as Japanese and European ship owners sensitive to the call of “green dismantling”. See, DEHUA, “Present Situation and Future Development of the Ship Recycling Industry in China”, presentation given at the *BIMCO General Meeting*, Hong Kong, 4-6 June 2007, available at: <https://www.bimco.org/General_Meetings/GM2007/Speeches_and_presentations.aspx>. See also Association Robin des Bois, *Ship-breaking.com. Information Bulletin on ships demolition. Ships sent to demolition from January 1st to December 31st 2009*, 2010, available at <<http://www.robindesbois.org/english/shipbreaking/shipbreaking.html>>; N. Cotzias Shipping Group, *Maritime Economic Outlook Monthly Report*, December 2009, p. 18; and *Ibid.*, *Maritime Economic Outlook Monthly Report*, November 2010, p. 28, available at: <http://www.cotzias.gr/main_company.html>.

volved and all the stakeholders concerned. The first international mandatory instrument aimed specifically at ship-recycling was adopted during the International Conference on the Safe and Environmentally Sound Recycling of Ships, held in Hong Kong, China, from 11 to 15 May 2009, under the auspices of the International Maritime Organization (IMO).

In the following paragraphs, the evolving international normative framework at the global level will be outlined and the regulatory questions connected with the matter will be highlighted (Section 2). The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention or Ship-Recycling Convention) will then be analyzed to assess how far it addresses the environmental and safety concerns inherent in ship-recycling (Section 3).

2. THE EVOLVING INTERNATIONAL NORMATIVE FRAMEWORK AND THE NEED FOR A GLOBAL MANDATORY INSTRUMENT

The subject of ship disposal by dismantling has become a priority on the international agenda since the late 1990s. It was brought to the attention of the Marine Environmental Protection Committee (MEPC) of the International Maritime Organization in 1998, when Norway proposed the topic to be adopted on the IMO agenda.⁷ One year later, the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), at their fifth meeting, decided to address the subject and mandated the technical and legal working groups to discuss the issue.⁸ In the same years, the International Labour Organization (ILO) also became interested in this area, in so far as the work on ship-breaking beaches is considered amongst the most dangerous jobs in the world.⁹

The background to these initiatives was the growing concern expressed by some governments¹⁰ and the accusations levelled by several NGOs, the latter claiming

⁷ The proposal rested on a study commissioned by the Norwegian Ministry of the Environment: ULFSTEIN, *Legal Aspects of Scrapping of Vessels*, Cambridge, 1999, available at: <<http://www.ban.org/Library/dismant>>.

⁸ Conference of the Parties to the Basel Convention, Decision V/28, 5th meeting, Basel, 6-12 December 1999 (UNEP/CHW.5/29), available at: <<http://www.basel.int/meetings/cop/cop5>>.

⁹ ANDERSEN, *Worker Safety in the Ship-Breaking Industries. An Issue Paper*, ILO, Geneva, 2001, available at: <<http://www.ilo.org>>.

¹⁰ At European level, countries like Norway, the Netherlands and Denmark have been proactive in the effort to apply the Basel Convention and the EC Waste Shipment Regulation to ships directed to developing countries for dismantling (see *infra*). The case of the National Defense Reserve Fleet (NDRF) of the United States is also well known: the US Government had imposed a moratorium on the export of federally-owned ships taking into consideration the environmental and humanitarian concerns around ship-breaking. This choice, nonetheless, resulted in the accumulation of about two hundreds ships awaiting disposal, whose retention entailed extremely high maintenance, storage and security costs. See COHEN, "U.S. Shipbreaking

that the practice of sending old ships to developing countries for dismantling constitutes a disguised form of illicit hazardous waste trade. According to a study published by Greenpeace, shipping companies receive an average price of two million dollars for each ship sold to dismantling companies for scrap, while in contrast to the “polluter pays” principle, they externalize to the workers and the environment in developing countries the costs of ensuring that the dangerous and toxic materials and substances contained in end-of-life ships are recovered and disposed of without polluting and endangering human health.¹¹ Environmental and human rights NGOs have played a crucial role in calling the international community’s attention to ship-breaking activities, especially rousing public interest in some cases, such as that of the vessel *Clemenceau* that left France for India and returned to French waters following the judgment of the *Conseil d’Etat*, or that of the ship *Blue Lady*, which left Germany and was dismantled on the Indian beach of Alanga, after being refused by Bangladesh due to the large amounts of hazardous wastes on board.¹²

In response to the growing attention of the international community on the legal position of vessels sold for recycling, the International Chamber of Shipping (ICS) took the initiative, in 1999, to establish the Industry Working Party on Ship-Recycling (IWPSR)¹³. In 2001, the IWPSR took the first concrete step by

Exports: Balancing Safe Disposal with Economic Realities”, *Environmental Law and Policy Journal*, 2004-2005, p. 237 ff.; United States Environmental Protection Agency, *A Guide for Ship Scrappers: Tips for Regulatory Compliance*, Washington, D.C., 2000, available at: <<http://www.epa.gov/Compliance/resources/publications/>>.

¹¹ Greenpeace Netherlands, *The Continuous Evasion of the “Polluter Pays Principle”*, Amsterdam, 2002, p. 2, available at: <<http://www.greenpeaceweb.org/shipbreak>>.

¹² See PAUL, “Exporting Responsibility. Shipbreaking in South Asia. International Trade in Hazardous Waste”, *Environmental Policy and Law*, 2004, p. 73 ff. For details of the mentioned cases, see PELS, “The Bleu Lady Case and the International Issue of Ship Dismantling”, *Law, Environment and Development Journal*, 2008, p. 135 ff.; ILIOPOULOU, “Note. À propos des tribulations du ‘Clemenceau’ (CE, 15 février 2006, Association Ban Asbestos France, Association Greenpeace France, Comité anti-amianté Jussieu, Association nationale de défense des victimes de l’amianté)”, *Revue du Droit Public et de la Science Politique en France et à l’Etranger*, 2007, p. 1687 ff.; ORELLANA, “Shipbreaking and Le Clemenceau Row”, *ASIL Insight*, 2006, available at: <<http://www.asil.org/insights.cfm>>; GALLEY, “Shipbreaking. A Convenient Washing of Hands?”, *Mountbatten Journal of Legal Studies*, 2008, p. 96 ff.; Greenpeace International, *The Clemenceau: Fact Sheet*, 12 January 2006, available at: <<http://www.greenpeace.org/international>>. See also the web page of the European Commission, *cit. supra* note 5. In 2005, a coalition of environmental, human and labour rights organizations was created: the “NGO Platform on Shipbreaking” is a global platform, now recognized as the pre-eminent international non-governmental advocacy organization on this critical subject by different international organizations, including IMO and the Basel Convention; see at: <<http://www.shipbreakingplatform.org/>>.

¹³ The Industry Working Party comprises representatives from: Baltic and International Maritime Council (BIMCO), International Association of Dry Cargo Ship-owners (INTERCARGO), International Association of Independent Tanker Owners (INTERTANKO), International Chamber of Shipping (ICS), International Tanker Owners Pollution Federation (ITOPF), International Transport Workers’ Federation (ITF), Oil Companies’ International Marine Forum (OCIMF), along with the active participation, as observers, of the European Community

adopting the Industry Code of Practice on Ship-Recycling.¹⁴ The document is based on the premise that a vessel may be bought and sold several times during its economic life and that the sale and purchase of a vessel is generally conducted via brokers or cash buyers, so the last operator of the ship can seldom have a direct influence on conditions in recycling yards or even on the choice of yard. Nonetheless, he can, and should, contribute to ensuring that information is available on any potentially hazardous materials or substances integral to the ship and can determine the general condition of the ship when handed over. The Code of Practice is intended to encourage these objectives and recommends, *inter alia*, the creation of an “inventory of potentially hazardous materials on board”, the delivery of the vessel in a “gas free condition” and the identification of hazardous areas on vessels sold for recycling, as best practices to be adopted by shipping companies.

In 2003, the IMO also issued a set of Guidelines on Ship-Recycling to give advice to all stakeholders in the recycling process, including administrators of ship-building and maritime equipment, supplying countries, flag, port and recycling States, as well as inter governmental organizations and commercial bodies such as ship-owners, repairers and recycling yards. However, the approach the document is based on has been criticized by NGOs, arguing that it reflects mainly the position of the ship-breaking industry. Moreover, the voluntary character and the lack of an enforcement mechanism have limited its effectiveness.¹⁵

One year later, the ILO adopted a set of guidelines covering aspects of occupational health and safety related to ship-dismantling. This non-legally binding instrument is designed to assist those who have responsibilities for ship-breaking operations in the implementation of all relevant provisions of ILO codes of practice, standards and other guidelines; it suggests a national framework that defines the general responsibilities and rights of employers, workers and regulatory authorities in ship-breaking.¹⁶

Ship-owners' Associations (ECSA), and the International Association of Classification Societies (IACS).

¹⁴ Industry Working Party on Ship Recycling, *Industry Code of Practice on Ship Recycling*, London, August 2001, available at: <www.marisec.org/recycling>.

¹⁵ IMO, “Guidelines on Ship-Recycling”, Resolution A.962(23), 2003; “Guidelines for the Development of the Ship-Recycling Plan”, MEPC/Circ.419, 2004; “Amendments to the IMO Guidelines on Ship-Recycling”, Resolution A.980(24), 2005; “Implementation of the IMO Guidelines on Ship-Recycling: ‘Gas-Free for Hot Work’ Certification”, MEPC/Circ.466, 2005; “Promotion of the Implementation of the IMO Guidelines on Ship-Recycling”, MEPC/Circ.467, 2005.

¹⁶ ILO, *Safety and Health in Ship-breaking: Guidelines for Asian Countries and Turkey*, Geneva, 2004. A considerable number of ILO Conventions dealing with occupational safety, health hazard and workers protection could be applied to ship-breaking activities, *inter alia*, ILO Conventions No. 87, 98, 127, 139, 148, 155, 162 and 170.

2.1. *The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*

Since 2003, IMO and ILO have been working in close cooperation with each other and with the Conference of the Parties to the Basel Convention.¹⁷ The Basel Convention is, indeed, the main international legal instrument whose aim is to protect human health and safeguard the environment against the dangers posed by the management, disposal and transboundary movement of hazardous and other wastes.¹⁸ The subject of ship-breaking has entered the agenda of the Convention as a matter of priority, given that many materials carried on board ships or contained in their structure would be classified as hazardous wastes, according to those listed in annexes of the Convention, at the time of their disposal.

The Basel Convention rests on two pillars. The first is the Prior Informed Consent (PIC) procedure for transboundary movements of hazardous and other wastes between Parties; transboundary movements can take place only upon prior written notification by the “State of export” to the competent authorities of the “State of import” and the “State of transit” (Article 6). The aim of the PIC procedure is to ensure that the State of import can make an informed decision on whether to authorize the movement from another State Party; movements to and from non Parties are, instead, deemed illegal unless there is a special agreement. Furthermore, in 1995, in recognition of the inequality of resources and capacity between developed and developing countries, the Conference of the Parties to the Convention (COP) decided to prohibit all transboundary movements of hazardous and other wastes from Annex VII listed countries (members of the European Union and the Organisation for Economic Co-operation and Development, and Liechtenstein) to non-Annex VII listed countries. The so-called “Ban Amendment” has not yet entered into force generally, although its content has been applied within the European Union, under EC Regulation 1013/2006 on the shipment of waste, even in the case where exported wastes are destined for recycling.¹⁹

¹⁷ A joint working group has been established to pursue a coordinated approach to the relevant aspects of ship-dismantling with the aim of avoiding duplication of work and gaps or overlapping of responsibilities and competencies between the three organizations. Session documents can be accessed on the Basel Convention website: <<http://www.basel.int/ships/jimbwg.html>>.

¹⁸ The Basel Convention, adopted on 22 March 1989, entered into force on 5 May 1992. As of June 2010, 172 Countries, covering the five UN Regional Groups, were Parties to the Convention. See BIRNIE and BOYLE, *International Law and the Environment*, Oxford, 2002, pp. 428-438; SCOVAZZI and TREVES (eds.), *World Treaties for the Protection of the Environment*, Milano, 1992, pp. 431, 485, 507; MOISÉ, “La Convention de Bâle sur les mouvements transfrontières de déchets dangereux (22 mars 1989)”, RGDIP, 1989, p. 899 ff.; VAN AELSTYN, “North-South Controversy Mounts around the International Movement of Hazardous Waste”, RECIEL, 1992, p. 340 ff.

¹⁹ COP to the Basel Convention, Dec. III/1, 3rd meeting, Geneva, 18-22 September 1995 (UNEP/CHW.3/34). See ANDREWS, “Beyond the Ban. Can the Basel Convention Adequately

Second, the Basel Convention lays down the principle of Environmentally Sound Management (ESM), which entails the adoption of an integrated life-cycle approach and involves thorough controls from the generation of a hazardous waste to its storage, transportation, treatment, reuse, recycling, recovery and final disposal.

While the control of waste movements as per the Basel Convention functions relatively well for most hazardous wastes, several legal and practical questions have emerged with regard to the application of the Convention to ships moved for recycling. Some of them still persist today. The first uncertainty is whether a ship can be classified as waste and, in particular, at which precise moment a ship ceases to be a ship and becomes waste; even more so, which criteria should be used for determining the point at which a ship becomes waste, in particular with reference to the “intent to dispose” of the ship.²⁰ Other difficulties concern the identification of the State or States (e.g., flag State, port State, State in which the owner is based) that have the responsibility to ensure compliance with the appropriate provisions of the Convention, in particular, who is the responsible “State of export”.²¹ Finally, it is not clear what rules, if any, should be applied to waste, both cargo and operationally generated, on a ship destined for breaking and the application of the duty to re-import under the Convention (Article 8).²²

Safeguard the Interests of the World’s Poor in the International Trade of Hazardous Waste?”, Law, Environment and Development Journal, 2009, p. 167 ff.

²⁰ Article 1(1) of the Basel Convention: “Wastes are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law”.

²¹ Answering this question is even more difficult if we consider the different possible scenarios: the ship is government-owned; a ship becomes waste in an area under the jurisdiction of a Party and then proceeds to the ship-breaking State; a ship becomes waste on the high seas and proceeds to the ship-breaking State; a ship becomes waste on the high seas and sails to a transit Party State and finally proceeds to the ship-breaking State; the ship becomes waste in an area under the jurisdiction of the ship-breaking State; a ship becomes or is found abandoned or scuttled on land or at sea. For a deeper analysis, see the decisions adopted by the Open-ended Working Group (OEWG), *Legal Aspects of the Full and Partial Dismantling of Ships*, UNEP/CHW/OEWG/2/12, Geneva, 2003, and UNEP/CWH/OEWG/3/34, Geneva, 2004, available at: <<http://www.basel.int/meetings/meetings.html>>.

²² Article 8 of the Basel Convention: “When a transboundary movement of hazardous wastes or other wastes to which the consent of the States concerned has been given, subject to the provisions of this Convention, cannot be completed in accordance with the terms of the contract, the State of export shall ensure that the wastes in question are taken back into the State of export”. A famous case is that of the ship *Sea Beirut*, abandoned near the French port of Dunkirk, in 2002, and sold, through an intermediary, by the port authorities to a dismantling company in Turkey. The Dunkirk port authorities (despite their knowledge) did not notify either the French or Turkish authorities that the ship contained asbestos. The Turkish Government refused to accept the ship and repeatedly requested France (the alleged exporter country) to take back the ship under the provisions of the Basel Convention. In 2004, the government of France replied that since the *Sea Beirut* had been sold to a Turkish company on the basis of a dismantling contract, the request was unfounded.

In 2002, the Conference of the Parties to the Convention adopted the Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships.²³ This non-binding instrument is addressed to countries which already have or wish to establish ship-breaking facilities and is limited to technical and procedural aspects, providing information and recommendations on procedures, processes and practices that must be implemented to attain ESM for ship-dismantling. The guidelines, nonetheless, point out that the improvement of ship-breaking activities affects not only the ship-dismantling facility but also raises issues relating to procedures prior to dismantling, as well as to the destination of the waste or material streams derived from the extraction process. To this end, the document provides examples of good practices, such as the prior decontamination of the ship, i.e. the cleaning and removal of hazardous wastes and materials (including fuels and oils) prior to ship voyage for dismantling or, if this is not possible, prior to cutting at a cleaning station located at the facility.

With regard to legal issues, a significant step was taken two years later, in 2004. The COP, with its decision VII/26, recognized that “a ship may become a waste as defined in article 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules”.²⁴ There is hence no doubt that a ship containing asbestos, PCBs or other Basel listed hazardous wastes may be considered hazardous waste under the Basel Convention and, therefore, that such a ship sent for dismantling may be considered a movement of hazardous waste.²⁵ Granted that, the decision (and the following ones on this issue) reminds the Parties to fulfil their obligations under the Basel Convention, in particular their obligations with respect to the prior informed consent procedure, to the minimization of transboundary movements of hazardous wastes and to the environmentally sound management principle, “where applicable”. The above-mentioned uncertainties relating to the

²³ Conference of the Parties to the Basel Convention, *Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships*, adopted with Dec. VI/24, 6th meeting, Geneva, 9-13 December 2002 (UNEP/CHW.6/23).

²⁴ COP to the Basel Convention, Dec. VII/26, 7th meeting, Geneva, 25-29 October 2004 (UNEP/CHW.7/33). About the different definitions of “ship” and the regulatory questions they raise, see SCHIANO DI PEPE, *Inquinamento marino da navi e poteri dello Stato costiero*, Torino, 2007, pp. 69-77, and its bibliography.

²⁵ Yet, in its comments submitted to the Open-ended Working Group, the shipping industry has argued that the Basel Convention’s scope does not extend to ships, because “a ship never ‘becomes waste’ [...]. Some ‘waste’ is created when an owner of a ship dismantles it for the purpose of recycling its components” (OEWG, 3rd session, 2004, OEWG/3/INF/5 p. 94). According to this position, end-of-life ships would thus remain ships until their dismantling and are not waste at the time of their export. In the same manner, in its comments submitted pursuant to the Decision VIII/11 adopted by the Conference of the Parties (8th meeting, 2006) and to the Decision VI/17 adopted by the Open-ended Working Group (6th session, 2007), India affirms that “[a] ship destined for recycling should not be considered as waste. Therefore, prior consent of exporting and importing countries before a ship is sent for recycling may not be necessary”; available at: <<http://www.basel.int/ships/commentsOEWG6/oewg6.html>>.

application of the Convention to a ship moved for dismantling actually still apply.²⁶ Needless to say, the decision to recycle is often taken when the ship is on the high seas, making it more difficult to identify the competent authority.

In recognizing the difficulties related to the application of the Basel Convention to a ship destined for recycling and by noting that duplication of regulatory instruments having the same objective should be avoided, the Basel Convention Secretariat has participated in negotiations carried out, under the auspices of IMO, for the adoption of a mandatory instrument specifically relating to ship-breaking. In its decisions, the COP welcomes the IMO's efforts to provide for a globally binding ship-recycling regime and invites the IMO to ensure that the Convention to be adopted guarantees "an equivalent level of control as established under the Basel Convention" and to consider incorporating clear responsibilities for all stakeholders in ship-recycling, "including ship-owners, ship-recycling facilities, flag States and ship-recycling States, also taking into account their current capacity and the common but differentiated responsibilities and sovereign rights of the Parties".²⁷

Now that the Hong Kong Convention has been adopted, the Open Ended Working Group of the Basel Convention has been requested by the COP to carry out a preliminary assessment on whether the Ship Recycling Convention establishes an equivalent level of control and enforcement as that established under the Basel Convention. It is worth noting that the principle of the equivalent level of control is not only called for in decisions taken by the Parties, but the Convention's Article 11 provides the legal basis for it.²⁸ The results of the assessment will be transmitted to the COP 10 that will meet in October 2011. Should the Parties conclude that equivalency has been met, they may consider options to exclude ships covered by the Hong Kong Convention from the scope of the Basel Convention. Otherwise, as the Basel Convention's Secretariat noted during the meetings to develop the Ship-Recycling Convention, the Basel Convention would continue to apply to those aspects, as expressed in decision VII/26; in this case, nevertheless, there may even emerge a problem of coexistence of the two treaties.

²⁶ See MOEN, "Breaking Basel: The Elements of the Basel Convention and Its Application to Toxic Ships", *Marine Policy*, 2008, p. 1053 ff.

²⁷ COP to the Basel Convention, Dec. VII/26, 7th meeting, Geneva, 25-29 October 2004 (UNEP/CHW.7/33); Dec. VIII/11, 8th meeting, Nairobi, 27 November 2006-1 December 2006, (UNEP/CHW.8/16); Dec. IX/30, 9th meeting, Bali, 23-27 June 2008 (UNEP/CHW.9/39).

²⁸ Article 11 of the Basel Convention: "Notwithstanding the provisions of Article 4 paragraph 5, Parties may enter into bilateral, multilateral, or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention. These agreements or arrangements shall stipulate provisions which are not less environmentally sound than those provided for by this Convention in particular taking into account the interests of developing countries".

2.2. *The United Nations Convention on the Law of the Sea, the MARPOL Convention for the Prevention of Pollution from Ships and the London Convention on Dumping of Wastes and other Matter*

Some obligations for States which may have relevance for the environmentally sound management of ship-breaking are also set out in the United Nations Convention on the Law of the Sea (UNCLOS), wherein the prevention and the control of pollution of the marine environment is embraced. States have the general duty to protect and preserve the marine environment (Article 192); to take all measures necessary to ensure that activities under their jurisdiction or control are so conducted so as not to cause damage by pollution to other States and their environment (Article 194); not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another (Article 195); to monitor the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment (Article 204); to assess the potential effects of planned activities under their jurisdiction or control on the marine environment (Article 206); and to take such measures as are necessary to prevent, reduce and control pollution of the marine environment by dumping and from land-based sources (Articles 207, 210, 211).²⁹ These measures must conform to generally accepted international regulations, procedures and practices, which are mainly contained in a number of IMO Conventions. In the current debate, two conventions in particular have been identified as containing principles that are applicable in the event of marine pollution caused by the disposal of wastes at sea: the 1973 International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), and the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and its 1996 Protocol.³⁰

The MARPOL 73/78 Convention is the main international instrument covering the prevention of pollution of the marine environment by ships from operational or accidental causes. It was established in order to eliminate intentional pollution of the marine environment by oil and other harmful substances and minimize accidental discharges. The Convention applies “to vessels of any type whatsoever operating in marine environment” and, with some exceptions, to “any release how-

²⁹ See STARACE, “Protection and Preservation of the Marine Environment in the United Nations Convention on the Law of the Sea: An Appraisal”, *IYIL*, 1980-1981, p. 52 ff.; BIRNIE and BOYLE, *cit. supra* note 18, p. 347; FODELLA and PINESCHI (eds.), *La protezione dell’ambiente nel diritto internazionale*, Torino, 2009, p. 315.

³⁰ See the comments provided by the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs of the United Nations, in Open-ended Working Group of the Basel Convention, “Legal Aspects of the Full and Partial Dismantling of Ships. Comments Provided by Parties and Others”, (UNEP/CHW/OEWG/3/INF/5), 24 February 2004.

soever caused” (“discharge”) of substances that, if introduced into the sea, are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.³¹ The six technical annexes of the MARPOL Convention contain detailed regulations with respect to handling on board ships and to any discharge into the sea or release into the atmosphere of six main groups of harmful substances.³² The Convention requires that operational wastes, which cannot be discharged into the sea in accordance with relevant requirements, shall be delivered to port reception facilities and also requires port States to provide adequate port reception facilities, in accordance with the substances of the respective annexes. Supposedly, MARPOL 73/78 would apply to ship-dismantling activities carried out within the territorial waters of the ship-breaking country; as a consequence, any discharge of ship-generated wastes (e.g., oil or oily mixtures, residues of other liquid substances carried in bulk, tank washing, sewage) would be prohibited and States would be obliged to ensure the availability of the necessary reception facilities. The main ship-breaking countries are all parties to MARPOL 73/78 but the applicability of this legal instrument to discharges from end-of-life vessels is debatable: one only needs to consider the concept of “operating” ship. In the same way, the respective competencies and the possible overlapping and gaps between MARPOL 73/78 and the Basel Convention are discussed, the latter recognizing the competence of the pre-existing MARPOL Convention on the regulation of wastes derived from the normal operations of a ship (Article 1(4)).³³

The London Convention and its Protocol require Parties to take effective measures to prevent marine pollution caused by the deliberate disposal at sea (“dumping”) of wastes and other matter from vessels, aircraft, platforms or other man-made structures, as well as the deliberate disposal of these vessels or platforms themselves.³⁴ The London Convention prohibits the dumping of certain hazard-

³¹ The Convention applies, subject to certain exceptions, to ships entitled to fly the flag of a Party to the Convention and ships not entitled to fly the flag of a party but which operate under the authority of a Party.

³² Mineral oils (Annex I), Noxious Liquid Substances (NLS) carried in bulk (Annex II), Harmful substances carried in packaged form (Annex III), Sewage (Annex IV), Garbage (Annex V) and Air Emissions (Annex VI). Annexes I and II of MARPOL 73/78 are mandatory, a State ratifying the Convention must accept these annexes.

³³ Article 1(4) of the Basel Convention: “Wastes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument, are excluded from the scope of this Convention”. See the documents of the 6th and the 7th session of the Basel Convention Open-ended Working Group, available at: <<http://www.basel.int/meetings.html>>.

³⁴ In the Convention “dumping” has been defined as the deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures, as well as the deliberate disposal of these vessels or platforms themselves. The 1996 Protocol also included in the definition any storage of wastes or other matter in the seabed and the subsoil thereof from vessels, aircraft, platforms or other man-made structures at sea and any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of deliberate disposal.

ous materials and requires a special permit for the dumping of a number of other identified materials and a prior general permit for other wastes or matter. The 1996 Protocol adopts a precautionary approach and is much more restrictive: under the Protocol all dumping is prohibited, except for possibly acceptable wastes on the so-called “reverse list”. Furthermore, contracting Parties are required to adopt administrative or legislative measures to ensure that no dumping permit is issued unless an assessment of alternative waste disposal and recycling options has first been carried out. In theory, the London Convention and its Protocol would prohibit the deliberate disposal into the marine environment of hazardous wastes present on end-of-life ships. However, as is the case for the MARPOL Convention, it is not clear if these instruments are applicable to wastes from decommissioned ships.

Finally, it is worth underlining that all the uncertainties and difficulties in the implementation and enforcement of the existing legal instruments, hitherto briefly described, are aggravated by the traditional practice of “flags of convenience” (FOC) which enables ship-owners to avoid restrictive regulatory regimes by changing registration to countries that have minimal regulations and open registries.

3. THE HONG KONG INTERNATIONAL CONVENTION FOR THE SAFE AND ENVIRONMENTALLY SOUND RECYCLING OF SHIPS

In 2005, the IMO Assembly asked the MEPC to develop a mandatory instrument regulating: the design, construction, operation and preparation of ships so as to facilitate safe recycling, the operation of ship-recycling facilities in a safe and environmentally sound manner and the establishment of an appropriate enforcement mechanism for ship-recycling, incorporating certification and reporting requirements.³⁵ The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships was adopted in 2009, after four years of negotiations.³⁶

³⁵ IMO Assembly, Resolution A .981 (24).

³⁶ Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 15 May 2009, SR/CONF/45. See PUTHUCHERRIL, *From Shipbreaking to Sustainable Ship Recycling. Evolution of a Legal Regime*, Leiden, 2010; MATZ-LÜCK, “Safe and Sound Scrapping of ‘Rusty Buckets’? The 2009 Hong Kong Ship-Recycling Convention”, *RECIEL*, 2010, p. 95 ff.; TSIMPLIS, “The Hong Kong Convention on the Recycling of Ships”, *Shipping & Trade Law*, 2009, p. 1 ff.; SUNDELIN, *The Scrapping Vessel. An Examination of the Waste Movement Regime’s Applicability to Vessels Destined for Scrapping and Potential Improvements Made in the IMO Draft Convention on Ship Recycling*, unpublished Master thesis, Handelshögskolan Vid Goteborgs Universitet, Department of Law, 2008, p. 42, available at: <<http://www.jdsupra.com/>>; MIKELIS, “Developments and Issues on Recycling of Ships”, Paper presented at the East Asian Seas Congress, 2006, available at: <<http://www.imo.org/>>; BHATTACHARJEE, *cit. supra* note 6; PELS, *cit. supra* note 12.

The structure of the Convention consists of a main body, covering the scope of the Convention, the general obligations and the procedural articles, and a number of regulations making specific provision for requirements for ships, requirements for ship-recycling facilities and reporting requirements. The regulations are annexed to the Convention but “form an integral part of it”; there is, thus, no difference in “weight” between the main body and the annex, yet the amendment procedure is different. The Convention also has some appendices identifying hazardous materials subject to control and containing forms for certificates and authorizations. Finally, in order to ensure the global, uniform and effective implementation and enforcement of its relevant requirements, the Convention provides for the development, by the IMO, of several sets of guidelines for safe and environmentally sound ship-recycling.³⁷

The structure of the Hong Kong Convention has been criticized as “unorthodox”, because most of the articles of the Convention itself are very generic, while most of the substantive provisions are found in the annex where they are easier to amend. This flexibility is not trusted by the NGO Platform on Ship-breaking which challenges the low level of transparency in the IMO.³⁸ In his report, the Special Rapporteur Ibeanu also notes that the Convention fails to regulate in detail many important aspects of ship-breaking activities such as the authorization of ship-recycling facilities, the development of ship-recycling plans or the elaboration of appropriate procedures to prevent adverse effects on human health and the environment; these and other issues will be addressed only by the non-mandatory guidelines which Parties are only required to “take into account”.

From a different perspective, it has been remarked that the Convention lays down, for the first time, a uniform set of procedures and standards for ship-recycling activities. In so doing, it may pave the way for standardization of the ship-

³⁷ Resolution No. 4, adopted at the Hong Kong International Conference on the Safe and Environmentally Sound Recycling of Ships, invites IMO to develop as a matter of urgency and adopt, as soon as practicable and in any case before the entry into force of the Convention: guidelines for the development of 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 safe and environmentally sound ship-recycling; guidelines for the development of the Ship-Recycling Plan; and other guidelines or circulars as may be identified by the Marine Environment Protection Committee. The first set of guidelines relating to the Inventory of Hazardous Materials was adopted by the MEPC in July 2009 (Resolution 179 (59)). Thereafter, at its 60th session (22-26 March 2010), the MEPC has agreed that three further guidelines should be developed in parallel (on facilities, on the Ship-Recycling Plan and on the authorization of the facilities) in view of the close interrelationship between them and has established a correspondence group on ship-recycling guidelines.

³⁸ Secretariat of the Basel Convention, “Compilation of Assessments Provided by Parties and Others of the Level of Control and Enforcement Established by the Basel Convention, in Its Entirety, and Comparisons with the Expected Level of Control and Enforcement To Be Provided by the Draft Legally Binding Instrument on Ship-Recycling in Its Entirety”, COP 8, 27 November 2006-1 December 2006 (UNEP/CHW.8/INF722,) p. 3.

breaking process across jurisdictions and act as a bulwark against the race to the bottom between ship-breaking countries.³⁹

Other critiques have been advanced with regard to the scope of the Convention that excludes from its ambit warships, naval auxiliary or other State-owned or operated vessels which are used only for non-commercial service, small ships (less than 500 GT) or ships engaged only in domestic voyages (Article 3). It appears, in effect, that since the aim of the Convention is to control the environmental impact of ship-recycling activities, ships falling within the scope of the Convention should be identified with regard to the hazardous materials and substances contained in them, rather than to their use during their operational life. With reference to warships and other government owned ships (operating on a non-commercial basis), Denmark observed during the negotiation process that due to the special purpose of these ships, it is appropriate to exempt them from inspections during their operating life; however, such ships “should follow the remaining provisions of the Convention with regard to ship-recycling. There is no environmental reasoning for keeping this group of ships out of the requirement of recycling of ships in a safe and environmentally sound manner”.⁴⁰ Suffice it to say, in this regard, that the Committee of technical experts nominated pursuant to order of the Indian Supreme Court in the mentioned *Research Foundation* case and charged with reporting on the hazards associated with ship-breaking, has included warships among the categories of ships of “special concern”.⁴¹

The objective pursued by the Hong Kong Convention is to prevent, reduce, minimize and, to the extent practicable, eliminate accidents, injuries and other adverse effects on human health and the environment caused by ship-recycling; enhance ship safety and protect human health and the environment throughout a ship’s operating life (Article 1(1)). From this perspective, the Convention is based on a “cradle to grave” approach, addressing all aspects related to a ship’s ultimate recycling, from considerations at the design and operational phases, through to its final dispatch to a recycling facility and the requirements for such facilities. This approach, underlying many international instruments on waste management, has

³⁹ BHATTACHARJEE, *cit. supra* note 6, p. 221; MIKELIS, *cit. supra* note 36, p. 7.

⁴⁰ IMO, Marine Environment Protection Committee, 56th session, 7-11 May 2007 (MEPC 56/3/12). The Convention requires that ships which are excluded by Article 3 (see paragraphs 2 and 3) act in a manner consistent with the Convention, as far as reasonable and practicable.

⁴¹ *Research Foundation* case, Order of 17 February 2006 (table 2.1), *cit. supra* note 6. During negotiations, India had proposed that warships should be included under the scope of the Convention. The MECP agreed that “warships should not be included as long as they retain their sovereign immunity and also that when warships are decommissioned and then sold to commercial interests, they may lose their sovereign immunity and, at that stage, they could come under the scope of the convention”. Yet the Committee just agreed that there may be a need to develop a guidance document in the future. IMO, Marine Environment Protection Committee, 58th session, 6-10 October 2008 (MECP 58/3/13 and MEPC 58/23, para. 3.19).

been widely recognized as a big step forward in so far as it has the potential of progressively eliminating the hazards involved in ship-breaking.

In order to achieve the pursued objective, each Party undertakes to give full and complete effect to the provisions of the Convention (Article 1(1)). Parties (both flag States as well as port States) first of all have an obligation to prohibit and/or restrict the installation and use of hazardous materials listed in appendix 1 to the Convention on ships flying their flags or operating under their authority and on ships whilst in their ports, shipyards, ship-repair yards or offshore terminals (Regulation 4). Furthermore, all ships, both new and existing, are required to have on board an Inventory of Hazardous Materials, subject to verification by the flag State (Regulation 5). The Inventory is mandatory for new ships right from the commencement of their operations, whereas existing ships have a grace-period of five years within which they need to develop it. Such an inventory must be specific to each ship and identify hazardous materials contained in the ship's structure or equipment, and clarify that the ship complies with Regulation 4 (Part I). Part I of the Inventory must be properly maintained and updated throughout the ship's operational life; prior to dismantling, Part II on operationally generated wastes and Part III on stores have to be incorporated into the Inventory.

In addition, every ship has to comply with the survey and certification requirements prescribed by the flag State (Article 5). Regulations 10 and 11 specify the types of surveys that every ship needs to undergo prior to obtaining the necessary certifications. These include an initial survey before the ship is in service and before the International Certificate on Inventory of Hazardous Materials is issued, a renewal survey at intervals not exceeding five years and a final survey prior to the ship being taken out of service for recycling after which an International Ready for Recycling Certificate shall be issued; an additional survey may be made after any change, replacement or significant repair of the structure.

Another major element of control is the authorization of ship-recycling facilities and operations. Recycling States have an obligation to ensure that ship-recycling facilities operating under their jurisdiction are authorized in accordance with the regulations annexed to the Convention (Article 6), to ensure that they meet the requirements provided for (Regulations 15, 16 and 17). In addition, prior to any recycling, a ship-specific Ship-Recycling Plan shall be developed by the ship-recycling facilities (Regulation 9).⁴² The ship-recycling States are required to approve the Ship-Recycling Plan of ships that will be recycled within their jurisdiction; such a decision will be made through a review of the Inventory of Hazardous Materials and of the ship-specific Ship-Recycling Plan, to ensure that the capabilities of the recycling facility match the ship-recycling operation to be conducted. To this end, the Convention provides for specific notification obligations (Regulation

⁴² The Ship-Recycling Plan should include information on, *inter alia*, the type and amount of materials identified in the Inventory of Hazardous Materials that the facility can handle in an environmentally sound manner and how the recycling will be undertaken.

24). Ship-owners are required to inform the flag States of their intention to recycle a ship so that the competent authority may prepare for the final survey and eventually issue the International Ready for Recycling Certificate. In the same way, the recycling facility preparing to receive the ship is required to notify its State of the intention to recycle a ship and to communicate all the relevant information, including the Inventory of Hazardous Materials, the (draft) Ship-Recycling Plan and, at the end of the recycling operations, a Statement of Completion that is to be issued by the recycling facility when the recycling of a ship is completed in accordance with the Convention (Regulation 25). However, ship-recycling States may opt for an explicit or a tacit approval procedure of each Ship-Recycling Plan (that is, of each ship) (Article 16(6)). In conclusion, there is no need for express consent from the recycling State for each ship-recycling, nor is a direct notification between the flag State and the recycling State necessarily provided for. During negotiations, there was a long debate regarding the initial notification and reporting requirements (Regulation 24) and the approval of the Ship-Recycling Plan (Article 16(6)). A few delegations stated that reporting requirements must serve a necessary control purpose and that it is vital to the success of the Convention that the right enforcement instruments are in place.⁴³ According to some observers, the absence of a State-to-State notification requirement does not satisfy the Basel principle of the prior informed consent because it does not allow States to take meaningful action.⁴⁴

It is also worth noting that the Regulations concerning Preparation for Ship-Recycling do not impose any obligation on ship-owners to pre-clean ships of their hazardous materials prior to their dispatch to a recycling facility, even those materials on board the ship which are not necessary for the final voyage to the recycling yard (Regulation 8). The Hong Kong Convention only requires that ships destined to be recycled, in the period prior to entering the ship-recycling facility, shall “conduct operations to minimize” the amount of cargo residues, fuel oil and wastes remaining on board. It further requires that ships shall be recycled only in facilities that are fully authorized to undertake all the recycling which the Ship-Recycling Plan specifies to be conducted. In the same manner, the International Ready for Recycling Certificate is issued by the flag State after the competent authority has carried out the final survey to verify the existence of the Inventory of Hazardous

⁴³ IMO, Marine Environment Protection Committee, 56th session, 9-13 July 2007 (MEPC 56/3); 57th session, 31 March-4 April 2008 (MEPC 57/3); 58th session, 6-10 October 2008 (MEPC 58/23). In particular, Denmark proposed an additional reporting step, in order to ensure communication between the ship-owner and the recycling State, but the proposals did not obtain support from the Committee (MEPC 56/3/12).

⁴⁴ Human Rights Council, Report of the Special Rapporteur Ibeanu, *cit. supra* note 3, para 62(b); Greenpeace International and FOEI, “Consideration of the Draft International Convention for the Safe and Environmentally Sound Recycling of Ships”, in International Conference on the Safe and Environmentally Sound Recycling of Ships (SR/CONF/14), para. 2; NGO Platform on Shipbreaking, *Determining “Equivalent Level of Control” as Established under the Basel Convention*, 31 January 2009, available at: <<http://www.shipbreakingplatform.org/>>.

Materials, and whether it is consistent with the Ship-Recycling Plan, and the authorization of the ship-recycling facility. The Convention thus assumes that, as long as a recycling facility has the requisite authorization and has developed a Ship-Recycling Plan consistent with the Inventory of Hazardous Materials, it should be allowed to conduct the entire dismantling process including removal of the hazardous wastes. An early draft text of Regulation 8 of the Convention contained a provision concerning the issue of the prior-removal of hazardous materials; however, the provision was deleted by the Committee during the deliberations.⁴⁵ Still, this issue has been at the heart of some recent cases and has been singled out by some national courts. The Indian Supreme Court, in the *Research Foundation* case, premised that “the ship should be properly decontaminated by the owner prior to the breaking” and recommended that “[a]t the international level, India should participate in international meetings on ship-breaking [...] with a clear mandate for the decontamination of ships of their hazardous substances such as asbestos, waste oil, gas and PCBs, prior to export to India for breaking”.⁴⁶ Similarly, the Supreme Court of Bangladesh, in March 2009, ordered that no end-of-life vessel shall be imported by Bangladeshi ship-breakers without having been pre-cleaned of hazardous materials such as asbestos, PCBs, heavy metals and oily sludges, before arriving in Bangladesh. The Court affirmed that this pre-cleaning requirement is in accordance with Bangladesh’s domestic legislation as well as its responsibilities as a Party to the Basel Convention.⁴⁷

This issue is closely related to the practice of “beaching” that under the Hong Kong Convention remains an open matter (at least until guidelines have been adopted by IMO). Indeed, this technique is not only highly polluting in itself but also requires ships to be delivered in operational shape, precluding all remedial

⁴⁵ It is interesting to note that France and the United Kingdom submitted a proposal stating that “prior-removal of hazardous materials should be addressed in the Convention in order to avoid a major loophole” (MEPC 58/3/6).

⁴⁶ *Research Foundation* case, Order of 6 September 2007, paras. 8.2 and 8.16, *cit. supra* note 6.

⁴⁷ Supreme Court of Bangladesh, High Court Division, *Bangladesh Environmental Lawyers Association (BELA) v. Ministry of Shipping and Others*, Writ Petition No. 7260 of 2008, Judgment on 5 March 2009, Operative Portion of Order available at: <<https://www.elaw.org>>. The Bangladesh Environmental Lawyers Association filed the petition challenging the entry of the ship MT Enterprise (enlisted in the Greenpeace list of vessels containing hazardous materials) into Bangladesh, despite the refusal of the country to allow entry of two other Greenpeace listed ships, MT Alfaship and SS Norway (renamed SS *Blue Lady*, see *supra* section 2 and note 12). The Supreme Court of Bangladesh also ordered the closure, within two weeks, of all ship-breaking yards “operating without necessary Environmental Clearance as required by law”. At the present time, the situation in Bangladesh is unclear. Despite this and other orders issued by the Supreme Court the business goes on. See the Bangladesh Environmental Lawyers Association web site: <<http://www.belabangla.org>>; *Ship-breaking.com. Information and Analysis Bulletin on Ship Demolition*, No. 22, January 2011, available at: <<http://www.robindebois.org>>; and the web site of the NGO Platform for Shipbreaking, available at: <<http://www.shipbreakingplatform.org>>.

measures prior to export and the removal of material that would make the ship unfit for navigation.

Health and safety matters in ship-breaking facilities are covered by Regulations 19-23. Authorized ship-recycling facilities are required to establish and utilize appropriate procedures for the prevention of hazardous conditions like explosions and fire, or accidents, spills, and emissions which may cause harm to human health and/or the environment; to establish and maintain an emergency preparedness and response plan; to provide for workers' safety and training; to report to the competent authorities on incidents, accidents, occupational diseases and chronic effects resulting from ship-recycling activities and to ensure the safe and environmentally sound removal and management of any hazardous material. In particular, all wastes generated from the recycling activity shall be kept separate from recyclable materials and equipment, labelled, stored in appropriate conditions and only transferred to waste management facilities authorized to deal with their treatment and disposal in a safe and environmentally sound manner.⁴⁸ Nonetheless, the Convention fails to adequately take into account a critical issue emerged in several discussions, especially with reference to the Basel Convention regime, namely the traceability of wastes dispatched to downstream facilities so as to allow verification of their proper handling and final disposal.⁴⁹

Another critical lack is the absence of an independent audit mechanism of on-the-ground conditions at the recycling yard, despite such a mechanism having been discussed at an early stage of the drafting. The provision for a mandatory auditing scheme, included in a draft text of the Convention, was deleted as proposed by China and supported by India and other delegations, adducing that it contravened the sovereignty of Member States and, therefore, might become a potentially serious impediment to the ratification of the convention.⁵⁰ This is a serious flaw that worsens the other mentioned critical issues since, as has been pointed out, the recycling States have economic incentives for granting authorization/certification even to facilities/activities which do not comply with the provisions of the Convention.⁵¹

⁴⁸ According to Article 2(10) of the Hong Kong Convention, "Ship Recycling" means "the activity of complete or partial dismantling of a ship at the Ship Recycling Facility [...] and includes associated operations such as storage and treatment of components and materials on site, but not their further processing and disposal in separate facilities".

⁴⁹ Human Rights Council, Report of the Special Rapporteur Ibeanu, *cit. supra* note 3, para 62(e); EU, "Submission by the European Community and Its Member States Related to Decision IX/30 on Dismantling of Ships", 30 January 2009, available at: <<http://www.basel.int/ships/ix30-comments/index.html>>.

⁵⁰ IMO, Marine Environment Protection Committee, 56th session, 9-13 July 2007 (MEPC 56/3, para. 20; MEPC 56/23, para. 3.27; MEPC 56/3/13); 57th session, 31 March-4 April 2008 (MEPC 57/3, paras. 3.9-3.12).

⁵¹ EU, "Assessment on Ship Dismantling with particular Reference to the Levels of Control and Enforcement Established by the Basel Convention and the Expected Level of Control and

In addition to flag States' and recycling States' surveillance powers, the control mechanism of the Convention provides for inspection of ships by port States. Ships to which the Convention applies can be inspected by duly authorized officers in any port and offshore terminal of a Party. However, such inspections are limited to verifying that there is on board either an International Certificate on Inventory of Hazardous Materials or an International Ready for Recycling Certificate which "if valid, shall be accepted". Only where a ship does not carry a valid certificate or there are "clear grounds" for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate, and/or Part I of the Inventory of Hazardous Materials, or there is no procedure implemented on board the ship for the maintenance of Part I of the Inventory, may a detailed inspection be carried out, taking into account guidelines developed by the IMO (Article 8).

The Parties are required to cooperate in the detection of violations and the enforcement of the provisions of the Convention that provide for investigations to be undertaken at ports of Parties even at the request of another Party. Furthermore, the Convention empowers Parties to warn, detain, dismiss or exclude a ship from their ports if a ship is detected to be in violation of its provisions. Similarly, if any State Party has sufficient evidence to indicate that a ship-recycling facility is operating in violation of the Convention, it may demand the Party with jurisdiction over it to make an inspection and file a report (Article 9).

The Convention also requires Parties to prohibit violations under national laws and establish sanctions that shall be "adequate in severity to discourage violations of the Convention". If a Party is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of an alleged violation (by a ship entitled to fly its flag or a facility operating under its jurisdiction), it shall cause such proceedings to be taken as soon as possible, in accordance with its law (Article 10). Although the article does not expressly refer to "criminal" proceedings and penalties, such as for instance the Basel Convention,⁵² the provision encourages Parties to adopt effective instruments in order to foster compliance with the Convention.

Enforcement to Be provided by the Draft Ship Recycling Convention in Their Entirety", submitted to the Basel Convention Secretariat pursuant to OEWG decisions, at its 6th Session, 3-7 September 2007. The document highlights that the practical effectiveness of the control and enforcement mechanisms laid down by the draft Hong Kong Convention will depend on a variety of factors, including the authorization policy of the recycling States and the possible involvement of third parties in the monitoring and auditing of ship-recycling facilities (para. 83). The document is available at: <<http://ec.europa.eu/environment/waste/ships/>>.

⁵² Article 4(3) of the Basel Convention. An increasing number of international instrument contains an express obligation to impose criminal penalties in order to promote compliance with environmental regulations. See FASCIGLIONE, "L'internazionalizzazione della tutela dell'ambiente attraverso il diritto penale", in CATALDI and PAPA (eds.), *Ambiente, diritti ed identità culturale*, Napoli, 2006, p. 151 ff.

Finally, a significant provision pertains to the reporting system. Parties are required to report to the IMO a list of authorized ship-recycling facilities, an annual list of ships flying their flag to which an International Ready for Recycling Certificate has been issued (including the name of the recycling company and location of the ship-recycling facility), an annual list of ships recycled within their jurisdiction and information on violations of the Convention and actions taken in respect of ships and recycling facilities (Article 12). Recycling State Parties are also required to provide, at the request of other Parties or of the IMO, the relevant information on which its decision to authorize a recycling facility is based (Article 7). It is hoped that such a centralized storage and dissemination of information will assist towards effective enforcement, monitoring and implementation of the treaty. However, it is only required that the IMO “disseminate as appropriate” such information, whereas public access to collected data may represent a way to improve compliance with the Convention, especially thanks to the role of “public watchdog” played by NGOs.

The Hong Kong Convention has been the object of criticism. According to several observers from NGOs, international organs and scholars, it has fatal flaws and has failed to adequately take into account some fundamental problems; even the IMO Secretary General has defined the new treaty “a good outcome in the circumstances”.⁵³ Beyond the various critical issues already underlined, the major question appears to be the allocation of responsibilities for safe and environmentally sound ship-breaking.⁵⁴ The Convention seems to place a disproportionate burden of responsibility on either flag States and recycling States (and facilities), depriving other actors like ship-owners and States where owners are based of any responsibilities. The main responsibility for the control procedures, including the survey and certification system, falls indeed upon flag States and, to a far lesser extent, on port States, thanks to a limited right of inspection. On the other hand, ship-breaking States (and facilities) are required to improve the recycling activities in order to match the Convention’s regulations while ship-owners only have to keep the Inventory of Hazardous Material updated and to notify their intention to dismantle a vessel. This framework is worsened by the absence of any provision for a ship-recycling fund, or an alternative financing mechanism, to help ship-recycling States (facilities), which are primarily developing countries, to improve their recycling standards in accordance with the Convention’s requirements. During the negotiations, the proposal for the establishment of a fund financed by ship-owners was abandoned; the underlying concept of the Convention is that its provisions, together with market forces, will be sufficient to make ship-dismantling a safe and environmentally sound activity. Such an allocation of responsibilities and costs appears questionable for various reasons.

⁵³ IMO press release, “New International Convention Adopted to Ensure Safe and Environmentally Sound Ship Recycling”, 18 May 2009.

⁵⁴ See *supra* notes 36 and 38.

First of all, it risks endangering the practical effectiveness of the mechanisms envisaged by the Convention which will necessarily depend, to a large extent, on the existence of strong incentives for compliance. The lack of financial support added to the global market dynamics may be a disincentive for developing countries to join the treaty. As a matter of fact, recycling States will find it attractive to become a Party to the Convention if it is apparent that the majority of ship-owners will send their ships only to recycling facilities which comply with the new standards and rules and if the costs of improving the recycling activities are balanced by the economic benefits.⁵⁵ Moreover, it can be questioned if the main responsibility should be given to ship-recycling States – which until now have not enforced their own legislation – and to flag States, which often lack the capacity and the interest to implement international regulations, most of all taking into consideration the practice of the flags of convenience.⁵⁶ If FOC States, which control about half of the global tonnage, barely enforce the existing obligations, how can they be expected to enforce a new set of obligations under the Hong Kong Convention?

Second, the balance of responsibilities outlined by the Convention does not appear to be in accordance with the “polluter pays” principle according to which natural or legal persons who are responsible for the pollution must pay the costs of such measures as are necessary to eliminate or to reduce that pollution.⁵⁷ The

⁵⁵ EC, “Communication from the European Commission to the Council. An Assessment of the Link between the IMO Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships, the Basel Convention and the EU Waste Shipment Regulation”, Brussels, 12 March 2010 (COM (2010) 88 final). The Hong Kong Convention does not contain any geographical export limitation as long as the recycling facilities are authorized and located in a State Party. The United States of America proposed to allow the recycling of ships flying the flag of a Party in recycling facilities located in non-Party States, if the facilities meet or exceed the environmental and safety standards in the Convention. However, the majority of the delegations were not in favour of non-Party facilities; MECP, 56th session, 9-13 July 2007 (MEPC 56/3/18; MECP 56/23; MEPC 56/3); MEPC, 57th session, 31 March-4 April 2008 (MEPC 57/3, MEPC 57/21). The Convention, instead, allows ships flying the flag of non-Parties to be recycled in State Parties’ facilities, provided that Parties apply the requirements of the Convention as may be necessary to ensure that no more favourable treatment is given to such ships (Article 3(4)).

⁵⁶ See SUNDELIN, *cit. supra* note 36, p. 42. Despite attempts to improve “flag State implementation”, in recent years, improved compliance with international standards seems to be accomplished primarily as a result of the pressure applied on the industry by responsible port States and by the reactive, and in some cases parallel, efforts of industry leaders. See VORBACH, “The Vital Role of Non-Flag State Actors in the Pursuit of Safer Shipping”, *Ocean Development & International Law*, 2001, p. 27 ff.

⁵⁷ Originally developed by the OECD as an economic principle for an efficient allocation of environmental costs (OECD, “Guiding Principles concerning International Economic Aspects of Environmental Policies”, OECD Doc. C (72)128), the “polluter pays” principle has gained increasing acceptance and “has progressively moved beyond the sphere of good intentions and scholarly commentary to become a frame of reference for law-makers”. See DE SADELEER, *Environmental Principles: From Political Slogans to Legal rules*, New York, 2002, pp. 21-60, 22. It is expressed and reflected in a number of international recommendations and treaties, at the global and regional level, from the Rio Declaration on Environment and Development, Principle

principle requires the internalization of the environmental costs of economic activities, namely, the costs of the environmentally sound management and disposal of ship-generated wastes. The creation of a ship-recycling fund based on contributions from ship-owners and shipping States and destined to provide for a full array of technology, governance and infrastructural resources as well as to ensure pre-cleaning of ships would force ship-owners to internalize the costs associated with the use of dangerous materials and substances on ships.⁵⁸

At last, such an allocation of responsibilities and costs does not take into account the inequality of resources and capabilities between developed and developing countries. This issue is, instead, at the heart of the Basel Convention's regime that is based on the fundamental premise that developing countries have limited capabilities to deal with the consequences of trade in hazardous materials, due to the absence of adequate financial, legal and infrastructural resources.⁵⁹ During the negotiation process, the Conference of the Parties to the Basel Convention called attention to this matter and invited the IMO to consider the current capacity and the common but differentiated responsibilities of the Parties.⁶⁰ Nevertheless, it does not seem that this crucial feature has been taken into due consideration.

These remarks raise questions about the ability of the Ship-Recycling Convention to achieve the objective to control the adverse effects on human health and on the environment caused by ship-breaking. In his report, Special Rapporteur Ibeanu points out that

“the forum chosen for the development of the Convention and the approach followed by IMO to reach an agreement over the final text

16, (A/CONF.151/26 Vol. I), to Art. 191 of the Treaty on the Functioning of the European Union. Although generally acclaimed, the “polluter pays” principle is not uncontroversial and has several dimensions and “functions”. See BIRNIE and BOYLE, *cit. supra* note 18, p. 92; and BUGGE, “The Polluter Pays Principle: Dilemmas of Justice in National and International Contexts”, in EBBESSON and OKOWA (eds.), *Environmental Law and Justice in Context*, Cambridge, 2009, pp. 411-428.

⁵⁸ Milieu/COWI, *Study in Relation to Options for New Initiatives Regarding Dismantling of Ships. Note on the Ship Dismantling Fund. Pros and Cons of the Three Options*, Bruxelles, 2009, para 1.4; EC, “Green Paper on Better Ship Dismantling”, Brussels, 22 May 2007 (COM (2007) 269 final); EC, “An EU Strategy for Better Ship Dismantling”, Bruxelles, 19 November 2008 (COM (2008) 767 final), para. 5.6, available at: <<http://ec.europa.eu/environment/waste/ships/>>.

⁵⁹ See SAWYER, “Shipbreaking and the North South Debate: Economic Development or Environmental and Labor Catastrophe?”, *Penn State International Law Review*, 2002, p. 535 ff., and *supra* section 2.1.

⁶⁰ See *supra* note 27. Article 11 of the Basel Convention also refers to this issue. According to it, Parties may enter into agreements and arrangements regarding transboundary movement of hazardous or other wastes; however, such agreements and arrangements shall stipulate provisions which are not less environmentally sound than those provided for by the Convention “in particular taking into account the interests of developing countries”.

have in some cases determined the predominance of economic interests over the overarching objective of protecting human health and the environment against the major hazards posed by the current ways of dismantling ships”.

These concerns are strengthened by another critical aspect, specifically the stringent requirements for the entry into force of the Convention. The treaty will, in fact, enter into force twenty-four months after the date on which fifteenth States, representing forty per cent of world merchant shipping by gross tonnage, have either signed it without reservation as to ratification, acceptance or approval or have deposited instruments of ratification, acceptance, approval or accession with IMO Secretary General. Furthermore, the combined maximum annual ship-recycling volume of those States must, during the preceding ten years, constitute not less than three per cent of their combined merchant shipping tonnage.⁶¹ According to a study commissioned by the European Commission, the Convention is not expected to enter into force before 2015 and the full effect of the new international regime is likely to become effective even later (by the end of 2020 at the earliest).⁶²

⁶¹ The Convention was opened for signature at IMO headquarters from 1 September 2009 until 31 August 2010; thereafter, it will be open for accession by any State. Up to 27 January 2011, the Convention has been signed, subject to ratification or acceptance, by France, Italy, the Netherlands, Saint Kitts and Nevis and Turkey. Turkey, actually promoting “green demolition”, is making a remarkable return to the market of ship-dismantling; the combination of steel industries/demolition of vessels is working well. Ships are no longer demolished on beaches. Demolition is carried out on solid surfaces and liquid waste can be collected (“dry demolition”). However, shipyards in Turkey still use asbestos in new ships. According to Lloyd’s List, this is not an isolated case. Even though an amendment to the Safety Of Life At Sea Convention (SOLAS) bans asbestos since 2002, many shipbuilding and repair yards in Asia and across the globe are still using asbestos (*Information and Analysis Bulletin on Ship Demolition*, 21 July 2010, available at: <<http://www.robindesbois.org>>).

⁶² Miliew-COWI, *Study in Relation to Options for New Initiatives Regarding Dismantling of Ships. Executive Summary*, Brussels, August 2009, available at: <<http://ec.europa.eu/environment/waste/ships/>>.