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## CHAPTER THREE INTERNATIONAL CONVENTIONS IMPACTING HNS SHIPMENTS 3.1 INTRODUCTION

For an effective maritime safety culture, many States believed in the establishment of the International Maritime Organisation (IMO), 1 a permanent body that would be able to coordinate the international nature of the shipping industry. This chapter examines principally the IMO's international conventions on safe and secure navigation, marine pollution control, liability and compensation and other waste control provisions and regional/sub-regional chemical spill contingency response action plans that impact upon HNS shipments in the Straits of Malacca (the Straits) as they form the underlying bases of protection of the Straits from HNS pollution. The examination starts with a discussion of international environmental law principles on marine pollution control that are needed to support the transit passage regime in the Straits. In particular, this chapter highlights the importance of ratification of the 1996 HNS Convention and the 2010 HNS Convention Protocol and the 2000 OPRC-HNS Protocol by Malaysia for implementation in the Straits. 3.2

## ENVIRONMENTAL LAW PRINCIPLES 3.2.1 Sustainable Development 1 IMO is the United Nations

specialized agency responsible for improving maritime safety and preventing pollution from ships.20Decem.2008,12.30pm< <http://www.imo.org>>. The IMO as it was renamed in 1982 (formerly called the Inter-Governmental Maritime Consultative Organisation -IMCO) is one of the oldest United Nation Organisations and the IMO Convention was opened for signature at Geneva on 6 March 1948. One of the purposes of the organisation is to "provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships, Article 1 (a) IMO Convention. Basic Documents, Volume One, 2004 edition. The term

"Sustainable Development" was defined in the 1987 Report of the World Commission on Environment and Development 2 as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". 3 States have made numerous unilateral and consensus declarations committing to sustainable development, including RIO in 1992, New York in 1997, and Johannesburg in 2002. 4 Principle 4 of the Rio Declaration states that "in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it". 5 An important point is that sustainable development implies a responsibility for everybody, private and public sector alike. 6 The principle of sustainable development has been applied in several international conventions such as the 1992 UN FCC (Article 2) and the 1997 Kyoto Protocol (Article 2), 7 the 1994 Desertification Convention (Article 2) and it also makes over forty references to sustainable development, 1992 UN Convention on Biological Diversity (Articles 1 and 2) 8 and the Biosafety Protocol, 9 and the 2001 International Treaty on Plant Genetic Resources for Food and Agriculture 2 The World Commission on Environment and Development (WCED) was established in the autumn 1983 by a resolution of the General Assembly of the United Nation. The chairman was Gro Harlem Brundtland, the vice-chairman was Dr Mansour Khalid and 22 members of commission from 21 nations. They differed widely in experience, competence and cultural background. Bugge & Voigt, ed., Sustainable Development in International and National Law, (Amsterdam: Europa Law Publishing, 2008) at 4. 3 Kiss, Alexandre and Shelton, Dinah, International Environmental Law, 3rd ed., (New York: Transnational Publishers, 2004), at 216. 4 Bugge & Voigt, ed., Sustainable Development in International and National Law, (Amsterdam: Europa Law Publishing, 2008) at 162. 5 Kiss, Alexandre and Shelton, Dinah, loc. cit. 6 Bugge & Voigt, ed., op cit at 9. 7 United Nations Framework Convention on Climate Change (adopted 9 May 1992, entry into force 21 March 1994) 1771 UNTS 107, (1992) 31 ILM 849; Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 11 December 1997, entry into force 16 February 2005) (1998) 37 ILM 22. Bugge & Voigt, ed., Sustainable Development in International and National Law, (Amsterdam: Europa Law Publishing, 2008) at 149. 8 190 countries have ratified the 1992 United Nations Convention on Biological Diversity (UN CBD), which recognizes that conservation of biological diversity is a common concern of human kind and is an integral part of the development process, and covers all ecosystems species, and genetic resources. 8 It links traditional conservation efforts to the economic goal of using biological resources sustainably. It establishes principles for the fair and equitable sharing of the benefits arising from the use of genetic resources, notably those destined for commercial use. The UN CBD regime is built on measures and incentives for the conservation and sustainable use of biological diversity; regulated access to genetic resources; access to and transfer of technology, including biotechnology; technical and scientific cooperation; impact assessment; education and public awareness; provision of financial resources; and national reporting on efforts to implement treaty commitments: Bugge & Voigt, ed., Sustainable Development in International and National Law, (Amsterdam: Europa Law Publishing, 2008) at 153 9 Bugge & Voigt, ed., Sustainable Development in International and National Law, (Amsterdam: Europa Law Publishing, 2008) at 153 87 where there are 24 references to sustainable agricultural development and sustainable use of genetic resources. "The Polluter Pays" 10 principle is an environmental policy principle which requires that the costs of pollution be borne by those who cause it. 11 It has been supported by the Organization for Economic Co-Operation and Development (OECD) and was incorporated in EC law through the 1987 Single European Act (Article 130r) and in the 1992 Maastricht Treaty. 12 There are conventions that proclaim the principle in the preambles such as the International Convention on Oil Pollution, Preparedness, Response and Cooperation 1990, the 1992 Helsinki Convention on the Transboundary Effects of Industrial Accidents 13, and those that affirm the principle in an operative provision 14 such as Article 2(5) of the 1992 Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area, Article 4(4) of the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (as amended in 1995), 1992 revision of the Oil Pollution Liability and Fund Conventions and the adoption in 1996 of the new Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea. 15 10 The Polluter Pays Principle was first discussed in the United Nations Conference and Development held in Rio de Janeiro, 1992. The principle 16 as stated.....National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should in, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and

investment. 11 [http://www.eoearth.org/article/polluter\\_pays\\_principle](http://www.eoearth.org/article/polluter_pays_principle), 25 June 2010, 4 pm.. 12 De Sadeleer, Nicolas, *Environmental Principles, From Political Slogans to Legal Rule*, (New York: Oxford University Press, 2002) at 23. Bugge has identified four versions of the Polluter Pays Principle economically, it promotes efficiency; i) legally: it promotes justice; ii) it promotes harmonization of international environmental policies; iii) it defines how to allocate costs within a State. 13 Ibid. 14 De Sadeleer, Nicolas, *Environmental Principles, From Political Slogans to Legal Rule*, (New York: Oxford University Press, 2002) at 23. 15 McKinley, Derek. *The 1996 International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea: Implications for State Parties, the Shipping, Cargo and Insurance Industries*, (Diss. LLM, University of Cape Town, South Africa, 2005). The "Precautionary Principle" or "Precautionary Approach" is a response to uncertainty, in the face of risks to health or the environment. 16 In general, it involves acting to avoid serious or irreversible potential harm despite lack of scientific certainty as to the likelihood, magnitude, or causation of that harm. 17 Precaution is now an established principle of environmental governance, prominent in law, policy and management instruments at international, regional and domestic level, across such diverse areas of pollution, toxic chemicals, food and phytosanitary standards, fisheries management, species introductions and wildlife trade. 18 Principle 15 of the Rio Declaration states: 19 "In order to protect the environment, the precautionary principle shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation." The "Precautionary Approach" 20 should be invoked when: i) there is good reason to believe that harmful effects may occur to human, animal, or plant health or to the environment; and ii) the level of scientific uncertainty about the consequences or likelihood of the risk is such that the best available scientific advice cannot assess the risk with sufficient confidence to inform decision-making. 16 [http://www.pprinciple.net/the\\_precautionary\\_principle.html](http://www.pprinciple.net/the_precautionary_principle.html) ,26/6/2010, 11.20 am. 17 Ibid. 18 Ibid. 19 Kiss, Alexandre and Shelton, Dinah, *International Environmental Law*, 3rd ed., (New York: Transnational Publishers, 2004), at 216. 20 The Precautionary Approach was first discussed in the United Nations Conference and Development held in Rio de Janeiro, 1992. "Precautionary Principle" is defined in the Dictionary of Environmental Science and Technology as the reduction of risks to the environment by taking avoiding action before any serious problem arises. 21 The preventive principle seeks to minimize the environmental damage and pollution. The basis for the preventive principle in international law must be sought in multilateral and bilateral conventions intended to ensure environmental protection rather than in international "Strict Liability". 22 This principle 23 is implicitly or explicitly endorsed by an extensive body of international treaties and related instruments, subject to marine pollution 24 , the management of high seas fisheries, the protection of rivers, atmospheric pollution, climate, the ozone layer, waste management, toxic substances, biodiversity, the Antarctic, transboundary environmental risk assessment and notification and consultation. The preventive approach requires each State to exercise 'due diligence', which means to act reasonably and in good faith and to regulate public and private activities subject to its jurisdiction or control that are possibly harmful to any part of the environment. 25 The principle does not impose an absolute duty to prevent all harm, but rather an obligation on each State to prohibit activities that could 21 De Sadeleer, Nicolas, *Environmental Principles, From Political Slogans to Legal Rule*, (New York: Oxford University Press, 2002) at 23. 22 De Sadeleer, Nicolas, *Environmental Principles, From Political Slogans to Legal Rule*, (New York: Oxford University Press, 2002) at 64. 23 Ibid. 24 The principle is reflected in the following provisions: Article 1 of the 1972 London Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter; Article 1 of the 1973 London International Convention for the Prevention of Pollution From Ships (not in force); Article 1 of the 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources (replaced the 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources (replaced by the 1992 OSPAR Convention); Articles 4 to 8 of the 1976 Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution; Article 5(5) of the 1980 Athens Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based sources and Activities (as amended in Syracuse on 7 March 1996, not yet in force); 1982 UNCLOS, Article 192, 194 (1)-(2), 195,196,204,207,208,209,210,212; Article 2 of the 1985 Montreal Guidelines on the Protection of the Environment Against Pollution from Land-based Sources; the Preamble to the 1990 OPRC Convention; Article 2(1)(a) of the 1992 OSPAR Convention; Article 3(1) of the 1992 OSPAR Convention; Article 3(1) of the 1992 Helsinki on the Protection of the Marine Environment of the Baltic Sea Area; Articles 5(2)-10 of the

1992 Convention on the Protection of the Black Sea Against Pollution. See also Principle 7 of the Black Sea Against Pollution. See also Principle 7 of the 1972 Stockholm Declaration on the Human Environment. 25 Kis, Alexandre and Shelton, Dinah, *International Environmental Law*, 3rd ed., (New York: Transnational Publishers, 2004), at 204. 90 cause significant harm to the environment. 26 Preventive measures aim to avoid environmental harm and reduce or eliminate the risk of harm. In practice, the main use of the principle is in issuing authorizations that set out the conditions for administrative controls, and in some cases criminal penalties. 27 These authorizations use technical specifications to determine means of operation, quantities and concentrations of pollutants that may be discharged, and what type of security measures must be put in place by the permit holder during the duration of the permit. 28 Environmental assessment 29 has undergone a considerable expansion of its remit- from development projects (environmental impact assessment) to plans, programmes and policies (strategic environmental assessment). 30 There is now a legal base, not just for project-based environmental assessment (the EU's EIA Directive) but more wide-ranging assessment of plans and programmes (though, notably, not policy) in the form of the Directive on Strategic Environmental Assessment (the SEA Directive). 31 The EIA Directive provides a good example of the integrated nature of environmental assessment: Article 3 requires the identification, description and assessment of the direct and indirect effects of a project on "human beings, fauna and flora, soil, water, air, climate and landscape, material assets and the cultural heritage" and, importantly, the interaction between these various factors. 32 In explicitly providing for some form of public participation in environmental decision making, the 26 Id. at 206. 27 De Sadeleer, Nicolas, *Environmental Principles, From Political Slogans to Legal Rule*, (New York: Oxford University Press, 2002) at 72. 28 Ibid. 29 Id, at 548. 30 Id, at 549. 31 Ibid. 32 Id, at 557. EIA Directive has been considered the first important example of EU-derived "environmental rights legislation". 33 The development of strategic environmental assessment is similarly a mark of recognition of the complexity of decision making, especially the idea that development consent is never a discrete choice but takes place in a re-established policy framework. 34 George has highlighted the importance of adopting an environmental formula to support transit passage in straits used for international navigation which is based on a preventive, precautionary and holistic approach to regulating transit passage from an underlying environmental basis in the context of the sustainable development of the Straits of Malacca. 35 In this chapter such an underlying environmental basis is supported and the importance of adopting a Strategic Environmental Assessment as adopted in the EU is stressed.

### 3.3 DEFINITION OF HNS AND CATEGORIES OF HNS CONVENTIONS

The conventions impacting HNS shipments are arranged into four (4) categories: ? ? ? ? Category One - liability and compensation, Category Two - pollution and navigation, Category Three - wastes and consent, and Category Four - hybrids. A definition of the term "HNS" is assessed under all four categories.

#### 3.3.1 Definition of the term "HNS"

33 Ibid.. 34 Id, at 568. 35 George, Mary, *Legal Regime Of The Straits Of Malacca And Singapore*, (Kuala Lumpur: LexisNexis ,2008), at.. The term "pollution of the marine environment" in Article 1(4) of the 1982 LOSC means "means the introduction by man, directly or indirectly of substances or energy into the marine environment (including estuaries) which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities." The substances having deleterious effects are inter alia the halogenated hydrocarbons and organochlorine pesticides, petroleum and its derivatives, other organic chemicals, heavy metals such as mercury and lead, suspended solids, radio-active substances and thermal waste. 36 3.3.1.1 The 1996 HNS Convention in Article 1, 5 (a) (i) to (vii) states that noxious substances are any substances, materials and articles carried on board a ship as cargo, referred to below: a) oils 37 carried in bulk listed in appendix 1 of Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as amended ; b) noxious liquid substances carried in bulk referred to in appendix II of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as amended, and those substances and mixtures provisionally categorised as 36 *Encyclopaedia of Public International Law*, vol.11, *Law Of The Sea. Air And Space*, The Netherlands: Elsevier Science Publishers 1989) at 200. 37 The inclusion of oil in this list is to provide for the risks of fire and explosion (i.e non-pollution) damage arising from the carriage of oil as well for pollution damage caused by non-persistent oil. Pollution damage arising from the carriage of persistent oil is covered by CLC/FUND and is therefore excluded from the 1996 HNSC. Citation extracted from Alan

Khee-Jin Tan (2006), Vessel Source Marine Pollution, Cambridge University Press, page 336. falling in pollution category A, B, C or D (revised as X, Y, Z or OS subsequently) in accordance with the regulation 3 (4) of the said Annex II; c) dangerous liquid substances carried in bulk listed in chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 1983, as amended, and the dangerous products for which the preliminary suitable conditions for the carriage have been prescribed by the Administration and port administrations involved in accordance with paragraph 1.1.3 of the Code; d) dangerous, hazardous and harmful substances, materials and articles in packaged form covered by the International Maritime Dangerous Goods Code, as amended; e) liquefied gases as listed in chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1983, as amended, and the products for which preliminary suitable conditions for the carriage have been prescribed by the Administration and port administrations involved in accordance with paragraph 1.1.6 of the Code; f) liquid substances carried in bulk with a flashpoint not exceeding ? 60 C (measured by a closed cup test); g) solid bulk materials possessing chemical hazards covered by appendix B of the Code of Safe Practice for Solid Bulk Cargoes, as amended, to the extent that these substances are also subject to the provisions of the International Maritime Dangerous Goods Code when carried in packaged form; and h) residues from the previous carriage in bulk of substances referred to in (a) (i) to (ii) and (v) to (vii) above.

3.3.1.2 The List of Oils in Appendix I to Annex 1 of MARPOL 73/78 38 are as follows: List of oils\* (This list of oil shall not necessarily be considered as comprehensive) Gasoline blending stocks Alkylates – fuel Reformates Polymer – fuel

**1 Gasoline blending stocks Alkylates – fuel Reformates Polymer – fuel**

**1 Distillates Straight run Flashed feed stocks Gas oil Cracked**

**1 Gasolines Casinghead (natural) Automotive Aviation Straight run Fuel oil no.1 (kerosene) Fuel oil no.1 – D Fuel oil no.2 Fuel oil no.2 – D**

Naphtha Solvent

**1 Oils Clarified Crude oil Mixtures containing crude oil Diesel oil Fuel oil no.4 Fuel oil no.5 Fuel oil no.6 Residual fuel oil Road oil Transformer oil Aromatic oil (excluding vegetable oil) Lubricating oils and blending stocks Petroleum Heartcut distillate oil Mineral oil Penetrating oil Spindle oil Turbine oil**

**1 Jet fuels JP – 1 (kerosene) JP – 3 JP – 4 JP – 5 (kerosene, heavy) Turbo fuel Kerosene Mineral spirit**

The term "Noxious liquid substances in bulk" in MARPOL Annex 11 falls into four categories, graded A to D, with A being the most severe and D the least: 39 Category A justified the application of stringent anti-pollution measures, Category B justified the application of special anti-pollution measures, Category C required special 38 Citation taken from MARPOL CONSOLIDATED EDITION 2006 Articles, Protocols, Annexes, Unified Interpretations of the International Convention for the Prevention of Pollution from Ships, 1978, as modified by the Protocol of 1978 relating thereto, International Maritime Organization (IMO), London, 2006. 39 <http://www.imo.org>, 27Jan.2009, 9am. operational conditions, and category D required

some attention in operational conditions as follows: Category A 40 - Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a major hazard to either marine resources or human health or cause serious harm to amenities or other legitimate uses of the sea and therefore justify the application of stringent anti-pollution measures. Examples are acetone cyanohydrins, carbon disulphide, cresols, naphthalene and tetraethyl lead. Category B 41 – Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify the application of special anti-pollution measures. Examples are acrylonitrile, carbon tetrachloride, ethylene dichloride and phenol. Category C 42 – Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a minor hazard to either marine resources or human health or cause minor harm to amenities or other legitimate uses of the sea and therefore require special operational conditions. Examples are benzene, styrene, toluene and xylene. 40 Ibid. 41 Ibid. 42 <http://www.imo.org>, 27 Jan. 2009, 9am.. Category D 43 – Noxious liquid substances which if discharged into the sea from tank cleaning or deballasting operations would present a recognizable hazard to either marine resources or human health or cause minimal harm to amenities or other legitimate uses of the sea and therefore require some attention in operational conditions. Examples are acetone, phosphoric acid and tallow. The Annex also listed other liquid substances which are not included in Categories A, B, C, and D. Examples are coconut oil, ethyl alcohol, molasses, olive oil and wine. 44 There are four new revised category systems, X, Y, Z and OS (other substances) for noxious liquid substances in MARPOL Annex 11. The revised version

**2 was adopted in October 2004 and entered into force on 1st January 2007.**

Unlike categories **A,**

B, C and D, the new categories X, Y, Z and OS deal with total prohibition to partial and freedom to discharge as follows: 45 Category X: 46 Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into marine environment; 43 Ibid. 44 Ibid. 45 Ibid. 46 <http://www.imo.org>, 27 Jan. 2009, 9am.. 97 Category Y: 47 Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment; Category Z: 48 Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment; and Other Substances: 49 substances indicated as OS (other substances) in the pollution category column of chapter 18 of the International Bulk Chemical Code which have been evaluated and found to fall outside Category X, Y or Z as defined in regulation 6.1 of this Annex because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning or deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing only substances referred to as "Other Substances" shall not be subject to any requirements of MARPOL Annex II. 47 Ibid. 48 Ibid. 49 Ibid.

**2 Alongside the revision of Annex II, the marine pollution hazards of thousands of chemicals have been evaluated by the Evaluation of Hazardous Substances Working Group, giving a resultant Hazard Profile which indexes the substance according to its bio-accumulation; bio-degradation; acute toxicity; long-term health effects; and effects on marine wildlife and on benthic habitats.**

50 3.3.1.3 The 2000 OPRC-HNS Protocol, the term "HNS" means any substances other than oil which, if introduced into the marine environment is likely 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. HNS are further defined by reference to Annex 2 of MARPOL 73/78, the International Maritime Dangerous Goods (IMDG) Code and various other Codes of Practice, such as the International Bulk Chemical Code (IBC Code) and the Code of Safe Practice for Solid Bulk Cargoes (BC Code). HNS include liquid substances defined as noxious or dangerous; liquefied gases; liquid substances with a flashpoint not exceeding  $\geq 60$  C; dangerous, hazardous and harmful materials and substances carried in packaged form; and solid bulk materials defined as possessing chemical hazards. 3.3.1.4 Chapter 17 of The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 1983 as amended refers to the dangerous liquid substances carried in bulk and the dangerous products for which the preliminary suitable conditions for the carriage have been prescribed by the Administration and port administrations involved in accordance with paragraph 1.1.3 of the Code. 50 Ibid. Below are the examples of dangerous liquid substances listed in chapter 17 but the list is not exhaustive: ? Acetic acid ? Acetic anhydride ? Acetone cyanohydrins ? Acetonitrile ? Acrylic acid ? Acrylonitrile ? Acrylonitrile-Styrene copolymer dispersion in polyether polyol ? Adiponitrile ? Alachlor technical (90% or more) ? Alcohol (C9 – C11) poly (2.5 - 9) ethoxylate ? Alcohol (C6 – C17) (secondary) poly (3 – 6) ethoxylate ? Alcohol (C6 – C17) (secondary) poly (7 – 12) ethoxylate ? Alcohol (C12 – C16) poly (1 – 6) ethoxylate ? Alcohol (C12 – C16) poly (20+) ethoxylate ? Alcohol (C12 – C16) poly (7 – 19) ethoxylate ? Alcohols (13+) ? Alkyl (C8 – C9) phenyl propoxylate ? Alkyl (C8 – C10) polyglucoside solution (65% or less) ? Allyl alcohol ? Allyl chloride ? Aluminium sulphate solution ? Aminoethyl ethanolamine ? Benzyl acetate ? Benzyl alcohol ? Alkanes (C6 – C9) ? Iso- and cylo – alkanes (C10 – C11) ? Iso- and cylo – alkanes (C12+) ? n-alkanes (C10+) ? Alkylated (C4 – C9) hindered phenols ? Alkylated, alkylindane, alkylindene mixture (each C12 – C17) ? Alkyl (C5 – C8) benzenes ? Alkyl (C9+) benzenes ? Alkyl (C12+) dimethylamine ? Alkyl dithiocarbamate (C19 – C35) ? Alkyldithiothiadiazole (C6 – C24) ? Alkyl ester copolymer (C4 – C20) ? Alkyl (C8 – C10) / (C12 – C14) : (60 % less / 40% or more) polyglucoside solution (55% or less) ? Alkyl (C8 – C40) ? Alkyl (C8 – C9) phenylamine in aromatic solvents ? Alkyl (C12 – C14) polyglucoside solution (55% or less) ? Aniline ? Ammonium sulphate solution ? Amyl acetate (all isomers) ? n-Amyl alcohol ? Amyl alcohol primary ? sec-Amyl alcohol ? Butyl acetate (all isomers) ? Butyl acrylate (all isomers) 3.3.1.5 The International Maritime Dangerous Goods Code (IMDG Code) "HNS"

**1 means any substances, materials and articles carried on board a ship as cargo, referred to**

**1 dangerous, hazardous and harmful substances, materials and articles in packaged form covered by the International Maritime Dangerous Goods Code, as amended.**

51 For the purposes of this Code, it has been necessary to classify dangerous goods in different classes and the classification shall be made by the shipper/ consignor or by the appropriate competent authority where specified in this Code; Class 1: Explosives (for example is Trinitrotoluene), Class 2: Gases (for example is Acetylene), Class 3: Flammable liquids (for example is Ethyl alcohol), Class 4: Flammable liquids (for example is Calcium carbide), Class 5: Oxidizing substances and organic peroxides (for example is Sodium Chlorate), Class 6: Toxic and infectious substances (for example is Sodium cyanide), Class 7: Radioactive material (for example is Radium), Class 8 Corrosive substances (for example is Caustic Soda), Class 9: Miscellaneous dangerous substances and articles (for example is Polychlorinated biphenyls) 52 . The following segregation groups are identified and examples below are not exhausted: 53 TABLE OF IMDG SUBSTANCES 1. Acids 1052 Hydrogen fluoride, anhydrous 1182 Ethyl chloroformate 1183 Ethyldichlorosilane 1238 Methyl chloroformate 1242 Methylchlorosilane 1250 Methyltrichlorosilane 1295

Trichlorosilane 1298 Trimethylchlorosilane 1305 Vinytrichlorosilane 51 Ibid. 52 International Maritime Organisation, International Maritime Dangerous Goods Code Volume 1, 2006, UK: Polestar Wheatons Ltd, at 35. 53 Id, at 6. 2. Ammonium compounds 0004 Ammonium picrate dry or wetted with less than 10% water, by mass 0222 Ammonium nitrate, with more than 0.2% combustible substances 0402 Ammonium perchlorate 1310 Ammonium picrate, wetted with not less than 10% water, by mass 1439 Ammonium dicromate 1442 Ammonium perchlorate 1444 Ammonium persulphate 1512 Zinc ammonium nitrite 1546 Ammonium arsenate 1630 Mercury ammonium chloride 3. Bromates 1450 Bromates, inorganic, n.o.s. 1473 Magnesium bromate 1484 Potassium bromate 1494 Sodium bromate 2469 Zinc bromate 2719 Barium bromate 3213 Sonium bromated 4. Chlorates 1445 Barium chlorate, solid 1452 Calcium chlorate 1458 Chlorate and borate mixture 1459 Chlorate and magnesium chlorate mixture, solid 1461 Chlorates, inorganic, n.o.s. 1485 Potassium chlorate 1495 Sodium chlorate 1506 Strontium chlorate 1513 Zinc chlorate 2427 Potassium chlorate, aqueous solution 5. Chlorites 1453 Calcium chlorite 1462 Chlorites, inorganic, n.o.s. 1496 Sodium chlorite 1908 Chlorite solution 6. Cyanides 1541 Acetone cyanhydrin, stabilized 1565 Barium cyanide 1575 Calcium cyanide 1587 Copper cyanide 1588 Cyanides, inorganic, solid, n.o.s. 1620 Lead cyanide 1626 Mercuric potassium cyanide 1636 Mercury cyanide 1642 Potassium cuprocyanide 1653 Potassium cyanide, solid 7. Heavy metals and their salts (including their organometallic compounds) 0129 Lead azide, wetted with not less than 20% water, or mixture of alcohol and water, by mass 0135 Mercury fulminate, wetted with not less than 20% water, or mixture of alcohol and water, by mass 1347 Silver picrate, wetted with not less than 30% water, by mass 1366 Diethylzinc 1370 Dimethylzinc 1389 Alkali metal amalgam, liquid 1392 Alkaline earth metal amalgam, liquid 1435 Zinc ashes 1436 Zinc dust or zinc powder 1469 Lead nitrate 1470 Lead perchlorate 8. Hypochlorites 1471 Lithium hypochlorite 1748 Calcium hypochlorite mixture 1791 Hypochlorite solution 2208 Calcium hypochlorite mixture, dry with > 10% but with not less than 39% available chlorine 2741 Barium hypochlorite with > 22% available chlorine 2880 Calcium hypochlorite, hydrated or calcium hypochlorite, hydrated mixture with not less than 5.5% but not more than 16% water 3212 Hypochlorites, inorganic, n.o.s. 3255 tert-Butyl hypochlorite 9. Lead and its compounds 0129 Lead azide, wetted with not less than 20% water, or mixture of alcohol and water, by mass 0130 Lead styphnate, wetted with not less than 20% water, or mixture of alcohol and water, by mass 1469 Lead nitrate 1470 Lead perchlorate, solid 1616 Lead acetate 1617 Lead arsenates 1618 Lead arsenites 1620 Lead cyanide 1649 Motor fuel anti-knock mixture 1794 Lead sulphate with more than 3% free acid 10. Liquid halogenated hydrocarbons 1099 Allyl bromide 1100 Allyl chloride 1107 Amyl chloride 1126 1-Bromobutane 1127 Chlorobutanes 1134 Chlorobenzene 1150 1,2-Dichloroethylene 1152 Dichloropentanes 1184 Ethylene dichloride 1278 Propyl chloride 12. Mercury and mercury compounds 0135 Mercury fulminate, wetted with not less than 20% water 1389 Alkali metal amalgam, liquid 1392 Alkaline earth metal amalgam, liquid 1623 Mercuric arsenate 1624 Mercuric chloride 1625 Mercuric nitrate 1626 Mercuric potassium cyanide 1627 Mercurous nitrate 1629 Mercury acetate 1630 Mercury ammonium chloride 13. Nitrites and their mixtures 1487 Potassium nitrate and sodium nitrite mixtures 1488 Potassium nitrite 1500 Sodium nitrite 1512 Zinc ammonium nitrite 2627 Nitrites, inorganic, n.o.s. 2726 Nickel nitrite 3219 Nitrites, inorganic, aqueous solution n.o.s. 14. Perchlorates 1442 Ammonium perchlorate 1447 Barium perchlorate, solid 1455 Calcium perchlorate 1470 Lead perchlorate, solid 1475 Magnesium perchlorate 1481 Perchlorates, inorganic, n.o.s. 1489 Potassium perchlorate 1502 Sodium perchlorate 1508 Strontium perchlorate 3211 Perchlorates, inorganic, aqueous solution n.o.s. 15. Permanganates 1448 Barium permanganate 1456 Calcium permanganate 1482 Permanganates, inorganic, n.o.s. 1490 Potassium permanganate 1503 Sodium permanganate 1515 Zinc permanganate 3214 Permanganates, inorganic, aqueous solution n.o.s. 16. Powdered metals 1309 Aluminium powder, coated 1326 Hafnium powder, wetted with not less than 25% water 1352 Titanium powder, wetted with not less than 25% water 1358 Zirconium powder, wetted with not less than 25% water 1383 Pyrophoric alloy or metal, n.o.s. 1396 Aluminium powder, uncoated 1398 Aluminium silicon powder, uncoated 1418 Magnesium powder 1435 Zinc ashes 1436 Zinc dust or zinc powder 17. Peroxides 1449 Barium peroxide 1457 Calcium peroxide 1472 Lithium peroxide 1476 Magnesium peroxide 1483 Peroxides, inorganic, n.o.s. 1491 Potassium peroxide 1504 Sodium peroxide 1509 Strontium peroxide 1516 Zinc peroxide 2014 Hydrogen peroxide, aqueous solution, 20 – 60% 18. Azides 0129 Lead azide, wetted 0224 Barium azide, dry 1571 Barium azide, wetted 1687 Sodium azide 19. Alkalis 1005 Ammonia, anhydrous 1160 Dimethylamine, aqueous solution 1163 Dimethylhydrazine, unsymmetrical 1235 Methylamine, aqueous solution 1244 Methylhydrazine 1813 Potassium hydroxide, solid



1814 Potassium hydroxide, solution 1823 Sodium hydroxide, solid 1824 Sodium hydroxide, solution 1825 Sodium monoxide

3.3.1.6 Chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1983, as amended, HNS refers to liquefied gases listed therein and it prescribes preliminary suitable conditions for their carriage by the Administration and port administrations involved in accordance with paragraph 1.1.6 of the Code: Table of the name of product under International Code for the Construction and Product Name Equipment of Ships Carrying Liquefied Gases in Bulk 1983 Acetaldehyde Ammonia, anhydrous Butadiene Butane Butane-propane mixture Butylenes Chlorine Diethyl ether\* 54 Dimethylamine Ethane Ethyl chloride Ethylene Ethylene oxide Isoprene Isopropylamine Methane (LNG) Methyl bromide Ethyl bromide Monoethylamine\* Nitrogen Pentanes (all isomers)\* Pentene (all isomers)\* Propane Propylene Propylene oxide\* Refrigerant gases (see notes) Sulphur dioxide Vinyl chloride Vinyl ethyl ether\* Vinylidene chloride\* 3.3.1.7 The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, "Waste" means substances or objects which are disposed of or are intended to be disposed of by the provisions of national law, nevertheless "wastes" that are excluded from the Basel Convention are radioactive wastes and waste derived from normal operations of a ship. The 54 \*This cargo is also covered by the IBC Code. issue of overlap between the 1996 HNS Convention and any liability and compensation regime under Article 12 55 of the Basel Convention is addressed under Category Three below. Below are the categories of Wastes to be controlled under Annex I of the 1989 Basel Convention: 56 Waste Streams- Y1 Clinical wastes from medical care in hospitals, medical centers and clinics Y2 Wastes from the production and preparation of pharmaceutical products Y3 Waste pharmaceuticals, drugs and medicines Y4 Wastes from production, formulation and use of biocides and phytopharmaceuticals Y5 Wastes from the manufacture, formulation and use of wood preserving chemicals Y6 Wastes from the production, formulation and use of organic solvents Y7 Wastes from heat treatment and tempering operations containing cyanides Y8 Waste mineral oils unfit for their originally intended use Y9 Waste oils/water, hydrocarbons/water mixtures, emulsions Y10 Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCTs) and/ or polybrominated biphenyls (PBBs) Y11 Waste residues arising from refining, distillation and any pyrolytic treatment Y12 Wastes from production formulation and use of inks, dyes pigments, paints, lacquers, varnish Y13 Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives Waste chemical substances arising from research and development or teaching Y14 activities which are not identified and/or are new and whose effects on man and/or the environment are not known Y15 Wastes of an explosive nature not subject to other legislation Y16 Wastes from production, formulation and use of photographic chemicals and processing materials Y17 Wastes resulting from surface treatment of metals and plastics Y18 Residues arising from industrial waste disposal operations 55 Article 12 of 1989 Basel Convention- Consultations On Liability- The Parties shall co-operate with a view to adopting, as soon as practicable, a protocol setting out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes and other wastes. 56 <http://www.basel.int/techmatters/index.html> 19 September 2010, 10.45 am. Wastes having as constituents but the list are not exhaustive: 57 Y19 Metal carbonyls Y20 Beryllium; beryllium compounds Y21 Hexavalent chromium compounds Y22 Copper compounds Y23 Zinc compounds Y24 Arsenic; arsenic compounds Y25 Selenium; selenium compounds Y26 Cadmium; cadmium compounds Y27 Antimony; antimony compounds Y28 Tellurium; tellurium compounds 3.3.1.8 The 1998 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (The 1998 Rotterdam Convention) The 1998 Rotterdam Convention entered into force on the 24 February 2004. 58 The objective of agreement is to promote shared responsibility and cooperative efforts among parties in the international trade of certain hazardous chemicals in order to protect human health and environment from potential harm and to contribute to their environmentally sound use, by facilitating information exchange about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to parties. 59 Toxic pesticides and other hazardous chemicals kill or make seriously ill thousands of people every year. 60 They also poison the natural environment and damage many wild animal species. 61 Governments started to address this problem in the 1980s by establishing a voluntary Prior Informed Consent procedure (PIC). 62 PIC required exporters 57 <http://www.basel.int/techmatters/index.html> 19 September 2010, 10.45 am. 58 <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treaties> 19 September 2010, 10.45 am. 59 Ibid. 60 Ibid. 61 Ibid. 62 Ibid.

trading in a list of hazardous substances to obtain the prior informed consent of importers before proceeding with the trade. 63 In 1998, governments decided to strengthen the procedure by adopting the Rotterdam Convention, which makes PIC legally binding. 64 The Convention establishes a first line of defence by giving importing countries the tools and information they need to identify potential hazards and exclude chemicals they cannot manage safely. 65 If a country agrees to import chemicals, the Convention promotes their safe use through labelling standards, technical assistance, and other forms of support. 66 It also ensures that exporters comply with the requirements. 67 There are 39 chemicals listed in Annex III of the Convention and subject to the Prior Informed Consent procedure, including 24 pesticides, 4 severely hazardous pesticide formulations and 11 industrial chemicals. Examples of the chemicals are monocrotophos and methamidophos. 68 Many more chemicals are expected to be added in the future. Main provisions of the Convention: 69 a) establishes the principle that export of a chemical covered by the Convention can only take place with the prior informed consent of the importing party. b) establishes a Prior Informed Consent procedure, a means for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive future shipments of specified chemicals and for ensuring compliance with these decisions by exporting countries. c) contain provisions for the exchange of information among parties about potentially hazardous chemicals that may be exported and imported. 63 Ibid. 64 Ibid. 65 Ibid. 66 Ibid. 67 Ibid. 68 Experience on Implementation of the Rotterdam Convention: Malaysia <http://www.fao.org> , 25 August 2010, 2 pm. 69 <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treaties> 19 September 2010, 10.45 am. d) cover pesticide and industrial chemicals that have been banned or severely restricted for health or environmental reasons by parties and which have been notified by parties for inclusion in the PIC procedure. e) one notification from each of two specified regions triggers consideration of addition of a chemical to the list of products subject to the PIC procedure, these regions being determined by the Conference of Parties at its first meeting. f) Severely hazardous pesticides formulations that present a hazard under conditions of use in developing countries or countries with economies in transition may also be nominated for the PIC procedure. In conclusion, it could be said that Rickaby's broad definition of 'Hazardous and Noxious Substances' as those substances that due to their intrinsic properties may, if released, endanger human life, the environment or property is suitable for this thesis too. 70 This would cover HNS in the 1996 HNS Convention and includes but are not limited to: 71 Noxious liquid substances described in Annex 2 of MARPOL 73/78 and the IBC Code, Dangerous goods, described in the IMDG Code, Solid Cargoes covered by the BC Code and 'HNS for the purpose of the 2000 OPRC-HNS Protocol. 72 3.4 CATEGORY ONE: LIABILITY AND COMPENSATION CONVENTIONS 70 Rickaby, Simon, "Marine responses to HNS and dealing with the MSC Napoli contaminated cargo" 15 January 2010. <http://www.spillcontrol.org?IMO Documents/Braemar Howell HNS paper Nov 2008> , 15 June 2010, 11.45 am. 71 Ibid. 72 Ibid. 3.4.1. The International Convention On Liability And Compensation For Damage In Connection With The Carriage Of Hazardous And Noxious Substances By Sea, 1996 After the Torrey Canyon disaster in 1967 whereby more than (thirty one) 31 million gallons of crude oil were dumped into the English Channel by the super tanker, the IMO developed a liability and compensation regime on oil pollution (the 1992 CLC and the 1992 Fund Convention) and at the same time acknowledged, besides oil pollution, pollution caused by hazardous and noxious substances. An examination of the background to the carriage of chemical substances by sea reveals that many difficulties and complexities were posed compared to oil transportation, namely: 73 a) the hazardous and noxious substances (HNS) comprise an extremely wide range of chemicals and substances with varying degrees of toxicity and risks to the marine environment. The International Oil Pollution Compensation Fund estimated that more than 6,500 items fell in the category of HNS; b) the differing types and sizes of ships that carried HNS also posed difficulties for the uniform imposition of compulsory insurance requirements and; c) for the different types of HNS cargoes that were received in port by different receiving parties, it was extremely difficult to devise any compensation system which could effectively levy contributions from the cargo interests. 73 Alan Khee-Jin Tan (2006), *Vessel Source Marine Pollution*, Cambridge University Press, at 335. In the meantime, HNS matters would have to be left to general principles of domestic tort law. 74 The absence of important concepts of compulsory insurance and strict liability revealed the inadequacies of domestic tort law in handling this matter. 75 Consensus and compromise had been reached at the Conference of International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (the 1996 HNS) which follows the two-tier system and is similar to the 1992 International Convention on

Civil Liability for Oil Pollution Damage 76 and the 1992 International Convention on the Establishment of an International Fund for Compensation For Oil Pollution Damage. In the two-tier system of compensation, the first tier is provided by the ship owner through strict liability by using insurance cover or other financial security and the second tier is the compensation above the ship owner's liability which is provided by the HNS Fund. 77 An examination of the Preparatory work of the HNS International Conference (HNSC), shows that the decision taken at the seventy-first session of the Legal Committee of the Diplomatic Conference of the 1996 HNS Convention agreed to define HNS by reference to various lists contained in other conventions (for example extracted from MARPOL 73/78 or IMDG Code and others). 78 The International Union for the Conservation of Nature and Natural Resources (IUCN) believed that a free-standing list would have the added advantage of being a quick and easy reference point for those 74 Ibid. 75 Ibid. 76 Although the 1996 HNS Convention is modeled on the 1992 CLC and 1992 FUND Convention, there are differences between HNS Convention and CLC & FUND Convention; among the important differences CLC and FUND Convention cover pollution damage caused by spills of persistent oil from tankers while HNS Convention covers pollution damage by HNS and damage caused by other risks. 77 All HNS ships must carry the 'Blue Card' in order to ensure that the ship-owner would satisfy the system of compulsory insurance and this certificate to be issued by the state or the appropriate authority of any State party to the convention. 78 Submission by the International Chamber of Shipping, LEG/CONF.10/6(a)/6, 6 February 1996. (including masters, cargo handlers and lawyers) who wanted to know which substances were covered by the Convention. 79 The free-standing list of HNS would solve the problem of non-ratification of the related conventions. The substances covered by the convention are hazardous and noxious that should be included on the basis of strict liability. The 1996 HNS Convention has excluded coal and wood chip from the list of HNS. During the preparatory work, delegations from Japan and Korea submitted that these low-hazard substances (coal and wood chip) have little detrimental effect on the marine environment and this was proven because there have been no reported cases of maritime pollution caused by coal for the past 25 years. 80 Furthermore, according to the delegations, the coverage of large volume and low-hazard substances in the Convention would seriously jeopardize the fair and equitable mechanism of the Convention. Though the 1996 HNS Convention excluded fishmeal from the list of HNS substances, it was included in the final list of HNS substances in the International Maritime Dangerous Goods (IMDG) Code and the Code of Safe Practice for Solid Bulk Chemicals (BC Code). The delegation from Peru submitted at the preparatory work that although fishmeal was included in the list of HNS, it was not toxic to the marine environment. 81 Furthermore, one of the four (4) resolutions contained in the attachment of the Final Act of the 1996 HNS Convention is the resolution on the treatment of fishmeal in the IMDG and the BC Codes. The Conference was requested to take note of this statement, and the HNS Fund when set up was to give due consideration to the fact that fishmeal, when suitably treated and accompanied by the necessary certificate, 79 Submission by the International Union for the Conservation of Nature and Natural Resources, LEG/CONF.10/6(a)/12, 26 February 1996. 80 Submission by Japan, LEG/CONF.10/6 (a)/7 6 February 1996, submission by Korea, LEG/CONF.10/6 (a) 7 March 1996. These countries submitted while drafting the HNSC to exclude coal as HNS. 81 Submission by Peru, LEG/CONF.10/6(a)/31 12 April 1996. should not be included in the itemized lists of substances covered by the HNS convention. 82 The question of small ships was previously discussed at the conference in order to ensure justice and fairness be granted to small ships below a certain size and to exempt the said ships from compulsory insurance. 83 The delegations from the Republic of Korea asserted that there must be relief for very small ships from the requirement of compulsory insurance in the light of the situation envisaged. 84 The delegations from the Baltic and the International Maritime Council submitted that: a) the principle of sharing the responsibility for compensation of victims in HNS incidents between ship and cargo must be maintained and; b) the liability of the ship owner for pollution damage is strictly subject to very limited exemption (for example the vessel's size which carry HNS cargo). 85 Finally, the IMO successfully adopted the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, in May, 1996 (the 1996 HNS Convention). One commentator asserts that, "Charterers and receivers will pay more, ports and terminals face new liabilities, ship owners will need new insurance and documentation, P&I Clubs must set up new guarantees, authorities around the world will have more requirements to police and in 82 Ibid. 83 Submission by the Republic of Korea, LEG/conf.10/6(a)/17,7 March 1996. 84 Ibid. 85 Submission by the Baltic and International Maritime Council, LEG/CONF.10/6(a)/26, 4 April 1996. 114 any

accident to almost any ship, claimants for environmental damage will have new legal remedies to pursue". 86 The 1996 HNS Convention was adopted on 3 May 1996. The convention contains fifty four (54) Articles in six (6) Chapters with two (2) Annexes. 87 The 1996 HNS Convention will enter into force 18 months after the date on which at least 12 States, including four States each with not less than 2 million units of gross tonnage, have expressed their consent to be bound by it, and the Secretary-General has received information in accordance with Article 43 88 that those persons in such States who would be liable to contribute pursuant to Article 18 89 , paragraph 1(a) and (c), have received during the preceding calendar year a total quantity of at least 40 million tonnes of cargo contributing to the general account. 90 86 Issues stated in c, d and e are from McKinley, Derek. The 1996 International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea: Implications for State Parties, the Shipping, Cargo and Insurance Industries, (Diss.LLM, University of Cape Town, South Africa, 2005), at 13. 87 Chapter 1 consists of Articles 1- 6 under the heading of General Provisions, Chapter II consists of Articles 7-12 on liability, Chapter III consists of Articles 13-36 on Compensation By The International Hazardous And Noxious Substances Fund (HNS Fund), Chapter IV consists of Articles 37-42 on Claims And Action, Chapter V consists of Articles 43-44 on Transitional Provisions, Chapter VI consists of Articles 45-54 on Final Clause and finally Annex 1 deals with the Certificate Of Insurance Or Other Financial Security In Respect Of Liability For Damage Caused By Hazardous And Noxious Substances (HNS), and Annex II deals with Regulations For The Calculation Of Annual Contributions To The General Account. 88 Article 43 of 1996 HNS Convention;

**1 When depositing an instrument referred to in article 45, paragraph 3, and annually thereafter until this Convention enters into force for a State, that State shall submit to the Secretary General data on the relevant quantities of contributing cargo received or, in the case of LNG, discharged in that State during the preceding calendar year in respect of the general account and each separate account. 89 Article 18 of the**

1996 HNS Convention; 1. Subject to article 16, paragraph 5, annual contributions to the general account shall be made in respect of each State Party by any person who was the receiver in that State in the preceding calendar year, or such other year as the Assembly may decide, of aggregate quantities exceeding 20,000 tonnes of contributing cargo, other than substances referred to in article 19, paragraph 1, which fall within the following sectors: (a) Solid bulk materials referred to in article 1, paragraph 5 (a)(vii); (b) Substances referred to in paragraph 2; and (c) Other substances. 2. Annual contributions shall also be payable to the general account by persons who would have been liable to pay contributions to a separate account in accordance with Article 19, paragraph 1 had its operation not been postponed or suspended under Article 19. Each separate account the operation of which has been postponed or suspended under article 19 shall form a separate sector within the general account. 90 Article 46 of 1996 HNS Convention. In a report prepared by the United Kingdom to assist governments in joining the 1996 HNS Convention, the catastrophic HNS incidents that occurred between 1995 and 2002 were described as follows: 91 i) San Antonia spilled 30,000 tonnes of benzene during cargo operations at Melbourne, Australia on 15 th January 1995. ii) Stolt Spain lost 32 tonnes of styrene monomer after the vessel hit an object underwater and polluted the waters of the port outside Isle of Vaddo, Sweden on 18 th February 1995. iii) Kira lost cargo of 7000 tonnes of phosphoric acid when the tanker sank in rough weather at Peloponnisos, Greece on 12 th February 1996. iv) Allegra collided with a cargo ship during fog and 800-900 tonnes of palm oil leaked off the Devon Coast, English Channel on 1 st October 1997. v) Martina ran hard aground and 280 tonnes of hydrochloric acid and other chemicals were transhipped at Koster Fjord, Denmark on 13 th November 1998. vi) Hikari II collided with a dredger off Sequence Bay, Singapore. It was reported that the vessel carried 500 tonnes of phenol and that approximately 230 tonnes of phenol were spilt at the area. Swimming and fishing in the area were banned until the spill diluted naturally on 4 th August 2000 vii) Agamemnon carrying 2000 tonnes of containerized ammonium nitrate sank during loading operations at Rayong, Thailand. The cargo of

HNS lost caused mass fish death in the area on 1 st January 2001. viii) Eiwa Maru sank with 500 tons of Xylene after it collided with a container ship in Japan in October 2002. 92 : 91 International Maritime Organisation, Legal Committee, 85 th session, Agenda item 5, Monitoring Implementation Of The Hazardous And Noxious Substances Convention, (London: International Maritime Organisation, 2002). ix) Cape Horn's tank exploded with 1500 tonnes in Set Top Box (Stb) tank and the ship was carrying 14,000 tonnes of Methanol. It was reported that nine (9) crews members were injured on the ship and on the tug in Italy in 2003. x) Sue Elegance which was carrying 2 Twenty-foot Equivalent Unit (TEUs) of 15 tonnes each of Calcium Hypochlorite and Herbicide "Atrazine." It was reported that the heat to Calcium chloride (CaHCL) caused it to explode which set fire to the herbicide. The incident happened at Durban in 2003; xi) MSC Napoli the worlds' largest container vessel was hit by five (5) heavy waves causing the engine room to flood and master and crews abandoned the ship: boxes of HNS were rescued from the ship and brought ashore since the incident on 19 January till end of November 2007. The HNS convention has not entered into force because there is not enough support amongst the flag States. This lack of support is probably due to the lack of a common interest among ship owners registered with those flag States that would lead them to take financial responsibility for damage caused by HNS cargoes. 93 The ship owners are typically not HNS cargo owners and therefore they are not inclined to carry primary responsibility for the HNS cargo. 94 In contrast, oil cargo owners are also tanker ship owners and so they have the same interests in simplifying litigation and limiting their liability. 95 92 Rickaby, Simon, "Marine responses to HNS and dealing with the MSC Napoli contaminated cargo" 15 January 2010, <http://www.spillcontrol.org/IMO Documents/Braemar Howells HNS PAPER nOV 2008> , 15 June 2010, 11.45am. 93 Email interview with Prof John Ross, Australian National Centre for Ocean Resources & Security, University of Wollongong, Australia on 21 st July 2010. 94 Ibid. 95 Ibid. The following States have ratified the 1996 HNS Convention: 96 RATIFICATIONS STATES WITH FLEET >2MILL GT TONS OF GENERAL ACCOUNT OF CARGO RECEIVED ANNUALLY (CA.) Angola ? Cyprus X ? Ethiopia ? Hungary ? Liberia X ? Lithuania ? Morocco ? Russian Federation X ? Saint Kitts and Nevis ? Samoa ? Sierra Leone ? Slovenia 120,000 Syrian Arab Republic ? Tonga ? 14 3 120,000 Required:>12 states Required:>4 states Required:>40 mill tonnes in total Based on the table on the 1996 HNS Convention, fourteen (14) States have ratified with three (3) states with fleet > 2 million GT and 120,000 tons of general account cargo received annually. For the Convention to enter into force, it requires one more State with fleet >2mill GT to be party to it. From this Table, it is clear that the strait States of Malaysia, Indonesia and Singapore have not ratified the 1996 HNS Convention. 3.4.1.1 Objectives of the 1996 HNS Convention The 1996 HNS Convention anticipates the

**1 dangers posed by the world-wide carriage by sea of HNS and**

seeks to ensure that adequate, prompt and effective 96 <http://folk.uio.no/erikro/WWW/HNS/hns.html> 26 March 2010, 11am.

**1 compensation is available to persons 97 who suffer damage caused by the maritime carriage of**

HNS. 98 It adopts

**1 uniform international rules and procedures for determining questions of liability and compensation in respect of such damage 99 and ensures that the economic consequences of damage caused by the carriage by sea of**

HNS is

**1 shared by the shipping industry and the cargo interests involved.**

100 Under Article 1 of the 1996 HNS Convention, damage means: a) loss of life or personal injury on board or outside the ship carrying the hazardous and noxious substances caused by those substances; b) loss of or damage to property outside the ship carrying the hazardous and noxious substances caused by those substances; c) loss or damage by contamination of the environment caused by the hazardous and noxious substances, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; and d) the costs of preventive measures and further loss or damage caused by preventive measures. 101

**1 Carriage by sea means the period from the time when**

**1 any part of the ship's equipment on loading to the time they cease to be present in any part of the ship's**

97 Article 1 of 1996 HNS Convention; person means any individual or partnership or any public or private body, whether corporate or not, including a State or any of its constituent subdivisions. 98 Establishing a guaranteed level of compensation for claims arising from HNS accidents up to 250 million Special Drawing Rights (SDR). Special Drawing Rights is the rights within the meaning of the Articles of Agreement of the International Monetary Fund. SDR 250m is about GBP 200 or USD\$ 303m. 99 Preamble of the 1996 HNS Convention. 100 Ibid. 101 Article 1 of 1996 HNS Convention. equipment, on discharge. 102 Contributing cargo means any hazardous and noxious substances which are carried by sea as cargo to a port or terminal in the territory of a State Party and discharged in that State. 103 Cargo in transit means that which is transferred directly, or through a port or terminal of original loading to the port or terminal of final destination and it shall be considered as contributing cargo only in respect of receipt at the final destination. Article 1 of the 1996 HNS Convention defines a ship as "any seagoing vessel and seaborne craft, of any type whatsoever". Persons are defined "as any individual or partnership or any public or private body, whether corporate or not, including a State or any of its constituent subdivisions". 104 Owner is defined as "the person or persons registered as the owner of the ship or, in the absence of registration, the person or persons owning the ship. However, in the case of a ship owned by a State and operated by a company which in that State is registered as the ship's operator, owner shall mean such company". 105 3.4.1.2 Scope of application of the 1996 HNS Convention The 1996 HNS Convention as stated in Article 3 (a) applies to any damage by contamination or otherwise caused in the territory, including the territorial sea of a State Party; Article 3(b) applies to damage by contamination of the environment caused in the exclusive economic zone of a State Party 106 , Article 3(c) applies to damage other than damage by contamination of the environment, caused outside the territory, including the territorial sea, of any State, if this damage has been caused by a substance carried on board a ship registered in a State Party or, in the case of 102 Art 1 of 1996 HNS Convention. 103 Ibid. 104 Ibid. 105 Ibid. 106 If a state has not established such a zone , in an area beyond and adjacent to the territorial sea of that State determined by that state in accordance with international law and extending not more than 200 nautical miles from the baselines from which the breadth of its territorial sea is measured. an unregistered ship, on board a

**1 ship entitled to fly the flag of a State Party and**

finally in Article 3 (d) the Convention covers costs of preventive measures, whenever taken. 107 According to the 1996 HNS Convention, the scope of claiming damage covers damage by contamination or otherwise

within the territory including territorial sea of a State party. The damage caused by contamination in the exclusive economic zone of a State party is also covered by convention. McKinley explained 108 that the convention will govern claims for pollution damage in the exclusive economic zone of a state party irrespective of whether the ship was registered in that State party. However, for other types of damage which occur in the exclusive economic zone, the convention will only cover ships registered in State party or entitled to fly the flag of a State party. Preventive measures 109 as defined in the convention mean "any reasonable measures taken by any person after an incident has occurred to prevent or minimize damage". The 1996 HNS Convention does not cover damage occurring during the maritime carriage of radioactive materials. 110 3.4.1.3 Liability of the 1996 HNS Convention Article 7 stipulates that the owner of the ship at the time of an incident shall be liable for damage caused by any hazardous and noxious substances in connection 107

**1 This Convention shall not apply to pollution damage as defined in the International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended, whether or not compensation is payable in respect of it under that Convention and to damage caused by a radioactive material of class 7 either in the International Maritime Dangerous Goods Code, as amended, or in appendix B of the Code**

Solid Bulk Cargoes, as amended. 108 McKinley, Derek, *The 1996 International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea: Implications for State Parties, the Shipping, Cargo and Insurance Industries*, (Diss. LLM, University of Cape Town, South Africa, 2005) at 20. 109 Article 1(7) of 1996 HNS Convention. 110 The compensation for nuclear damage (including damage of all forms of transport to and from a nuclear installation) is provided under the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy and the 1963 Vienna Convention on Civil Liability for Nuclear Damage. The 1996 HNS Convention has adopted a resolution on liability and compensation for damage occurring during the transport of radioactive materials which are contained in the Attachment of this Final Act.

**1 with their carriage by sea on board the ship.**

111 However, the owner may be exonerated from liability if the owner proves that the damage was wholly caused by an act or omission done with the intent to cause damage by a third party. 112 However, the owner of

**1 a ship shall be entitled to limit his liability under this convention:**

**1 a) 10 million units of account for a ship not exceeding 2,000 units of tonnage; and b) for a ship with a tonnage in excess thereof, the following amount in addition to that mentioned in (a): for each unit of tonnage from 2,001 to 50,000 units of tonnage, 1,500 units of account; for each unit of tonnage in excess of 50,000 units of tonnage, 360 units of account; provided, however, that this aggregate amount shall not in any event exceed 100 million units of account**

113 . A ship carrying hazardous and noxious substances shall be required to maintain insurance or other financial security in order to cover liability for damage under this convention. 114 3.4.1.4 Compulsory insurance of the 1996 HNS Convention 111 Article 7 of 1996 HNS Convention under Chapter II- Liability. 112 The liability of the owner of the ship will be exonerated

**1 if the owner proves that: a) the damage resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character; or b) the**

**1 damage was wholly caused by the negligence or other wrongful act of any Government or other authority responsible for the maintenance of lights or other navigational aids in the exercise of that function; or c) the failure of the shipper or any other person to furnish information concerning the hazardous and noxious nature of the substances shipped either i) has caused the damage, wholly or partly ; or ii) has led the owner not to obtain insurance in accordance with article 12; provided that neither the owner nor its servants or agents knew or ought reasonably to have known of the hazardous and noxious nature of the substances shipped.**

113 Article 9 of 1996 HNS Convention. 114 Article 12 of the 1996 HNS Convention, the

**1 compulsory insurance certificate shall be carried on board of the ship.**

122 Chapter II of the 1996 HNS Convention consists of Compulsory Insurance of the Owner and Chapter III consists of Compensation by the International Hazardous And Noxious Substances Fund. The owner of a ship registered in a State Party and actually carrying HNS shall be required to maintain insurance or other financial security (guarantee of a bank or similar financial institution). 115 This compulsory insurance certificate

**1 shall contain the following particulars: 116 a) name of the ship, distinctive number or letters and port of registry; b) name and principal place of business of the owner; c) IMO ship identification number; d) Type and duration of security; e) Name and principal place of business of insurer or other person giving security and, where appropriate, place of business where the insurance or security is established; and f) Period of validity of certificate, which shall not be longer than the period of validity of the insurance or other security. The compulsory insurance certificate shall be carried on board the**

**1 ship and a copy shall be deposited with the authorities who keep record of the ship's registry or, if ship is not registered in a State Party, with the**



**authority of the State issuing or**

115 Article 12 (1) of the 1996 HNS Convention. 116 Ibid. certifying the certificate. 117 Article 12 (8) states that

**1 any claim for compensation for damage may be brought directly against insurer or other person providing financial security for the owner's liability for damage.**

Article 13 stipulates that the aims of the HNS Fund are to provide compensation for damage in connection with the carriage of HNS by sea, to the extent that the protection afforded by Chapter II of the 1996 HNS Convention is inadequate or unavailable; and in order to consider claims made against the HNS Fund. The HNS Fund shall incur no obligation if: 118 a) it proves that the damage resulted from an act of war, hostilities, civil war or insurrection or was caused by HNS which had escaped or been discharged from a warship or other ship owned or operated by a State and used at the time of the incident, only on Government non-commercial service; or b) the claimant cannot prove that there is a reasonable probability that the damage resulted from an incident involving one or more ships. 3.4.1.5 Limitation of actions of the 1996 HNS Convention As to the

**1 limitation of actions, rights to compensation under Chapter II**

(liability of ship owner) and under Chapter III (HNS Fund) an action should be brought within three years from the date when the person suffering the damage knew or ought reasonably to have known of the damage. 119 No action should be brought later than 117 Article 12 (4) of the 1996 HNS Convention. 118 Article 13 (3) of the 1996 HNS Convention. 119 Article 37 of 1996 HNS Convention, right of compensation under Chapter II and Chapter III are

**1 within three years from the date when the person suffering the damage knew..**

**1 ten years from the date of the incident which caused the damage. 120 The side effect of**

HNS damage whether to persons or marine ecological system would sometimes appear later than three years. However as stated in Article 37 (4) where the incident consists of a series of occurrences, the 10 year period shall run from the date of the last of such occurrences. 3.4.1.6 Administration of the 1996 HNS Convention For the

**1 organization and administration of the HNS Fund, there is an Assembly and a Secretariat. The Assembly**

meets all State parties once a year and among the functions of the Assembly are to determine its own rules of procedure, to adopt the annual budget, to establish a Committee on Claims for Compensation and to review the implementation of this Convention. 3.4.1.7 Disadvantages of non-ratification of the 1996 HNS Convention by Malaysia: The disadvantages of non-ratification of the 1996 HNS Convention: 121 a) the

victims of pollution damage arising from incidents involving carriage of HNS by sea will not receive adequate, prompt and effective compensation; b) it will remain administratively and legally difficult to actually obtain compensation for costs incurred as a result of an HNS incident in Malaysian waters. This is because, even if the ship is identified, it will not be subject to strict liability that will be enforced by the Convention. 120 The rationale was to harmonize the time bars for claims against the ship owner and claims against the HNS Fund to facilitate distribution of the second tier fund, and also to reduce delays in the distribution of the second tier fund due to unknown, future claims. Submission by Norway, LEG/CONF.10/6 (a)/33, 17 April 1996. 121 Noor Apandi Osnin, Civil

### 1 **Liability For Damages Caused By Hazardous And Noxious Substances** The HNS

Convention, (Kuala Lumpur: MIMA, 2006) at 26. The HNS imported by Malaysia There are some main codes for importing substances corresponding to the 1996 HNS Convention as listed in appendices 1 and 11. The listed and coded imported goods are acquired from the Statistic Department of Malaysia. These imported goods are listed and coded conforming to the Malaysian Trade Classification and Custom Duties Order or The Custom Code Book. The lists of HNS substances are given in this chapter. However, some examples of the main codes for imported substances corresponding to the HNS Convention are given below. 122 NO. CODE(S) DESCRIPTION 1 1511 Palm Oil And Its Fractions, Whether or Not Refined, But Not Chemically Modified. 2 2705 Coal Gas, Water Gas, Producer Gas And Similar Gases, Other Than Petroleum Gases And Other Gaseous Hydrocarbons. 3 2707 Oils And Other Products Of The Distillation Of High Temperature Coal Tar; Similar Products In Which The Weight Of The Aromatic Constituents Exceeds That Of The Non-Aromatic Constituents. 4 2709 Petroleum Oils And Oils Obtained From Bituminous Minerals, Crude. 5 2711 Petroleum Gases And Other Gaseous Hydrocarbons. 6 2712 Petroleum Jelly; Paraffin Wax, Slack Wax, Ozokerite, Lignite Wax, Peat Wax, Other Mineral Waxes, And Similar Products Obtained By Synthesis Or By Other Processes, Whether Or Not Coloured. 7 2713 Petroleum Coke, Petroleum Bitumen And Other Residues Of Petroleum Oils Or Of Obtained From Bituminous Minerals. 8 2714 Bitumen And Asphalt, Natural; Bituminous Or Oil Shale And Tar Sands; Asphaltites And Asphaltic Rocks. 9 2715 Bituminous Mixtures Based On Natural Asphalt, On Natural Bitumen, On Petroleum Bitumen, On Mineral Tar Or On Mineral Tar Pitch (For Example, Bituminous Mastics, Cut-Backs) 10 2801 Fluorine, Chlorine, Bromine And Iodine. The status of the 1996 HNS Convention in Malaysia 123 : the 1996 HNS Convention has not been ratified in Malaysia, Indonesia and Singapore. Basically, these are the obligations that need to be fulfilled by a State Party to the 1996 HNS Convention: 124 a) issue or certify compulsory insurance certificate for ships under its flag; 122 Osnin, Noor Apandi, "Impact Of International Convention On Chemical Imports: Malaysia & HNS Convention", (2007) 4 The Malayan Law Journal Articles 185. 123 <http://www.imo.org/> 28 th January 2009, 4.00pm. 124 Osnin, Noor Apandi, loc. cit. b) accept a compulsory insurance certificate issued by other States Parties including those for ships not registered in a State Party; c) ensure that ships under its flag are not permitted to carry HNS without having compulsory insurance certificate; d) ensure that any ship carrying HNS within its territory has compulsory insurance cover; e) recognise the HNS Fund as a legal entity with its Director as the legal representative; f) submit reports on receipts of contributing cargo; g) exempt the HNS Fund from all direct taxation; h) authorise the transfer and payment of contributions and compensation without any restriction; i) ensure that the straits States courts have jurisdiction to entertain actions against the ship owner and his insurer; j) ensure that the straits States

### 1 **courts have jurisdiction to entertain actions against the HNS Fund;**

k) recognise and enforce judgements on HNS incidents and claims (for further discussion of points (a) to (b) under domestic laws, refer Chapter Five of this thesis). There are advantages and disadvantages if Malaysia ratifies and implements the 1996 HNS Convention into her domestic law. According to Nor Apandi, if Malaysia does not ratify the 1996 HNS Convention there will be no extra burden administratively or

financially, placed on Malaysian ship owners or receivers of 127 HNS cargoes. However by not ratifying the 1996 HNS Convention, there are some disadvantages: a) victims of pollution damage arising from HNS incidents by sea will not receive any compensation (for further discussion on liability and compensation under domestic laws, refer Chapter Five of this thesis); b) it will remain administratively and legally difficult to obtain compensation for costs incurred as a result of an HNS incident in Malaysian waters (the Straits of Malacca) (refer Chapter Two); c) the costs of responding to any incident occurring in or affecting Malaysian waters will fall solely on the Malaysian government and when the convention enters into force, Malaysian ship owners will have to look to other States for insurance certificates in order to trade with a State party; d) Malaysian ship owners will be subjected to increased financial liabilities and to a requirement to maintain insurance cover to meet their liabilities under the Convention; e) Malaysian industry receivers will be subject to levies for financial contributions to the HNS Fund (when operational), and the associated increased administrative burden to report receipts of HNS and f) There will be an immediate need to set up Malaysia's implementing legislation and reporting system. 125 If Malaysia ratifies the 1996 HNS Convention, Malaysia will benefit from the ratification in many ways; 125 Osnin, Noor Apani, "Impact Of International Convention On Chemical Imports: Malaysia & HNS Convention", (2007) 4 The Malayan Law Journal Articles 185. a) to mitigate the risk from thousands of ships carrying HNS in Malaysian waters (see Chapter Two) especially in the Straits of Malacca; b) the convention will ensure that the victims of damage arising from the HNS incident in Malaysian waters will receive prompt, adequate and effective compensation; c) the 1996 HNS Convention will remove legal obstacles that individual claimants experience in having to prove fault of damages against a ship owner through the application of strict liability of the ship owner. The ship owner is required to maintain a financial security; d) the 1996 HNS Convention will significantly increase the ship owner's liability for HNS damages and simplify compensation arrangements; e) the cost to receivers of the 1996 HNS Convention in financing the HNS Fund when in force will be spread globally through all the State parties; f) the industries that profit from the transport and use of HNS will also contribute towards any damages that may occur during its transportation, as to follow the concept of "Polluter Pays" principle; g) small businesses receiving quantities of HNS below the threshold will not have to contribute to the system but will enjoy the protection offered by the HNS Convention and h) small businesses in coastal locations stand to benefit, in terms of access to available compensation for damages incurred, in particular, the tourism and fishing industries, which will be financially protected in the event of damage arising from an incident involving the carriage on HNS by sea. 126 126 Osnin, Noor Apani, "Impact Of International Convention On Chemical Imports: Malaysia & HNS Convention", (2007) 4 The Malayan Law Journal Articles 185. Malaysia, Indonesia and Singapore have not ratified the 1996 HNS Convention. 127 3.4.2 THE 2010 HNS CONVENTION PROTOCOL 128 The IMO Legal Committee approved a Protocol to the HNS Convention in 2009 followed by the Protocol of 2010 to the 1996 HNS Convention, 129 (2010 HNS Protocol), designed to address the practical problems that have prevented many States from ratifying the original Convention. 130 Among the obstacles

**3 has been the requirement for States to report the quantities of HNS received to IMO,**

which has proved difficult,

**3 in part, due to the sheer range and diversity of hazardous and noxious substances that are governed by the HNS Convention. 131 The**

Protocol

**3 is set to address this problem as well as others thought to be acting as barriers to ratification of the Convention. 132 The IMO Council has endorsed**

**the**

Legal Committee's recommendation that a diplomatic conference be convened in April 2010 for the purpose of considering and adopting the Protocol. 133 There are three issues that have been addressed which have prevented the States from ratifying the 1996 HNS Convention 134 : a) The first problem recognised in the 1996 HNS Convention, is the difficulty

**3in setting up the reporting system for packaged goods. In the solution**

stated in the 127 Status of Convention as at 31 January 2010, <http://www.imo.org> 10.55 am. 128 International Conference On The Revision Of The HNS Convention, Provisional Agenda, Election of the President 1. Adoption of the agenda 2. Adoption of the Rules of Procedure 3. Election of the Vice-Presidents and other officers of the Conference 4. Appointment of the Credentials Committee 5. Organisation of the work of the Conference, including the establishment of other committees, as necessary 6. Consideration of : 1. A draft protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 2. Any draft Conference resolutions 7. Consideration of the reports of the committees 1. Credentials Committee 2. Other committees 8. Adoption of the Final Act and any instruments, recommendations and resolutions resulting from the work of the Conference 9. Signature of the Final Act, <http://www.imo.org/Conventions/> 26th March 2010, 11 am 129 The

**3Legal Committee of the IMO ,meeting for its 95 th session at IMO Headquarters in London has approved a draft Protocol to the 1996 HNS Convention.**

<http://www.imo.org> 9 April 2010, 5 pm. 130 HNS Convention <http://www.itopf.com/spill-compensation/hns-convention/> 26 th March 2010, 12.40pm. 131 Ibid. 132 Ibid. 133 Ibid. 134 <http://www.imo.org>, 9 April 2010, 5 pm. Protocol to this problem,

**3packaged goods have been excluded from the definition of contributing cargo, which means the receivers of these goods will not be liable for contributions to the HNS FUND. However the incidents involving packaged goods will remain eligible for compensation as the ship owners' limits of liability for incidents involving packaged HNS will be increased.**

b) **The**

second problem recognised in the 1996 HNS Convention is that the person liable for liquid natural gas carrier or liquefied natural gas carrier (LNG) contributions is the person who holds title to an LNG cargo immediately prior to its discharge. In the case of other accounts, the person liable is the receiver. The receiver must be subject to the jurisdiction of a State Party, the titleholder need not be. It would be impossible to enforce payment of contributions to the LNG account by titleholders in non-States Parties. In the solution stated in the Protocol to this problem, the receiver as defined in Article 1.4 of the Convention, will be liable for annual contributions to the LNG account, except in the limited situation where the titleholder pays them, following an agreement to this effect with the receiver and the receiver has informed the State Party that such an agreement exists. c) Although it is an obligation for States ratifying the HNS, to submit reports on contributing cargo, very few States did not comply with the obligation to submit

**3reports on contributing cargo. This omission has been a contributing**

**factor to the Convention not entering into force. In addition, there has been a growing awareness of the desirability of preventing the invidious situation which has occurred in the IOPC Funds, where non-submission of reports results in non-payment of contributions but not in withholding of compensation. The protocol deals with this problem in three (3) ways: firstly; in order to ratify the draft protocol, States will be required to submit reports on contributing cargo to IMO as**

Depository as the organisation

**3will not accept any ratification which is not accompanied by such reports. States will also be obliged to continue to submit reports annually thereafter until the Protocols enter into force. Secondly; should a State fail to submit reports annually, after depositing its instrument of ratification, but prior to entry into force of the Protocol, it will be temporarily suspended from being a Contracting State. The Protocol will not enter into force for any State which is in arrears with reports. Finally, once the Protocol has entered into force for a State, compensation will be withheld, temporarily or permanently, in respect of that State, if it is in arrears with report, except in the case of claims for personal injury and death.**

135 3.4.2.1 Advantages of ratification of the 2010 HNS Convention Protocol by Malaysia Malaysia is not a party to the 2010 HNS Convention Protocol. Upon ratification, Malaysia will benefit as follows: a) HNS

**3packaged goods have been excluded from the definition of contributing cargo,**

but the ship owners'

**3limits of liability for incidents involving packaged HNS will be increased.**

135 <http://www.imo.org>, 9 April 2010, 5 pm. b) upon ratification of the Protocol but prior to its entry into force, if Malaysia fails to submit reports on contributing cargo, Malaysia

**3will be temporary suspended from being a contracting State.**

If Malaysia is in arrears with report on contributing cargo, any compensation made will be withheld except for any claims of personal injury and death. Basically, the 1996 HNS Convention deals with the liability and compensation for HNS by sea and the 2010 HNS Convention Protocol 136

**3is designed to address practical problems that have prevented many states from ratifying the original Convention.**

In other words, Malaysia is proposed to ratify the 1996 HNS and the 2010 HNS Convention Protocol. 3.4.3 The Protocol on Preparedness, Response and Co-operation to pollution incidents by Hazardous and Noxious Substances 2000 (the 2000 OPRC-HNS Protocol) The 2000 Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances (2000 OPRC-HNS Protocol) was adopted on 15 March 2000. 137 It entered into force on 14 June 2007. 138 The 2000 OPRC- HNS Protocol follows the principles of the International Convention on Oil Pollution Preparedness Response and Co-operation, 1990 (1990 OPRC Convention). In fact the Protocol to the OPRC Convention extends the co-operation and planning obligations for oil pollution incidents to pollution incidents involving other hazardous and noxious substances. The 2000 OPRC- HNS Protocol consists 136 <http://www.imo.org>, 4 September 2010, 4.00 pm. 137 <http://www.imo.org>, 11 December 2008. 138 Ibid. of 18 Articles and one Annex which deals with Reimbursement of Costs of Assistance. 139 3.4.3.1 Objective of the 2000 OPRC-HNS Protocol The objective of 2000 OPRC- HNS Protocol is to have

**1 prompt and effective action in order to minimize the damage which may result from such an incident.**

A pollution incident by hazardous and noxious substances means any occurrences having the same origin, including fire or explosion, which results or may result in a discharge, release or emission of hazardous and noxious substances and which poses or may pose a threat to the marine environment, or to the coastline or related interests of one or more States, and which requires emergency action or immediate response. The intention of the 2000 OPRC HNS Protocol is to set a global framework for international co-operation in combating major incidents or threats of marine pollution from ships carrying hazardous and noxious substances. 140 3.4.3.2 Entry into Force of the 2000 OPRC-HNS Protocol The 2000 OPRC- HNS Protocol entered

**2 into force twelve months after ratification by not less than fifteen States.**

141 Malaysia and Indonesia have not ratified the 2000 OPRC- HNS Protocol; however Singapore has acceded to the said convention. 142 139 The Articles of the Protocol are as follows: Article 2 – Definitions; Article 3 - Emergency Plans and Reporting; Article 4 - National and Regional Systems for Preparedness and Response; Article 5 - International Co-operation in Pollution Response; Article 6 - Research and Development; Article 7 - Technical Co-operation; Article 8 - Promotion of Bilateral or Multilateral Agreements for Preparedness For and Response; Article 9 - Relation to Other Conventions and other Agreements; Article 10 - Institutional Arrangements; Article 11 - Evaluation of the Protocol; Article 12 – Amendments; Article 13 - Signature, Ratification, Acceptance, Approval and Accession; Article 14 - States with more than one system of law; Article 15 - Entry into Force; Article 16 – Denunciation; Article 17 – Depository; and Article 18 - Languages. 140 Rickaby, Simon, "The OPRC-HNS Protocol and its practical implications", PAJ Oil Spill Symposium, (Tokyo, 24-25 February 2005). 141 The

**2 Protocol will enter into force on 14<sup>th</sup> June 2007 after the**

fifteenth ratification was filed with IMO . Portugal was the 15<sup>th</sup> State to ratify the Protocol , <http://www.imo.org> 13JULY 2006, 10am. 142 Status of Conventions as at 31 January 2010, <http://imo.org/> 10.55 am. As stated, each Party to the Protocol is required to ensure that: a) ship which carry HNS

**2 carry a shipboard pollution emergency plan to deal specifically with incidents involving HNS. The**

ship master or other person having charge has to follow reporting procedures to the extent required; 143 b) authorities and operators in charge of seaports and HNS handling facilities have in place pollution incident emergency plans for HNS; 144 c) other countries are notified of a pollution incident where those countries are likely to be affected by a HNS incident; 145 d)

**1 a national system for responding promptly and effectively to pollution incidents**

is established and current information about this system is provided to the IMO; 146 e) there is co-operation and provision of advisory services, technical support and equipment for the purpose of responding to a HNS incident when the severity of the incident so justifies, upon the request of a Party affected or likely to be affected; f)

**1 necessary legal or administrative measures will be taken to facilitate the arrival, utilization and departure from,**

as well as the expeditious movement into, through, and out of its territory of personnel, cargoes, materials and equipment engaged in responding to a HNS incident. 143 Article 3 of OPRC-HNS 2000 Protocol, paragraph 1. 144 Id at 2. 145 Id at 3. 146 According to Article 4 OPRC-HNS 2000 Protocol, the system shall include as minimum the designation of; a) the competent national authority with responsibility for preparedness for and response to pollution incidents, the national operational contact point and an authority which is entitled to act on behalf of the state to request assistance or to decide to render the assistance requested; b) a national contingency plan for preparedness and response which includes the organizational relationship of the various bodies involved. Parties to the Protocol should conclude bilateral or multilateral conventions for preparedness for and response to pollution incidents 147 3.4.3.3 Special features and relationship with the 1996 HNS Convention and the 2000 OPRC HNS Convention The Protocol does not apply to warships, naval auxiliary or other ships used

**1 only on government non-commercial service. However, States Parties should ensure**

that these vessels act consistently with the Protocol without interfering with the operations of these vessels. 148 There are differences (as explained below) between the 2000 Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances from the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996. The characteristics of the 1996 HNS Convention and the 2000 OPRC HNS Protocol are as follows: a) the 2000 OPRC-HNS Protocol follows the principles of the International Convention on Oil Pollution Preparedness, Response and Co-operation, which entered into force in 1995. The 1996 HNS follows the principles of the International Convention on Civil Liability for Oil Pollution Damage 1992 and International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992, which entered into force in 14 th June 2007; b) the 1996 HNS Convention provides for liability and compensation for incidents of HNS while the 2000 OPRC-HNS Protocol provides for preparedness and 147 Article 8 OPRC-HNS 2000 Protocol. 148 Article 1 OPRC-HNS 2000 Protocol, paragraph 3. response measures dealing with HNS spills

**2 either nationally or in co-operation with other countries.**

3.4.3.4 Advantages of ratification by Malaysia Upon ratification by Malaysia, this Protocol will enable Malaysia to have: a) prompt and effective action to minimize the damage which may result from HNS pollution incidents including fire or explosion; b)

**2international co-operation in combating major HNS shipping incidents.** Upon ratification **of**

this Protocol, Malaysian ships which carry HNS are required to have a shipboard pollution emergency plan to deal with HNS pollution and authorities of seaports are required to have HNS handling facilities if HNS incident occurs. The 2010 HNS Convention Protocol does not affect the 2000 OPRC HNS Protocol because both Protocol deal with different purposes. The 2010 HNS Convention Protocol is drafted to counter problems that lead to delay ratification by the States for the 1996 HNS Convention to enter into force. The 2000 OPRC HNS Protocol requires the Parties to establish measures for dealing with pollution incidents, either nationally or in co-operation with other countries. 149 Ships under the 2000 OPRC HNS Protocol are required to carry a shipboard pollution emergency plan to deal specifically with incidents involving HNS. 150 149 <http://www.imo.org>, 14 October 2009, 3.00 pm. 150 Ibid. 3.5 CATEGORY TWO: CONVENTIONS ON CONTROL OF MARINE POLLUTION AND SAFE AND SECURE NAVIGATION 3.5.1 THE MARPOL 73/78. 151 The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. 152 The

**2Convention includes regulations aimed at preventing and minimizing pollution from ships-both accidental pollution and that from routine operations and currently includes six technical Annexes** of which Annexes I

and II related to HNS shipment, namely: ? Appendix 1 of Annex 1 of MARPOL 73/78 (oils carried in bulk); 153 ? Appendix II of Annex II of MARPOL 73/78 (noxious liquid substances carried in bulk), substances and mixtures provisionally categorised as falling within pollution category A, B, C or D in accordance with regulation 3(4) of the said Annex II; are discussed below. 3.5.1.1 Objectives of the MARPOL 73/78 MARPOL 73/78, amongst others, recognises

**1that deliberate, negligent or accidental release of oil and other harmful substances from ships constitutes a serious source**

151 MARPOL 73/78, Annexes I & II entered into force on 31 December, Annex III 1 July 1992, Annex IV Annex V enter into force 31 December 1988 and Annex VI enters into force 19 May 2005. <http://www.imo.org> , 27 January 2009. 152 <http://www.imo.org>,27Jan.2009, 9am. 153 Ibid.

**2Annex I Regulations for the Prevention of Pollution by Oil Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form Annex IV Prevention of Pollution by Sewage from Ships Annex V Prevention of Pollution by Garbage from Ships Annex VI Prevention of Air Pollution from Ships (entry into force 19 May 2005).**

of pollution. 154 Harmful substances



**1 means any substance which, if introduced into the sea, is 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, and includes any substance subject to control by the present Convention.**

155 3.5.1.2 Special Areas in the MARPOL 73/78 An "oil tanker" means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers, any "NLS tanker" as defined in Annex II of the present Convention and any gas carrier as defined in regulation 3.20 of chapter II-1 of SOLAS 74 (as amended), when carrying a cargo or part cargo of oil in bulk. A "Special area" means a sea area where for recognized technical reasons in relation to its oceanography and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by oil is required. 156 The revised Annex II includes a number of changes for example improvements in ship technology, such as efficient stripping techniques, have made possible significantly lower permitted discharge levels of certain products. 157 For ships constructed on or after January 1, 2007, the maximum permitted residue in the tank and its associated piping after discharge will be a maximum of 75 litres for products 154 Other related objectives are (a) recognizing the

**1 importance of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as being the first multilateral instrument to be concluded with the prime objective of protecting the environment, and appreciating the significant contribution which that Convention has made in preserving the seas and coastal environment from pollution (b) desiring to achieve the complete elimination of intentional pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances (c) considering that this object may best be achieved by establishing rules not limited to oil pollution having a universal purport.**

155 Art 2, of MARPOL 73/78. 156 For the purposes of this Annex, the Special Area are defined as follows; the Mediterranean Sea, the Baltic Sea, the Black Sea, the Red sea, the Gulfs, the Gulf of Aden, the Antarctic, the North West European and the Oman area of the Arabian Sea. Citation is taken from MARPOL CONSOLIDATED EDITION 2006 Articles, Protocols, Annexes, Unified Interpretations of the International Convention for the Prevention of Pollution from Ships, 1978, as modified by the Protocol of 1978 relating thereto, International Maritime Organization (IMO), London, 2006. 157 Ibid.

**2 in categories X, Y and Z. 158 Previous limits set a maximum of 100, 300 or 900 litres**

with a 50 litre tolerance, depending on the pollution category and age of the ship 159 . 3.5.1.3 Advantages of ratification of the MARPOL 73/78 by Malaysia Malaysia is a party to Annex I (Oil) of MARPOL 73/78 which came into force on 2 nd October 1983, Annex II (Noxious Liquid Substances in Bulk) which entered into force on 6 th April 1987 and Annex V (Garbage from Ships) which came into force on 31 st December 1988. 160 Singapore acceded to the MARPOL 73/78 Annexes 1, II, III, IV, V and MARPOL Protocol 1997 Annex VI. 161 Indonesia acceded to MARPOL 73/78 Annexes 1 and II. 162 MARPOL 73/78 superseded the Convention on the Prevention of Pollution by Oil 1954 (OILPOL). 163 As Malaysia is a party to MARPOL 73/78, Annex 1 and II which covers operational/deliberate or accidental causes of pollution by release of oil

and noxious liquid substances in bulk by ships, Malaysia is empowered to impose these regulations on all commercial ships in the Straits of Malacca. This is vital for Malaysia as chemical cargoes considered to pose an environmental threat have been divided into four MARPOL 73/78 Annex II pollution categories, categories X, Y, Z and OS, based on their potential impact, 164 thus introducing new prohibitions and 158 Ibid. 159 Ibid. 160 Status of Conventions as at 31 January 2010, <http://www.iom.org/> 10.55am 161 Ibid. 162 Ibid. 163 The primary aim of the 1954 OILPOL Convention was

**2 pollution resulting from routine tanker operations and from the discharge of oily wastes from machinery spaces. The problem of pollution of the**

seas by oil is tackled by the 1954 OILPOL Convention

**2 in two main ways: i) it established "prohibited zones" extending at least 50 miles from nearest land in which the discharge of oil or of mixtures containing more than 100 parts of oil per million was forbidden, and ii) it also required Contracting Parties to take all appropriate steps to promote the provision of facilities for the reception of oily water and residues.**

164 Lloyd's Register, Classification News, May 16, 2006, No 14/2006. permissions as examined above. This new system replaces the previous four category (A, B, C, and D) system. 3.6

**1 INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK, 1983**

3.6.1 Advantages of ratification of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals In Bulk, 1983 by Malaysia Malaysia complies with the requirements on carriage prescribed by port administrations of

**1 dangerous liquid substances carried in bulk listed in chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, 1983 for the**

carriage. 3.6.2 The International Maritime Dangerous Goods Code The International Maritime Dangerous Goods (IMDG) Code was developed as a uniform international code for the transport of dangerous goods by sea covering such matters as packing, container traffic and stowage, with particular reference to the segregation of incompatible substances. 165 The development of the IMDG Code dates back to the 1960 Safety of Life at Sea Conference, which recommended that Governments should adopt a uniform international code for the transport of dangerous goods by sea to supplement the regulations contained in the 1960 International Convention for the Safety of Life at Sea (SOLAS)' 166 Malaysia and Indonesia have ratified SOLAS Convention 1974 and SOLAS Protocol 1978 but not the SOLAS 165 <http://www.imo.org/>, 27 Jan 2009, 9am. 166 Ibid Protocol 1988. 167 Singapore has ratified SOLAS Convention 1974, SOLAS Protocol 1978 and SOLAS Protocol 1988. 3.6.3 Advantages of ratification of the IMDG Code Malaysia has ratified this Code for it promotes a uniform international code for the transportation of dangerous goods by sea which covers packing, container traffic, stowage, with particular reference to the segregation of incompatible substances. 3.6.4 International Code for the Construction and Equipment of

Ships Carrying Liquefied Gases in Bulk 1983 3.6.4.1 Advantages of ratification of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1983 by Malaysia Malaysian will benefit by complying with this Code as it involves

**1 substances, materials and articles carried on board a ship as**

liquefied gases cargo as listed in Chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1983, where the carriage has been prescribed by the port administrations involved. 3.6.4.2 The 2004 International Ship and Port Facility Security Code (the 2004 ISPS CODE) The terrorist attacks of September 11, 2001, provided the catalyst 168 for adopting The International Ship and Port Facility Security Code (ISPS) Code 169 through 167 Ibid. 168 [http://www.worldtraderref.com/WTR\\_site/ISPS.asp](http://www.worldtraderref.com/WTR_site/ISPS.asp), 30 August 2010. amendments to the Safety of Life at Sea (SOLAS) Convention 170 which entered into force on July 1, 2004. 171 It establishes an international framework for co-operation between Contracting Governments, government agencies, local administrations and the shipping and port industries to detect security threats such as terrorism, piracy and smuggling 172 and take preventive measures against security incidents and to establish relevant roles and responsibilities at the national and international level. 173 The Code itself is divided into two parts. 174 Part A presents mandatory requirements; Part B contains guidance regarding the provisions of Chapter XI-2 of the Convention and part A of the Code. 175 The ISPS provisions do not extend to the actual response to attacks or to any necessary clear-up activities after such an attack. 176 For each ship and port authority affected, ISPS Code requires the implementation of a Ship Security Plan, the implementation of a Port Facility Security Plan, the appointment of a Ship Security Officer, the appointment of a Company Security Officer, the installation of ship alarms and the installation of shipboard Automatic Identification Systems (AIS). 3.6.4.3 Advantages of ratification of the 2004 ISPS Code by Malaysia Malaysia is a party to the ISPS Code. This would ensure that the ISPS Code is applied to all Malaysian ships and ports as well as ships that call upon ports of contracting nations: 177 Port facilities serving such ships engaged on international 169 Ibid. 170 Ibid. 171 Ibid. 172 Ibid. 173 Ibid. 174 Ibid. 175 Ibid. 176 Ibid. 177 [http://www.worldtraderref.com/WTR\\_site/ISPS.asp](http://www.worldtraderref.com/WTR_site/ISPS.asp), 30 August 2010. 143 trade. 178 The ISPS Code does not directly apply to warships, naval auxiliaries or other ships owned or operated by a SOLAS Convention Contracting Government and used only on Government non-commercial service. 179 Malaysia also benefits the international cooperation framework in the Code to detect security threats and take preventive measures against security incidents affecting ships or port facilities used in international HNS trade. Two ports in Malaysia have been identified and included in the American Container Security Initiative. 180 They are the Port Klang and Tanjung Pelepas Port. 181 Port Klang was certified to be ISPS compliant on 30 June 2004 by the Marine Department of Malaysia, the Designated Authority responsible for ensuring the implementation pertaining to port facility security and ship/port interface for ports in Malaysia. 182 The four (4) port facilities in Port Klang that are ISPS compliant are Northport, Westport, Star Cruises Terminal and Kapar Power Station. 183 This is vital for Malaysia for purposes of safety and security of HNS shipments and control of marine pollution by controlling breaches of security threats through the Straits of Malacca. The shipping community was informed as of 1 July 2004 that ships calling at Port Klang will be subject to control and compliance measures including assessment of ship security information provided by the shipmasters in Pre-Arrival Notification of Security prior to entering port. 184 If there are clear grounds that a ship may be subjected to a more detailed inspection, delay or detention, restriction of operations or movements in the port, may even be denied entry 185 . 178 Ibid. 179 <http://www.pka.gov> ,30 August 2010. 180 Ibid. 181 Ibid. 182 Ibid. 183 Ibid. 184 Ibid. 185 Ibid. 3.7 PORT STATE CONTROL The provisions of Port States and Flag States under the 1982 LOSC are examined to highlight the requirements necessary to avoid or mitigate HNS incidents and the requirements of Flag State implementation as provided in the 1992 Flag State Implementation Committee of the IMO. The requirements of Port State Control that would avoid or mitigate HNS incidents based on: i) the safe transport of dangerous cargoes and related activities in port areas, ii) manual on chemical pollution. Ports are usually located and built on the edge of coastal zones. Article 11 of the 1982 LOSC defines ports as the outermost permanent harbour works which form an integral part of the harbour system and regarded as forming part of the coast'. 186 The significance of ports compared to roadsteads,

normally used for the loading, unloading and anchoring of ships, situated wholly and partly outside the outer limit of the territorial sea. 187 Most ports are actively engaged in protecting the environment surrounding the port areas and to minimize the impact of port activities on management of estuaries, all forms of pollution at ports, managing ecology and habitat, management of chemicals in or near water environments, oil discharge prevention and response, dredging and sediment removal including its disposal, management of ports and marinas and vessels, management of wastes from vessels, loading and unloading of ships, ballast water and hull fouling and 186 Article 11 of 1982 LOSC. 187 Ibid. cleaning, safety of ships and safety of population of the people living around harbours and security of goods. 188 As flag States generally lack enforcement of their obligations, maritime nations consider it in their interest to accept wider Port State Control. Basically there is a lack of enforcement on the part of the flag State towards the discharge of its obligations that make the maritime nations accept wider Port State Control. The maritime nations are reluctant to accept more extensive coastal state jurisdiction compared to port State control. The focus of coastal State regulations is primarily on the protection of territorial integrity and maritime resources, border protection and the national obligations to the international community to provide maritime and aviation search and rescue services. 189 There is often much overlap between the objectives and authorities of the various agencies tasked with coastal State regulation and those tasked with port State regulation and in practice there is normally close cooperation and sharing of resources and information. Customary international law does not seem as a rule to provide the port State with jurisdiction over foreign vessels in its internal waters regarding polluting activities attributed to these vessels, if these activities have no territorial link to the State concerned. 190 Port State jurisdiction on the other hand means that: 'a State may exercise enforcement jurisdiction over foreign ships in its ports in respect of offences against international rules and standards even if committed in sea areas beyond its coastal jurisdiction...even if the violations were committed on the high seas (or foreign waters) 188 BA Hamzah, "Ports and Sustainable Development: Initial Thoughts", United Nations, Institute for Training and Research, Hiroshima Office for Asia and the Pacific, at 3. 189 Ambrose Rajadurai, Regulation of Shipping: The Vital Role of Port State Control, Maritime Law Association of Australia & New Zealand Journal Volume 18, 2004 page 86. 190 George C. Kasoulides, "Port State Enforcement Regime", Port State Control And Jurisdiction Evolution of the Port State Regional, Martinus Nijhoff Publishers, The Netherlands 1993, page 110. and they did not in any way affect the port State the latter would be entitled to take enforcement action against the vessel concerned'. 191 Port State Control ensures 'foreign ships are seaworthy, do not pose a pollution risk, and provides a healthy and safe working environment and complied with relevant conventions of the IMO and the International Labour Organization'. It is usually limited to regulation of ships which have 'moored' (this includes ships which have anchored, berthed alongside, are at a single point mooring or at an offshore facility) at point within the territory of the state. 192 The main characteristics of the port State enforcement are summarized as follows: 193 (a) voluntariness- this is an essential element of the new regime. A port State cannot compel a vessel on the high seas or even in its own territorial waters or EEZ to proceed to its port and face proceeding; (b) ports or offshore terminals- the exercise of this power is restricted to these areas and does not include the functional internal waters area; (c) investigative and adjudicative powers- the jurisdiction is engaged solely by reason of the voluntary presence of a delinquent or suspect vessel in its ports, the enforcement prerogative, therefore, is primarily investigative and only secondarily adjudicative; 191 Id page 111. 192 IMO Resolution A.787(19) PARA 1.6.6 A Port State Control Officer is defined as: "A person duly authorized by the competent authority of a Party to a relevant convention to carry out port State control inspections, and responsible exclusively to that Part. According to IMO Resolution A.787 (19) the provisions of SOLAS, MARPOL and Standards of Training, Certification and Watch keeping 1978 (STCW) stipulate that no more favorable treatment is to be given to the ships of countries which are not party to the relevant convention and requires the Port State Control Officer to be satisfied that the ship and crew do not pose a danger to life, property or the environment. The IMO Resolution A.787 (19) at paragraph 1.5.2 stated that "the ship shall be subject to such restrictions as are necessary to obtain a comparable level of safety and protection of the marine environment." The primary duty of the Port State Control Officer (PSCO) is to ascertain actual compliance with the relevant equipment, for example paragraph 2.2.5 of IMO Resolution A.787 (19) stipulated that if "the PSCO from general impressions or observations on board has clear grounds for believing that the ship, its equipment or its crew do not substantially meet the requirements, the Port State Control Officer should proceed to a more detailed inspection." Clear ground as defined in IMO Resolution A. 787 (19) para 2.2.3 comprises: 'Evidence that the

ship, its equipment, or its crew does not correspond substantially with the requirements of the relevant conventions or that the master or crew members are not familiar with essential shipboard procedures relating to the safety of ships or the prevention of pollution'. 193 George C. Kasoulides, "Port State Enforcement Regime", Port State Control And Jurisdiction Evolution of the Port State Regional, Martinus Nijhoff Publishers, The Netherlands 1993, page 123. (d) any discharge-the enforcement powers are restricted to discharges from ships. These include accidental and "intentional" discharges of oil, noxious and hazardous substances in bulk or packaged form; sewage and garbage (for example discharges such as reballasting; tank cleaning activities and leaking from engines); (e) international waters-this procedure is to be followed only in the case of an incident with no "territorial link" to the port state; (f) applicable international standards- the port state may only enforce standards that are either part of customary international law or laid down in maritime conventions on the related issue (for example MARPOL 73/78 discharge standards). (g) a right to enforce-the port State has only a discretionary power to enforce and may decline to do so; (h) discharges in foreign waters- no investigation may be undertaken except if the port State is so requested by another interested Law of the Sea Convention party. Even then, the port State must comply "as far as practicable" with a request. The coastal State could also ask for the suspension of such proceedings; (i) the role of the flag State- it may request the investigation of discharge violations by its vessels on the high seas or foreign waters. It might also decide to pursue legal proceedings if a flag state decides so to do, subject to the safeguards of Article 228; (j) penalties- although the Law of the Sea Convention specifically refers to monetary penalties, Article 230(2) further suggests, by implications, that imprisonment can be ordered as sanction

**1 in the case of wilful and serious pollution of the territorial sea. 3.**

8 CATEGORY THREE: CHEMICAL WASTES AND CONSENT 3.8.1 THE 1989 BASEL CONVENTION ON THE CONTROL OF TRANSBOUNDARY MOVEMENTS OF HAZARDOUS WASTES AND THEIR DISPOSAL (THE 1989 BASEL CONVENTION) 194 The 1989 Basel Convention entered into force on the 5 May 1992. 195 The objective of agreement is to lay down obligations with regard to ensuring that the transboundary movement of wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes. 196 To control at international level the transboundary movement and disposal of wastes that are hazardous for human health and the environment. 197 The 1989 Basel Convention provides for the attainment of its objectives through control of the transboundary movements of hazardous wastes, monitoring and prevention of illegal traffic, assistance for the environmentally sound management of hazardous wastes, promotion of cooperation between parties in this field, and development of technical guidelines for the management of hazardous wastes. 198 The important remarks of the 1989 Basel Convention: 199 a) transboundary movement and management of hazardous and other wastes: the overall goal of the Basel Convention is to protect, by strictly control, human health and the environment against the adverse effects which may result from the generation, transboundary movement and management of hazardous and other wastes; b) reducing transboundary movement of wastes and controlling permitted transboundary movement: further objectives include: reducing transboundary 194 Malaysia has ratified the Basel Convention on Transboundary Movement of Hazardous Waste 1989 on 12 th August 1993. 195 <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treaties> 19 September 2010, 10.45 am. 196 Ibid. 197 Ibid. 198 Ibid. 199 Ibid. movements of wastes to a minimum consistent with their environmentally sound management and efficient management, and controlling any permitted transboundary movement under the terms of the convention; minimizing the amount of hazardous wastes generated and ensuring their environmentally sound management; assisting developing countries in environmentally sound management of the hazardous and other wastes they generate; c) managing the disposal of hazardous wastes: in summary, the aim of the Basel Convention is to help reduce the transboundary movements and amounts of hazardous wastes to a minimum, and to manage and dispose of these wastes in an environmentally sound manner; d) strict control system based on the prior written consent procedure: the Basel Convention has set up a very strict control system, based on the prior written consent procedure. Hazardous wastes shall be exported only if the State of export does not have the technical capacity and facilities to dispose of them in environmentally sound management. Transboundary movement shall be

prohibited if the State of export or import has reason to believe that the wastes shall not be managed in expected manner. The Department of Environment is the Competent Authority in the Implementation of the Basel Convention in Malaysia. Malaysia 200 , Indonesia and Singapore have ratified the 1989 Basel Convention. Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal has entered into force on the 8 October 2005 and 200 Malaysia became a Party to the 1989 Basel Convention on 8 October 1993. inserting a new Article 4A. 201 Malaysia has ratified the amendment to the 1989 Basel Convention. 202 3.8.1.1 Advantages of ratification of the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal by Malaysia Malaysia is a party to the 1989 Basel Convention which governs any movement of hazardous wastes from an area under national jurisdiction of a State of export, State of import and State of transit. Any hazardous waste movement must come under approval of Malaysia Department of Environment. 3.9 RESOLUTIONS OF THE FINAL ACT OF THE INTERNATIONAL CONFERENCE ON HAZARDOUS AND NOXIOUS SUBSTANCES AND LIMITATION OF LIABILITY, 1996 (1996 HNS CONVENTION RESOLUTIONS) The Final Act of the International Conference on Hazardous and Noxious Substances and Limitation of Liability, 1996 adopted 4 (four) resolutions which are contained in the Attachment to the Final Act. The resolution related to the Basel Convention, resolution on the relationship between the HNS Convention and a prospective regime on liability for damage in connection with the transboundary movements of hazardous wastes. The 1996 HNS Convention is aware that there may be some overlap between the regime established in the HNS Convention and any liability and compensation regime which may be elaborated under Article 12 203 of the Basel Convention. 201 <http://ec.europa.eu/world/agreements/prepareCreateTreaties> , 19 September 2010, 10.45 am. 202 Ibid. 203 Article 12 of 1989 Basel Convention- Consultations On Liability- The Parties shall co-operate with a view to adopting, as soon as practicable, a protocol setting out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes and other wastes. The resolution recommends that this relationship should be determined in accordance with the following principles: 204 a) uniformity: the relationship between the HNS Convention and other liability and compensation regimes should be resolved at the international level, and so far as possible, uniformly for all Contracting Parties to the HNS Convention and other regimes; b) legal certainty: the relationship between the HNS regime and any regime established in a future treaty on liability and compensation for the transboundary movements of HNS wastes should be clearly set out in a legally binding form; c) avoiding overlap: compensation for damage should in principle be provided under one compensation regime only. Overlap between the HNS regime and other compensation regimes should be kept to an absolute minimum; and d) equity: contributors to one liability and compensation regime which substantially covers the same risk.

3.9.1 Advantages of ratification of Resolutions of the Final Act of the International Conference on Hazardous and Noxious Substances and Limitation of Liability, 1996 by Malaysia The 1996 HNS Resolutions deal with situations of overlap between the regime established in the HNS Convention and any liability and compensation regime which may be elaborated under the Basel Convention with the principles of uniformity, legal certainty, avoiding overlap and equity. As Malaysia has not ratified the 1996 HNS 204 Final Act of the International Conference on Hazardous and Noxious Substances and Limitation of Liability, 1996, Part 2, Conference Resolution – Resolutions on the relationship between the HNS Convention and a prospective regime on liability for damage in connection with the transboundary movements of hazardous wastes, at 56. Convention, it means that the 1996 HNS Convention Resolutions also do not apply in Malaysia. 3.10 THE 2001 STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANT 205 The 2001 Stockholm Convention was adopted in 2001 and entered into force in 2004. 206 The 2001 Stockholm Convention is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty issue of humans and wildlife, and have adverse effects to human health or to the environment. 207 Exposure to persistent organic pollutants can lead serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and even diminished intelligence. 208 The 2001 Stockholm Convention focuses on eliminating or reducing releases of 12 POPs (persistent organic pollutants). 209 It sets up a system for tackling additional chemicals identified as unacceptably hazardous. 210 It recognises that a special effort may sometimes be needed to phase out certain chemicals for certain uses and seeks to ensure that this effort is made. It also channels resources

into cleaning up the existing stockpiles and dumps of POPs that litter the world's landscape. 211 Ultimately, the Convention points the way to a 205 The entry into force of the Amendments adding Nine chemicals in the Stockholm Convention on Persistent Organic Pollutants. <http://chm.pops.int/Convention/tabid/54/language/en-US/Default.aspx>, 29 July 2010. 206 <http://chm.pops.int/Convention/tabid/54/language/en-US/Default.aspx>, 29 July 2010. 207 Ibid. 208 <http://chm.pops.int/Convention/tabid/54/language/en-US/Default.aspx>, 29 July 2010 209 Ibid. 210 Ibid. 211 Ibid. future free of dangerous POPs and promise s to reshape our economy's reliance on toxic chemicals. 212 The Stockholm Convention is perhaps best understood as having five essential aims; eliminate dangerous POPs, starting with the 12 worst, support the transition to safer alternatives, target additional POPs for action, clean-up old stockpiles and equipment containing POPs, work together for a POPs free future. 213 The list of POP pollutants, but the list is not exhaustive: Aldrin, Chlordane, DDT, Dieldrin, Dioxins, Endrin, Furans, Heptachlor, Hexachlorobenzene, Minex, Polychlorinated, Biphenyls (PCB) and Toxaphene. 3.10.1 Advantages of ratification of the 2001 Stockholm Convention on Persistent Organic Pollutants by Malaysia Malaysia is a signatory to the 2001 Stockholm Convention on POPs on 16 May 2002 and is one of the 12 countries selected to implement a GEF/UNEP-funded project for the development of a National Implementation Plan (NIP) for POPs management. 214 Malaysia's National Implementation Plan for POPs management proposes several policy directions, with the ultimate aim of eliminating certain POPs and supporting transition to safer alternatives. 215 Actions proposed to reduce and negate environmental impacts of POPs can only materialize if all parties take concerted actions. 216 Institutional capacity building, raising public awareness and ensuring participation from 212 Ibid. 213 Ibid. 214 International POPs Elimination Project-IPEP, <http://www.ipen.org>, 1 Sept 2010. 215 Ibid. 216 Ibid. all stakeholders to tackle the problem of POPs and implementing the solutions is essential. 217 Singapore has ratified the 2001 Stockholm Convention and Indonesia has not ratified the said convention. 218 3.11 THE ROTTERDAM CONVENTION ON THE PRIOR INFORMED CONSENT PROCEDURE FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES IN INTERNATIONAL TRADE 1998 The objectives of the 1998 Rotterdam Convention are: 219 a) to promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm; b) to contribute to the environmentally sound use of those hazardous chemicals, by facilitating information exchange about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties. The 1998 Rotterdam Convention was adopted on 10 September 1998 and entered in to force on 24 February 2004. 220 Malaysia became a party to the Rotterdam Convention on 4 September 2002. 221 The 1998 Rotterdam Convention covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons 217 Ibid. 218 <http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace> 19 September 2010, 10.45 am. 219 <http://www.sustainlabour.org/pops/index> , 23 July 2010. 220 <http://www.sustainlabour.org/pops/index> , 23 July 2010. 221 <http://www.fao.org/docrep> 1 September 2010. by Parties and which have been notified by Parties for inclusion in the Prior Informed Consent (PIC) procedure. One notification from each of two specified regions triggers consideration of addition of a chemical to Annex III of the Convention, severely hazardous pesticide formulations that present a hazard under conditions of use in developing countries with economies in transition may also be nominated for inclusion in Annex III. 222 The Conference of the Parties decides on the inclusion of new chemicals to existing lists. 223 Once a chemical is included in Annex III, a decision guidance document containing information concerning the chemical and the regulatory decisions to ban or severely restrict the chemical for health or environmental reasons is circulated to all Parties. 224 Parties have nine months to prepare a response concerning the future import of the chemical. The response can consist of either a final decision (to allow import of the chemical, not to allow import, or to allow import subject to specified conditions) or an interim response. Decisions by an importing country must be trade neutral (ie, apply equally to domestic production for domestic use as well as to imports from any source). 225 The import decisions are circulated and exporting country Parties are obligated under the Convention to take appropriate measure to ensure that exporters within its jurisdiction comply with the decisions. 226 222 <http://www.sustainlabour.org/pops/index> , 23 July 2010. 223 Ibid. 224 Ibid. 225 <http://www.sustainlabour.org/pops/index> , 23 July 2010. 226 Ibid. 3.11.1 Advantages of ratification of The 1998 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade by Malaysia Malaysia is a party to the 1998 Rotterdam Convention. Malaysia gains benefits by

promoting shared responsibility and cooperation among parties in the international trade of hazardous chemical in protecting human health and the environment. 227 In Malaysia, the authority responsible for the implementation and enforcement of the Pesticides Act 1974 is the Department of Agriculture. 228 The Pesticides Board is responsible for the implementation and enforcement of various rules and regulations under the Pesticides Act 1974, including those related to the registration of pesticides. 229 Only those pesticides that are registered with the board may be imported, manufactured, used, distributed and sold in country. 230 Custom import and export prohibition orders are to prevent the import and export of pesticides subject to the Annex II Rotterdam Convention. 231 3.12 CATEGORY FOUR: HYBRIDS Hybrid cases are where HNS ships collide with non-HNS ships and this situation, called a "hybrid accident" within the Straits of Malacca and the situation falls under five other international liability and compensation regimes. 232 In the event of a hybrid accident, a court would apportion the damages to a particular liability regime on the expert information available. 233 This section will not discuss the solutions and calculation of a hybrid accident. 227 <http://www.fao.org/docrep> , 1 Sept 2010. 228 Ibid. 229 Ibid. 230 <http://www.fao.org/docrep> , 1 Sept 2010. 231 Ibid. 232 McKinley, Derek, *The 1996 International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea: Implications for State Parties, the Shipping, Cargo and Insurance Industries*, (Diss. LLM, University of Cape Town, South Africa, 2005) at 59 233 Ibid.

3.12.1 International Convention on Civil Liability for Oil Pollution Damage, 1969, 1992- The Protocol of 1976, the Protocol of 1984, the Protocol of 1992 (And the 2000 Amendment) The international compensation regime for damage caused by spills of persistent oil from laden tankers was based initially on two IMO Conventions-the 1969 International Convention on Civil Liability for Oil Pollution Damage 1969 (1969 CLC). 234 The old regime was amended in 1992 by two Protocols, which increased the compensation limits and broadened the scope of the original Conventions. 235 The liability of this convention is strict: (i.e. liability even in the absence of fault) subject to a number of specific exceptions, it is the duty of the owner to prove in each case that any of the exceptions should in fact operate. The convention requires ships covered by it to maintain insurance or other financial security in sums equivalent to the owner's total liability for one incident. It applies to all sea going vessels carrying oil in bulk as cargo; however, ships carrying more than 2000 tons of oil are required to maintain insurance in respect of oil pollution damage. Ships covered by it are to maintain insurance or other financial security in sums equivalent to the owner's total liability for one incident. 236 It is applicable to ships which actually carry oil in bulk as cargo, for example generally laden tankers. 237 Spills from tankers in ballast or bunker spills from ships other than tankers are not covered, nor is it possible to recover costs when preventive measures are so successful that no actual spill occurs. 238 The shipowner cannot limit liability if the incident occurred as a result of the owner's personal fault. 239 234 <http://www.itopf.com> , 19 April 2005, 3.00 pm. 235 Ibid. 236 <http://www.imo.org>, 28Jan.2009, 4.00pm . 237 Ibid. 238 Ibid. 239 Ibid. The Protocol of 1976 entered into force on 8 April 1981. This Protocol to the CLC 1969 provides a new unit of account based on the Special Drawing Rights (SDR) which is used by the International Monetary Fund (IMF). For those countries which are not members to IMF and do not permit the use of SDRs, the Protocol provides gold as an alternate monetary unit. The Protocol of 1992 240 was adopted on 27 th November 1992 and entered into force on 30 th May 1996. There are changes in the 1992 Protocol: 241 (a) the protocol widened the scope of the Convention to cover pollution damage caused in the exclusive economic zone or equivalent area of a State Party' (b) allows expenses incurred for preventive measures to be recovered even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage, (c) the protocol extended the Convention to cover spills from sea-going vessels constructed or adapted to carry oil in bulk as cargo (applies to laden and unladen tankers), (d) under the protocol, a ship owner cannot limit liability if it is proved that the pollution damage resulted from the ship owner's personal act or omission. In October 2000 agreement was reached on increasing limits of the 1992 CLC and FUND Convention by a little over 50% with effect from 1 st November 2003. 242 In May 2003 a Supplementary ("third tier") Fund was established at the IMO through a new Protocol that will increase the amount of compensation in States that ratify it to about US\$1,160 million. 243 The status of ratification on the 1992 CLC is as follows: 244 The Protocol of 1984 was adopted to the convention (CLC 1969) on the 25 May 1984. It was observed that by the middle of the 1980's, the limits of liability were too low in order to provide adequate compensation for a major pollution incident. Henceforth, the 1984 Protocol provided a new and simplified procedure to amend the liability limits, see <http://www.imo.org>, 28Jan.2009, 4.00pm 240 Ibid. 241 Ibid. 242 <http://www.itopf.com> , 19 April 2005, 3.00 pm. 243 Ibid. 244 <http://www.imo.org> 28Jan.2009, 4



pm. Malaysia has denounced the 1969 CLC and acceded to the 1992 Protocol. 245 Singapore has denounced the CLC 1969 and acceded to the CLC Protocol 1976 and CLC Protocol 1992. 246 Indonesia has acceded to the CLC 1969 and CLC 1992. 247 3.12.2 Advantages of ratification of the International Convention on Civil Liability for Oil Pollution Damage, 1992 by Malaysia As Malaysia is a party to this Convention in case of a hybrid accident, Malaysia is ensured that adequate compensation is available to persons who suffer from the spills caused by persistent oils from laden tankers. Malaysian ships are required to maintain insurance or other financial security equivalent to the owner's total liability for one incident. This convention applies strict liability. Malaysia benefits under the 1992 Protocol because: a) it covers pollution damage caused in the Malaysian exclusive economic zone; and b) it allows for expenses incurred for preventive measures to be recovered even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage. 3.13 INTERNATIONAL CONVENTION ON THE ESTABLISHMENT OF AN INTERNATIONAL FUND FOR COMPENSATION FOR OIL POLLUTION DAMAGE, 1992 (THE 1992 FUND CONVENTION)-THE PROTOCOL OF 1976, THE PROTOCOL OF 1984, THE PROTOCOL OF 1992, THE 2000 AMENDMENTS (RAISING LIMITS) & THE 2003 PROTOCOL (SUPPLEMENTARY FUND) 245 Status of Conventions as at 31 January 2010, <http://www.imo.org>. 10.55 am 246 Ibid. 247 Ibid. The 1992 Protocol replaces the 1971 FUND Convention. The purposes of the 1992 Fund Convention are as follows:- 248 a) to provide compensation for pollution damage to the extent that the protection afforded by the 1969 Civil Liability Convention is inadequate; b) to give relief to ship-owners in respect of the additional financial burden imposed on them by the 1969 Civil Liability Convention, such relief being subject to conditions designed to ensure compliance with safety at sea and other conventions; and c) to give effect to the related purposes set out in the Convention. Under the Fund Convention, victims of oil pollution damage may be compensated beyond the level of the ship owner's liability. The Fund's maximum liability may increase to not more than 60 million SDR (about US\$82 million) for each incident. The Fund's obligation to pay compensation is confined to pollution damage suffered in the territories including the territorial sea of Contracting State. The Fund is also obliged to pay compensation in respect of measures taken by a Contracting State outside its territory. 249 The 2003 Protocol (Supplementary Fund) 250 The aim of the established Fund is to supplement the compensation available under the 1992 Civil Liability and Fund Conventions with an additional, third tier of compensation. 248 <http://www.uscg.mil/hq/g-ci/affairs/MMSCODE/English/AppendC.htm>. 249 <http://www.imo.org>, 27 Jan 2009, 9am. The Protocol of 1976: The Protocol of the Fund Convention was adopted on the 19 November 1976. The Protocol provides for a unit of account based on the Special Drawing Right (SDR) as used by the International Monetary Fund (IMF). The Protocol of 1984: The Protocol of the Fund Convention was adopted on 25 May 1984. The Protocol intended to raise the limits of liability and provides greater compensation to be paid to victims of oil pollution incidents (The 1984 Protocol is superseded by the 1992 Protocol). Ibid. Winding up of 1971 Fund: Due to denunciation of the 1971 Fund Convention, this Convention ceased to be in force on May 2002. Ibid. 250 Ibid. The protocol is optional and participation is open to all States Parties to the 1992 Fund Convention. The status of ratification of the 1992 Fund Convention is as follows: Malaysia has ratified to the 1971 Fund Convention and FUND Protocol 1992 and the 1992 Protocol. Singapore has acceded to 1992 Protocol. Indonesia on the other hand has denounced the 1971 Fund Convention but has not acceded to the Fund Protocol of 1992 and 2003. 3.13.1 Advantages of ratification of the International Convention on the Establishment Of An International Fund For Compensation For Oil Pollution Damage, by Malaysia As Malaysia is a party to this Convention, in the event of a hybrid accident, victims of oil pollution damage may be compensated beyond the level of the ship owner's liability. The Fund's obligation to pay compensation is confined to pollution damage suffered in the territories including Malaysia's territorial sea (subject to the earlier discussion). The Fund is also obliged to pay compensation in respect of measures taken by Malaysia outside its territory. The 1992 Fund provides compensation for pollution damage to the extent that the protection afforded by the 1969 Civil Liability Convention is inadequate. 3.14 INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR BUNKER OIL POLLUTION DAMAGE, 2001 (THE 2001 BUNKER CONVENTION) The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (the 2001 Bunker 251 Convention) caters for liability and compensation for spills of oil carried in ships' bunkers. Thus, the registered owner of a vessel needs to maintain 251 Oxford Dictionary Thesaurus and Word power Guide, 2001 defined Bunker as a large container for storing fuel. compulsory insurance cover. Another important issue in the bunkers convention is the requirement for direct action, which would allow a claim for

compensation for pollution damage to be brought directly against an insurer. 252 It will enter into force one year following the date on which 18 States, including five States each with ships whose combined gross tonnage is not less than 1 million; have either signed it without reservation as to ratification, acceptance, approval or accession with the Secretary-General. 253 It applies to pollution damage caused in the territorial sea and in the exclusive economic zone and to preventive measures, whenever taken, to prevent or minimize such damage. The ship-owner at the time of an incident shall be liable for pollution damage caused by any bunker oil on board or originating from ship. 254 The registered owner of a ship having a gross tonnage greater than 1000 registered in a State Party be required to maintain insurance or other financial security, such as a bank guarantee or similar financial institution, to cover the liability of the registered owner for pollution damage in an amount to the limits of liability under the applicable national or international regime. An action should be brought within three (3) years from the date when the damage occurred, however no action should be brought after more than six years from the date when the damage occurred. Indonesia has not acceded to the 2001 Bunker Convention 255 . Malaysia and Singapore have acceded to the 2001 Bunker Convention. 256 3.14.1 Advantages of ratification of the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 252 IMO adopts bunkers convention, <http://www.imo.org>,13July 2006,4pm. 253 Article 14 of 2001 Bunker Convention.. 254 No liability for pollution damage shall attach to the shipowner if the shipowner proves that: a) the damage resulted from an act of war, hostilities, civil war, insurrection or a natural phenomena an exceptional, inevitable and irresistible character; or b) the damage was wholly caused by an act or omission done with the intent to cause damage by the party; or c) the damage was wholly caused by the negligence or other wrongful act of any Government or authority responsible for the maintenance of lights or other navigational aids in the exercise of the function. 255 Status of Conventions as at 31 January 2101, <http://www.imo.org> ,10.55 am. 256 <http://www.imo.org>,28Jan.2009,4pm. As a State Party to this Convention, Malaysia can provide compensation for

**2 spills of oil carried in ships' bunkers. The pollution damage covers the**

Malaysian territorial sea and exclusive economic zone. 3.15 ATHENS CONVENTION RELATING TO THE CARRIAGE OF PASSENGERS AND THEIR LUGGAGE BY SEA, 1974 (THE 1976 PROTOCOL, THE 1990 PROTOCOL, THE 2002 PROTOCOL) The 1974 Athens Convention was adopted on 13 December 1974 and it entered into force on 28 April 1987. 257 The Convention establishes a regime of liability for damage suffered by passengers carried on a seagoing vessel. 258 As far as loss of or damage to luggage is concerned, the carrier's limit of liability varies, depending on whether the loss or damage occurred in respect of cabin luggage, of a vehicle and/or luggage carried in or on it, or in respect of other luggage. 259 The objective of the 1974 Athens Convention is to determine by agreement certain rules relating to the carriage of passengers and their luggage by sea during an international carriage if (Article 2) a) the ship is flying the flag of or is registered in a State Party to this Convention; or b) the contract of carriage has been made in a State Party to this Convention; or c) the place of departure or destination, according to the contract of carriage, is in a State Party to this Convention. The liability of the carrier under Article 3 of the 1974 Athens Convention arises for the damage suffered as a result of the death of or personal injury to a passenger and the loss 257 <http://www.imo.org>. 26 January 2009. The 1976 Protocol is adopted 19 November 1976 and enter into force 30 April 1989. 258 <http://www.imo.org>,28Jan.2009,2 pm. 259 Ibid. of or personal injury to a passenger and the loss of or damage to luggage if the incident occurred in the course of the carriage and was due to the fault or neglect of the carrier or of his servants or agents acting within the scope of their employment. The burden of proving that the incident which caused the loss or damage occurred in the course of the carriage, and the extent of the loss or damage, shall lie with the claimant. The liability of the carrier for the death of or personal injury (Article 7) to a passenger shall in no case exceed 700,000 franc per carriage. 260 3.15.1 Advantages of ratification of the 1974 Athens by Malaysia The advantages are that this Convention establishes a regime of liability for damage suffered by passengers carried on a seagoing vessel and the carrier's liability on the loss or damage of cabin luggage. The Convention requires insurance to cover the limits for strict liability for the death and personal injury to passengers. The Protocol introduces compulsory insurance to cover passengers on ships and raises the limits of liability. The slow rate of

acceptance of the 1974 Athens Convention (it has been ratified by 28 States) has been largely attributed to the low level of the limits of liability set in the original convention and its 1990 Protocol (which raised the limits but never entered into force). 261 The Convention requires insurance as provided in new Article 4 bis to cover the limits for strict liability for the death and personal injury to passengers. 260 Where in accordance with the law of the court seized of the case damages are awarded in the form of periodical income payments, the equivalent capital value of those payments shall not exceed the said limit. Under Article 8, the liability of the carrier for the loss of or damage to cabin luggage shall in no case exceed 12,500 francs per passenger, per carriage; . a) The liability of the carrier for the loss of or damage to cabin luggage shall in no case exceed 50,000 francs per vehicle, per carriage. b) The liability of the carrier for the loss of or damage to luggage other than that mentioned in paragraphs 1 and 2 of this Article shall in no case exceed 18,000 francs per passenger, per carriage. Nuclear damage (Article 20) No liability shall arise under this Convention for damage caused by a nuclear incident: a) If the operator of a nuclear installation is liable for such damage under either the Paris Convention of 29 July 1960 on Third Party Liability in the Field of Nuclear Energy as amended by its Additional Protocol of 28 January 1964, or the Vienna Convention of 21 May 1963 on Civil Liability for Nuclear Damage, or If the operator of a nuclear installation is liable for such damage by virtue of a national law governing the liability for such damage, provided that such law is in all respects as favourable to persons who may suffer damage as either the Paris or the Vienna Conventions 261 <http://www.imo.org>.28January 2009,4.40pm . 3.16 THE

## 2 **CONVENTION ON LIMITATION OF LIABILITY FOR MARITIME CLAIMS, 1976** AND PROTOCOL **1996** (THE 1996 **LLMC Protocol**) The

Convention replaces the International Convention Relating to the Limitation of the Liability of Owners of Seagoing Ships, which was signed in Brussels in 1957. 262 The 1976 LLMC was adopted in 19 November 1976 and entered into force 1 December 1986. 263 The 1996 Protocol was adopted on 3 May 1996 and entered into force 13 May 2004. 264 The objective of the 1976 LLMC 265 is to determine by agreement certain rules relating to the limitation of liability for maritime claims. 266 Article 1 stipulates that ship owners and salvors may limit their liability for claims. 267 The following claims subject to limitation are admissible under Article 2: a) claims in respect of loss of life or personal injury or loss of damage to property occurring on board or in direct connection with the operation of the ship or with salvage operations, and consequential loss resulting therefrom; b) claims in respect of loss resulting from delay in the carriage by sea of cargo, passengers or their luggage; c) claims in respect of other loss resulting from infringement of rights other than contractual rights, occurring in the direct connection with the operation of the ship or salvage operations; 262 <http://www.imo.org>.27January 2009,3pm. 263 <http://www.imo.org> 12 September 2009. 264 Ibid. 265 The Convention on Limitation of Liability for Maritime Claims, 1976 (LLMC 1976) was adopted at the International Conference on Limitation of Liability for Maritime Claims held in London, from 1 to 19 November 1976, at the Invitation of the Inter-Governmental Maritime Consultative Organization (IMCO), now International Maritime Organization (IMO). The LLMC 1976 entered into force on 1December 1986 and, as at 31 March 2007, 51 States have become Parties to it. The

## 2 **Protocol of 1996 to amend the Convention on Limitation of Liability for Maritime Claims, 1976 (the 1996 LLMC Protocol)** was adopted at the

International Conference on Hazardous and Noxious Substances and Limitation of Liability, 1996, at the invitation of the International Maritime Organization (IMO). The LLMC 1976 Protocol entered into force on 13 May 2004 and, as at 31 March 2007, 25 States have become Parties to it. The Protocol provides for enhanced compensation, as well as for a simplified procedure for updating the limitation amounts. Article 9 of the LLMC 1976 Protocol requires inter alia that, as between the Parties thereto, the 1976 LLMC and the 1996 LLMC Protocol shall be read and interpreted together as one single instrument. <http://maritimecompliance.com/store/show/IA444S> 19.12.2008, 2.45 pm. 266 The 1976 Limitation of Liability

for Maritime Claims has 15 Articles and 4 Chapters. 267 "Ship owner" means the owner, charterer, manager and operator of a seagoing ship. "Salvor" means any person rendering services in direct connection with salvage operations. d) claims in respect of the raising, removal, destruction or the rendering harmless of a ship which is sunk, wrecked, stranded or abandoned including anything that is or has been on board such ship; e) claims of a person other than the person liable in respect of measures taken in order to avert or minimize loss for which the person liable may limit his liability in accordance with this Convention, and further loss caused by such measures. f) claims set out in paragraph 1 shall be subject to limitation of liability even if brought by way of recourse or for indemnity under a contract or otherwise. However, claims set out under paragraph 1(d), (e), (f) shall not be subject to limitation of liability to the extent that they relate to remuneration under a contract with the person liable. The limits under the 1976 Convention were set at 333,000 SDR (US\$499,500) for personal claims for ships not exceeding 500 tons plus an additional amount based on tonnage:

**2 Under the 1996 LLMC Protocol, which entered into force in 2004, the limit of liability for claims for loss of life or personal injury for ships not exceeding 2,000 gross tonnage is 2 million SDR (US\$3.17 million). For larger ships, additional amounts are used in calculating the limitation amount.**

268 3.16.1 Advantages of ratification of the 1976 LLMC by Malaysia Malaysia is a party to

**2 the Convention on Limitation of Liability For Maritime Claims, Protocol 1996.**

Malaysia benefits because this convention determines by agreement certain rules relating to the limitation of liability for maritime claims. 269 Analysis indicates that liability limits under the 1957 Brussels Limitation Convention or the 1976 268

**2 For each ton from 2,001 to 30,000 tons, 800 SDR (US\$1,269) For each ton from 30,001 to 70,000 tons, 600 SDR (us\$952) For each ton in excess of 70,000 tons, 400 SDR**

(US634) 269 A commentator asserted that liability limits under the LLMC are too low in proportion to the volume, quantity and depth. 167 LLMC were too low in proportion to the volume, both in quantity and depth, of claims arising from an HNS incident, thus the efforts to bring the HNS Convention into force 270 . The status of the 1976 LLMC ratification as follows: 271 Malaysia has acceded to the 1996 LMC Protocol but not the 1976 LMC. Indonesia has not acceded to the 1976 LLMC or to the 1996 LMC Protocol. Singapore has acceded to the 1976 LLMC but not the 1996 LLMC Protocol. 272 3.17 CONCLUSION Eighteen (18) international Conventions and Protocols on HNS shipments in the Straits of Malacca were examined. The definition of HNS was seen to be very broad encompassing solids, packaged goods, liquids and gases and also includes wastes. HNS Conventions were classified into four categories and their main features, obligations arising there from, and finally the benefits of ratification were highlighted. With regard to safety and security of navigation and control of HNS pollution through the IMO Conventions, Malaysia is better prepared having ratified the necessary conventions. However, for payment of liability and compensation for HNS pollution whether in a hybrid accident or otherwise, Malaysia has not ratified the 1996 HNS or the 2010 HNS Convention Protocol and therefore cannot seek the benefits of that system of strict liability. The first and important step for Malaysia to take would be to report to the Director of the HNS Fund the contributing cargo before ratification and annually until the 1996 HNS Convention enters into force. Due to the slow

progress of entry into force of the 1996 HNS 270 McKinley, Derek. The 1996 International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea: Implications for State Parties, the Shipping, Cargo and Insurance Industries, (Diss.LLM, University of Cape Town, South Africa,2005) at 39. 271 <http://www.imo.org>.28JAN.2009,11.47pm. 272 Status of Conventions as at 31 January 2010, <http://www.imo.org> ,10.55 am. Convention, the IMO held an International Conference on the Revision of the HNS Convention in April 2010 at London. However, it is expected that the 2010 HNS Convention Protocol will give a boost to the number of States ratifying the 1996 HNS Convention and to overcome the complexities or difficulties for States in ratifying the 1996 HNS Convention. Till ratification, the issue of liability and compensation for HNS pollution, if it arises, will have to be decided by the Malaysian Court under the law of torts. With regards to a liability and compensation framework for marine pollution by oil, Malaysia is in a better position having ratified the oil pollution conventions. The ratification of these conventions by the other strait States means that the Straits of Malacca is better equipped with a

**1 liability and compensation framework for oil pollution. The 2001 Bunker Convention caters for liability**

and compensation for spills of oil carried in ships' bunkers. As Malaysia and Singapore have ratified the 2001 Bunker Convention but Indonesia has not ratified it yet. This means that Malaysia and Singapore are covered if any spillage from ship bunkers. Malaysia and Singapore have ratified the Convention on Limitation of Liability for Maritime Claims (LLMC) Protocol 1996, but the compensation is too small for HNS spillage. Indonesia, on the other hand will not get any advantage of getting compensation if spillage from ship bunkers and HNS occur because of the non- ratification of the two conventions. As the Straits of Malacca is one of the busiest and confined straits used for international navigation, it is vital for Malaysia and the other two strait States to ratify the 1996 HNS and its 2010 Protocol HNS Convention and the 2000 OPRC-HNS Protocol as the Straits requires a sub-regional response action plan to respond to a HNS incident. Singapore has ratified the 2000 OPRC-HNS Protocol. Ratification of the above conventions and protocols are vital to implement the regime of liability and compensation of HNS shipment for the sustainable development and

**1 protection and preservation of the marine ecosystem in the Straits of**

Malacca. 86 88 89 91 92 93 94 95 96 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113  
115 116 117 118 119 120 121 123 124 125 126 128 129 130 131 132 133 134 135 136 137 138 139 140  
141 142 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165  
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