

**THE INTERNATIONAL CONVENTION ON LIABILITY AND  
COMPENSATION FOR DAMAGE IN CONNECTION WITH  
THE CARRIAGE OF HAZARDOUS AND NOXIOUS  
SUBSTANCES BY SEA, 1996.**

Study of the HNS Convention 1996.

Candidate number: 8013

Supervisor: Ms. Vibe Ulfbeck

Deadline for submission: 09/01/2007

Number of words: 17,615 (max. 18.000)

17.10.2007

This document is an analysis of the reasons as to why the HNS Convention, whose significance for the maritime society is also demonstrated, has not become yet in force. Through a comparative presentation of the Convention with other conventions, the difficulties of application and criticisms are developed as well as the propositions of solutions that can accelerate the process of ratification and reduce controversies.

# Content

<b><u>1. INTRODUCTION</u></b>	<b><u>1</u></b>
<b><u>2. THE HNS CONVENTION'S LEGAL INTERNATIONAL BACKGROUND</u></b>	<b><u>5</u></b>
<b>2.1 History</b>	<b>5</b>
2.1.1 From the first negotiation to the conclusion of the HNS Convention	5
2.1.2 The criticisms	7
<b>2.2 The current regime in Norway: application of the Maritime Code 1994.</b>	<b>8</b>
<b>2.3 Hazardous materials trade</b>	<b>10</b>
2.3.1 Convention on Civil liability for Damage caused during carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels	10
2.3.2 Liability for waste trade	11
2.3.3 Protocol on preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol)	12
<b><u>3. THE HNS CONVENTION 1996 COMPARED TO THE OIL POLLUTION CONVENTION AND BUNKER OIL CONVENTION</u></b>	<b><u>14</u></b>
<b>3.1 The shipowner's liability system</b>	<b>14</b>
3.1.1 Liability system	15
3.1.2 Channelling of liability	18
3.1.3 Limitation of liability	19
3.1.4 Case of hybrid accident involving collision and HNS damage	27
<b>3.2 Compulsory insurance</b>	<b>31</b>
3.2.1 Scope of application of article 12	32
3.2.2 Necessity to have compulsory insurance	33
3.2.3 Issuance of certificates	35
3.2.4 Direct action right	37

<b>3.3</b>	<b>HNS Fund</b>	<b>39</b>
3.3.1	The compensation system	39
3.3.2	Contributions to the HNS Fund.	41
3.3.3	States duties: contributions reporting	43
3.3.4	The LNG issue	45
3.3.5	Case of terrorism	46
<b>4.</b>	<b>TWO EXAMPLES OF DIFFICULTIES OF RATIFICATION</b>	<b>50</b>
<b>4.1</b>	<b>European Union: the incompatibility between the HNS convention and Regulation 44/2001</b>	<b>50</b>
4.1.1	Overview of the conflict with EC Law	51
4.1.2	Council Decision 02/971/EC	52
<b>4.2</b>	<b>United States: the unilateralist standpoint with CERCLA</b>	<b>54</b>
4.2.1	Comparison between CERCLA and the HNS Convention	54
4.2.2	Application on two cases	56
4.2.3	The M/V SANTA CLARA I	56
4.2.4	The M/V NICOLAOS	58
<b>5.</b>	<b>CONCLUSION</b>	<b>60</b>
	<b>REFERENCES</b>	<b>62</b>
	<b>ANNEX</b>	<b>A</b>

## 1. Introduction

Transport of hazardous substances is a very dangerous activity. If a spill happens, the aftermath can be disastrous for human beings and the environment. Fortunately, no major catastrophe comparable to *The Erika* has happened yet but there have been some alarming incidents.

For example, in February 1990, in Los Angeles, while charging, longshoremen complained about strong odours emanating from the cargo. The cargo was trifluoropropane that is a non-toxic but highly explosive gas. As a precaution, the harbour was closed. However notifications of possible injury were received.

In December 1993, *The Sherbro* lost in a storm 91 containers of nitrocellulose and pesticides near Normandy. The cargo spread on the shore and was collected without major damage.

In December 1999, 20,000 detonators were lost by the *Mary H* and hundreds of kilometres of beaches in France are rendered inaccessible.

The 31<sup>st</sup> October 2000, *The Ievoli Sun* sank. It was transporting styrene (3,998 tonnes), isopropyl alcohol (996 tonnes) and methyl ethyl ketone (1, 027 tonnes). Styrene is a chemical product that presents risks for human health. It has the appearance of a water-white liquid that evaporates easily but once mixed with other components, it emits a strong odour and can be explosive. With water it changes into white strands. It is irritating for the respiratory system and can provoke different kinds of lesions. It is also carcinogenic. Special care had to be taken for the cleaning up of the shore. In this case, 6 claims have been made for a total of 11,661,830 euros.

More recent cases happened all over the world with more or less disastrous consequences<sup>1</sup>.

However the elaboration of the “Hazardous and Noxious Substances Convention” (hereafter HNS Convention) was not done directly after the happening of a disaster contrary to the “International Convention on Civil Liability for Oil Pollution Damage 1969/1992” (hereafter CLC 1992) and “Fund Convention 1971/1992”, drafted just after *The Torrey Canyon* catastrophe. It was nevertheless inspired by the system dealing with oil pollution liability, although the “Convention on Civil Liability for Operators of Nuclear Ships”, first system designed for compensation of damages caused by hazardous substances, pre-existed.

The HNS Convention seeks to provide a uniform international regime for the determination of questions related to liability and compensation to the victims suffering damages caused by spills at sea of hazardous and noxious substances.

The Convention is based on a two-third system comparable with the one established under the CLC 1992 and the Fund Convention.

Damage is defined as loss of life or personal injury, loss of or damage to property outside the ship, loss or damage by contamination of the environment, costs of preventive measures and further loss or damage caused by preventive measures<sup>2</sup>.

The Convention also provides a list of what should be considered as hazardous and noxious substances<sup>3</sup>. This list refers itself to other existing lists. Those substances include both bulk

---

<sup>1</sup> For example, *Jolly Rubina* in South Africa (2002), *Accord* in China (2002), *Tasman Spirit* in Pakistan (2003), *Bow Mariner* in the USA (2004), *Vicuna* in Brazil (2004), *Kasco* in Vietnam (2005), *GG Chemist* in China (2005), *Samho Brother* in Taiwan (2005) and *Ece* in France (2006).

<sup>2</sup> HNSC 1996 article 1-6.

<sup>3</sup> HNSC 1996 article 1-5. ). “Hazardous and noxious substances” are defined as oils defined by MARPOL 73/78, which are those oils not within the scope of CLC, noxious liquid substances defined in Annex II of MARPOL 73/78, 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, dangerous, hazardous and

cargoes and packaged goods. They can be solids or liquids. The Convention includes liquefied gases (LNG or LPG) but excludes pollution damage as defined in the CLC 1992 and Fund Conventions to avoid an overlap of the two regimes. Some bulk solids as coal and iron ore are excluded because they represent a low level of hazard. Finally, the list refers to hundreds of materials.

Limitation of liability is possible for the registered shipowner on whom strict liability is channelled. In addition, he must subscribe to a compulsory insurance to cover his liability under the Convention. If the damage exceeds the limitation amount, the HNS Fund would provide a second tier of compensation. This Fund is financed by cargo interests. It would also pay in case no liability is found or if the owner is incapable to pay. Compensation is possible for up to 250 million SDR when hazardous and noxious substances caused damage.

The Convention shall enter into force 18 months after that 12 States have accepted it. Amongst those 12 States, four must have no less than two million units of gross tonnage. Entities in these States who would be responsible to pay contributions to the general account must have received a total quantity of at least 40 million tonnes of contributing cargo in the preceding calendar year<sup>4</sup>.

The 30<sup>th</sup> September 1997, the Convention was signed with reservation of ratification by eight states<sup>5</sup>. Today, eight States<sup>6</sup> have ratified the Convention and only two of them have at least two million units of gross tonnage (Cyprus and Russia). As a consequence, it is not in force yet. It would be in force once ratified by European Union members through the “third Erika package” expected in 2008.

---

harmful substances, materials and articles in packaged form covered by the International Maritime Dangerous Goods Code (IMDG Code), liquefied gases, etc.”

<sup>4</sup> HNSC 1996 article 46-1.

<sup>5</sup> Canada, Denmark, Finland, Germany, Norway, Netherlands, United Kingdom and Sweden.

<sup>6</sup> Angola, Saint-Kitts-and-Nevis, Cyprus, Samoa, Russia, Slovenia, Morocco and Tonga.

Its compensation system is complex but comparable to the one provided for oil pollution. Nevertheless, it is a fair regime that splits the risks of transport of dangerous goods between those who benefit from it.

It is undoubtedly necessary that this Convention is ratified as fast as possible<sup>7</sup> since it was drafted more than a decade ago. This need can be demonstrated by an analysis of the legal international background of the Convention (2).

Why does it take so long? Several reasons can be found. Some concern the substance of the Convention: its complexity and its scope make it more difficult to apply than the ones on oil pollution. We will therefore analyse and compare the HNS, CLC 1992, and Bunker Oil Pollution conventions (3).

Other reasons (4) concern either procedural aspects as within the European Union (4.1.) or political behaviour such as the one in the United States (4.2.).

---

<sup>7</sup> William O'Neil, secretary-general of IMO : « it is unsatisfactory that the world should have to wait for years and years for the required number of ratifications to bring a convention in force.”



## **2. The HNS Convention's legal international background**

The need to provide an international convention regulating the transport of hazardous and noxious substances has been developed progressively (2.1) since no major accidents involving hazardous substances had created political incitements to draft such a convention. Nevertheless, such a convention appeared to be necessary in order to establish a uniform regime, to ameliorate the current situation in each country, as shown afterwards with the example of the Norwegian legislation (2.2), and to fill the gaps in the field of international regulations about transport of polluting cargo (2.3).

### **2.1 History**

#### **2.1.1 From the first negotiation to the conclusion of the HNS Convention**

The HNS Convention is the first convention that was not issued directly after a major catastrophe. It was created to complement the conventions about liability for oil pollution. Potentially, pollution by hazardous and noxious goods can be as dangerous for human life and environment as pollution by oil spills.

In 1975, preparatory works started between the IMO States after that a questionnaire had been sent to member States to gather their needs and ideas in 1974. Nevertheless, slow progress was made because several interests were in conflict. The shipowners wanted a shared responsibility between the shipowner and the cargo owners. This view was supported by Japan. The cargo owners wanted an exclusive liability on the owner of the vessel and were helped by Australia.

The scope of application of the Convention was also problematic: should it cover bulk cargo only or also packaged cargo? Bulk cargo is more likely to cause environmental disaster. An extension of the Convention to include packaged cargo would increase problems to organize contributions from cargo interests.

The idea of extending the CLC 1969 was proposed but rejected later on.

In 1984, no consensus was found even if the general inclination privileged the same type of liability than the one found for oil pollution, except the carriers. They declared themselves to be hostile towards the Convention, considering the preventive measures<sup>8</sup> already in place and the economic context, different from the one for oil transportation. Consequently, the project of Convention was about to be abandoned; even the CMI distanced itself from the project.

However the European Union declared that it would draft a regulation on that matter whether no international convention was adopted.

The IMO, threatened by this latter project, had to ascertain its position of generator of maritime conventions by adopting a new resolution as fast as possible. This initiative was welcomed by European governments which preferred the adoption of a universal regime of responsibility rather than a regional legislation which would not be as satisfactory in maritime matter.

It is in this new political context that diplomatic negotiations took place in March 1996. Each government felt a need of success and the HNS Convention was signed, enforcing the IMO's authority. The Convention was finalized the 3<sup>rd</sup> May 1996.

---

<sup>8</sup> Françoise Odier *La Convention sur la Responsabilité et l'Indemnisation pour les Dommages Liés au Transport par Mer de Substances Nocives et Potentiellement Dangereuses (Convention HNS)* Annuaire du Droit de la Mer 1996, Institut du Droit Economique de la Mer, Pedone, p. 94

### 2.1.2 The criticisms

As we have seen, the main argument opposed to the HNS Convention was its complexity. The Convention is based on the CLC/IOPC regime whereas chemicals are substantially different from oil. The cargo sizes are smaller. Chemicals are volatile, rapidly dissolve or degrade. Moreover the safety record of vessels transporting chemicals by sea is good<sup>9</sup>. Chemical tankers and other risky vessels were already subject to preventive rules.

Shipowners were reluctant towards the HNS Convention because it implies an increased financial liability. The threshold of liability borne by shipowners would be substantially increased and in addition, they will have to subscribe compulsory insurance. The number of shipowners who will be concerned by these fees augmentation is larger because the goods involved are not only transported in bulk but also in packaged forms. Would the scheme have only covered bulk transport, the HNS Convention would be applicable to a limited number of specialised ships. HNS in packaged form may be carried by any cargo ship. So even small carriage-capacity vessels should pay a high level of compensation and nearly all vessels would be covered by the liability scheme.

The cargo owners complained about the increase of their financial burden. They would have to participate to compensation of damages and bear an administrative burden to report. It could provoke a distortion of competition due to the heterogeneity of compensation rules at an international level. They were also afraid to take away the shipowners' sense of responsibility and to become the guarantor for the respect of safety standard on what they have no control.

Insurance industry was sceptical about the market capacity to take into consideration the HNS risk without having the possibility to link it with the existing indemnity regimes.

---

<sup>9</sup> *Proposals on Chemical Accidents at Sea Face Strong Opposition*, International Petrochemical Report, May 1984.

As for the States, they should have an incentive to implement a convention. This incentive can be materialised in financial or other kinds of benefices. States will be more reluctant to implement a convention when this convention asks for the establishment of an administrative support manned by highly paid civil servants. The HNS Convention requires States to monitor and report the movement of cargoes falling into the category of hazardous and noxious substances.

Despite the controversies around the HNS Convention and its difficult drafting process, it is clear that it would ameliorate the situation as it is today in nearly all countries as it can be demonstrated by having a closer look at the current regime in Norway.

## 2.2 The current regime in Norway: application of the Maritime Code 1994.

Even though the HNS Convention has not been yet ratified, a procedure to facilitate implementation has already been incorporated into the United Kingdom's legislation. It was inserted into the *Merchant Shipping and Maritime Security Act 1997* under section 14 which came into force on 17 July 1997. The rapidity shown by the United Kingdom was due to the unsatisfactory character of the current regulation of the carriage of hazardous and noxious substances by sea.

In Norway, no incorporation has been made yet but, after the entry into force of the HNS Convention, the Maritime Code (hereafter NMC 1994) will devote its Chapter 11 to the liability and compensation regime for damage caused by spills at sea of hazardous and noxious substances.

Currently, the regime of general liability of the carrier is applicable. There is no distinction pursuant to the nature of the goods causing damage<sup>10</sup>. Special provisions about liability

---

<sup>10</sup> NMC 1994 Chapters 7 and 9.

caused by dangerous goods are only found in order to make the sender liable towards the carrier and sub-carrier<sup>11</sup>.

The problem is when the sender has rendered himself responsible towards the carrier by not informing the carrier of the dangerous nature of the goods and an incident, which would be covered by the HNS Convention, happened including damages to third parties.

The starting point for the third party would be to prove the shipowner's negligence, the causation between the negligence and the damages, and the sufficient proximity. At that point, two possibilities can be distinguished: (i) damages caused by a negligent act or omission of the shipowner or the one for whom he is responsible under NMC 1994, section 151 in the management of the ship and (ii) damages due to an inadequate stowage of the goods.

In the first part of the alternative, the shipowner is negligent. However, a problem arises concerning the proximity of the damages. Unaware of the nature of the goods, the shipowner could not have foreseen the extent of the damage or even its existence. Damages could be caused by the inherent particularities of the goods.

In the second part of the alternative, damages are caused by an inadequate stowage considering the nature of the goods. In this case, the shipowner is not negligent because he was not aware that special care was required for this type of goods.

In those two cases, it would be difficult for third party to claim for the shipowner's liability. The logic would be to hold responsible the actual tortfeasor, the sender, who has acted negligently by not complying himself to the requirements of NMC 1994 section 257. But difficulties as identification of the sender, sufficient insurance, sufficient security and even insolvency of the sender can arise. The shipowner is normally easy to identify, can subscribe insurance and provide security in the ship.

---

<sup>11</sup> NMC 1994 section 291.

As a conclusion, the current system is not enough protective for damage to third parties in case of damage caused by spills of hazardous and noxious substances at sea.

There is an existing need to implement the HNS Convention which would fulfil a gap in the regulations of both the hazardous materials trade and the liability and compensation mechanisms.

### 2.3 Hazardous materials trade

The HNS Convention is an item in a set of international conventions and protocols that aims at regulating the hazardous materials trade. Each regulates a specific aspect of the hazardous materials trade without overlapping each other's scope.

#### 2.3.1 Convention on Civil liability for Damage caused during carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels

The "Convention on Civil liability for Damage caused during carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels" (thereafter CRTD) is the geographical complement of the HNS Convention which concerns maritime transportation. The CRTD was prepared by the United Nations Economic Commission for Europe but other countries can become signatories. It was opened to signatures in 1990 but it is not in force yet.

The CRTD retains a strict liability with limited liability of the operators<sup>12</sup>. The responsible person is presumed to be the registered owner or the owner if no registration exists.

---

<sup>12</sup> CRTD article 1-8.

The idea proposed by the carriers of a joint liability between shippers and carriers was found unworkable and impractical because most of governments think that joint and several liability is too complex. But by way of exceptions, the unfairness of placing all responsibilities on the carrier has been avoided. When other persons are liable, the Convention renders the consignor or consignee liable for accidents caused during the loading and unloading without the carrier's participation. There is also joint and several liability when both the carrier and another person are involved in loading and unloading<sup>13</sup>.

Liability is limited<sup>14</sup> but governments can adopt higher limitation or unlimited liability<sup>15</sup>. CRTD provides for compulsory insurance<sup>16</sup> for the carrier and the person controlling the vehicle at the time of accident. Claims for compensation may be addressed directly to the insurers.

The proposition to supply a fund of compensation in case the liability limits would be exceeded did not gain the support from the majority of States.

### 2.3.2 Liability for waste trade

Hazardous waste is not explicitly excluded of the scope of application of the HNS Convention. However, waste trade is extensively regulated both at the International and European Community level. According to the principle of the most special prevails on the general, the HNS Convention should not be applicable when the others regulations criteria are fulfilled.

The "Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal"<sup>17</sup> (hereafter Protocol to Basel

---

<sup>13</sup> CRTD article 6.

<sup>14</sup> CRTD article 9.

<sup>15</sup> CRTD article 24.

<sup>16</sup> CRTD article 13.

<sup>17</sup> December 10, 1999.

Convention<sup>18</sup>) was made to ascertain a comprehensive regime of adequate compensation when cross-border movements of waste are involved. The system is based on notification and consent from the importing country before waste is transported to that country.

The notifier of waste is strictly liable when damage occur during the transboundary movement of hazardous wastes, including illegal traffic, from the moment the wastes are loaded at the port of export<sup>19</sup>. Liability ceases when the disposer takes possession of wastes. Strict liability is limited and compulsory insurance must be taken.

For other persons causing damage, fault liability would be applicable without limitation.

In the European Union, Regulation 259/93 deals with transport of hazardous waste. Under the Basel Convention and this Regulation, the European Union prohibits shipment of waste from OECD countries to non-OECD countries. However, the enforcement and control of this regulation are problematic as shown in the case of the *Probo Koala* in August 2006. In this case, the repumping of waste and their exportation from the Netherlands to Ivory Coast have been done in contradiction with the principles of R259/93. The shipment of liquid sludge containing hydrocarbons was unloaded in Ivory Coast and a total of 10 deaths, 69 persons in hospital and more than 102,000 persons under medical treatment has been reported.

### 2.3.3 Protocol on preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol)

The triptych prevention-compensation-sanction is assured by the combination of the OPRC-HNS Protocol and the HNS Convention. Indeed, the OPRC-HNS Protocol sets up a preventive regime for the transport by sea of hazardous and noxious substances.

---

<sup>18</sup> March 22, 1989.

<sup>19</sup> Protocol article 3-1.



The OPRC-HNS Protocol entered into force on 14 June 2007, one year after ratification of fifteen States which are parties to the OPRC Convention.

It aims to provide a global framework for international co-operation in combating major incidents or threats of marine pollution. Parties to the Protocol must establish measures dealing with pollution incidents in co-operation with other States.

Ships are required to carry a shipboard pollution emergency plan to deal specifically with incidents involving hazardous and noxious substances. Nevertheless, the definition of hazardous and noxious substances differs from the definition chosen by the HNS Convention.

Preventive measures aim to avoid accidents that could cause damages to the population or to the environment. However, it is always also preferable to implement rules on compensation and sanction as aimed in the HNS Convention. A compensation regime already exists but it is based on negligence liability. According to the shipowners, this regime is fair. All accidents by sea are not due to human's fault and the risky nature of sea transportation. Nevertheless, victims will systematically retain the vessel as the responsible party. It is, therefore, necessary to establish a strict liability regime in case of damage by sea pollution. Protection of victims is the first and political goal of the HNS Convention.

To sum up, there is a real need for the principle of the HNS Convention. The draft has been made on a known basis that has been improved. Logically, it should have already been ratified by a sufficient number of countries to be in force. But interested parties have developed some objections during the drafting process that handicapped the ratification by States. A practical comparison between the HNS Convention and the oil pollution conventions could assert the reasons of this slowness.

### **3. The HNS convention 1996 compared to the oil pollution convention and bunker oil convention**

The CLC 1992, Fund Convention 1971/1992, HNS Convention 1996 and Bunker Oil Convention 2001 represent the International Maritime Organization's achievement for unification of the international law on liability and compensation in case of marine pollution.

HNS Convention introduces a system of strict liability of the shipowner (3.1) under a system of compulsory insurance (3.2) and insurance certificates which is a copy of the CLC 1992. But it is not possible to obtain sufficient cover through the shipowner's liability alone. As a result the shipowner's liability only forms the first tier of liability. The second tier is paid by cargo interests grouped in HNS Fund (3.3). The HNS Fund is basically similar to the approach taken under Fund Convention 1992.

It seems that there should be no problem of implementation of a convention when it is modelled on another convention highly ratified; however a closer analysis to the HNS Convention shows some differences that can explain the reluctance of the shipping industry, the insurance companies and the cargo owners towards it.

#### **3.1 The shipowner's liability system**

Chapter 2 of the HNS Convention deals with the liability of the shipowner. This scheme is now classical in Maritime Law: strict liability (3.1.1), channelling of liability (3.1.2) and limitation (3.1.3).

### 3.1.1 Liability system

The chosen liability is a strict liability which provides a different evidential regime from the fault based liability (3.1.1.1). Without a mechanism of exemptions, this regime would have seemed unfair for the shipowner (3.1.1.2).

#### 3.1.1.1 Rationale underlying the choice of strict liability regime

Under English law, the landmark case about strict liability is *Rylands v. Fletcher*<sup>20</sup> where the court held:

“We think that the true rule of law is, that the person who for his own purpose brings on his lands and collects and keeps there anything likely to do mischief if it escapes must keep it in at his peril, and, if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape”.<sup>21</sup>

Where a hazardous activity is involved, the party who creates the risk and gains economical benefit from that activity should bear the risks. Strict liability is a liability based on risk and not on fault.

As with the CLC 1992<sup>22</sup> and CRTD 1989<sup>23</sup>, the shipowner, under the HNS Convention, is subject to a strict liability<sup>24</sup>. The rationale of this regime of liability answers to what was exposed in *Rylands v. Fletcher*.

---

<sup>20</sup> [1868] Lloyd's Rep. 3 H.L. 330.

<sup>21</sup> Under French Law, article 1384 paragraph 1 of the *Code Civil* introduces a general liability for 'deeds of the things within one's keeping' which corresponds to the rule held in *Rylands v. Fletcher*. Moreover, there are many strict liability legislations both in public and private law for damage caused by things or caused by specific activities.

<sup>22</sup> CLC 1992, article 3.

<sup>23</sup> CRTD 1989, article 5.

Furthermore, strict liability is an advantage for innocent victims of pollution since they will not have to prove that the damage was caused by the shipowner. The victim only has to establish causation between the torts and the behaviour of the defendant but no direct link. It participates to satisfy victims of a maritime accident by accelerating the procedures of compensation. It is particularly interesting for the victims when the circumstances of the accidents are unclear and when it is not sure that the fault lays with the shipowner. Innocent victims do not need to acquire relevant information which either is inaccessible or needs considerable costs. The shipowner has the burden to prove that the exemptions are applicable. The liability regime under the HNS Convention uses in the same time the techniques of reversed burden of proof and of liability for risk.

Finally, even if this reasoning is not unanimous, strict liability is a good way to improve prevention of marine pollution. It creates an incentive for the shipowners to comply with the safety standards. Shipowners will ensure that a certain degree of care in the management of the ship is maintained. In order to avoid liability, they have to decrease the probability of accidents. With this aim, they may develop stringent methods to ascertain the seaworthiness of the ship, take preventive and precautionary measures.

#### 3.1.1.2 The mechanism of the HNS strict liability

CLC 1992 offers compensation only when damages are obvious. For HNS damage, this rule was not maintained because it would be problematic as the damage can appear progressively or a long time after the leaking of a hazardous or noxious substance happened<sup>25</sup>.

---

<sup>24</sup> HNSC 1996, article 7-1.

<sup>25</sup> The Minamata disease. A Japanese village was poisoned by mercury issued by a petrochemical plant. First symptoms were discovered in 1953 and the source of disease was identified in 1959. 3,000 persons were contaminated in the meantime. See <http://rare diseases.about.com/od/rare diseases1/a/102304.htm>.

The exemptions contained in CLC 1992<sup>26</sup> are found in the HNS Convention<sup>27</sup>. Shipowner will not be liable if the pollution is caused by an act of war or irresistible natural phenomenon, is wholly caused by an act or omission done with the intent to cause damage by a third party (act of terrorism), or by the negligence or wrongful act of a public authority. The exception is important in case of terrorism. If there is no liability, there will be no right of action against the insurers. The case of contributory negligence is also covered by the HNS Convention<sup>28</sup>. The shipowner may be partly or wholly exonerated from liability.

But in addition to those exemptions, article 7-2 (d) provides an exemption peculiar to the nature of the transported goods.

If the shipowner or its servants or agents did not know or could not reasonably know the hazardous and noxious nature of the goods shipped because the shipper or the one in charge to provide information failed to furnish it, the shipowner will not be automatically liable if the damage was wholly or partly caused by the substances or if the shipowner did not take an insurance as a result of the absence of information<sup>29</sup>.

This is a novelty of the regime comparing to the liability system for oil pollution. It takes into account that hazardous and noxious substances may be transported in many forms and in small quantities but remains highly dangerous. In CRTD, the same exemption was provided because the transported goods are of the same nature. The shipowner is not liable when no information was provided pursuant to the current regime of carriage of goods by sea<sup>30</sup>. As we have seen previously, in Norway, the responsible tortfeasor would be the sender. Exceptionally, the receiver would be responsible when, for instance, he requests that the sender hides information about the goods to the carrier. There would be issues of identification of the sender, predictability, financial security, inadequate protection of the victims.

---

<sup>26</sup> CLC 1992 article 3-2 a) b) and c).

<sup>27</sup> HNSC 1996 article 7-2.

<sup>28</sup> HNSC 1996 article 7-3.

<sup>29</sup> For practical examples, see 4.2.3 and 4.2.4.

<sup>30</sup> In Norway see NMC 1994 section 291.

However, with the HNS Convention, the HNS Fund will supply compensation<sup>31</sup>. Victims have a security in the fund which is an important advantage comparing to the situation as it is today.

### 3.1.2 Channelling of liability

The HNS Convention article 7-5 provides a system of channel of liability towards the registered owner. It is based on the CLC 1992. No claim can be made against the servants, agents, crew members, pilots, charterers, salvors etc.

The channelling of liability is an interesting system for the injured party who is protected by an extensive strict liability imposed on the shipowner. The original CLC made the shipowner liable but did not protect other parties from suit except the agent and servants. In CLC 1992 and HNS Convention 1996, the protection was spread to other parties, except if the pollution was caused by the wilful misconduct of such a person.

In addition, it is an advantage for the shipowner and other parties that may be responsible, as it is a simple system that avoid long courts proceedings, to know who should be held liable. Furthermore, it is predictable for the shipowner who will cover himself and it avoids problem of double insurance.

Channelling of liability is a mechanism that is often used in conventions on compensation for pollution but it is not unanimously appreciated. After the *Erika* accident the channelling provisions of CLC 1992 was criticized by the European Community (EC) and it is one of the reasons for refusal of the United States (US) to sign the IMO's pollution liability conventions<sup>32</sup>. The EC and the US think that excluding charterers, operators and managers from liability could serve as a disincentive to maintain high standards aboard ships and due care in their operations.

---

<sup>31</sup> HNSC 1996 article 14-1 (a).

<sup>32</sup> George J. Mitchell, *Preservation of State and Federal Authority Under the OPA 1990*, 21 Environmental Law 237 p. 240 (1991)

Under the Bunker Oil Convention, channelling of liability was not used. But more than an answer to the criticisms, this may be explained by the fact that there is no complementary convention comparable to the Fund Convention where compensation is given by the IOPC Fund. This fund exists for the HNS Convention and is called the HNS Fund.

Not adopting a channelling mechanism raises also problems increased by the presence of insurance. For example, it can be difficult to determine the apportionment of liability between several parties and their insurers. It is difficult also to figure out how limits of liability are applicable.

Furthermore, contrary to HNS Convention, Bunker Oil Convention does not protect salvors and cleanup contractors. Protection of those parties is called “responder immunity”. It is made to encourage taking measures to prevent or minimize pollution. Indeed, people undertaking those activities don’t bear the risk of liability claims. This protection responds to the underlying principles of the convention, to enforce prevention and protection against marine pollution. As such, several States, among others Australia and England, decided to add in their domestic legislation, responder immunity when implementing the Bunker Oil Convention.

In compensation to the regime of strict liability and channelling of liability, the shipowner can limit his liability.

### 3.1.3 Limitation of liability

The exception to the right to limit liability is when the damage results by the personal act or omission of the shipowner who acted with knowledge that such a damage could result. This exception is found also in the CLC 1992 and Convention on Limitation of Liability for Maritime Claims, 1976 (hereafter LLMC 1976).

### 3.1.3.1 The right to limit liability

Shipowners' liability is limited according to the gross tonnage of the vessel<sup>33</sup>.

- When the vessel is up to 2,000 GT, the liability is limited to 10 million SDR.
- When the vessel' gross tonnage is between 2,001 and 50,000, in addition to the 10 million SDR, the liability is limited to 1,500 SDR/ton.
- For vessels over, a supplement of 360 SDR/ton is added up to 100 million.

For example<sup>34</sup>, if a chemical tanker of 15,000 GT with a cargo of benzene has an accident during berthing, the shipowner would be liable up to:

$$10 \text{ million} + (15,000 - 2,000) \times 1,500 = 29.5 \text{ million}$$

On the top of it the HNS Fund may have to pay up to the aggregate limit of 250 million. It will have to compensate the victims up to 220.5 million.

Determination of the amounts was the result of a compromise between two opposite theories. Most of developed countries wanted a high level of limitation and even some European countries find difficult to maintain a right of limitation when incidents still happen. However developing countries were favourable to fix low limits for the first level not to handicap their national shipping industry.

The first level of limitation was conceived as a result of the 71<sup>st</sup> session of the IMO Legal Committee in October 1994 where the United Kingdom demonstrated that a small ship carrying particularly harmful hazardous and noxious substances can cause more damages than a larger ship that transport less harmful cargo. In practice, very dangerous chemicals tend to be transported in small parcels on board of small ships. A vessel whose tonnage is of 500 GT would be deemed to have a tonnage of 2,000 tonnes for the purpose of the HNS Convention. This threshold is criticised because the owner of a vessel which practices

---

<sup>33</sup> HNSC 1996, article 9.

<sup>34</sup> This scenario was provided by Joe Nichols, Workshop 25 and 26 May 2006, IMO London.



coastal navigation and carries dangerous goods have to conclude an insurance contract for 10 million SDR. It is seldom that a vessel does not transport hazardous and noxious substances if we take into account the large scope of definition of such substances. It may have been practical to introduce a minimum quantity of cargo under which the HNS Convention is not applicable to avoid the risk of imposing a too heavy burden on small carriers. The HNS Convention provides the possibility for the States Parties to exclude its application if certain conditions are fulfilled<sup>35</sup>

The difference of figures comparing to the CLC 1992<sup>36</sup> reflects the difference of the carried goods. Transportation of oil needs special equipment and vessel with a certain capacity contrary to the transportation of hazardous and noxious substances that can be done by unspecialised small vessels. As a result, the figures exceed those found in the CLC 1992.

However it is regrettable that the limitations do not take more into account the nature of the transported goods and the notion of environmental risk. Not taking more into account the degree of danger to the environment is understandable in the measure that it would introduce more complexity due to the large number of goods covered by the HNS Convention. But, for example<sup>37</sup>, in the case of carriage of coal<sup>38</sup>, the shipowner liability will be limited to a higher level than in the case of carriage of a very noxious good whose weight is less significant.

A precondition for the shipowner to limit its liability is to establish a limitation fund. He will be able to constitute the fund representing the limit of his liability in the court of the country in which the damage has been caused<sup>39</sup>.

---

<sup>35</sup> HNSC article 5. Cf. 3.2.1.1.

<sup>36</sup> NMC 1994 section 194.

<sup>37</sup> This example is theoretical because coal is outside the scope of the HNSC (Karine Le Couviour *The HNS Convention : A New Challenge for International Maritime Law*, SIMPLY 2000, p.169 and 'Athanasia Comminos' [1990] 1 Lloyd's Rep 277).

<sup>38</sup> Françoise Odier, *La Convention sur la Responsabilité et l'Indemnisation pour les Dommages Liés au Transport par Mer de Substances Nocives et Potentiellement Dangereuses*, Annuaire du Droit de la Mer 1996 Tome 1 p.100.

<sup>39</sup> HNSC article 9-3.

The constitution of a fund corresponds with what is already found in the LLMC 1976. But a difference is that the shipowner does not have to wait for the issuance of a claim to constitute a fund.

Constitution of a limitation fund prevents any person to exercise any action against other assets of the shipowner for his HNS claim and if the vessel has been arrested following the incident, it has to be released<sup>40</sup>.

Shipowners' insurers can also constitute a limitation fund.

Both the CLC 1992 and the HNS Convention encourage the shipowner to take prompt actions in minimizing damage by providing that costs incurred by the shipowner can be ranked as other admissible claims against the shipowner's own limitation fund<sup>41</sup>. It gives the shipowner a strong incentive to act promptly. This provision is not found in the Bunkers Convention or others limitation conventions.

Considering the *Vicuna* case, the 15<sup>th</sup> November 2004, two explosions arose onboard of the *Vicuna*, a chemical tanker of 11,636 GT while discharging 14,000 tonnes of methanol in the port of Paranagua in Brazil. Two sailors were found dead and two lost. The vessel broke in two and approximately 400 tonnes of propulsion fuel were spilled.

The pollution happened in a sensitive area where tourism and fishing are two important activities. Fishing and sale of aquacultural products were forbidden until disappearance of risks. Dolphins, turtles and birds were affected by pollution.

In total, the wreck removal, pollution prevention and the clean up costs were up to 40 million USD. Fines payable to the port, local environment agency and federal environment agency were more than 30 million USD.

---

<sup>40</sup> HNSC article 10.

<sup>41</sup> HNSC article 9-8. We find the same incentive under article 14-2, where the owner can claim for compensation for his "expenses reasonably incurred or sacrifices reasonably made [...] voluntarily".

This incident should be covered by the Bunker Oil Convention and the HNS Convention. Distinction should be made between damages covered by each convention. However article 1-6 of the HNS Convention stipulates that if damages caused by hazardous and noxious substances cannot be separated from damages resulting from other factors, they shall be deemed to be provoked by hazardous and noxious substances. Exception is made if the other factors are either covered by the CLC 1992 or radioactive material of class 7. There is nothing said about damages covered by the Bunker Oil Convention. Limitation of the shipowner's liability would be less than 24.5 million SDR.

### 3.1.3.2 The linkage problem

Nowadays, limitation is fixed by each State. Most of them follow the Brussels Limitation Convention 1957 or the LLMC 1976 as it is in Norway. Limitation under these regimes is too low to cover a major pollution incident by hazardous and noxious substances.

As a result, it was decided not to link the limits under the HNS Convention to existing limitation of liability. In fact, mainly insurers were in favour of such a linkage. They argued that linkage was necessary in order to make full use of the insurance market capacity.

If there was a uniform limitation regime, there would be no linkage problem. In that hypothesis, the HNS Convention would only provide that a Contracting State can declare that the shipowner's right to limit would be made, for example, under the LLMC 1976. If a HNS accident happens for which the LLMC 1976 Fund is not sufficient, the shipowner would have to provide a supplementary fund.

However, difficulties appear, for instance, when a State is party to the HNS Convention and the unamended LLMC 1976. It will be unable to impose higher limits on the owner of a vessel with the flag of another State Party to the unamended LLMC 1976. So it was

necessary to provide the States the right to exclude application of the LLMC 1976 in order to apply the HNS Convention. The 1996 Protocol to the LLMC 1976 introduces that a State Party may exclude claims covered by the HNS Convention from the ambit of the 1996 Protocol<sup>42</sup>. Higher limits are made applicable to pollution by hazardous and noxious substances. The United Kingdom adopted this reservation when adopting the Protocol 1996. It is probable that any State Party to the LLMC 1976 and HNS Convention will ratify the Protocol 1996.

### 3.1.3.3 Overview of the theoretical discussion about the necessity to limit the shipowner's liability

A part of the legal authors criticizes the possibility for the shipowner to limit his liability on the ground that legal basis justifying limitation of liability is difficult to find.

Gotthard Gauci argues that it is an anachronistic concept which is “an unjustly discriminatory attempt to subsidise the shipping industry at the expense of other interests”<sup>43</sup>. The suppression of limitation of liability corresponds to the principle that the one who damages the property of somebody else should pay for it or provide remedy that would constitute *restitution in integrum*.

His argumentation is mainly based on the fact that limitation of liability can produce absurd results as for the *Torrey Canyon* case<sup>44</sup> where the limitation was too low. He also demonstrates that unlimited liability would be insurable in opposition to what it is argued. Insurance companies would provide a ceiling upon which it will not pay and as a consequence only a marginal increase of price would be supported by the shipowning industry. For oil pollution damage and nuclear damage, unlimited liability has even been implemented by some judicial systems. For instance, Florida Statutes impose unlimited

---

<sup>42</sup> Protocol to the LLMC 1976, 1996, article 7.

<sup>43</sup> Gauci, *Limitation of Liability in Maritime Law ; an Anachronism ?*”, 1995, Marine Policy Vol 19, N°1, 65, p. 66.

<sup>44</sup> 281 F Sup. 228 (1968).

liability for damage to natural resources and property damages<sup>45</sup>. Californian Government Code § 8670.56.5 retains an unlimited and strict liability for damages incurred by leaking or discharging of oil in addition to requirement for financial security up to a specific amount. In the case of nuclear damage, Swiss Law<sup>46</sup> also applies unlimited liability and compulsory insurance up to a certain amount.

In *The Bramley Moore*, Lord Denning says: “I agree that there is not much room for justice in this rule; but limitation of liability is not a matter of justice. It is a rule of public policy which has its origin in history and its justification in convenience.”<sup>47</sup> He does not condemn the system in its necessity contrary to Mr Justice Black, in *Maryland Casualty v. Cushing*<sup>48</sup>, where he declares that help provided by the Congress to shipowners was borne by the “injured seamen”.

The Dean Rodière<sup>49</sup> reviews the history of limitation of liability to establish whether it is still a necessary system. In the past, limitation was based on the ship. Once the ship was abandoned, liability of the shipowner stopped. The reason was that at each journey, the shipowner risked his vessel for the common benefice. This situation changed when counts could not be separated due to a rapprochement of journeys.

At that moment the proposition was made to limit liability of the vessel up to its insurability. There can be a problem of substitution between responsibility and insurance. This substitution is criticised by Rodière as being contradictory with moral. Compensation by shipowners is not assessed according to shipowners’ fault but according to their activities and resources. They become guarantors. However is it not the result achieved by the system of strict liability more than by the existence of limitation and compulsory insurance?

---

<sup>45</sup> Florida Statutes 376.12.

<sup>46</sup> RS 732.44 Loi sur la responsabilité civile en matière nucléaire, Chapitre 2 article 3 and article 11.

<sup>47</sup> Lord Denning M.R. In *The Bramley Moore* [1963] 2 Lloyd’s Rep. 429, p. 437.

<sup>48</sup> 1953 AMC Vol XXXII 827, p. 859.

<sup>49</sup> René Rodière, *La limitation de responsabilité du propriétaire de navires, passé, présent et avenir*, Droit Maritime Français 1973.

In addition, a shipowner may be incited not to feel responsible. Shipowners are encouraged to think that they can always limit their liability and would have the incentive to break safety standards. They would pay for further insurance coverage in compensation.

But what was the goal when drafting the HNS Convention? Was it not precisely that victims will get easily a compensation for the damages they suffered, financially secured by the shipowners, their insurers and the HNS Fund? Is there really a risk that preventive measures would not be respected? If shipowners don't respect them, they will take the risk to damage their property, have to pay penalties, and compensate the third party victims for their losses without being able to limit their liability<sup>50</sup>. The same wording is found in LLMC 1976 and CLC 1992. However the exception to the right to limit liability is very seldom applied. As a consequence, it would be better to envisage the possibility to amend the HNS Convention to add that the right to limit liability would be lost in case of breach of safety standards.

Gavin Little<sup>51</sup> notices that G. Gauci does not consider the potential scale of damages in case of oil or hazardous substances spills. In the case of hazardous substances carriage, transportation must be done in bulk, at low expenses and relatively safely. That's the reason why ships are used but it includes a significant level of risks linked to the perils of sea. The economic consequences of marine pollution by hazardous or noxious substances are potentially serious even for a large shipowning company and its insurers. It is normal that they do not want to bear all the risks inherent to such a carriage.

In the case of the HNS Convention, the amounts of limitation are supposed to be high enough to cover the majority of incidents. Shipowners will agree to have a high level of liability as long as it is insurable. The advantage for them is that there is a predictability of

---

<sup>50</sup> HNSC article 9-2.

<sup>51</sup> Gavin Little, *The Hazardous and Noxious Substances Convention : a new horizon in the regulation of marine pollution*, LMCLQ 1998, pp. 558-559.

what they are supposed to pay and that they will enjoy a better reputation towards potential injured parties.

As a consequence, victims are better protected by the HNS Convention, except in really extreme cases, and shipowners are able to insure themselves without unpredictability. It is a win-win situation. Introducing an unlimited system of liability with compulsory insurance and a ceiling would not improve fundamentally the situation for the victims especially since limited liability is extended by financial securities provided by the HNS Fund.

However, it may happen some problems of coordination when the HNS Convention is applicable in the same time than other conventions that do not retain the same rules on liability.

#### 3.1.4 Case of hybrid accident involving collision and HNS damage

Collision liability is regulated in the “Convention for the Unification of Certain Rules of Law with Respect to Collision between Vessels”<sup>52</sup> (hereafter 1910 Convention). In Norwegian law, the 1910 Convention has been transposed in the Chapter 8 of the Maritime Code 1994.

The provisions of this chapter are peculiar comparing to the rest of the Maritime Code in the way that they consist in a review of all possible case and for each case decide who should be liable. The general characteristic is that the liability regime is a liability for fault.

In the HNS Convention, rules on conflict of conventions have been elaborated at article 4. Claims must arise out of any contract for the carriage of goods or passengers. They concern conflict with laws applicable to workers, pollution damage as defined in the CLC 1969 and damage caused by a radioactive material of class 7.

---

<sup>52</sup> Brussels, 23 september 1910.

A large number of hypotheses can arise.

#### 3.1.4.1 Collision between two HNS carriers

First, what will happen if two ships transporting hazardous and noxious substances collide?

The HNS Convention has a provision for incidents involving two or more HNS carriers<sup>53</sup>. To be responsible, the owners should not be exempted under article 7. If the requirements of article 8 are fulfilled, the owners are liable jointly and severally for all damage that are not reasonably separable.

But what kind of damages is covered? If one vessel was transporting passengers and HNS cargo, to whom shall they claim compensation?

As we have seen, the HNS Convention excludes claims arising out of any contract. That seems to prevent the passengers of the vessel to claim against the owner of this vessel on the ground of the HNS Convention. They should be able to claim against him only on the ground of the contract and by extension on the ground of the “Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974”<sup>54</sup> (hereafter Athens Convention 1974). The carrier is liable for his, or the one he is responsible for, fault or negligence<sup>55</sup>. Limitation is up to 175,000 SDR for each passenger except if higher limits are agreed between carrier and passengers.

If damage occurs in the scope of article 4, *e.g.* damage to a worker or to the goods transported under contract of carriage, the answer would be the same.

---

<sup>53</sup> HNSC 1996 article 8.

<sup>54</sup> In the Norwegian Maritime Code 1994, under chapter 15.

<sup>55</sup> NMC 1994 section 418.



However, injured passengers can claim against the registered owner of the other vessel carrying hazardous and noxious substances. The problem arises when damages are not reasonably separable. Recourse action is provided by article 8-3. If a passenger claims against the owner of the other vessel for compensation of his damage on the ground of the HNS Convention, the owner should be able to use his recourse right against the other owner involved in the HNS accident. However the HNS Convention seems not to be applicable pursuant to article 4. The owner of the passenger/HNS vessel will use the defence under the Athens Convention 1974.

#### 3.1.4.2 Case where only one vessel carries hazardous and noxious substances.

Second hypothesis is when only one vessel involved in a collision is carrying hazardous and noxious substances. In this case, we are out of the scope of article 8.

The HNS Convention does not deal directly with this situation. However in article 42, the HNS Convention holds that it supersede any convention already in force in case of conflict.

A scenario<sup>56</sup> is that a chemical tanker of 20 000 GT and a cruise ship of 85 000 GT collide. In the collision 5 passengers are killed and 30 are injured. The cruise ship's bunker tanks are breached. The chemical tanker spills some of its cargoes and it causes the death of ten more passengers.

For the damages caused by the spill of chemical, the HNS Convention would be applicable including for the death of the passengers as the passengers did not contract with the shipowner.

The shipowner will be able to limit his liability at 37 millions SDR (10 million for the first level + 18 000 x 15000 for the second level).

---

<sup>56</sup> This scenario was provided by Joe Nichols, Workshop 25 and 26 May 2006, IMO London.

If the damages are more important than this amount, the HNS Fund will have to pay under article 14-5. The total compensation received by the aggrieved parties will be limited up to 250 million SDR. As a consequence the Fund will provide 213 million SDR (250 million – 37 million).

We do not take into consideration that the spill of chemicals is the consequence of the collision. Normally, if the collision was caused by both ships, each vessel would cover the damage in proportion to its fault<sup>57</sup>. In case both ships are equally liable, the cruise ship would have to cover half of the damages occurred by the spill of chemicals. A more extreme case would be that the cruise ship is the only one to be at fault for the collision and as such has to pay for all the damages. This situation would be unsatisfactory. First of all, transporting hazardous and noxious goods is a risky enterprise. The carriers who benefit from this activity should be the one to bear the associated risks. As seen previously, it is not a system of liability based on blameworthy conduct but on risks. The cruise ship has no means to know in advance what could be the consequence of a collision. Furthermore, the carrier is the person who is in the best position to take adequate insurance. However, article 8-3 enables the HNS shipowner to claim against the other owner in a recourse action.

For the first damages that are the direct consequences of the collision, the 1910 Convention would apply as well as the Bunker Oil Convention when in force, the CLC/Fund Convention and the Athens Convention<sup>58</sup>.

Cases of collision involving one HNS carrier and another type of vessel happened several times<sup>59</sup>. On 31<sup>st</sup> January 2006, the *ECE* sank after colliding with another vessel near the coasts of France. It transported around 10,000 tonnes of phosphoric acid and 90 tonnes of

---

<sup>57</sup> NMC 1994 section 161.

<sup>58</sup> For a concrete example of collision between a cruise ship and a container vessel, in 1999, the *Ever Decent* transporting cyanide and other hazardous substances collided with the *Norwegian Dream*, carrying 1750 passengers and 638 crew members. Substantial physical damage to both vessels arose including a fire onboard of the *Ever Decent*, but no major injuries.

<sup>59</sup> See, for instance, the *Happy Fellow* (1995), the *Ichiyo Maru No21* (1997), the *Allegra* (1997), *Qi Yun 881* (1999), the *Martina* (2000), the *Tasei Maru* (2000), the *Formosa One* (2001), the *Dutch Aquamarine* (2001), the *Freja Asia* (2002), the *Kasco* (2005), the *Samho Brother* (2005).

propulsion fuel. Phosphoric acid represents a low degree of danger for the environment. However damages as defined pursuant to article 1-6 shall be covered by the rules of the HNS Convention.

To conclude, the liability system under the HNS Convention is now classical for the maritime society. Even though it constitutes a supplementary financial burden for the shipowners, whose liability has increased, it is today welcomed by them, as long as their liability is insurable. Criticisms to this system are not peculiar to the Convention. It is natural that not every country is fully satisfied with an international convention. The HNS Convention is the result of a compromise in which each State Party finds a benefit even if it is counterbalanced by some detriments. So in itself, the liability system does not constitute a real hindrance to the adoption of the HNS Convention.

### 3.2 Compulsory insurance

The HNS Convention Article 12 imposes compulsory insurance on the registered shipowner. It gives the choice between insurance and other financial security provided for example by a bank. It seems to be the same obligation than under the CLC 1992 article 7<sup>60</sup>. Victims will have a right of direct action against the insurer that cannot assert defences issued from the insurance policy but can assert the ones available for the insured.

The significance of the issue of insurance is shown by the fact that the negotiations in 1984 failed partly because insurers refused to provide insurance for the HNS risk. This refusal can be explained by the fact that we still do not know about the actual harmful effect of 70% sold chemical product.

---

<sup>60</sup> NMC 1994 section 191.

### 3.2.1 Scope of application of article 12

#### 3.2.1.1 Limited scope pursuant to the size of the ship

Article 12 does not provide any exemption according the type or size of ship. It is a difference with CLC 1992 which stipulates that there is no obligation to subscribe insurance under a minimum of 2,000 tonnes of oil as cargo in bulk. This minimum does not exist in the HNS Convention. The first paragraph only refers to ships carrying hazardous and noxious substances. Neither does the limitation of liability provide a minimum. Shall every ship be insured as every ship will carry some materials that are covered by the HNS Convention? Even in the definition, there is neither minimum quantity under which the HNS Convention is not applicable nor any requirements about the reasons why the substance is on board. Must it be cargo transported from one port to another or product used for the maintenance of the vessel? As a consequence, it will be seldom that a shipowner will not have to cover himself for HNS risks.

However, if there is no general exemption for the non application of the Convention, each State can decide that the HNS Convention as a whole will not be applicable to ships whose gross tonnage is inferior to 200 GT and carrying dangerous goods in package form when they are involved in domestic transport or if an agreement exists between two neighbouring States for sea carriage between them<sup>61</sup>.

This exemption has a restricted scope but it answers to criticisms, as seen previously, and protects very small shipowners who should not have to support a too heavy financial burden in paying compulsory insurance fees.

---

<sup>61</sup> HNSC article 5-1 and 5-2.

### 3.2.1.2 Limited scope pursuant to the owner of the ship

Under article 4.4, the Convention does not apply to warships, naval auxiliary or other ships owned or operated by a state and used only on non-commercial service. As a consequence they are not obliged to comply with the requirements of compulsory insurance.

However a State can decide to apply the Convention to its warships and others pursuant to article 4.5. In that case requirements for mandatory insurance are applicable.

### 3.2.2 Necessity to have compulsory insurance

Even if it is rare that owners do not have sufficient financial security to cover their liabilities, the maritime society was not willing to take this risk. Indeed, in the absence of compulsory insurance requirements, the shipowner is free to take a cover for one or another type of liabilities. Mandatory insurance has the advantage to at least ensure compensation to pollution victims.

The disadvantage of compulsory insurance is that it creates discrepancy in competition. First, a shipowner may not be able to purchase insurance. It is common that insurer uses different insurance rates to take into account of the higher risks of substandard ships. In a way, this policy encourages their member shipowners to reduce or avoid pollution incidents. They will also be required to maintain their class through the insured period. It is particularly important to counterbalance the “moral hazard”. When an operator is insured, his behaviour is different from the situation he is not. He will act naturally less carefully regarding prevention.

Secondly, considering the international nature of maritime transportation, without uniform rules, shipowners would have to comply with different more or less permissive national laws which would create competition issues. Then it is necessary to create a uniform system of compulsory insurance.

The last remaining competition issue is when a ship is registered in a State that is not party to the HNS Convention. Article 12-1 does not require from ships registered in a non-member country to purchase a compulsory insurance. However article 12-2 stipulates that any State Party can issue a certificate for those vessels. Those two articles seem contradictory. If a vessel is not required to get insurance why should it have certificates proving that it complies with the requirements of the issuing country? Is there an implied obligation for a vessel registered in a non-member State to provide sufficient security when she enters the seas of a State Party?

Article 12-1 prevents to widen the scope of the HNS Convention to States where it would not have been ratified. However, if a vessel not registered in a State Party causes an HNS incident in the territorial sea of a State Party, the HNS Convention will be applicable<sup>62</sup>. The strict liability of the registered shipowner will be retained and the limitation threshold will be higher than normally. It is probably advisable for the shipowner willing to conduct regular carriage by sea of hazardous and noxious goods in State Party waters to take sufficient security against his potential liability. If he freely secures himself, article 12-2 will be applicable and certificates will be issued. If the shipowner cannot produce certificates, the access to the port may be denied. Furthermore, he will be obliged to pay fines and penalties in the State Party where the vessel will arrive or leave the port.

However, if he does not take securities, and is unable to pay, the HNS Fund will substitute himself to the shipowner pursuant to article 14-1 b).

---

<sup>62</sup> HNSC article 3.

### 3.2.3 Issuance of certificates

The aim of the HNS Convention is to provide adequate compensation with a short notice. Not to restrict too much the way that compensation is secured, HNS Convention, CLC 1992 and Bunker Oil Convention allow maintaining other financial security than insurance. It can take the form of a guarantee from a bank or any similar institution as long as security is financially adequate.

Most of the time, the security will take the form of a blue card issued by a P&I Club. Certificate must be issued for each ship after a State Party has checked that financial security was sufficient. If the vessel is not registered in a State Party, the appropriate authority of any State Party may issue and certify a certificate<sup>63</sup>.

Due to the variety of securities, it is necessary that State parties recognise certificates issued in other countries otherwise there would be a conflict in the recognition of administrative decisions taken by another member State. It enables to ensure comity between States Parties. Such an obligation is made under article 12-7. However a State may at any time request consultation with the issuing or certifying State if it believes that the guarantor or insurer is not financially capable of meeting his obligations. Furthermore, a State Party is not obliged to accept a certificate in case the same recognising State would not have issued one for its on vessel. For instance, a State may revoke its own certificates and therefore it may refuse to accept certificates issued by other States Parties under the same circumstances. This possibility is made to ensure that no better treatment is given to foreign vessels comparing to domestic vessels.

---

<sup>63</sup> HNSC article 12-2.

To ease cooperation between States, the HNS Convention utilizes flag State control at a first stage<sup>64</sup>. The State Party where the vessel is flagged must verify the existence of certificates. At a second stage, member State would ascertain that such a security has been taken by each vessel, even registered in a non-member State, entering or leaving the territorial sea of the State. In practice, a State Party relies on the monitoring system of the country where the blue card provider has its principal place of business. If this country is not a party to the HNS Convention, it would be inappropriate and even against its duties for the States Parties to grant such a trust.

Most States that are already party to the CLC have a procedure for issuing and monitoring the validity of certificates. They have a system of penalties in case a vessel failed to provide enough security. In United Kingdom, under CLC, it is considered as an offence for a ship to enter or leave a domestic port or terminal without an insurance certificate issued by a State Party.

The HNS Convention gives little guidance as to the criteria regarding to the evaluation of the blue cards. Article 12, paragraph 1 establishes that the financial guarantees must be as reliable as a bank guarantee and paragraph 7 gives a State Party the right of consultation if it believes that the guarantor or insurer is financially unsound.

Pursuant to paragraph 6, States Parties are free to elaborate further national criteria in addition to those included in the HNS Convention. It is necessary for each State to rely on the foreign national criteria for issuance and validity of compulsory insurance certificate<sup>65</sup>. In the EU and EEA, States must rely on the supervision system of EU and EEA States where insurers are licensed<sup>66</sup> and cannot require prior approval of policy conditions.

---

<sup>64</sup> HNSC article 12-10.

<sup>65</sup> HNSC article 12-6.

<sup>66</sup> Treaty of Rome articles 59 and *seq.* and EEA Agreement articles 36 and *seq.* provides freedom to render insurance services. Council Directive 73/239/EEC article 13 amended by Council Directive 92/49/EEC article 9, stipulates that the “sole responsibility of the home member State” is supervision.



Otherwise they will go against free movement of services. However, prior notification of the insurance terms in case of compulsory insurance can be asked<sup>67</sup>.

### 3.2.4 Direct action right

Under the CLC 1992, Bunker Oil Convention, and HNS Convention, a right of direct action is given to the victims against the insurer or the guarantor<sup>68</sup>. It is a mean to avoid long proceedings and useless expenses.

The phrase “any claim” is broad enough to include claims from the shipowner for costs for preventive measures taken in order to avoid pollution. Costs for preventive measures are included in the definition of damage<sup>69</sup>. But as the shipowner is party of the insurance contract so he will exercise his right coming from the insurance policy.

The insurer has a limited scope of defences but in any case, his exposure cannot exceed limits under article 9 even if the shipowner is not entitled to limitation. The HNS Convention avoids the “paid to be paid” principles, usually found in P&I Insurances. The insurer can evoke defences that the shipowner would have had, except the case of insolvency. The insurer can assert the wilful misconduct of the owner to avoid payment.

The first question is to determine what a “wilful misconduct” means. The definition varies from country to country.

In England, “wilful misconduct” means

“misconduct to which the will is party as contradistinguished from accident, and is far beyond any negligence, even gross or culpable negligence, and involves that a person wilfully misconducts himself who knows and appreciates that it is wrong

---

<sup>67</sup> Council Directive 94/49/EEC article 30-2.

<sup>68</sup> HNSC article 12-8, CLC article 7-8 and Bunker Oil Convention article 7-10.

<sup>69</sup> HNSC article 1- 6 (d).

conduct on his part in the existing circumstances to do, or to fail or omit to do it, or persists in the act, failure or omission regardless of consequences”<sup>70</sup>.

In France, it will be nearly synonym of *dol* committed by the shipowner or his part or on the part of his servants or agent but it includes on the top “a reckless act or omission with the knowledge, sometimes implied, that harm will occur”.

A general answer should be to conclude that “wilful misconduct” corresponds with the article 4 of the 1976 LLMC: “act or omission, committed with the intent to cause such loss, or recklessly and with knowledge that such loss would probably result.”

The second interrogation concerns the identification of the person who wilfully misconducts himself. Is it the shipowner only or is it possible to extend the exemption when the blameworthy behaviour is attributable to the employees or agent of the shipowner? It seems that in case of pollution damages, it is preferable to limit the identification of the shipowner to the registered owner, the bareboat charterer, the manager and the operator.

If the insurer can assert a mean of defence, the damages would be entirely compensated by the HNS Fund.

In brief, compulsory insurance requirements produce some difficulties that have slowed down the adoption of the HNS Convention: competition issues, recognition by States and capacity of the insurance market... The Convention solved most of these problems and practice should overcome the remaining ones.

---

<sup>70</sup> *Forder v. Great Western Railway Company*, [1905] 2 K.B. 532, p535.

### 3.3 HNS Fund

The HNS Fund is said to operate in a similar way as the IOPC Fund. It indeed assesses payment of claims for compensation (3.3.1), receive reports of contributing cargo and levies contributions (3.3.2 and 3.3.3). But it will cover more than pollution damages in opposition with the IOPC Fund and the compensation system is more complicated. The LNG account obeys to special rules comparing to the other accounts and the IOPC Fund (3.3.4).

#### 3.3.1 The compensation system

Under Chapter III, the HNS Convention establishes a HNS Fund, which is based on the 1992 IOPC Fund. It is to compensate the innocent victims of pollution that cannot be compensated because the shipowner is exempted of liability, is financially incapable to meet his obligations, or the damage exceeds the limits of liability<sup>71</sup>. When the shipowner is unknown, the Fund will be liable as well.

##### 3.3.1.1 Obligation of compensation and exemptions

In the latter case, the existence of the Fund ameliorates significantly the situation as it is today where the States have to indemnify victims or even worth where damages to the victims remain uncompensated. However, the Fund does not have to pay when it is not shown with “reasonable probability” that pollution comes from a ship.

When the shipowner is financially incapable to meet his obligations under the HNS Convention, the starting point is that the mandatory insurance will provide for

---

<sup>71</sup> HNSC article 13-1 and 14-1.

compensation. However, if the taken financial securities were not sufficient to satisfy the claim, the HNS Fund will have to pay.

We can imagine also a scenario where the shipowner is financially incapable and where the incident causing damage was provoked by his wilful misconduct. Under article 9-2, the shipowner is not entitled to limit his liability but he is unable to pay. Under article 12-8, the insurer is exempted in case of wilful misconduct. As a consequence, the HNS Fund remains the final payer. It acts as a guarantor that will compensate the victims. In a way, victims have a credit of compensation and either the shipowner, the insurer or the HNS Fund will indemnify them.

In practice when the compensation exceeds the limits of liability of the shipowner, the IOPC Fund settles claim before a court decision confirms that the shipowner is able to limit his liability. It is likely that the HNS Fund will follow the same proceedings.

The only mean of exemption for the Fund is provided in articles 14-3 and 4. Once again, if damages have been caused by “act of war, hostilities, civil war or insurrection or was caused by hazardous and noxious substances which had escaped from a warship” and when there is no “reasonable probability” that the pollution resulted from a ship, no payment from the Fund can be required. Contributory negligence of the victims enables the Fund to be partly or wholly exonerated from payment.

Exemptions for the Fund have a narrower scope than exemptions for the shipowner. It is relevant to determine what would happen in case of terrorism.

### 3.3.1.2 Identification of contributors

The amount payable by the Fund must not exceed 250 million SDR minus the amount claimed from the shipowner<sup>72</sup>.

Contributors to the HNS Fund are designated by the “receiver-payer” principle. The receiver is responsible as a guarantor because the user of the hazardous and noxious substances must be associated when a damage connected to carriage of such substances occurs. The analogy with the oil industry is not possible. Indeed, the oil industry does not encompass as many operators and entities as the chemical industry that counts up to several thousands of firms. Products are different aspects and the whole capacity of the ships is not used only for their carriage. It is difficult to identify shippers and, as a consequence, receivers have been made responsible to contribute to the HNS Fund.

A major difference with the 1992 Fund is that the system of contributions to the HNS Fund is more complicated.

### 3.3.2 Contributions to the HNS Fund.

The Fund shows through its original structure the variety of hazardous and noxious substances. Oil pollution involves a unique product to be the cause of damage. HNS Convention deals with a variety of substances whose characteristics are completely different. That is the reason why the HNS Convention introduces several accounts.

---

<sup>72</sup> HNSC article14-5.

Contributions made to the Fund are assigned to four accounts: a general account<sup>73</sup> and three separate accounts<sup>74</sup>. There is no link between definition of hazardous and noxious substances and the accounts or sectors they belong to. Contributions are made by entities that receive a certain minimum quantity of HNS cargo during the preceding calendar year.

The goal of introducing separate accounts was to avoid cross-subsiding compensation from different types of industry. Each industry, *id est* chemical, LNG, LPG and crude oil, have a different safety record. For example, due to researches done in the sector of transportation of LNG, this sector improves a higher degree of safety. It would be unfair that the LNG industry has to contribute more because of the other sectors. In the same time it enables to make entities of each branch more responsible. It is an incitement to obey standards of safety in order to reduce the probability of incidents involving cargoes of their sector.

Before separate accounts can enter into operation, contributing cargo must exceed 350 million tonnes for the oil account, 20 million tonnes for the LNG account and 15 million for the LPG account<sup>75</sup>. Initial contributions requirements do not exist under the 1992 Fund.

Annual contributions to the general account shall be made by persons in a State Party who received the preceding year an aggregate amount of 20,000 tonnes of contributing cargo<sup>76</sup>. The minimum of 20,000 tonnes may be considered to be low considering that a large number of companies, even of medium size, will be subject to contribution to the Fund. Companies will consider the risk of contribution as a heavy burden, even heavier than the one borne by shipowners since fewer exemptions are available for the Fund.

The general account is divided into at least two sectors: solid bulk materials and other substances. Contributions are distributed amongst the sectors of the general account

---

<sup>73</sup> HNSC article 16-1.

<sup>74</sup> HNSC article 16-2.

<sup>75</sup> HNSC article 19-3.

<sup>76</sup> HNSC article 18-1.

according to the relative risks presented by each sector in order to minimize any cross-subsidisation.

Annual contributions to the separate account shall be made:

- in the case of oil<sup>77</sup>, by persons who received either (i) 150,000 tonnes of contributing oil defined in article 1-3 or (ii) 20,000 tonnes of other oils.
- in the case of LNG<sup>78</sup>, by persons who has title to LNG cargo at the port of discharge when it is the port of a State Party whatever quantity amount.
- in the case of LPG<sup>79</sup>, by persons who received 20,000 tonnes of LPG.

Suspension of the operations of a separate account may be decided by the Assembly under the circumstances exposed in article 19-4. The Assembly may also reinstate the operation of a separate account under article 19-5. When the accounts are suspended, a new separate sector will be formed in the general account.

It has been said that the threshold for LNG and LPG<sup>80</sup> will not be reached at the entry into force of the HNS Convention and, as a consequence, the establishment of a separate account will be delayed under article 19-3. Only the oil account will be in activity.

Contrary to the IOPC Fund, only one type of contributions exists under the HNS Convention, and it covers administrative expenses and claims for compensation.

### 3.3.3 States duties: contributions reporting

HNS Convention requires the States to monitor and report the movement of HNS cargoes. A correct reporting is essential for the success of the HNS Convention. This obligation

---

<sup>77</sup> HNSC article 19-1 (a).

<sup>78</sup> HNSC article 19-1 (b).

<sup>79</sup> HNSC article 19-1 (c).

<sup>80</sup> HNSC article 19-3 (b) and (c).

implies that States set up administrative machinery manned by highly paid civil servants and consequently costs will be significant. States will be more reluctant to ratify the HNS Convention than if the costs were born by the HNS industry.

Before the Convention enters into force, but after ratification, the State party must submit the relevant quantities of contributing cargo received or discharged for LNG during the preceding calendar year<sup>81</sup>. It does not require reporting the list of individual receivers with the quantity each one receives. At that time, States must also implement a national reporting scheme for the establishment of a reporting system.

After the implementation of the HNS Convention, States will have to make more details reports including the list of individual contributors, quantities of cargo received by each. If a member State neglects to report to the Director in time the list of receivers, the Assembly shall decide if a compensation for such a loss shall be due by the State Party.

Two solutions were available for the State Parties. They could decide between spot verification of reports done by the industry or acting as a police State which is administratively more complex and expensive. It would be interesting that member States coordinate themselves to achieve a uniform reporting system. The most practical solution is that contributors report to States and States report to the HNS Fund. In this way, part of the costs would be supported by the industry. After entry into force, the HNS Fund will be able to issue invoices to contributors.

To help contributing cargo receivers and States Parties to fulfil their reporting obligation by collecting data from individual receivers, the HNS Convention Contributing Cargo Calculator has been designed. This database facilitates to determine if substances are in the scope of application of the HNS Convention.

---

<sup>81</sup> HNSC article 43.



### 3.3.4 The LNG issue

The HNS Convention holds, as seen previously, different rules for the LNG account comparing to the others accounts and other liability conventions. The contributor is not the receiver but the titleholder at the port or terminal of discharge. The LNG industry differs from the other industries covered by the HNS Convention by its high level of safety achieved through long and costly researches. The market is developing rapidly. LNG is loaded onto special LNG carriers at liquefaction plants and discharged into regasification terminals. There are only 46 import terminals in the world. LNG cargoes are mainly sold under long-term contracts in order to provide securities.

The titleholder is the person who has to contribute to the HNS Fund. But the identity of the titleholder depends on the type of contract governing the sale of LNG. If the LNG is sold 'Cost and insurance freight' (CIF) or 'free on board' (FOB), the importer-buyer will be the contributing party. However, most of the contracts of sales is 'delivered ex ship' (DEX) and the titleholder is the seller.

Contracts of sale are most of the time long-term contracts and when they have been negotiated, the financial costs linked with the participation to the HNS Fund were not taken into consideration. The seller cannot increase prices either for competition reasons. Indeed, the LNG producers are in competition with other producers that can be not subject to the HNS Convention. For instance, a Norwegian producer of LNG sells his production *ex ship* in Spain. Spain and Norway will normally be parties to the HNS Convention in 2008. As the port of discharge is one of the member countries, the rule of titleholder is applicable. That means that the Norwegian producer will have the obligation to report and participate to the HNS Fund. If an Algerian<sup>82</sup> producer is also exporting LNG to Spain, he is normally subject to the same obligation to contribute to the LNG account. However, contributions

---

<sup>82</sup> We will consider that Algeria has not ratified the HNS Convention.

may not be collectable from States not party to the Convention since these States may not recognise the claims from the HNS Fund as enforceable. States Parties producers have to support unfair costs comparing to producers from other countries.

A solution to the problem of non collectable contributions is that the LNG industry requests from the contributors a security as a condition of discharge. The government may also require security as an “appropriate measure” to make the HNS Convention effective according to article 6.

Another issue that concerns all kinds of contributors is the impact of terrorist attacks.

### 3.3.5 Case of terrorism

Marine insurers fear that terrorists may use ship as a weapon after hijacking. A vessel transporting dangerous goods can be an easy target for terrorism<sup>83</sup>. Consequential impacts can be huge on society in term of loss of human lives. For example, a gas tanker colliding in a port like Shanghai or Dubai would be a real weapon for terrorists. Other accidents involving the transport of hazardous substances may easily be imagined.

How would the HNS Convention be applicable in this case?

#### 3.3.5.1 Definition of terrorism

A problem of definition arises. All definitions of terrorism ultimately tend to go further than intended. Does a Greenpeace attack that turns wrong become an act of terrorism? It is also difficult to distinguish terrorism from war and other political risks or from other criminal acts.

---

<sup>83</sup> As shown by the terrorist attack on the French tanker *Limburg* in October 2002, close to the Yemen.

Under French law, the Penal Code gives a definition of acts of terrorism: “the following offences constitute acts of terrorism where they are committed intentionally in connection with an individual or collective undertaking the purpose of which is seriously to disturb public order by means of intimidation or terror”<sup>84</sup>.

This definition has prevented the Court to accept compensation by a national fund to victims of a bomb explosion, happened in Corsica. The rationale of the precedent was that the *Code Pénal* requires a minimum of organisation and in the case, the bomb constituted an isolated act<sup>85</sup>.

### 3.3.5.2 Treatment of terrorism by the HNS Convention

Under article 7-2 (b), a cause of exemption of strict liability is when “the damage was wholly caused by an act or omission done with the intent to cause damage by a third party”. This exemption is the same that the one found in CLC 1992 article 3-2 (b) and Bunker Oil Convention article 3-3 (b). Even if terrorism is not directly named as a cause of exemption, we consider that this definition aims cases of terrorism.

The absence of strict liability of the shipowner can be explained by the impact it would have on compulsory insurance. It is problematic to oblige shipowners to purchase coverage for this risk as P&I Clubs have indicated that the Clubs themselves are unable to obtain suitable cover from their underwriters in relation to terrorism.

As a consequence, in case of terrorism, shipowner will not be strictly liable but liability for negligence can be sought for. This can happen when a shipowner is found liable for failure to implement proper measures against terrorism. He has to show that he exercised due care

---

<sup>84</sup> *Code Pénal* article 421-1.

<sup>85</sup> Cass. Civ. 1<sup>re</sup>, 17 October 1995, [1996] *RCA* no.72.

when controlling the activities of people aboard. For example, the shipowner must ensure that he limited the access to the ship. He must control passengers and employees.

Under article 14<sup>86</sup>, a similar exemption than article 7-2 (b) cannot be found. The HNS Fund has to pay compensation except when “act of war and hostilities”. Can “act of war and hostilities” be assimilated by extension to terrorism? The two situations are close as shown by the fact that the civil victims of both events are treated the same way under French Law<sup>87</sup>. However, if the intent of the HNS Convention was to exclude terrorism from the HNS Fund’s scope of obligation to indemnify victims, it will have use the same wording than in article 7. We can conclude that the HNS Fund will remain liable.

Terrorism can be considered as an event constituting a *force majeure* case. In a French decision of 1997<sup>88</sup>, it was decided that an irresistible event constitutes in itself *force majeure*, where its effect may not be prevented despite foreseeable character, in circumstances where the carrier took all the requested steps to avoid the occurrence of the event. However, *force majeure* is not a mean of defence available for the Fund. It is not included in the exhaustive list of article 14-3. Third parties, victims of terrorist attacks, can claim against the HNS Fund.

Moreover some countries have introduced a system of compensation for victims. In France, a Compensation Fund, created by a law of 9 September 1986, provides full compensation for physical injury and mental suffering. This Compensation Fund indemnifies French victims of a terrorist attacks in France or abroad and foreigners for attacks on French territory. As an exception to French law principles, the Compensation Fund must pay compensation even though the terrorists have been identified and prosecuted. It fulfils a national duty of solidarity<sup>89</sup>. However, the Compensation Fund by subrogation to the

---

<sup>86</sup> HNSC article 14 is based on the Fund Convention 1971/1992, article 4-2.

<sup>87</sup> Law of 6 July 1990, article 26. Victims of terrorism are granted the status of civil victims of war (*victimes civiles de guerre*). It includes free medical care and the benefit of a pension in addition to compensation.

<sup>88</sup> Cass. Com., 1<sup>st</sup> October 1997, [1997] *D. Affaires* 1217, no37.

<sup>89</sup> Cf. Court of Appeal of Paris, 24 June 1992, *Gazette du Palais*, no. 318-319 of 13-14 November 1992.

victims is entitled to recover what it has paid<sup>90</sup>. It is conceivable to see the Compensation Fund claiming against the HNS Fund.

The HNS Fund is complex and constitutes a heavy burden for the cargo owners and especially for the LNG producers. States also have their share of duties which generates extra administrative costs. But, solutions have been found to minimize those issues so that no more major problems prevent enactment of the HNS Convention nowadays. However there might be some formal and procedural hindrances that are inherent to each country. We will analyse the cases of two main potential participants to the HNS Convention.

---

<sup>90</sup> Cass. Crim., 20 October 1993, [1994] D. , 280, note Anne d'Hauteville.

#### **4. Two examples of difficulties of ratification**

To date, the HNS Convention has been ratified by Russia, Angola, Morocco, Cyprus, Saint Kitts and Nevis, Samoa, Slovenia and Tonga. The European Union (EU) plans to ratify it with the package “Erika 3” in 2008. The importance of adopting an international tool in matter of HNS pollution has always been recognized by the EU but difficulties in the process of ratification took place (4.1). On the contrary, the United States adopted unilateralist behaviour by implementing their own legislation with CERCLA (4.2).

##### **4.1 European Union: the incompatibility between the HNS convention and Regulation 44/2001**

In spite of the signature of the HNS Convention by Denmark, Finland, Germany, the Netherlands and the United Kingdom, no EU country has yet ratified it. Nevertheless, Ireland and the United Kingdom have begun to take steps towards ratification. This delay from the EU is the result of legal and jurisdictional problems. Articles 38 to 40 of the HNS Convention stipulate specific jurisdictional and enforcement rules that are directly in conflict with rules contained in R44/2001 (4.1.1). However this conflict has been settled by the adoption of the Council Decision 02/971/EC<sup>91</sup> (4.1.2).

---

<sup>91</sup> Council Decision 02/971/EC, 2002 OJ (L 337/55).

#### 4.1.1 Overview of the conflict with EC Law

On specific matters, the EU has an exclusive competence over areas that are also regulated by the HNS Convention. EC law has established a system of judicial cooperation between member States. A major tool of this system is the rules on jurisdiction of European courts, *litis pendens* and mutual recognition of judgments. These rules are included in the Regulation Brussels 1, R44/2001. When an international convention contains rules in contradiction with R44/2001, EU member States are not allowed to ratify such a convention. Most of the time, maritime liability conventions include provisions on competent jurisdiction and recognition of judgments. Article 38 of the HNS Convention provides jurisdiction to the State Party where the damage occurs or if it occurs outside the territory of a State Party, to the State Party where the ship is registered or flagged, where the owner has his usual residence or where the fund has been constituted.

R44/2001, article 2 gives jurisdiction to the Courts of the State where the defendant has his habitual residence and article 5-3 makes competent the Courts of the State where the harmful event occurred. EU is concerned by the fact that a lack of vigilance may lead to a gradual break-up of the common rules. Individual ratification by member States, outside the EU's control, endangers the uniform application of R44/2001.

Due to the EU's exclusive competence, it is presumed that the Community should ratify itself convention that includes provisions on matters involving exclusive Community competence. The HNS Convention is a mixed convention that includes matters of Community's competence and matters of member States' competence. The practice tends to show that it is better to have a co-ordinate and joint conclusion of mixed agreements by the Community, and its member States. Unfortunately, the HNS Convention has no accession clause entitling the European Union as a regional organisation to directly ratify

it<sup>92</sup>. It is therefore preferable that every member States ratified the HNS Convention jointly and simultaneously.

#### 4.1.2 Council Decision 02/971/EC

The ratification of the HNS Convention is highly desirable. For that reason, the Council of the European Union authorises the member States to ratify or accede to it with reservation<sup>93</sup>. The member States are still subject to the rules on recognition and enforcement of judgments contains in Regulation 44/2001.

In the first article of the Council decision, confirmed by the second article, a hierarchy between Community Law and the HNS Convention is settled. The HNS Convention can be ratified only to the extent that it is not in contradiction with matters that are under the Community exclusive competence. Article 2 gives a guideline of the way to make a reservation. member States remain subject to rules on recognition of judgements contained in R 44/2001.

However, a doubt is created by the wording of article 2. It is not clear that “declaration” shall be considered as a reservation with legal consequences. If it is a mere declaratory statement, it may not have the force of law. In my opinion, it should be considered as a reservation making applicable EC rules on recognition of judgments which is confirmed by the obligation for member States to notify that the ratification “has taken place in accordance with [the] Decision.”<sup>94</sup>.

A question that remains unclear is to know whether or not provisions about the competent jurisdiction included in the HNS Convention will be applicable to member States. There is

---

<sup>92</sup> For example, a clause permitting ratification by a regional organisation has been inserted in the 2002 Protocol to the 1974 Athens Convention, article 19-1.

<sup>93</sup> Decision 2002/971/EC point (7).

<sup>94</sup> Decision 2002/971/EC article 7.



no requirement to make a reservation on that matter. However ratification should not “prejudice to existing European Community competence” and be made in “the interest of the Community”. Two interests are in conflict: the integration in EC law of a necessary liability regime and the protection of a uniform set of procedural rules.

No requirements for simultaneous ratification by member States were made as well. It was only supposed to be done before the 30 June 2006. However in the project of report on the proposition of the directive on the civil liability and financial guarantees of shipowners dated on 31 August 2006, it was stated that it is proposed to member States to ratify the HNS Convention in the same time than the directive and to introduce it in EC Law. It should be a part of the third maritime safety package.

The will of the Community to participate in the HNS Convention is mentioned at two occasions. Firstly, article 1 stipulates that the ratification of the HNS Convention must be done by member States but “in the interest of the Community”. Secondly, article 5 shows the wish that “the Community [becomes] a contracting party” to the HNS Convention.

In conclusion, the Decision 2002/971/EC is not completely clear on the procedural aspects that should be adopted when the member States will ratify the HNS Convention. Nevertheless, the will to ratify and to implement it in a near future has overcome on the procedural EC rules.

Ratification by member States of the European Union is an important step for the success of the Convention. The most numerous countries with a significant fleet adopt it, the best it is for the uniformity and predictability of the rules governing maritime society. To that goal, it would be even better if the United States ratified the HNS Convention. At that point, the main issue is not insurmountable as well: it consists in the unilateralist policy of the United States.

## 4.2 United States: the unilateralist standpoint with CERCLA

The United States have adopted with respect to oil spills from vessels, their own legislation. Concerning the HNS Convention, even if it remains legally and politically rooms for ratification, the United States have already adopted their proper rules. A system of liability applicable to release of hazardous substances from a vessel already exists: the Federal Water Pollution Control Act (thereafter FWPCA) and the Comprehensive Environmental Response, Compensation and Liability Act (thereafter (CERCLA). CERCLA is the main piece of legislation and we will limit our study to compare it with the HNS Convention.

### 4.2.1 Comparison between CERCLA and the HNS Convention

Originally, CERCLA was designed to deal with the environmental consequences of the disposal of hazardous substances at onshore waste disposals but it is also applicable to substances released<sup>95</sup> from vessels. The primary liability is borne by the polluter but CERCLA also refers to a fund financed by taxes paid by various chemical feedstocks<sup>96</sup> to compensate those who were not fully compensated by the polluter<sup>97</sup>. In a way, the mechanism is close to the one of the HNS Convention where a first layer is provided by the shipowner and a second one by the chemical industry. But the analogy is limited.

Firstly, “hazardous substances” are referred as those listed by the Environmental Protection Agency. Even if this covered, many commonly shipped materials, there is a chance that this list is not completely overlapping the hazardous and noxious substances covered by the

---

<sup>95</sup> The term “release or threatened release” is defined to cover a multitude of facts: spilling, leaking, pouring,... dumping and disposing into the environment. 42 U.S.C. §9601(22) (1994).

<sup>96</sup> 26 U.S.C. §9507 (1994).

<sup>97</sup> 42 U.S.C. §9611 (1994).

HNS Convention. For instance, crude oil is excluded from CERCLA but is covered by the HNS Convention<sup>98</sup>.

Secondly, CERCLA renders strictly liable for releases four categories of parties. But only two are relevant for release from a vessel or facility: the owner and the operator of the vessel or facilities<sup>99</sup>. The HNS Convention only retains the strict liability of the registered shipowner. Under CERCLA section 9601 (20) (B) (i) the carrier is solely liable when the shipper utilizes a common carrier or contract carrier to transport a hazardous substances and under section 9601 (20) (B) (ii) it is conceivable to held the shipper liable for negligence. It is the case when the release was at least in part due to circumstances under the shipper's control.

The HNS Convention covers a larger category of damages than CERCLA which is limited to the costs incurred by the government and private parties responding to the release and damages to natural resources<sup>100</sup>. Personal injury and death claims and also property damages and business losses are not actionable. The scope of application of CERCLA is consequently limited in comparison with the one of the HNS Convention. Victims of other types of damage must base their claim on other statutes or common law remedies. For instance, Jones Act can be actionable for claims from seamen.

CERCLA Section 9607(b) enables the responsible party to be exempted of liability when the damage is the result of an act of God, act of war, or an act or omission of a third party other than an employee, agent or co-contractor of the defendant. The HNS Convention provides the same exemptions but exemptions that are closely related to the activity of transport of hazardous goods are added<sup>101</sup>.

---

<sup>98</sup> 42 U.S.C. §9601 (14).

<sup>99</sup> 42 U.S.C. §9604 (a) (1)-(4).

<sup>100</sup> 42 U.S.C. §9607(a) (1994).

<sup>101</sup> See 3.1.1.2.

Under CERCLA liability is limited to 5,000,000 USD or 300 USD per gross ton, whichever is higher when the vessel is carrying hazardous and noxious substances as cargo or 500,000 USD or 300 USD per gross ton whichever is greater<sup>102</sup>. Limits of the HNS Convention are substantially higher but exceptions to limitation are less numerous. They have both in common the wilful misconduct of the responsible party. In addition, no limitation can be asked when the release was made in violation of safety regulations or if the responsible party failed to provide assistance and cooperation to regulatory agencies. Those exceptions to the right of limitation would be helpful in the HNS Convention. It would prevent the “moral hazard”.

#### 4.2.2 Application on two cases

Referring to two existing American cases, we will attempt to figure out if the adoption of the HNS Convention by the United States would ameliorate their legislation.

#### 4.2.3 The M/V SANTA CLARA I<sup>103</sup>

In 1992, twenty-one containers were lost overboard from the cargo vessel, M/V Santa Clara I, when she encounters a severe storm off the coast of New Jersey. In all, 441 barrels of arsenic trioxide were lost. Besides, 800 pounds of magnesium phosphide spilled from drums stowed inside one of the cargo holds. It created a dangerous phosphine gas. The cargo was not properly designated but the shipper specified that it was a hazardous product and paid the hazardous cargo rate.

Costs associated with cleaning up the magnesium were about 2.2 million USD and longshoremen claimed for personal injuries against the vessel owner and operator.

---

<sup>102</sup> 42 U.S.C. §9607(c).

<sup>103</sup> *United States v. M/V Santa Clara I*, 887 F. Supp, 825, 1996 AMC 910 (D.S.C. 1995).

Coast Guard issued an administrative order pursuant to FWCPA section 311(c), CERCLA section 9606 (b) and Intervention on the High Seas Act section 5 against the owner and the operator to search for, locate and dispose of the barrels. The United States filed also a CERCLA action against the shipowner to recover its costs.

The shipowner, seeking for recovery of his costs and expenses, claimed against the shipper and the consignee of the arsenic on the ground that they were owner and operator of the facilities from which the arsenic leaked. He argued that stowage in containers was made improperly. The consignee argued that once the shipowner accepted contractually the cargo, CERCLA subsection 9601 (20) (B) (i) impose liability solely on the owner and operator.

The Court decided, on the one hand, that the common carrier was the CERCLA owner or operator, responsible for release that occurs beyond the shipper's control pursuant to section 9601 (20) (B). Consequently, the shipowner was considered to be the responsible party. On the second hand, it held that if the shipper or cargo owner failed to comply with his duty of care with respect to the shipment of cargo, they would be liable. But this requires the Court to undertake a factual determination of the causes and circumstances that resulted in the release and whether the release resulted solely from the causes and circumstances that were beyond the control of the shipper. In brief, both the shipper and the carrier could incur owner and operator liability for the containers "if both contributed to or caused a release or threatened release." The condition of existence of release was fulfilled in the present case. So the shipowner was liable under section 9607 (a) (1) and it was decided that the shipper failed to comply with government regulations regarding the labelling of hazardous cargo but the Court refused to hold the shipper liable on contract law. However, it was impossible to decide in a summary judgment that damages were due to the shipper's negligence without proving the foreseeability in the same time. The shipper's negligent liability was not retained.

Pursuant to the HNS Convention, the solution would have been slightly different.

Considering the damages, personal injuries caused by the spill of hazardous substances will also be covered by the registered shipowner who will be strictly liable, and his insurer. If the total of compensation for all claims is superior to the shipowner's maximum of liability amount, the HNS Fund will supply for the rest up to 250 million SDR.

The main issue would be to know if the shipowner could be exempted of liability under section 7-2 (d)<sup>104</sup>. It is doubtful that the exemption will be held because, even though the shipper of the magnesium phosphide concedes that he failed to properly designate the goods as hazardous cargo, the shipowner was still aware of the dangerous nature of the goods. There is no evidence that the failure to furnish information has caused wholly or partly the damage and the shipowner ought to have purchase an insurance policy because he knew that the vessel was "actually" carrying a hazardous good.

#### 4.2.4 The M/V NICOLAOS<sup>105</sup>

A fire broke out aboard the M/V Nicolaos while loading in Georgia. It was caused by the spillage of calcium hypochlorite which reacted with some organic material left by the stevedores. The cargo was packaged in drums and the warning failed to provide warning to the shipowner that contact with grease, oil or other organic material should be avoided.

The Court held that the shipper's failure was negligent even if they were not required by regulations. But the Court of Appeal requested to consider if the carrier knew about the hazardous characteristics of the cargo.

In a similar case governed by the HNS Convention, the question would have been to know if article 7-2 (d) was applicable. The actual knowledge of the shipowner is a central question under both American rules and the HNS Convention.

---

<sup>104</sup> Cf. 3.1.1.2.

<sup>105</sup> *Ionmar Compania Naviera, S.A. v. Central of Georgia R.R. Co.*, 471 F. Supp, 1979 A.M.C. 1747 (S.D. Ga. 1979)

In conclusion, the HNS Convention contains several advantages comparing to CERCLA and the American regime:

- the responsible party is more easily identifiable,
- the limitation of liability is in general higher,
- a larger amount of damages are taken into account,
- the exemption of liability are less numerous and not easily actionable,
- the system is unified with only one source of rules.

All those advantages create predictability.

Ratification of the HNS Convention would significantly improve the American system on liability for marine pollution by hazardous and noxious substances. Moreover, it would ameliorate the global situation as it is preferable that a maximum of countries ratifies liability conventions in order to have a universal harmonized regime. The United States passing its own particular legislation creates great inconvenience to the global shipping regime.

## 5. Conclusion

The HNS Convention should be in force after ratification of EU member States in the “third safety package” in 2008. Implementation of the HNS Convention is a positive step for several reasons.

Firstly, the HNS Convention is an important instrument for the improvement of the environmental protection and the victims’ compensation in case of pollution by hazardous and noxious substances. The compensation amounts will be higher than those provided by the different national laws. It should be more adequate regarding the potential seriousness of HNS accidents. Indeed, the figures of the ceiling of limitation are thought to cover most of the cases. Revision mechanism should be available to adjust the amount with normal inflation and if it happens that ceilings were not high enough. Proceedings are accelerated thanks to the strict liability and the channelling of liability.

Then the HNS Convention fulfils three gaps:

- It is the complement of other conventions dealing with transport of hazardous materials.
- It is the logical complement of other conventions dealing with marine pollution.
- It strengthens the preventive rules for this type of pollution. Incitement to obey safety measures is higher when a strict system of compensation and sanction is settled.

As a consequence, it is advisable that as the largest possible number of countries ratifies the HNS Convention. With this aim, ratification by the United States would constitute a real incentive to achieve a uniform and global regime. Uniformity enables better recognition of judgments and avoids conflict of jurisdiction. Moreover, it is fundamental to avoid getting



a patchwork of different national legislations rules when 90 per cent of the world trade is carried by sea.

Governments have been aware of the need of implementation of the HNS Convention. But criticisms and controversies have slowed down the process of ratification.

Criticisms have concerned both specific points (as for example controversies on the linkage of limitation amounts, problems of competition, articulation with other conventions, contributions from the LNG industry, case of terrorism) and the essence of the compensation system:

- some countries wanted to abolish the principle of limitation of liability for the shipowner,
- the rule of channelling of liability was not unanimously accepted,
- the insurance industry showed reluctance regarding the market capacity to cover the HNS risks,
- the HNS Fund is more complex than the IOPC Fund due to the diversity of goods included in the HNS Convention.

But most of those issues have found a solution nowadays by the establishment of a strict liability of the shipowner regime with compulsory insurance and channelling of liability and of the HNS Fund.

It is now up to individual States to consider or not their adhesion to the system pursuant to their own political opinions.

## References

### Articles written in French

Pierre Bonassies

*Droit Positif en 1996*

Droit Maritime Français, Hors Série 1997

Philippe Boisson

*La Convention SNPD de 1996 et l'indemnisation des dommages causés par le transport maritime de marchandises dangereuses*

Droit Maritime Français 1996, pp 979 & s.

François Odier

*La Convention sur la responsabilité et l'Indemnisation pour les Dommages Liés au Transport par Mer de Substances Nocives et Potentiellement Dangereuses (Convention HNS)*

Annuaire du Droit de la Mer, tome 1, PEDONE 1996

René Rodière

*La Limitation de Responsabilité du Propriétaire de Navires, Passé, Présent et Avenir*

Droit Maritime Français 1973

## Articles written in English

*Hazardous Noxious Substances : Some Recent Incidents*

Gard News issue 12 June 1992

Charles B. Anderson and Marisa Marinelli

*CERCLA and the Carriage of dangerous Goods and Hazardous Substances*

21 Tulane MLJ 96-97, pp.501-527

Jason Chuah

*The Probo Koala – Shipment of hazardous Waste*

The Journal of International Maritime Law, volume 12, issue 5, September-October 2006

Jon D. Edgcomb

*Hazardous Substances Releases from Vessels: Current U.S. Law, the HNS Convention and its Potential Impact if Ratified*

University of San Francisco Maritime Law Journal, Winter 1997

Karine Le Couviour

*The HNS Convention : a New Challenge for International Maritime Law*

SIMPLY 2000 (MarLus no.258(2000))

Gotthard Gauci

*Limitation of Liability in Maritime Law; an Anachronism?"*

Marine Policy, Vol 19, N°1 pp 65-74, 1995

Patrick J.S. Griggs

*Extending the frontiers of Liability – the proposed Hazardous and Noxious substances Convention and its effect on ship, cargo and insurance interests*

Lloyd's Maritime and Commercial law Quaterly, 1996

Cecilie Grue

*Liability for Damage caused to and by Dangerous Goods under the Maritime Code of 1994*  
SIMPLY Yearbook 1997

Bernhard A. Koch

*Terrorism, Tort Law, and Insurance, A Comparative Survey*

Bernhard A. Koch (Ed.)

Tort and Insurance Law vol. 11

Springer Wien New York, 2004

Gavin Little

*The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution*

Lloyd's Maritime and Commercial law Quaterly, 1998

George J. Mitchell

*Preservation of State and federal Authority Under the OPA 1990*

21 Environmental Law, 1991

Henrik Ringbom

*EU Regulation 44/2001 and its Implications for the International Maritime Liability Conventions*

Journal of Maritime Law and Commerce, January 2004

Erik Røsæg

*HNS Insurers and insurance certificates*

folk.uio.no/erikro/WWW/HNS/WPOtt2-3.ppt

Erik Røsæg

*Non-Collectable Contributions to the Separate LNG Account of the HNS Convention*

13 JIML, 2007

B. Soyer

*1996 Protocol to the 1976 Limitation Convention: a More Satisfactory Global Limitation Regime for the Next Millennium*

J.B.L. March Issue, 2000, pp. 164-165

Koji Takahashi

*External Competence Implications of the Regulation on Jurisdiction and Judgments*

International & Comparative Law Quarterly, April 2003

Philip R. Weems and Kevin D. Keenan

*Is the LNG Industry ready for strict liability?*

folk.uio.no/erikro/WWW/HNS/LNGarticle.pdf, 2003

Dr Michael White

*Marine Pollution from Ships: The Australian Legal Regime*

International Trade Law Journal, Summer 2000

Chao Wu

*Liability and Compensation for Bunker Pollution*

Journal of Maritime Law and Commerce, October 2002

Ling Zhu

*Compulsory Insurance and Compensation for Bunker Oil Pollution Damage*

Hamburg Studies on Maritime Affairs vol. 5

Springer, 2007

### **Handbooks written in English**

Charles B. Anderson and Colin De La Rue

*Shipping and the Environment*

Lloyd's Shipping Law Library, 1998

Thor Falkanger, Hans Jacob Bull and Lasse Brautaset

*Scandinavian Maritime Law, The Norwegian Perspective*

2<sup>nd</sup> Edition Universitetsforlaget

Edgar Gold

*Gard Handbook on Protection of the Marine Environment*

3<sup>rd</sup> Edition

Edgard Gold

*Gard Handbook on Marine Pollution*

Second Edition

Elli Louka

*International Environmental Law*

*Fairness, Effectiveness and World Order*

Cambridge

### **Thesis written in English**

Derek McKinley

*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.*

lawspace.law.uct.ac.za:8080/dspace/bitstream/2165/103/1/McKinleyD+2005.pdf

## **International conventions**

*Convention for the Unification of Certain Rules of Law with Respect to Collision between Vessels, 1910*

*Convention on Civil liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD), 1989*

*Convention on Limitation of Liability for Maritime Claims (LLMC), 1976*

*Convention relating to the Carriage of Passengers and their Luggage by Sea, 1974*

*International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention), 1996*

*International Convention on Liability for Bunker Oil Pollution Damage (Bunker Oil Convention), 2001*

*International Conventions on Civil Liability for Oil Pollution Damage (CLC), 1969/1992*

*International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), 1971/1992*

*Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal (Basel Protocol on Liability and Compensation), 1999*

*Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol), 2000*

## **Annex**

### **Abbreviations**

FOB	Free on board
FWPCA	<i>Federal Water Pollution Control Act</i>
CIF	Cost and insurance freight
CERCLA	<i>Comprehensive Environmental Response, Compensation and Liability Act</i>
DEX	Delivered ex ship
CLC	<i>International Conventions on Civil Liability for Oil Pollution Damage</i>
CMI	Comité Maritime International
CRTD	<i>Convention on Civil liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels</i>
EC	European Community
EEA	European Economic Area
EU	European Union
GT	Gross tonne
HNS	Hazardous and Noxious Substances
HNSC	<i>International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea</i>
IMO	International Maritime Organisation
IOPC	International Oil Pollution Compensation
LLMC	<i>Convention on Limitation of Liability for Maritime Claims</i>
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
NMC	Norwegian Maritime Code
OECD	Organization for Economic Co-operation and Development



OPRC-HNS	<i>Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances</i>
SDR	Special Drawing Rights
US	United States of America
USD	American Dollar