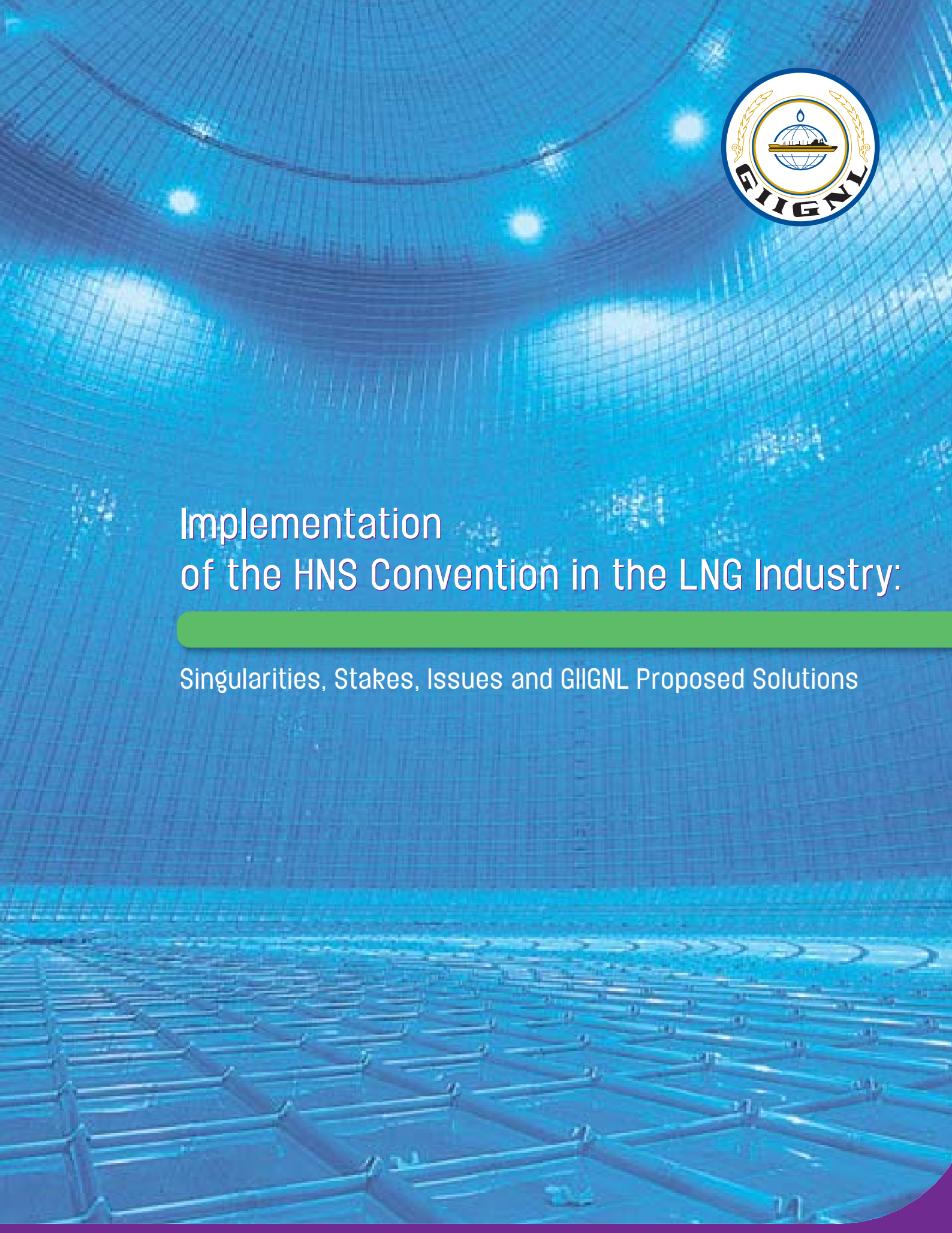


Implementation of the HNS Convention in the LNG Industry:

Singularities, Stakes, Issues and GIIGNL Proposed Solutions

Introduction to the GIIGNL's activities

The International Group of Liquefied Natural Gas Importers ("GIIGNL") is a non-profit organization founded in December of 1971.

It is composed of 56 member companies from 18 different countries across the world and involved in the importation of Liquefied Natural Gas.

The main objective of the GIIGNL is to promote the development of activities related to LNG: purchasing, importing, processing, transportation, handling, regasification and various uses of LNG. For this purpose, the GIIGNL is particularly involved in promoting the state-of-the art technology in the LNG industry, in communicating about the economic fundamentals of the industry, in enhancing facility operations, in diversifying contractual techniques, and in developing industry positions to be taken in international agencies.

As a member of the IOPC Fund since June 2007, the GIIGNL prepared this LNG overview in order to offer a better understanding to state delegations about this specific product and its market and to contribute to the debate on the implementation of the HNS Convention.

The GIIGNL prepared this LNG overview in order to offer a better understanding to state delegations about this specific product and its market.

① **the first chapter constitutes an introduction to the LNG Industry**

- presentation of an LNG Chain
- overview of the global LNG trade and its growth rate
- type of contracts
- LNG tankers and technical transportation constraints
- liquefaction and regasification plants around the world

② **the second chapter focuses on some singularities of the LNG industry that differentiate LNG from other Hazardous and Noxious Substances**

- LNG, a clean and unique product and activity
- high standards and firm regulations concerning security and maritime safety
- high level of investment required for an LNG chain
- DES and FOB, the fundamental incoterms of LNG sales and purchase

③ **the third chapter presents the HNS Convention as potentially applicable to the LNG market**

- a two tier compensation regime, a new perspective for the LNG industry
- a potential impact on LNG sales and purchase agreements
- the importance of global HNS ratification within LNG countries

④ **the last chapter concludes with the GIIGNL proposals regarding the LNG contribution to the HNS Fund issue**

- the GIIGNL contribution to the IOPC Fund Assembly from 2007
- the purpose of the IOPC Fund HNS Focus Group and the new Protocol proposal (which would amend the Convention regarding the LNG contribution)
- the potential solutions explored by the GIIGNL regarding the LNG contribution issue and in particular, the GIIGNL proposal for this issue

A global presentation of the LNG industry

THE LNG INDUSTRY: THE HIGHEST GROWTH RATE IN WORLD ENERGY TRADE

An LNG chain - liquefaction plant, transportation by LNG carrier, LNG terminal - is generally set up when pipeline transmission is too expensive, due to the long distances involved or to the technical difficulties of pipeline construction (deep-sea offshore links, for example). The increased distance between gas production zones and consumption zones, a consequence of the progressive depletion of gas sources close to consumers, is consequently a key factor in the growth of LNG trade across Europe and the world.

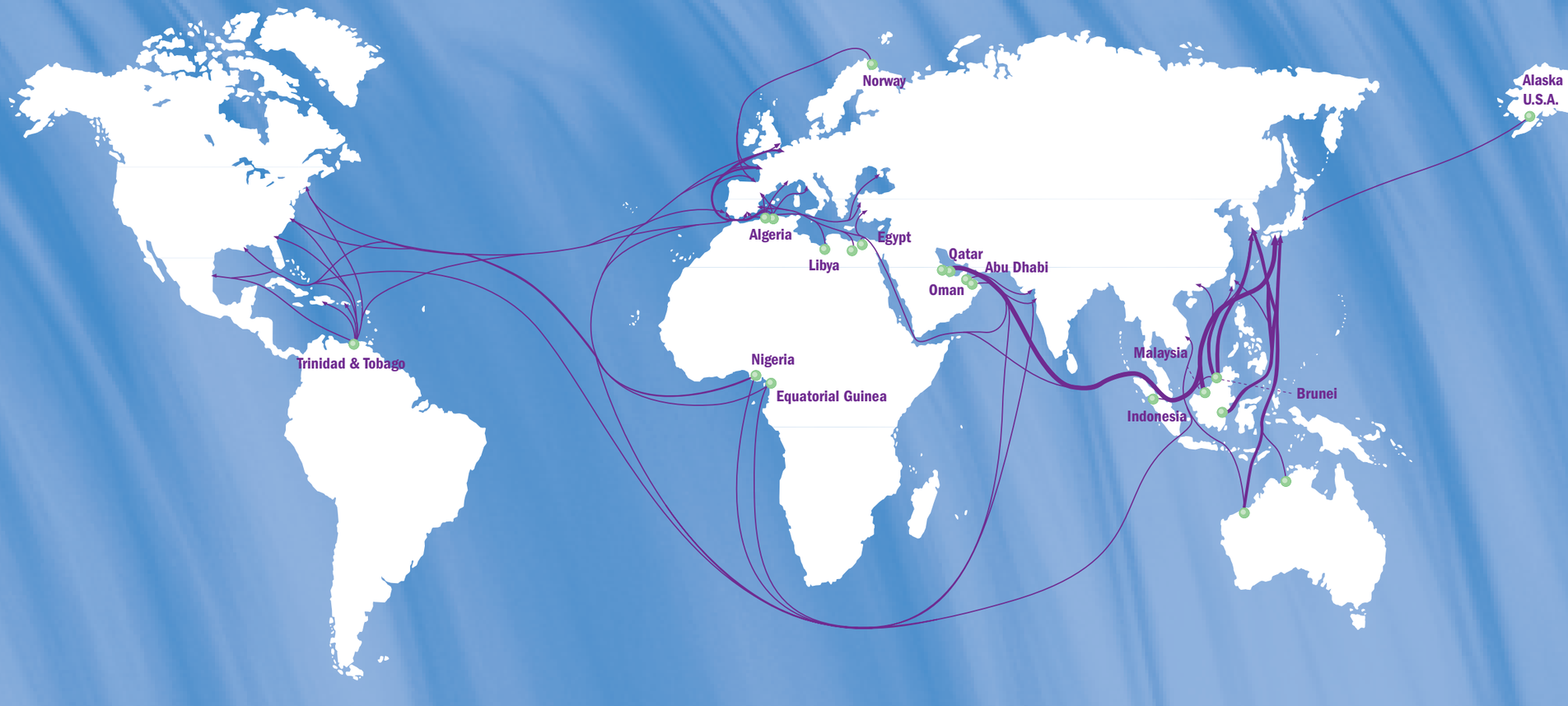
Given growing world demand for natural gas and ever-increasing distances between consumers and producer regions, volume of LNG trade increased by a total of 7.6% between 2006 and 2007.

To guarantee the competitiveness of LNG supply chains, the LNG industry has long focused its efforts on the development of new technologies, in order to reduce unit costs (larger and more efficient liquefaction cycles, higher tanker capacity, and improved propulsion methods).

In order to contribute to the sustainable development of this mode of natural gas transportation, the LNG industry is committed to improving safety along the entire chain (technologies of transfer facilities and storage tanks, rules governing equipment layout, etc.) and reducing the environmental impact (reduction of CO2 emissions from liquefaction plants, tankers and terminals, refrigeration energy recovery, improved heat balances, etc.).

The LNG Trade increased by 7.6% between 2006 and 2007

L'Espace Photo Gaz de France / DUREUIL PHILIPPE



Approximately 80% of LNG volumes are sold and purchased under long-term contracts

LNG CONTRACTS AND TRADE

On the LNG markets, buyers and sellers are generally linked by long-term contracts for predefined quantities of LNG produced in a liquefaction plant and received at one or several LNG terminals.

In 2007, world LNG imports totaled 213 billion cubic meters of natural gas in gaseous form, representing almost 24% of world natural gas trade. The market is organized between 31 countries, 16 importers, 14 exporters, and 1 that is both an importer and exporter. The largest LNG importers are Japan, South Korea, India, Taiwan, Spain, France and the USA. Approximately 80% of LNG volumes are sold and purchased under long-term contracts, which last generally up to 20 years. Experts are forecasting continued growth in the future, boosted by the entry into service of new liquefaction and regasification facilities. The LNG market could reach 300 billion cubic meters by 2010.

LNG TANKERS OVERVIEW

The world LNG tanker fleet totaled 254 ships at the end of 2007.

The volume of LNG carried by an LNG tanker depends on the vessel size, ranging from 19,000 cubic meters for the smallest to 216,000 cubic meters for the largest. Carriers boasting larger volumes are currently under construction.

LNG tankers are large double-hulled ships, 200 to 300 meters in length, and traditionally propelled by steam turbines or, recently, by dual fuel diesel electric propulsion. An LNG tanker can be compared to a giant thermos flask. Its tanks are fitted with an insulated lining to hold gas in liquid form at minus 160 degrees Celsius with very little evaporation at atmospheric pressure. The evaporation gas is used to fuel the tanker's boilers in the case of steam turbines propulsion or engines in the case of dual fuel diesel electric propulsion.

TECHNICAL CONSTRAINTS FOR TRANSPORTATION

➔ Constraints on design

Because LNG is an inflammable liquid when mixed with a certain proportion of air, and since it is at a very low temperature, a high level of technology is required for storage and transportation.
Due to the low temperature, facilities on the LNG ships, such as storage tanks, pipings and pumps, which are directly exposed to LNG shall be made of material such as stainless steel, which can stand low temperatures in order to prevent low temperature brittleness, and have a structure that takes into consideration thermal contraction and thermal stress. Moreover, effective insulation must be installed in the facilities in order to control the amount of vapor produced (boil off gas) and duplicate counter-measures for leakage of LNG must be taken.
The containment system of LNG ships generally has a barrier on the liquid side that is called the primary barrier, which withstands the pressure of stored LNG. Insulation is installed outside of the primary barrier to maintain the temperature of LNG. Some types of containment systems require a secondary barrier as a duplicate safety measure in case of leakage of LNG from the primary barrier.

➔ Constraints on operations

Smooth scheduling is necessary due to the particular constraints of LNG, which produces vapor in small but continuous quantities which represent a loss unless the ship can fully utilize it for propulsion. On the other hand, it is customary to always leave in the tanks of a ship some small quantities of LNG (LNG heel) for the return trip (ballast trip) in order for the tanks to remain in a cold state, and avoid a long and costly cooling process during the next loading operation.
Although LNG ships may be used as floating storages from time to time on special commercial or logistical occasions - usually when there is not enough storage capacity at the receiving point - ship operators must take care to smoothly schedule their loading and unloading operations in order for their ships to stay in a cold state, and not to stay idle or if necessary, for the least time possible.

OVERVIEW OF LIQUEFACTION AND REGASIFICATION PLANTS: A LARGE NUMBER OF FACILITIES IN SERVICE AROUND THE WORLD

There are 20 production sites across the world located in 15 different countries. The sites' annual liquefaction capacities vary from 1.1 billion cubic meters in gaseous form to 32 billion cubic meters (Ras Laffan in Qatar).

There are three major import markets: Asia, Western Europe, and North America.

The following statistics for each of these markets are taken from the GIIGNL annual survey for the year 2007.

There are three major import markets: Asia, Western Europe, and North America.

➔ Asia

Five importing countries - Japan, the world's largest, buying 38.9% of world production, South Korea (15.2% of world imports), Taiwan (4.9%) India (4.6%) and China (1.7%) - receive LNG produced in seven countries: Qatar (the world's leading exporter accounting for almost 17.0% of world production), Malaysia (13.1%), Indonesia (12.0%), Australia (8.7%), Oman (5.4%), Brunei (4.1%) and Abu Dhabi (3.3%).
In 2007, Asian countries also imported LNG produced in Alaska, Egypt, Nigeria, Equatorial Guinea, Trinidad & Tobago and Algeria.

➔ Western Europe

The LNG trade is mainly based on sales from Algeria (10.4% of world production), Nigeria (9.7%), Egypt (6.2%) and Qatar. LNG is imported by Spain (11.0% of world imports), France (5.6%), Turkey, Belgium, Italy, Greece, United Kingdom and Portugal. In 2007, additional cargoes were received from Oman, Libya and Norway.

➔ North America

The USA exports LNG to Japan from Alaska (0.6% of world production) and imports LNG to the East Coast and the Gulf of Mexico (9.5%), mainly from Trinidad & Tobago (8.4%), Nigeria, Algeria, Egypt, and obtains small quantities from other exporting countries (Qatar, Equatorial Guinea). Mexico (1.1%) imports LNG from Egypt, Nigeria and Trinidad & Tobago. Porto Rico and the Dominican Republic also import LNG.

58 LNG terminals are currently in service:

Japan ➔	27
Europe ➔	15
USA ➔	5
South Korea ➔	4
India ➔	2
Taiwan ➔	1
China ➔	1
Mexico ➔	1
Puerto Rico ➔	1
Dominican Republic ➔	1

Chapter 2

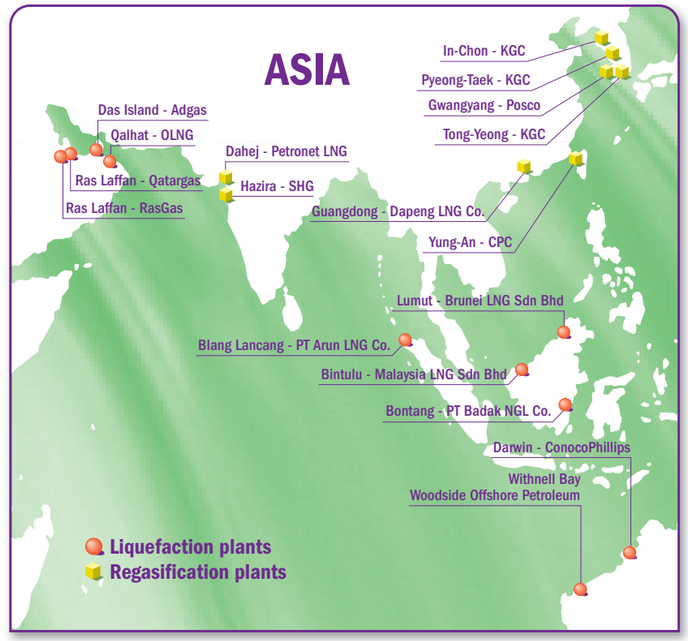
Some singularities of the LNG industry

LNG: A CLEAN AND UNIQUE PRODUCT AND ACTIVITY

The LNG industry has some singularities that make it different from other energy supply-based activities.

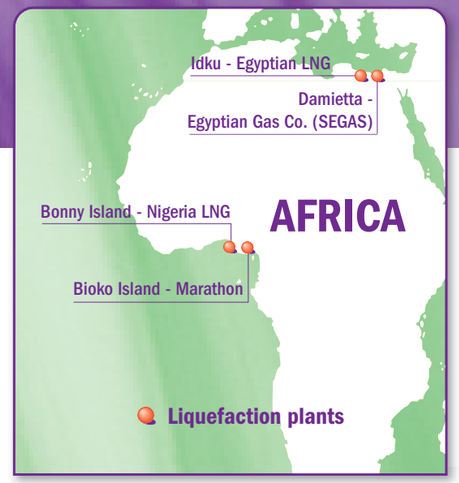
Liquefied natural gas, or LNG, is the liquid form of natural gas; it is not toxic, carcinogenic or corrosive and is obtained by simply cooling natural gas down to very cold temperature at ambient pressure. This process reduces its volume by a factor of about 600 for ease of storage and transportation.

LNG is composed primarily of methane (CH_4), which is considered to be the cleanest fossil resource because its molecules only contain one carbon atom, having the lowest carbon dioxide (CO_2) emissions per unit of energy produced when burned. Furthermore, it is suitable for use in high efficiency combined cycle power stations and has the highest energy-mass ratio of all of the existing hydrocarbons.



Generally speaking, in open atmosphere, LNG is not considered an explosive substance and only its vapors are flammable when mixed with air within a narrow range (5 to 15 percent). If there is less than 5 percent natural gas in the air, there is not enough natural gas in the air to burn. If there is more than 15 percent natural gas in the air, there is too much gas in the air and not enough oxygen for it to burn.

Additionally, its transportation has environment-related advantages, provided that LNG density is less than half of the water's density. Should an accident arise, it will float on the surface and quickly evaporate, leaving no residue; this way, there is no environmental clean-up needed for LNG spills on water. Furthermore, the risks linked to LNG vapors are noticeably reduced because at ambient temperature, their density is half that of the air's density and they rise into the atmosphere.



Furthermore, LNG does not tend to explode or burst the recipient containers when being carried because industry practice is to maintain it at a pressure similar to atmospheric pressure.

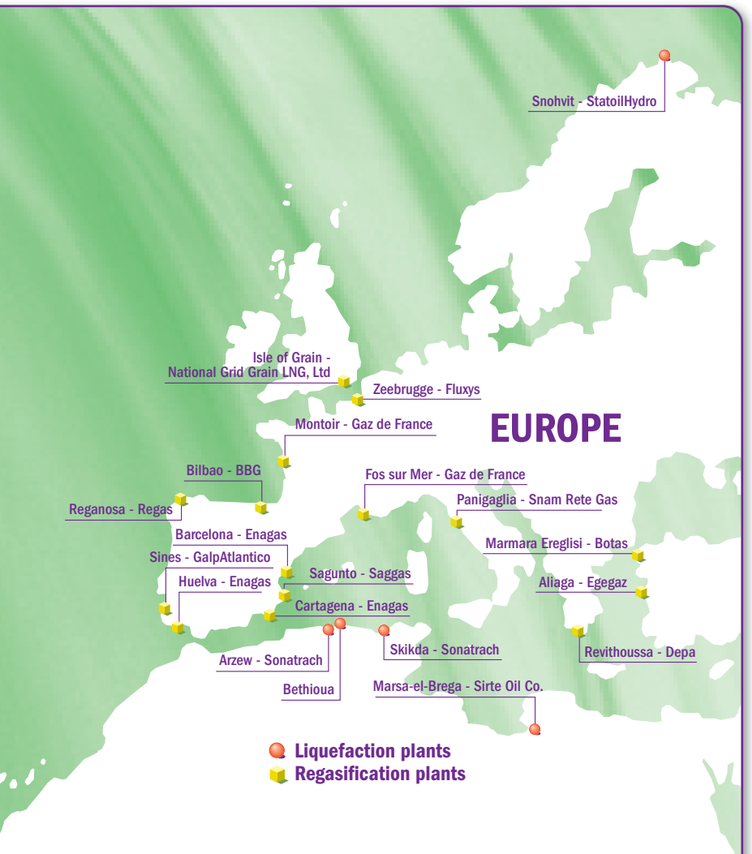
As an introductory explanation, the LNG supply chain begins with natural gas that is extracted from underground reservoirs and that is then sent through a pipeline to a liquefaction facility.

At the liquefaction facility, impurities are removed from the gas, and it undergoes several cooling processes until it reaches the above-mentioned temperature of minus 160 degrees Celsius.

The chilled gas, now LNG, is then loaded onto specially designed tanker ships where it will be kept chilled for the duration of the voyage, which may last from a few days to a few weeks, depending on the destination port.

Once the ship arrives at a regasification terminal, the LNG is offloaded into large storage tanks, equipped with full-containment walls and systems to keep the LNG cold until it is turned back into a gaseous state. The regasification process generally uses seawater or hot water as a heat source.

When the LNG has been warmed back to its natural state, the gas is moved into pipelines that will deliver the natural gas to consumers, power plants and industrial customers across the receiving country.



SECURITY AND MARITIME SAFETY

Strength of Ship's Body

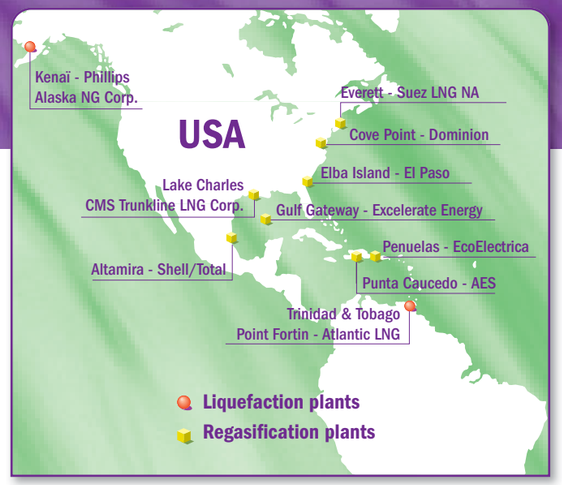
LNG ships are required to have a double hull structure and the positioning of everything from storage tanks to shell plating is provided in the IGC Code (International Gas Carrier Code). Therefore a high level of safety will be assured in the case of collision or stranding in the transportation of LNG For example, localized side damage anywhere in the LNG storage area extending inboard 760 millimeters measured normal to the hull shell is considered and the thickness of the water ballast tank located outside of storage tank is usually over 2 meters.
Moreover, the IGC Code provides that ships shall have relevant space separation so as to maintain the right balance in case of flooding in tank or hold space due to damage to the ship's body.

Safety Navigation Management

Safe navigation of LNG ships is realized through compliance with the SMS (Safety Management System) based on the ISM Code (International Safety Management Code), which was adopted during the general meeting of IMO (International Marine Organization) in 1993.
According to the ISM code, the ship managers shall prepare and practice the SMS, develop the Safety Navigation Manual and provide it for each vessel, and prepare and establish countermeasures and procedures for emergency situations. All shipmasters shall also practice the SMS on board and report to the Designated Person Ashore (DPA). The DPA has the responsibility and authority to monitor the safety and pollution prevention aspects of the operation of each vessel. The audit by flag state and Port State Control guarantees compliance with the ISM code.
The ISM Code plans to establish a comprehensive safety navigation management, not only for safety management on board but also for that of support sections, and is effective for accident prevention measures.

Ship Security Management

Security of LNG ships against marine terrorism and acts of piracy is based on compliance to the ISPS Code (International Ship and Port Facilities Security Code) which amended in 2002 the 1974 International Convention for the Safety of Life at Sea (SOLAS) and which has been effective since July, 2004.
According to these regulations, international ships shall prepare and practice the ship security plan, nominate the ship security officer, maintain the ship security record and carry out the ship security drill.



HIGH LEVEL OF INVESTMENTS

The LNG industry requires extremely high investments throughout the production, transportation and marketing activities.

The LNG industry requires major investments during its production, transportation and marketing activities. As a matter of fact, it is the most capital intensive sector among all the energy supply sectors.

Furthermore, during the last years, the LNG industry has experienced an increase in value chain cost, a reflection of general cost escalation in the global energy sector because of strong demand for energy and higher energy prices, and a consequence of competition for key inputs like materials and skilled labor.

Accurate data on LNG plant costs are difficult to pinpoint since costs vary widely depending on the location and whether a project is “greenfield” (built in a new location), or an expansion of an existing plant.

Nevertheless, there are four main price components of an LNG project, from the gas field to the receiving terminal:

- Exploration and gas production: from the reservoir to the LNG plant, including gas processing and associated pipelines (15 to 30 percent of costs);
- LNG plant: gas treatment, liquefaction, LPG and condensate recovery, LNG loading and storage (40 to 55 percent of cost);
- LNG shipping (10 to 25 percent of cost); and
- Receiving terminal: unloading, storage, regasification and distribution (5 to 10 percent of cost).

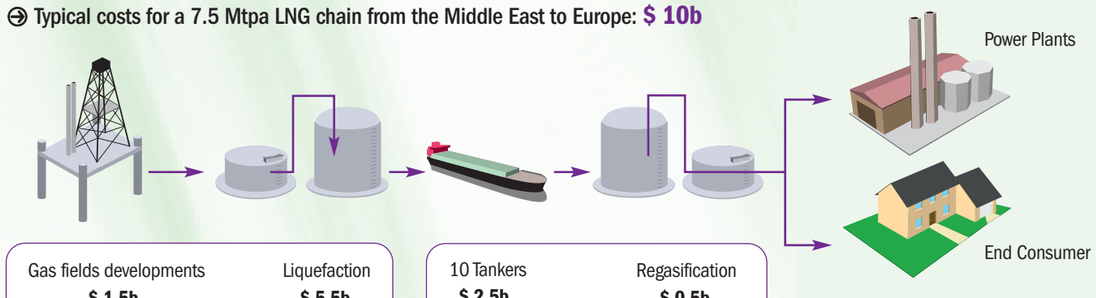
As an example, the total investment needed for the procurement of 7.5 million tons per annum (around 10 billion cubic meters of regasified gas per year) is currently around 10 billion USD.

In addition to requiring a high level of investment, LNG projects have a very long life cycle (6 to 10 years between the discovery of a gas field and the commissioning of the LNG plant) and require the simultaneous construction of several infrastructures in different countries.

Because of this, producers have traditionally secured long-term contracts to mitigate their exposure to price risk in order to make the project bankable.

A VERY CAPITAL-INTENSIVE INDUSTRY

Typical costs for a 7.5 Mtpa LNG chain from the Middle East to Europe: **$ 10b**

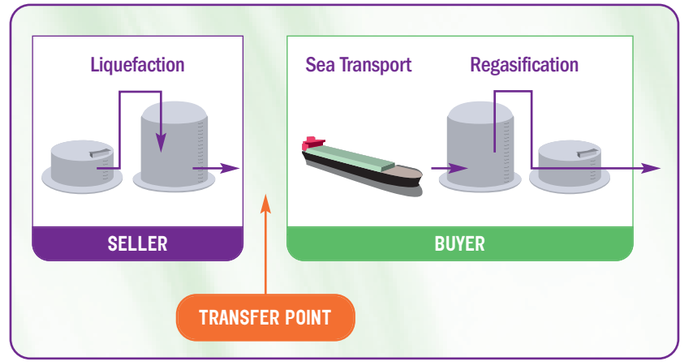


DES AND FOB, THE FUNDAMENTAL INCOTERMS OF LNG SALES AND PURCHASE

LNG Sales FOB (Ex-Liquefaction)

In a FOB sale, cargo loss risk is transferred from the Seller to the Buyer at the exit point of the liquefaction plant. The buyer has to organize and pay for sea transportation and regasification (or arrange for the sale of the cargo to another party at the exit point of the liquefaction plant).

Usually, the title transfer is linked to the risk transfer and is then passed from Seller to Buyer at the exit of the liquefaction plant in FOB sales.

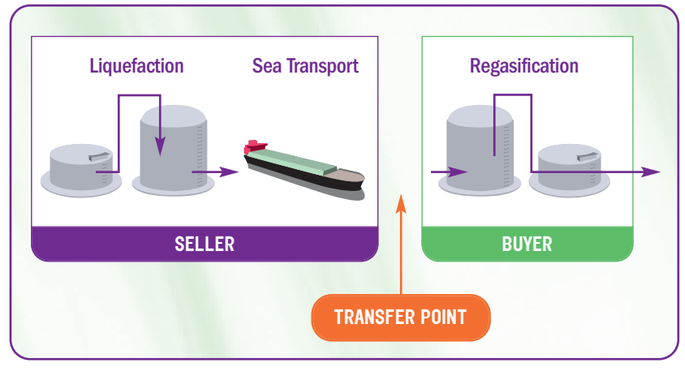


LNG Sales FOB

LNG Sales DES (Ex-Ship)

In a DES sale, cargo loss risk is transferred from the Seller to the Buyer at the inlet point of the regasification plant. The Seller has to organize and pay for liquefaction and sea transportation (or arrange for the procurement of a cargo from another party at some point on or before the inlet point of the regasification plant).

Usually, the title transfer is linked to the risk transfer and is then passed from Seller to Buyer at the inlet point of the regasification plant in DES sales. Regasification is paid for by the Buyer.



LNG Sales DES

A LARGE MAJORITY OF SINGULARITIES THAT HAVE NOT CHANGED SINCE 1996

As regards the singularities of the LNG trade in the world, there has been no significant change since 1996 when the HNS Convention was adopted. Although the number of LNG export countries has increased to become twice as much as that of 1996, spot trade is only 20% of world production as of 2007, and the major portion of LNG trade is still on a long-term basis. In fact, a large majority of the so-called “spot cargoes” originates from long term contracts and is diverted from their base destination.

© L'Espace Photo Gaz de France / KLO ALIAN

Chapter 3

The HNS Convention: a new perspective for the LNG market

Given the high level of investments and the long-term contracts that govern the relationship between parties involved in LNG chains, the LNG industry needs a commensurately high and sustainable commitment to security. Many efforts have been deployed towards this objective by ship owners and ship managers under the scrutiny of charterers or cargo owners (see “Security and maritime safety” above) and a rather satisfactory level of safety has been achieved so far, as no accident involving an LNG carrier resulting in serious casualties has ever occurred up to this point.

A strong and harmonized mechanism of a direct and strict liability system shall ensure a more appropriate reimbursement of potential victims of HNS incidents involving LNG, thus protecting its interests as a serious and respected industry.

> ***“The LNG industry should create a system of voluntary acceptance of strict liability, not only in the interests of those who might suffer loss or damage from an accident, but also in the long term interests of the LNG business”***
>
> Doctor Abecassis, The Special Problems of Liquefied Natural Gas, International Bar Association conference on LNG (1982).

A TWO-TIER COMPENSATION SYSTEM IS TO BE APPLIED TO THE LNG MARKET

The HNS Convention sets up a two-tier compensation system:

- Tier 1 to be covered by the ship owner's insurance, and the amount will depend on the gross tonnage of the vessel involved in the incident, up to a maximum of SDR 100 million;
- Tier 2 is covered by the “HNS Fund” levied by post-incident contributions from HNS receivers, up to a maximum of SDR 250 million.

The maximum compensation, inclusive of ship owner Tier 1 contribution, is SDR 250 million per incident. The HNS Fund is available in case of exceedance of Tier 1 limits or if the ship owner cannot fulfill its obligation or is exempted. In the latter case (act of war, terrorist act, omission or wrongful negligence of Government), the HNS Fund fully compensates for the damages applicable within the system but maintains same maximum amount.

Tier 1 and strict liability system for ship owners involved in HNS transport

As regards Tier 1, like the 1969 CLC-Tovalop regime for oil maritime pollutions, the GIIGNL considers that the HNS Convention will create a stringent liability mechanism in LNG transport activity whereby ship owners shall be strictly liable for accidents.
This means that ship owners will be liable even in the absence of fault on their part. The fact that damage has occurred will be sufficient enough to establish the ship owner's liability, provided that there is a causal link between the damage and the HNS (including LNG) carried on board the ship. Such a mechanism is necessary for any industry in development and should guarantee appropriate compensation for the victims.

One of the key elements justifying the way it has been written by the 1996 authors is that such a mechanism recognizes the singularities of the LNG industry as compared with other industries involving hazardous and noxious substances.

Tier 2 and specific system for LNG

Concerning Tier 2 and the HNS Fund, a specific system is applicable to contributions related to LNG imports, as opposed to other substances: following the definition of the "receiver" under Article 19.1 (b) of the HNS Convention, annual contributions to a separate LNG account shall be made with respect to each State party to the HNS Convention "by any person who in the preceding calendar year [...] immediately prior to its discharge, held title to an LNG cargo discharged in a port or terminal of that State".

This rule, applied to LNG in the 1996 system, clearly divides the share of contributions between DES sellers and FOB buyers. As explained above, one of the key elements justifying the way it has been written by the 1996 authors is that such a mechanism recognizes the singularities of the LNG industry as compared with other industries involving hazardous and noxious substances. There is also notably the fact that the persons able to positively contribute to the continuous enhancement of the general level of maritime security and safety are, in the LNG industry, either the FOB buyer of the DES seller, depending on the incoterm of the contract (direct relation to the LNG transport operations).

A POTENTIAL IMPACT ON LNG SALES AND PURCHASE AGREEMENTS

As the LNG cargo title owner can be either the seller or the buyer (depending on the incoterm of the contract: FOB or DES), it may impact LNG contract discussions because of this new liability.

SOME IMPLEMENTATION ISSUES

Moreover, the definition of "receiver" under Article 19.1 (b) of the HNS Convention may create some difficulties in the application of the jurisdiction of a country party to the HNS Convention whereby, under some DES LNG sales and purchase agreements, the seller, being an entity subject to the jurisdiction of another country not party to the HNS Convention, will be considered as the receiver contributor to the HNS fund. For the time being, nothing contained in the HNS Convention can provide an answer on the application of such issue and the solution might be different in terms of its application in each country having ratified the HNS Convention, since such country must internally implement the new rules. This offers some flexibility in the national interpretation of the HNS regime. Alternative solutions have been explored by the GIIGNL is the scope of the discussions held at the IOPC Fund workshop.

From the LNG industry's point of view, these types of difficulties can be solved via some practical solutions and it is the GIIGNL's opinion that it is not justified to denounce the principle of contribution sharing between FOB buyers and DES sellers concerning LNG imports

IMPORTANCE OF GLOBAL HNS RATIFICATION WITHIN LNG COUNTRIES

The GIIGNL believes that the LNG industry must now envisage and prepare for the assumption that the HNS Convention will be applicable over the next coming years. The process of ratification is ongoing and it is time to propose the LNG industry's views regarding the implementation of the Convention.

In accordance with the high level of safety and security practiced in the transportation of LNG, the LNG industry has been constantly defending the principle of a separate LNG account. This separate LNG account will offer strong protection to the LNG industry provided that a large part of LNG companies contribute to the fund.

Therefore, LNG companies have to anticipate and begin protecting their interests by encouraging a large-scale ratification of the Convention by LNG nations in the near future.

It is the GIIGNL's opinion that it is not justified to denounce the principle of contribution sharing between FOB buyers and DES sellers concerning LNG imports

L'Espace Photo Gaz de France / DUREUIL PHILIPPE

The GIIGNL proposals regarding LNG contribution to the HNS Fund issue

GIIGNL MEMBER OF THE IOPC FUND ASSEMBLY FROM 2007, AS AN OBSERVER

Since 2005, the GIIGNL has raised concerns regarding the implementation of the HNS system for the International Oil Pollution Compensation Fund or through contacts between GIIGNL members and their respective governments. More recently, the GIIGNL was granted observer status as an international non-governmental organization during the Montreal (Canada) IOPC Fund Meetings of June 2007.

Following the establishment of the IOPC Correspondence Group on non-collectable levies to the separate LNG account of the HNS Fund, the GIIGNL proposed to join and, during the summer 2007 period, expressed its views on the issues raised by the Correspondence Group. The GIIGNL also expressed its views when invited as non-governmental organization member to participate to the IOPC Fund meeting in London on 16 and 17 October 2007.

L'Espace Photo Gaz de France / DUREUIL PHILIPPE

The GIIGNL, as a representative of major LNG importers, is trying to focus the discussion on practical solutions that will allow the preservation as much as possible of the existing principle of contribution in order to maintain payment sharing between LNG players.

THE IOPC FUND HNS FOCUS GROUP - THE NEW PROTOCOL PROPOSAL TO THE CONVENTION, OCTOBER 2007 TO JUNE 2008

After the October IOPC Fund meeting, an HNS Convention Focus Group was created with the objective of encouraging the discussion of a new Protocol to the Convention, potentially modifying the 1996 text and proposing solutions notably for LNG contributions.

In order to contribute to the Focus Group and explore practical solutions - notably as regards detailing financial securities solutions - the GIIGNL proposed a few key discussion points in January 2008, in an attempt to maintain the original balance achieved in the text of the Convention on the sharing of LNG contributions.

The new debate opened by the Focus Group may impact LNG importers, as some countries have the intention of simplifying the existing HNS regime and limiting the HNS Fund contribution to LNG physical receivers by merely modifying the “receiver” definition under Article 19.1 (b) of the HNS Convention (which would no longer be the "title holder" to the cargo - so potentially the DES sellers).

Therefore, the GIIGNL, as a representative of major LNG importers, is trying to focus the discussion on practical solutions that will allow the preservation as much as possible of the existing principle of contribution in order to maintain payment sharing between LNG players (DES sellers and FOB buyers).

SOLUTIONS EXPLORED

Practically speaking, the GIIGNL assessed four different solutions aiming at preserving the spirit of the HNS Convention (and in particular the specific balance of financial contributions between the main actors of an LNG chain involved in the transportation of LNG cargoes : ship owner and title holder - i.e. DES seller or FOB buyer whatever the case should be, effectively in charge of the LNG cargo during its transportation, with all the associated risks and benefits), and, at the same time, giving sufficient comfort to member states that the financial contributions will effectively and easily be collected from the relevant actors.

The first two solutions that the GIIGNL explored basically consisted in adding some mandatory safety provisions to the original HNS Convention, to be provided by potential contributors (i.e. by the title holders or, if it is easier to apply, the ship charterers, who are in most cases the title holders, or their affiliates):

- either a mandatory shipping insurance required by the relevant Port State authorities from any LNG tanker entering into HNS waters,
- or a mandatory financial security (e.g. guarantees or deposits) for any LNG tanker entering into HNS waters.

However, the GIIGNL was advised by some experts that such mandatory safeties might be difficult to implement, in particular because they could be quite costly. In addition, a mandatory shipping insurance mechanism appears more difficult to put in practice than risk coverage, because it is not linked to the transportation but to the sale and purchase chain.

Therefore the GIIGNL concluded that, despite their merits, such solutions could not constitute as “universal” solutions to the LNG contribution issue, even though each member state would certainly be free to locally establish such mechanisms, as supplements to the general Convention rules.

A third solution would consist in creating a preventive fund using contributions from LNG title holders (for instance, levied under the form of new “local taxes” to be paid by LNG tankers to local authorities prior to unloading), in order to constitute a guarantee and remedy a potential default in post-accident contributions.

The fourth solution that the GIIGNL worked out is adding to the original mechanism of the HNS Convention (i.e. contributions received from title holders post-accident) a supplementary comfort or "fall-back" to be provided by the LNG "receiver" which would then become the "default contributor", should the relevant title holder not have been identified or not have paid the due contribution, despite reasonable efforts from the HNS Fund to obtain it.

However, it was concluded that such a solution is perhaps more difficult to implement and, like creating a dedicated private insurance fund, it may be quite complicated to defend within the industry community. Lastly, unlike insurance mechanisms, this solution may not be sufficient in the unlikely event of successive accidents with defaulting contributors.

The fourth solution that the GIIGNL worked out is adding to the original mechanism of the HNS Convention (i.e. contributions received from title holders post-accident) a supplementary comfort or "fall-back" to be provided by the LNG "receiver" which would then become the "default contributor", should the relevant title holder not have been identified or not have paid the due contribution, despite reasonable efforts from the HNS Fund to obtain it.

In this regard, it has to be noted that, in accordance with article 19.1 (b) of the Convention, the necessary reporting to be made by each State Party in order to identify any person liable to pay contributions will have to include the relevant "title holders" of imported LNG cargoes: to that respect, the GIIGNL suggests that such reporting should be carried out on an "on-going" basis, cargo by cargo. For instance, this can be done through specific mandatory forms identifying the title holder(s) of the LNG cargo prior to unloading, which would have to be provided to the port authorities in order to be authorized to discharge. Besides, the reporting should also take care of the LNG receivers, as fall-back potential contributors; it seems that national customs may be a convenient source.

Conclusions and recommandations

The GIIGNL concluded that the fourth solution is the preferred one, because it takes into account member states' implementation concerns by giving them sufficient comfort that the financial contributions will effectively and easily be collected from the relevant actors. At the same time, it preserves as much as possible the original spirit of the HNS Convention: although risks between the actors are less perfectly balanced because of the end guarantee provided by the LNG receiver, it appears to the LNG industry that such a default may be remedied in the negotiation of sales and purchases agreements. To the contrary, identifying the LNG receiver as the usual contributor would generate an unbalanced situation to the detriment of the DES buyers and this would be very difficult to rebalance through SPAs provisions.

LNG IMPORTS

	10^6 m³	10^6 t	10^9 m³ (n)	Market share %	Var. 2006-07 %
Belgium	4.526	2.078	2.582	1.21	-33.7
France	21.081	9.610	12.107	5.63	-10.5
Greece	1.497	0.669	0.868	0.40	50.6
Italy	3.762	1.728	2.171	1.01	-23.7
Portugal	4.612	2.112	2.610	1.23	29.5
Spain	41.243	18.630	23.631	11.02	-1.0
Turkey	8.954	4.102	5.144	2.39	9.1
UK	2.266	1.017	1.310	0.61	-59.3
Europe	**87.941**	**39.945**	**50.423**	**23.49**	**-7.7**
Dominican Rep.	0.979	0.423	0.571	0.26	81.0
Mexico	4.233	1.848	2.452	1.13	220.0
Puerto Rico	1.162	0.502	0.677	0.31	0.3
USA	35.718	15.650	20.723	9.54	36.7
Americas	**42.092**	**18.423**	**24.424**	**11.24**	**44.4**
China	6.406	2.986	3.611	1.71	298.6
India	17.192	7.896	9.789	4.59	27.4
Japan	145.439	66.978	82.461	38.85	6.9
Korea	57.015	26.237	32.377	15.23	3.0
Taiwan	18.237	8.332	10.383	4.87	7.3
Asia	**244.289**	**112.428**	**138.621**	**65.26**	**9.3**
Total	**374.322**	**170.797**	**213.469**	**100.00**	**7.6**

SOURCES OF IMPORTS

	10^6 m³	10^6 t	10^9 m³ (n)	Market share %	Var. 2006-07 %
Algeria	38.900	17.865	22.445	10.39	2.1
Egypt	23.337	10.000	13.629	6.23	-4.7
Equatorial Guinea	2.51	1.102	1.468	0.67	
Libya	1.222	0.593	0.683	0.33	15.4
Nigeria	36.388	16.666	20.596	9.72	25.4
Norway	0.282	0.127	0.163	0.08	
Trinidad & Tobago	31.275	13.511	18.233	8.36	14.1
Atlantic Basin	**133.914**	**59.863**	**77.218**	**35.78**	**11.5**
Abu Dhabi	12.506	5.840	7.078	3.34	5.2
Oman	20.220	9.503	11.384	5.40	9.4
Qatar	63.688	29.296	36.238	17.01	18.5
Middle East	**96.414**	**44.640**	**54.701**	**25.76**	**14.6**
Australia	32.512	15.183	18.272	8.69	8.2
Brunei	15.330	7.067	8.646	4.10	-4.5
USA	2.120	0.897	1.249	0.57	-23.6
Indonesia	44.952	20.521	25.555	12.01	-6.9
Malaysia	49.080	22.626	27.828	13.11	6.3
Pacific Basin	**143.994**	**66.293**	**81.550**	**38.47**	**0.4**
Total	374.322	170.797	213.469	100.00	7.6

QUANTITIES (10^6 liquid m³) RECEIVED IN 2007 BY THE IMPORTING COUNTRIES FROM THE EXPORTING COUNTRIES

	Algeria	Egypt	Equat. Guin.	Libya	Nigeria	Norway	Trinidad & Tobago	Abu Dhabi	Oman	Qatar	Australia	Brunei	USA	Indonesia	Malaysia	Total Import
Belgium	0.628						0.122			3.776						4.526
France	12.492	1.903			6.425	0.141	0.120									21.081
Greece	0.882	0.615														1.497
Italy	3.762															3.762
Portugal					4.612											4.612
Spain	6.645	7.057		1.222	14.142	0.141	4.180		0.137	7.719						41.243
Turkey	6.505	0.141			2.179		0.129									8.954
UK	1.008	0.268					0.585			0.405						2.266
Europe	**31.922**	**9.984**		**1.222**	**27.358**	**0.282**	**5.136**		**0.137**	**11.9**						**87.941**
Domin. Rep.							0.979									0.979
Mexico		2.107			1.032		1.094									4.233
Puerto Rico							1.162									1.162
USA	3.533	5.269	0.819		4.375		20.905			0.817						35.718
Americas	**3.533**	**7.376**	**0.819**		**5.407**		**24.14**			**0.817**						**42.092**
China	0.675				0.138				0.130		5.463					6.406
India	0.811	0.137			1.204		0.373	0.133	0.415	13.979					0.140	17.192
Japan	1.296	2.759	0.609		1.468		0.994	12.115	7.952	18.194	25.860	14.029	2.120	29.201	28.842	145.439
Korea	0.403	2.524			0.266		0.498	0.123	11.167	17.829	0.926	1.301		8.474	13.504	57.015
Taiwan	0.260	0.557	1.082		0.547		0.134	0.135	0.419	0.969	0.263			7.277	6.594	18.237
Asia	**3.445**	**5.977**	**1.691**		**3.623**		**1.999**	**12.506**	**20.083**	**50.971**	**32.512**	**15.330**	**2.120**	**44.952**	**49.080**	**244.289**
Total export	**38.900**	**23.337**	**2.510**	**1.222**	**36.388**	**0.282**	**31.275**	**12.506**	**20.220**	**63.688**	**32.512**	**15.330**	**2.120**	**44.952**	**49.08**	**374.322**