

P&I Club  
experience of  
HNS incidents



# Highlights

- Cover provided by the 13 IG Clubs generally
- Benefits of HNS Convention in terms of harmonisation
- Limitation of liability
- Historic HNS experience
- Case study 'Hanjin Pennsylvania'



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# International Group P&I Cover

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- **13 Clubs in the International Group**
- **Insure and pool third party liabilities relating to the use and operation of ships**
- **Cover over 90% of world ocean-going tonnage**
- **Cover over 95% of ocean-going tankers**

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# International Group P&I Cover

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HNS Convention defines four elements of damage, all of which already fall within the scope of Club Cover

- Loss of life or personal injury on board or outside a ship carrying the hazardous and noxious substances caused by those substances
  - Crew and Third parties
- Loss of or damage to property outside the ship carrying the hazardous and noxious substances caused by those substances
  - Fixed and floating objects
- Loss or damage by contamination of the environment caused by the hazardous and noxious substances
- The costs of preventive measures and further loss or damage caused by preventive measures
  - Pollution

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## Benefits of HNS Convention in terms of harmonisation

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- An International business calls for International governance and regulation
- Strict liability offers prompt compensation and certainty of limits
- ‘Level playing field’
- Predictability in terms of liability and exposure
- Risk Assessment



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# Limitation of liability

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- Higher limits
- Further potential for ship owners to have to establish multiple limitation funds
- HNS Fund only exposed in certain circumstances, and most importantly once ship owner limits have been exceeded
- Between Jan 2002 – Jan 2010
  - 192 HNS incidents reported
  - 189 under ship owner's limit under the HNS Convention
  - 2 out of remaining 3 incidents in States unlikely to accede: United States and Brazil
  - Total HNS Fund exposure over 8 year period = 29.9 million SDR = approx. USD 43.5million (and 17 million SDR of that in US and Brazil)

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# Hanjin Pennsylvania

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- Built in Korea 2002
- 50,242GT
- 21 crew
- 7 holds / 5,000 TEU
- Owned by Laeisz Lines
- Long term NYPE time charter to Hanjin
- Slot charterers: Hanjin, COSCO, Senator, APL, K Line, Yang Ming

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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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- On or around 8 November 2002 the vessel loaded 4,000 containers in Shanghai and Singapore for discharge at North European ports
- Of those, two containers contained cargoes of magnesium
- Three days out of Singapore, whilst the vessel was 160 nm off the East Coast of Sri Lanka a fire ball was seen emanating from the port side of hold no.4 running aft towards the bridge
- This was followed by an explosion
- Hatch covers of hold no.4 were blown off and various containers were lost overboard
- One crewmember who managed to access hold no.4 reported flames up to 4 metres high

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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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- CO2 was injected into holds 3, 4 & 5 and the crew did their best to tackle the fire with hoses
- Following a further explosion near where an officer was firefighting it was decided to evacuate to a nearby vessel



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# Hanjin Pennsylvania

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- Bosun badly burnt and sadly died from his injuries
- An AB was not found, presumed to have been thrown overboard during the blast



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# Hanjin Pennsylvania

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- Owners signed LOF incorporating SCOPIC with salvors Wijismuller
- Upon arrival of the first firefighting tug at the casualty salvors immediately invoked SCOPIC
- General average declared
- Fire experts, salvage experts, nautical surveyors and lawyers were instructed
- Thanks to the work undertaken by firefighting tug 'Manhuara' by 14<sup>th</sup> November the situation had improved and only light smoke was emanating from the vessel
- Six crewmembers, who had remained on the firefighting tug, re-boarded the vessel. During this time they determined that the accommodation and engine room were still intact and generators were still providing power to the navigation lights and pumps
- While the crewmembers were on board there was a further explosion in hold 6
- The crewmembers jumped overboard and were rescued

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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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- Subsequent investigations showed the magnesium in hold 4 had reacted with water in the hold to produce hydrogen. A further product of the reaction is heat, which caused spontaneous ignition of the gas
- As a result of the explosion and fire in hold no.4 the vessel developed a trim by the stern which caused water used to fight the fire in hold no.4 to accumulate in hold no.6, which was situated forward of the engine room bulkhead
- This is where the second container was stowed and the source of the second explosion

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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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- Thermal imaging showed the fire had reached the accommodation block and engine room
- Further investigations showed the bridge and accommodation, along with the engine control room, to have been destroyed
- Gradually the fire was brought under control



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# Hanjin Pennsylvania

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- But not before considerable cargo and debris had been lost overboard....



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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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# Hanjin Pennsylvania

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- All remaining sound containers removed
- Significant amount of worthless cargo/debris also removed to allow access to sound cargo
- Vessel finally re-delivered to owners on 31 January 2003



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# The Cost

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- 1976 LLMC limit of liability circa US\$10.5 million
- Under 2015 revised 96 LLMC Protocol limit would have been circa \$40 million
- Total claims paid well within limitation at around US\$3 million
- Less than US\$500,000 of that related to pollution damage/claims and less than \$200,000 for death compensation
- Ship owner's HNS limit of liability would have been US\$137 million

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# Lessons to learn

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- Dramatic images and extensive damage but cost well within HNS limit of liability
- Larger ships provide potential for larger casualties
- Depends on substances involved and proximity to shore and people
- However, still the largest exposure generally concerns loss of/damage to vessel, salvage, wreck removal and liabilities to cargo, which are not actually governed by the HNS Convention
- As historical data shows, combined with increasing limits of liability, reason to expect the vast majority of exposure will still be borne by ship owners and their insurers
- International Group and Clubs support the HNS Convention, albeit limited evidence of claimants being materially uncompensated at present without the Convention currently in force

Thank you

