The MSC Oscar is now the world's largest container ship
Photo: Wikimedia Commons

More than 300 people died in the Sewol disaster
Photo: Wikimedia Commons

The Blue Sky M was abandoned by its crew while carrying almost 800 migrants
Photo: Wikimedia Commons

Executive Summary

- 75 large ships lost worldwide in 2014, down 32% year-on-year
- South China and South East Asian waters top loss hotspots
- East Mediterranean and British Isles top locations for incidents
- Cargo and fishing vessels account for over 50% of all losses
- Ship size growth raises risk management concerns. Industry should prepare for $1bn+ loss
- Lessons not learned from overreliance on e-navigation. Cyber protection a major concern

This review focuses on key developments in maritime safety and analyzes shipping losses (**of over 100 gross tons**) during the **12 months prior to December 31, 2014**. It follows the **Safety and Shipping Review 2014** by Allianz Global Corporate & Specialty (AGCS), available at **www.agcs.allianz.com**

Safety of international shipping vessels is critical to the global economy. More than **90%** of trade is estimated to be transported by sea. The maritime industry continued to improve its safety record in 2014 with **75 total losses** reported worldwide; the lowest in 10 years.

Losses declined by **32%** compared with 2013 (**110**). The 2014 accident year also represents a significant improvement on the 10-year loss average (**127**). Shipping losses have declined by **50%** since 2005, driven in part by a robust regulatory environment.

More than a third of 2014's total losses were in two maritime regions. As in 2013, South China, Indo China, Indonesia & Philippines had the most losses (**17**),

followed by Japan, Korea and North China (**12**). Losses in both regions declined year-on-year. Total losses in the British Isles and surrounding waters (**6**) doubled.

A third of vessels lost were **cargo ships** (**25**) followed by fishing vessels (14). Together, they accounted for over 50% of losses.

For the past decade **foundered** (sunk/submerged) has been the most common cause of loss, accounting for **65%** of losses in 2014 (**49**). Wrecked/stranded (grounded) was second (13). There was a significant reduction in fires/explosions resulting in total losses (4), down 73% year-on-year.

There were **2,773 casualties** (incidents) during 2014 with the East Mediterranean & Black Sea region the hotspot (**490**), up 5% year-on-year. The British Isles, N.Sea, Eng. Channel, Bay of Biscay ranked second (465), up 29%.

December is the worst month for losses in the **Northern Hemisphere** (**110**) over the past decade with a 64% increase compared with the quietest month (May). In the **Southern Hemisphere** it is **August** (**22**) with a 214% increase in losses compared with December. For every total loss in the Southern Hemisphere there are approximately 7 in the Northern Hemisphere.

The unluckiest ship? Analysis shows one vessel in the Great Lakes region of North America has been involved in 19 incidents in the past 8 years – including six in 2013. It has suffered a fire, engine failure, steering failure and even hit a submerged log.

While the long-term downward trend in shipping losses is encouraging, more work needs to be done to improve the overall safety of vessels. Recent casualties such as **Sewol** and **Norman Atlantic** have raised significant concerns over passenger ship safety.

Vessel construction is not always the only weak point. Levels of crew experience, training and emergency preparedness can also be inadequate. **Minimum manning levels** are reducing the ability to train people on-board, providing invaluable insight. But with crews being mandated to meet often unachievable hours of rest – and taking on secondary and tertiary duties – improved training alone is not the panacea.

Container ship safety is also under the spotlight in light of inconclusive findings from the investigation relating to the cause of 2013's largest loss – **MOL Comfort** – and ever-increasing ship sizes. 2015 sees the entry-into-service of ships as long as four football pitches, able to carry **19,000+ containers**. This raises concerns about whether risk management needs reviewing after an **80% capacity increase** in just a decade.

Larger ships could also mean larger losses. The industry should prepare for a **$1bn+ loss** in future featuring a container vessel or even a specialized floating offshore facility. Maximum exposure will not necessarily be limited to vessel and cargo value but could also include environmental, social or business interruption backlash.

Overreliance on **electronic navigation** is also a rising safety concern. Lessons learned from accident reports

related to key technologies such as Electronic Chart Display and Information System are not always being filtered back into the training environment.

Dependence on e-navigation, the interconnectivity of the maritime sector, the current low levels of cyber security awareness and – longer term – the prospect of unmanned ships, means ships and ports could become enticing targets for hackers in future. A **cyber-attack** could result in a total loss, leading to substantial insurance claims for hull, cargo and protection & indemnity underwriters. It could even involve multiple vessels from the same company. Companies must simulate potential scenarios and identify appropriate mitigation strategies.

A pivotal moment for shipping in the high-risk Arctic waters was passed last year with the introduction of **the Polar Code**. However, questions remain around clean-up, training and vessel suitability. The code will need constant revision as industry develops. Problems encountered and best practices to employ should be regularly outlined. There were **55** shipping casualties in Arctic Circle waters in 2014. There were **just 3** a decade ago.

The recent outbreak of the **Ebola virus** has safety, as well as humanitarian, implications, for shipping following the decision last year by Mexico to refuse to allow the **Carnival Magic** passenger ship into port, amid fears a passenger had the disease. With reduced crews it is often the Chief Mate or Master that also acts as the ship's medical officer. Are ports going to rely on someone with basic medical training to make a diagnosis in the event of an infectious disease outbreak?

Vast improvements in tackling **piracy** in Somalia and the Gulf of Guinea have resulted in global attacks declining for a fourth successive year – **down 7%** in 2014. However, different piracy models continue to thrive elsewhere. Attacks in South East Asian waters are up year-on-year, as are incidents in the Indian sub-continent, with Bangladesh a new hotspot.

Other rising concerns include **Human trafficking and Search and Rescue issues**, particularly in the Mediterranean, which are stretching resources and rescue infrastructure; **War/upheaval risk** – the recent uptick in activity puts increasing pressure on the shipping supply chain. The risk fallen states present is an area which will increase; **Slow steaming engine challenges** – This practice has become a popular cost-saving strategy. However, it can impair engines on older ships and expose vessels to environmental and piracy threats for longer periods.

29 years

Average age of vessels lost in 2014

50%

Ship grounding is the top cause of loss by value - 50% of all marine insurance claims in excess of €1m*

*Source: AGCS' Global Claims Review

#1

Impact of increasing competition is the top risk identified by the marine sector in 2015*

*Source: Allianz Risk Barometer