



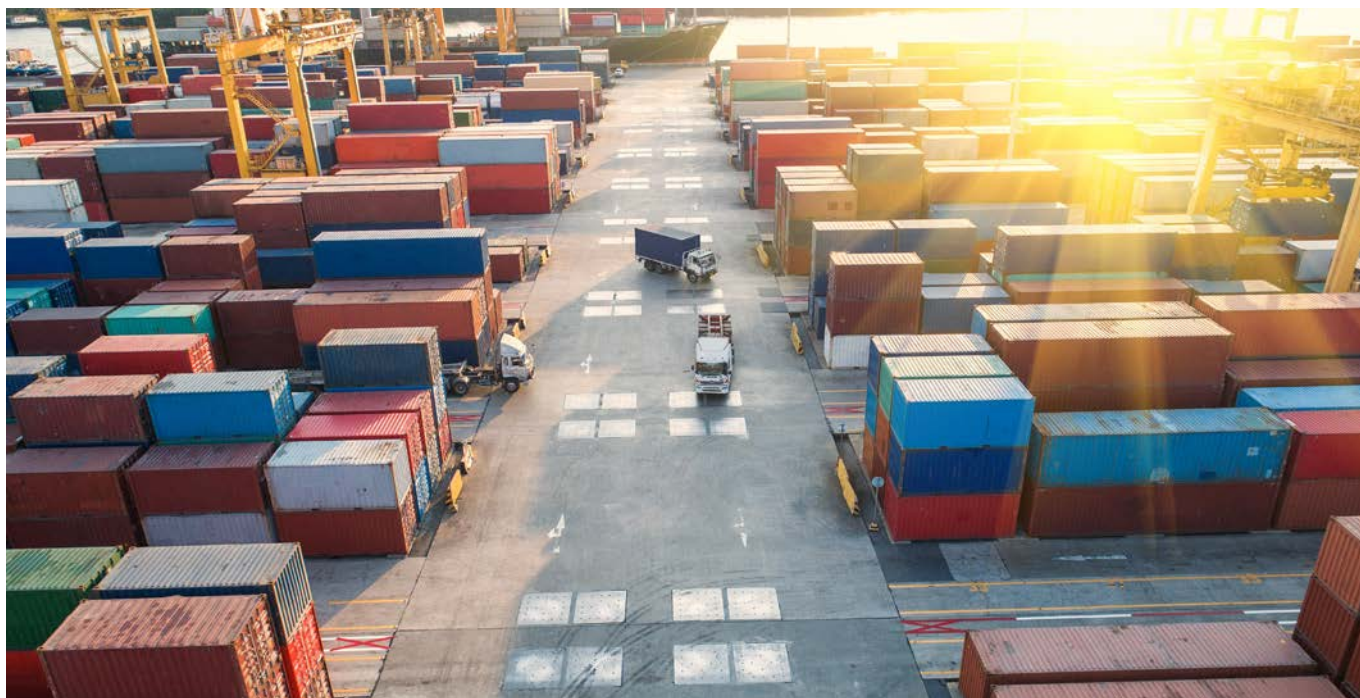
## The 5 most challenging emerging risks facing the Australian maritime industry



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The Australian maritime industry has gone from strength to strength in recent decades. It has, arguably, become the backbone of the Australian economy. According to Australian Industry Standards

- the industry added **\$4.85 billion to the Australian economy** in 2016
- **10% of the world's trade** will pass through Australia's ports
- **99%** of all Australian international trade is carried by sea, meaning 30 per cent of Australian GDP is dependent on international shipping
- nearly **29,000 ships visit Australian ports** each year - some of which make more than 25,000 trips in total.

And yet, in spite of its strengths and vital importance to the Australian economy, the maritime industry is facing several significant **challenges**. How the industry handles these emerging risks will have a direct impact on its viability and continued success.

## What to expect from this guide

In this guide, we'll explore the **key emerging risks** facing the Australian maritime industry and **how to mitigate them** with the help of specialist marine insurance brokers.

*Our intention is to help marine, cargo and logistics companies navigate the complex and evolving world of risk. The advice contained in this guide, however, should be used as a reference only. Talk to your insurance broker before making any changes to your insurances, or get in touch with us for more personalised advice.*



**\$4.85 billion**  
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# 1.

## Cybercrime

The maritime industry is 'easy meat' for cyber criminals, according to multinational cyber security firm [Kaspersky Lab](#). But while the extent of the cyber threat is well appreciated by those in the international maritime industry, it receives comparatively little attention in Australia.

*The Australian maritime industry is no stranger to cybercrime.*

### Cybercrime happens on our own shores

The Australian maritime industry is no stranger to cybercrime. In 2018 shipping company Svitzer Australia revealed that it had been the victim of a **data breach** (the [first to be publicised](#) under the [mandatory data breach notification scheme](#)) which saw up to **60,000 emails** from three accounts in finance, payroll and operations forwarded to external email addresses between May 2017 and March 2018.

The emails [reportedly contained sensitive information](#) (such as tax file numbers, next of kin details and superannuation account information) relating to around **500 Svitzer employees**. Svitzer employs approximately 1,000 people in Australia and is part of the Maersk Group, which in 2017 fell victim to a global ransomware attack.

### A rich history of cyberattacks

The Svitzer data breach is a reminder that the Australian marine industry **is not immune to cyberattacks** – and hasn't been for some time.

In 2012 it was revealed that the Australian Customs and Border Protection Service's Integrated Cargo System, used by importers of goods to track the movement of cargo through port terminals, had been [hacked by a criminal syndicate](#).

By exploiting a security vulnerability in the system, criminals were able to check if their shipping containers had been moved to a Customs Examination Facility or otherwise attracted police attention. With that information, they could abandon contraband-filled containers. [Fairfax Media](#) also reported that at least one privately owned cargo tracking program, which relies on data provided by Customs, was likely accessed by criminals too.

The incident proved just how fragile the Australian maritime industry's cybersecurity controls are, but it wasn't the first. In 2008 police discovered that a drug importing syndicate had tapped into *the very same* Integrated Cargo System to find out which containers were being screened.





## Private industry is a prime target

The Australian Customs and Border Protection Service case is just one example of how **damaging, organised** and **large-scale** cybercrime can be. But it's an exception, not the rule.

According to the [Australian Cyber Security Centre](#), government agencies aren't the most common targets for cybercrime. **Private industry is the most common target**, and **smaller firms** – which make up [89%](#) of Australia's maritime industry – are at the **most risk**.

Who are the perpetrators of cybercrime? In the past, cybercrime was largely committed by small groups or lone actors. Today, [INTERPOL warns](#): "We are seeing highly complex cybercriminal networks bringing together individuals from across the globe in real time to commit crimes on an unprecedented scale."

## Cybercrime is cheap, easy and effective

Don't be fooled into thinking that cybercrime requires vast networks of talent, resources and time to commit. On the contrary, cybercrime is **fast, cheap** and **easy**.

- [Researchers](#) have managed to make shipping vessels disappear off the radar by hijacking the Automatic Identification System ([AIS](#)) and issuing false alerts with cheap radio equipment.
- University of Texas researchers proved that it's possible to ['trick' navigation systems](#) on private [superyachts](#) and actually steer them, sending them off course.
- A group of cybersecurity professionals [discovered](#) that the configuration of certain ships' satellite antenna systems could be easily accessed by criminals, giving them the ability to change GPS coordinates or render navigation systems entirely useless.

## The Australian maritime industry can't afford to ignore cyber threats

Criminals can access sensitive information and wreak havoc on port terminal operations, vessels, government authorities and more with very little in the way of resources or effort. They're organised, sophisticated and willing to target anyone.

For marine, cargo and logistics companies, cyberattacks can occur on a number of fronts and there is **no single, foolproof** solution that responds to every risk. [We recommend](#) all companies in the marine industry, large or small, seek **stand-alone cyber insurance** to ensure they're sufficiently covered. In this day and age, cybercrime extensions to existing cover just won't cut it.





*“Given the uncertainties of mother nature, [cargo insurance] is a worthy investment as it would cover your cargo while it’s in storage and in transit until it reaches the safe hands of your buyer.”*

*Klaus Lysdal, Vice President of Sales and Operations, iContainers*

## 2. Cargo accumulation

Rising consumer demand for imported goods, particularly in developing countries, has produced some long-term growth opportunities for marine, cargo and logistics companies.

Ships and storage facilities are growing in size, and so too is the volume of cargo they carry. [Rod Nairn](#), CEO of Shipping Australia, says 2017 was a ‘year for records’ in ship sizes, and we anticipate that this trend will continue as globalisation unfolds and disposable incomes continue to rise.

But rising demand for imported goods is a double-edged sword. As fleets grow in size and container ships get bigger, ports and wharf infrastructure will struggle to cope. **Cargo accumulation** will expose cargo owners, shipping companies, marine underwriters and more to **catastrophic losses**. There’s also the increased risk of **vessel collisions**.

The [fire incidents](#) involving a Maersk vessel in the Arabian Sea in March 2018 highlights the risk of substantial cargo loss. The fire, which claimed the lives of four crew members and damaged

hundreds of containers, is a lesson in the importance of **cargo insurance**.

Indeed Klaus Lysdal, Vice President of Sales and Operations at online freight forwarder iContainers, says that “given the uncertainties of mother nature, [cargo insurance] is a worthy investment as it would cover your cargo while it’s in storage and in transit until it reaches the safe hands of your buyer.”

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### Work with your broker to mitigate the impact of catastrophic loss

Most cargo policies have limited extensions for cargo stored on wharves, in stockpiles or elsewhere. It’s important to review your insurance policies with a specialist marine broker to make sure they’re adequate in scope and sums insured.

# 3.

## Human capital

In 2017, more than [60% of employers](#) in Australia's maritime industry reported experiencing a skills shortage in the previous 12 months. The reasons for the shortage vary, but the most commonly-cited ones include:



Lack of skilled/qualified personnel



High cost of training and education



Geographic locations of job vacancies



'Unattractive' jobs and poor industry image

These are just some of the issues the Australian maritime industry is facing with **human capital**. Over the next few years, how the industry manages skills shortages (and other workforce issues) will have a profound impact on its overall viability.

### The industry's ageing workforce

Australia's maritime workforce is among the oldest in the country, according to [Australian Industry Standards](#). This is aligned with a broader trend we're seeing in the international sector, particularly in countries like Japan and the United Kingdom.

In Australia, [65%](#) of maritime professionals are aged 45 years or older. With much of the workforce approaching **retirement age**, companies in this industry will need to find creative ways to attract, train and retain young workers. One way to do this would be to make the industry 'more attractive' to young recruits by embracing new, innovative technologies – but that, as we've discussed earlier in this guide, comes with associated risks.

**65%** of maritime professionals are aged 45+

### Acknowledging the gender disparity

The Australian maritime workforce, in addition to being one of the oldest in the nation, is predominantly made up of men. In fact, [98.9%](#) of maritime workers in Australia are male. This, again, is consistent with a broader global trend: just 2% of the world's maritime workforce is made up of women.

Attracting more women to the industry will help alleviate the impact of skills shortages, but [very little is done to encourage more women](#) to consider seafaring (and other related jobs) as a viable career. Companies looking to 'tap' into the female workforce should consider initiatives such as

- **hosting workshops and seminars** that help women workers connect, engage with others and raise awareness about careers in the maritime industry
- **creating formal support networks** for women workers
- **improving job security and employee benefits**, which can help attract both women and men
- **equal representation**, particularly at the [leadership level](#).

### Workforce casualisation

Part-time work in the Australian maritime industry has [more than doubled](#) over the past 30 years. And while the majority of workers are employed full time, [projections](#) by the Department of Jobs and Small Business suggest that the **number of jobs will decline** over the next five years.

Casualisation is arguably both a symptom and a cause of the industry's skill shortage. The growing tendency to offer part-time and short-term contract work does little to improve the maritime industry's attractiveness to prospective workers, particularly those who are looking for **job security**.

### How an insurance broker can help

From an insurance perspective, it's important to **work with a marine specialist** who appreciates the risks and needs of an ageing workforce. A skilled insurance broker will also help manage [workplace risk](#) to create a safer, more appealing working environment.





## 4. Climate change

The maritime industry, as the [United Nations Conference on Trade and Development](#) states, “faces a dual challenge in respect of climate change: the need to reduce its carbon emissions and, at the same time, adapt to the potentially wide-ranging impacts of climate changes.”

### The emissions challenge

The maritime industry doesn't have a great environmental track record. Research shows that new ships built in 2013 are, on average, [10% less fuel-efficient](#) than those built 25 years ago. And though the **design efficiency** of new ships has improved since then, there is still more work to be done to reduce **shipping emissions**.

### Managing the impact of climate change

Climate change will have a substantial impact on the maritime industry. Addressing the full impact is beyond the scope of this guide, but we can identify a few key risks that climate change poses to

- **rising sea levels**, increasing sea surface **temperatures** and the frequency of **extreme weather events** will have a significant impact on operations and the growth of the Australian shipping industry
- **regulations** around emissions control and ship design will add operational and **administrative costs**
- **Melting ice caps** will create **new shipping routes** – and potentially make others inaccessible.

And that's just the tip of the ever-melting iceberg.

The Australian maritime industry needs to be better prepared for the growing number of emerging risks posed by climate change. Companies must work with their insurance brokers to understand (and insure against) these emerging risks. **Specialist marine insurance brokers** will be indispensable to companies looking to adapt and survive.

*The Australian maritime industry needs to be better prepared for the growing number of emerging risks posed by climate change.*



## 5. Geopolitical risks

Geopolitical tensions, particularly in waters around Southeast Asia, have the potential to disrupt global trade. Two key threats – piracy and escalation in the South China Sea – may directly impact Australian marine, cargo and logistics companies.



### Piracy and armed robbery

The threat of Somali piracy was front of mind for both the maritime industry and the general population in the mid-2000s. Even today, [travellers and seafarers remain cognisant](#) of the threat of piracy in the Gulf of Aden.

But today the threat of piracy and hijacking is far more prevalent in the waters of Southeast Asia than it is off the Somali coast. Recent data released by the [ICC International Maritime Bureau](#) (IMB) shows that **out of the 180** attempted and actual attacks recorded in 2017, **76** happened in Southeast Asian waters – that's **42.2% of total recorded attacks**.

The overall number of attacks overall, however, is on the decline; having dropped by 30% since 2013. This is a welcome trend, but the International Maritime Bureau [warns](#) that “the effects on crew and their safety continues to be a cause for concern.” Many attacks in Southeast Asia are low-intensity crimes of opportunity, but there have been cases of armed robbery and hijacking.

The entire global shipping system is exposed to the threat of piracy and robbery, but **Australian vessels are especially at risk** given the volume of shipping traffic through the South China Sea and the Strait of Malacca. Attacks on commercial vessels aren't as common as they used to be, but they still happen – most often in our own backyard. Stay vigilant, stay safe and reach out to our [specialist marine insurance brokers](#) for tailored risk management advice.

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## Tensions in the South China Sea

According to estimates from The United Nations Conference on Trade and Development (UNCTAD), [60% of global maritime trade passes through Asia](#). The South China Sea itself carries one-third (equating to roughly [US\\$3.37 trillion](#)) of global shipping.

The South China Sea is a vital trade artery for the world's largest economies, including Australia. Any disruption, military action or reduced access in the region would have **substantial economic ramifications**. It would also have a significant **financial impact** on marine, cargo and logistics companies.

The Center for Strategic and International Studies in the US has [analysed](#) the threat of escalating tensions to commercial vessels. According to the Center:

- **Short-term disruption** in the busy Strait of Malacca would force vessels to wait for access to be re-established, or use an alternate route. Both options would incur an additional shipping cost.
- **Long-term disruption** could have far-reaching consequences. It's estimated that a week-long closure of the Strait of Malacca would result in US\$64.5 million additional shipping costs. Rerouting shipping through the Lombok Strait would cost approximately US\$119 million.

From an insurance perspective, the threat of escalation in the South China Sea poses another problem. If the Strait of Malacca becomes a designated war risk area due to ongoing unrest or disruption, war risk premiums would rise dramatically. When the Gulf of Aden (historically a hotspot for piracy) was classified a **war risk** area in 2008 by Lloyd's Market Association, [premiums surged](#).

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## The importance of perspective

Though piracy remains a risk and tensions continue to bubble away in the South China Sea, it's important to maintain a sense of **perspective**. Incidents of piracy and armed robbery at sea are on the decline overall, and China's economic security is very much tied to the South China Sea. That's also true for other nations who claim sovereignty in the region.

Still, relying on statistics the power of vested interests is not a sound **risk management strategy**. Our advice is to work with a [skilled, specialist marine insurance broker](#) who understands the maritime industry and the unique geopolitical challenges it's facing. They'll know your risk profile and can help you mitigate emerging risks, so that you're not exposed at sea.



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## Why Gallagher?

Gallagher has one of the largest and most experienced specialist Marine insurance broking team in Australia. Through our deep experience in marine insurance and risk management, we see beyond what's straight ahead to ensure we look after your future success.

In a global economy shaped by significant disruption and change, we are constantly looking for innovative approaches and fresh insights that help us navigate the marine industry and help our client focus their attention on what drives competitiveness, long term growth and success

## We're an ethical business, and proud of it

Gallagher has been recognised as one of the World's Most Ethical Companies by the Ethisphere Institute, a global arbiter of ethical business practice, for seven years in a row, the only insurance broker in the world to achieve this distinction.

This recognition underscores Gallagher's unwavering commitment to ethical business practices and is validation that our enduring core values and corporate culture are true differentiators and provide a competitive advantage in the marketplace.

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