

Actuaries Institute: Collaboration needed to prevent multi-billion dollar losses from cyber attacks

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- Green Paper says issues are complex, no organisation is immune.
- Cyber attacks 'super-charged' by crypto and untraceable payments.
- Vibrant cyber insurance market is a key line of defence, but unique challenges need to be resolved.
- Identifies severe shortage of skilled personnel, recommends joint approach for training and skills development.
- Scenario planning will help businesses understand the role of insurance.

The Actuaries Institute today issued a detailed report urging government, businesses, and insurers to collaboratively address significant insurance gaps in protection against cyber attacks that have already cost the Australian economy billions of dollars.

In its Green Paper, 'Cyber Risk and the Role of Insurance,' the Actuaries Institute analysed the vulnerability of organisations, from SMEs to large corporates, and the role of cyber insurance in setting best practice standards for cyber resilience as part of a robust risk management framework.

"For cyber insurance to influence best practice in a major way, there are several gaps that need to be addressed by government, business and insurers," said the report's lead author Win-Li Toh, a principal at analytics and actuarial consultancy Taylor Fry.

"Adding to these challenges are escalating cyber losses that have reduced insurer appetite for this class, significant shortage of capacity to provide the levels of protection needed across the market, and premium hikes in the double/triple digits over the past two years," she said.

Actuaries Institute President Annette King said the Green Paper identifies pathways for key stakeholders in the Australian economy to prevent further significant damage from cyber attacks.

"Sitting back and doing nothing shouldn't be an option when cyber attacks cost the Australian economy \$33 billion last financial year," Ms King says, noting the Green Paper's recommendations including scenario planning and a joint approach towards training and skills development.

"The issues may be complex, yet it is clear that protection is vital for economic resilience given the headline-making losses we too often read about here and around the world."

In its assessment of economic losses, the Green Paper notes that only 20 per cent of small to medium enterprises (SMEs) have cyber insurance compared with 35 per cent to 70 per cent for larger organisations. In 2021, 75 per cent of ransomware attacks were on companies with fewer than 1,000 people.

In addressing these issues, Ms Toh said: "importantly, good cyber hygiene and security – not insurance – are the first line of defence." She noted government entities are a long way off baseline standards of cyber security and many businesses are also behind in their resilience against rapidly shifting risks.

"A vibrant cyber insurance market will do more than provide financial recompense for risks that break through the first line of defence. It can also strengthen that first line, by offering clear signals and incentives to business – in the form of eligibility, pricing and sharing of insights – on best-practice standards," she said.



Key gaps in achieving this best-practice approach include:

- A severe shortage of qualified cyber security personnel.
- Limited understanding of the role of cyber insurance among Boards.
- Limited education on cyber risks among SMEs.
- Achieving sufficient capacity and profitability in the market.
- Managing accumulation risks.

On a global basis, Ms Toh said cyber risk is growing at unprecedented levels, with ransomware attacks more than tripling in two years.

"The accessibility of Ransomware as a Service (malware products), combined with the development of crypto currencies enabling untraceable payments has super-charged the growth of cyber attacks.

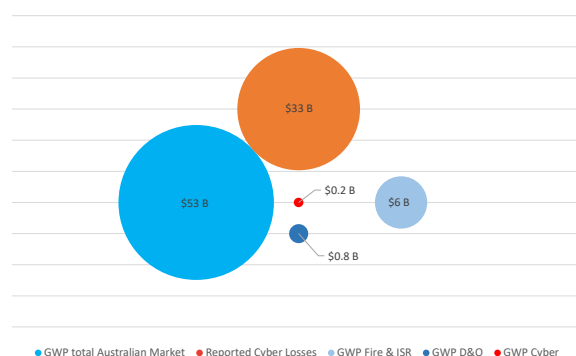
"This has brought more organisations of different types and sizes under the widening net of cyber criminals to the point where it is now clear that no firm is immune. This is why a vibrant and resilient risk management framework and infrastructure for cyber risk is crucial, of which insurance is one part," she said.

The Green Paper also notes that with no geographical boundaries, a computer virus can spread quickly around the world and results in many companies making a claim under their cyber insurance policy. "This is the accumulation risk challenge for an insurer – the potential for a single event to trigger losses across business lines and global borders," said Ms Toh.

Another issue is the difficulty in defining Acts of cyber War (or terrorism) that are excluded from insurance policies, with Lloyd's recently giving directions to underwriters towards excluding liability for losses arising from any state-backed cyber attack.

Ms Toh said, "finding the right balance between guidance, education, mitigation, cover and regulation, will be central in creating a robust risk management framework for cyber risk and cyber insurance."

Comparative size of cyber insurance market in Australia with other risks



Note: GWP = Gross Written Premium; Reported Cyber Losses are economic losses (insured losses + uninsured costs).

The paper can be found [here](#).

Lead author Win-Li Toh and Actuaries Institute CEO Elayne Grace are available for interview.



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Actuaries use data for good by harnessing the evidence to navigate into the future and make a positive impact. They think deeply about the issue at hand, whether it's advising on commercial strategy, influencing policy, or designing new products. Actuaries are adept at balancing interests of stakeholders, clients, and communities. They're called upon to give insight on complex problems, they'll look at the full picture. Actuaries analyse the data and model scenarios to form robust and outcome-centred advice.