

Hong Kong's new cybersecurity framework

In light of increasing cyber threats, regulators across the globe are focusing their efforts on improving the cybersecurity of banking systems. The Hong Kong Monetary Authority (HKMA) recently announced the launch of the 'Cybersecurity Fortification Initiative' (CFI), a new scheme designed to enhance the resilience of Hong Kong banks to cyber attacks. The CFI consists of three pillars:

- 1. Cyber Resilience Assessment Framework a riskbased approach for banks to assess and benchmark resilience against cyber attacks,
- 2. Cyber Intelligence Sharing Platform a platform for banks to share intelligence and to collaborate on cyber attacks,
- 3. Professional Development Programme a training programme designed to increase the number of qualified cybersecurity professionals.

The HKMA's Cybersecurity **Fortification Initiative**



Cyber Intelligence Sharing Platform



Cyber Resilience Assessment Framework (C-RAF)



Professional Development Programme

Knowledge sharing to support cyber risk assessment

Certified professionals to conduct assessments for resilience

Cyber Resilience **Assessment** Framework

· Establish a common risk-based framework for banks to assess their own risk profiles and determine the level of defense and resilience required.

Inherent Risk Assessment

Identify the risk exposure level across five areas (technology, delivery

- channels, product and technology services, organisational characteristics and track records on cyber threats)
- Determine the required maturity levels

Maturity Assessment

- Assess the maturity levels across seven key areas (governance, identification, protection, detection, response and recovery, situational awareness and third party risk management)
- Determine the current maturity levels

Improvement Plan

- Perform gap analysis (required level vs current level)
- Identify areas for improvement and increase the maturity level

Cyber Intelligence Sharing **Platform**

- Establish a secure platform to facilitate sharing of cyber threat intelligence among banks in order to enhance collaboration and improve the industry's resilience to cyber attacks
- Allow banks to make use of intelligence information in order to strengthen cyber resilience and take timely action against any attacks

Professional Development Programme

- · Increase the number of qualified cybersecurity professionals capable of carrying out effective cyber risk assessment and cyber-related security testing
- · Establish a new certification scheme for individuals and service providers that are responsible for testing cyber systems and providing intelligence updates

As the Cyber Resilience Assessment Framework (C-RAF) is under consultation for a period of three months, banks can use this opportunity to participate and provide feedback. Banks should also start to prepare to implement the CFI.

Cyber Resilience Assessment Framework (C-RAF)

- What cybersecurity information is available to the board and senior management when making appropriate C-RAF risk decisions?
- How do you ensure that the board and senior management are regularly involved in managing cybersecurity risks and resource allocation?
- How do you integrate C-RAF within the existing risk management framework?
- Who is responsible for assessing risk and conducting maturity assessments?
- How can you develop an improvement plan and continue to monitor its progression?
- How can banks conduct simulation based tests for cyber attacks?

Cyber Intelligence Sharing Platform

- Do you have a management framework for dealing with threat intelligence?
- Have you defined the roles and responsibilities across different departments, the process for dealing with any threats and the communication channels to senior management?
- How can you integrate threat intelligence with existing processes such as intrusion detection, incident response, crisis management, simulation based testing?
- What are the existing protocols for sharing threat intelligence?

Professional Development Programme

- Do you have adequate resources across your main three lines of defence? Do they have the necessary cybersecurity management skills?
- What is your existing programme for talent management?
- How do you track the skills and resources of your employees?
- · How do you promote organisational awareness on cybersecurity?

How KPMG China can help

C-RAF based assessment

- Assist in determining the inherent risk and provide risk ratings.
- Assess current maturity levels and perform gap analysis against what is required.
- Perform cyber attack simulation exercises.

Formulation of improvement roadmap

- Assist in developing an improvement plan and provide a roadmap, taking business priorities into consideration.
- Provide assistance in overall project management during the implementation of the roadmap.

Boardroom strategy workshop

- Boardroom awareness training to improve awareness and understanding of key risks.
- Assist in establishing a governance structure and process on management oversight.

Threat intelligence framework

• Establish a threat intelligence framework covering the analysis process, incident response, intelligence sharing approach, system integration approach and the roles and responsibilities across business units.

Training programme management

- Assist in developing a training programme for management in order to continuously track and monitor staff development.
- Assist in developing a programme to raise awareness of cyber risks

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