

# SPEECH BY MINISTER FOR COMMUNICATIONS AND INFORMATION JOSEPHINE TEO AT CSA CYBERSECURITY INNOVATION DAY ON 29 SEPTEMBER 2023

#### **Investing in Singapore's Cybersecurity Ecosystem Growth**

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**Distinguished Guests** 

Ladies & Gentlemen

#### **Introduction**

- 1. A very warm welcome to all of you. Thank you for inviting me.
- Exactly one week ago, the Cyber Security Agency of Singapore (CSA) held the fifth edition of Exercise Cyber Star, Singapore's flagship cyber defence exercise. There were more than 450 participants representing all of Singapore's 11 sectors that own and operate Critical Information Infrastructure. They coordinated and responded to cyber crisis scenarios at the national level, tackling simulated ransomware attacks and other malicious attempts to disrupt our essential services such as power and water.
- The exercise was a tremendous success, and it was a credible showcase of our cyber defenders. They have grown in capabilities and capacity to work together since the first Exercise, which involved just over 100 participants from four sectors.
- 4. Exercise Cyber Star is also an example of how cybersecurity is a team effort. Many partners must come together to coordinate and work towards a common purpose. We must therefore continue to develop each node within the entire ecosystem, which includes industry and academia.
- 5. Having a vibrant and thriving cybersecurity ecosystem in Singapore will also help to strengthen our team and sustain our efforts to defend our cyberspace in the longer term.

## <u>Key Message 1</u>: Singapore is a natural gateway to the cybersecurity market in Asia Pacific

- 6. The landscape for cybersecurity is changing rapidly. Digital opportunities are growing everywhere around us, and especially in ASEAN. The Boston Consulting Group has projected that ASEAN's digital economy will grow to almost \$1.3 trillion by 2030 compared to \$390 billion today. That's a three-fold increase in less than a decade.
- 7. As long as our regional digital economy grows, there will be a corresponding need for better cybersecurity measures to keep our digital systems safe. CSA's



recent study, conducted by a strategy consulting firm, EY-Parthenon, found that Southeast Asia is the fastest growing region for cybersecurity.

- 8. Singapore is well-placed as a gateway to tap on all these opportunities. We provide a conducive and stable political and business environment, undergirded by a robust innovation ecosystem and intellectual property protection framework.
- 9. Singapore is also an early adopter of advanced cybersecurity practices and technologies.
- 10. Over the years, we have become a cybersecurity thought leader and effective convenor, capable of drawing regional members here through initiatives such as the ASEAN Cybersecurity Centre of Excellence (ASCCE). We also host the annual Singapore International Cyber Week (SICW), a premier cybersecurity event that brings global cybersecurity leaders from the public and private sectors to Singapore. It will take place again in mid-October.
- 11. I encourage all companies and service providers to consider Singapore as your base in the Asia Pacific. You are very welcome to leverage our strengths as a gateway to seize the growing opportunities in our part of the world.

# <u>Key Message 2</u>: The Government will continue to strengthen and invest in our cybersecurity ecosystem

- 12. On the Government's part, we are committed to strengthening and investing in our Research, Innovation and Enterprise efforts to grow our local cybersecurity ecosystem.
- 13. Our cybersecurity workforce has tripled in six years from 4,000 in 2016 to 12,000 in 2022. With the opportunities available in Singapore, we expect to see a further aggregation of regional cybersecurity professionals here. Together with local cyber talents, this strong concentration of international talents will make Singapore an even more compelling place for businesses to be based.
- 14. Singapore is also home to a vibrant innovation ecosystem. Companies looking to innovate need talent, technology, an addressable market, and access to funding, and Singapore has all of these attributes. We also have a thriving research environment, which has good synergy with industry efforts and helps companies develop cutting-edge applications.
- 15. We have every intention to continue to grow our talent pool and promote innovation. Let me talk about two new initiatives that the CSA will be introducing under CyberSG, which is the umbrella for all our ecosystem development initiatives.
- 16. [Announcement] The first initiative is the "Cybersecurity Talent, Innovation, & Growth" Plan. Cyber TIG Plan is a comprehensive approach that will include existing and new efforts to give a bigger boost to our talent and industry development efforts.



- a. In talent development, the Cyber TIG plan will introduce a targeted programme to convert experienced STEM professionals to take on cyber roles. To ensure that our talent is of high quality, CSA will explore the feasibility of a professionalisation framework that will establish standards for the conduct and competence of Singapore's cybersecurity professionals.
- b. To further promote innovation, CyberCall will continue to be a core part of the Cyber TIG Plan. I am pleased to announce that for the new cycle of CyberCall, we will specifically include topics on artificial intelligence (AI).
- c. Within the field of cybersecurity, AI has unlocked new possibilities for both defenders and attackers, so it is an area that is ripe for innovation. We want to explore how AI may be used to strengthen cybersecurity, as well as how we can safeguard AI from cyberattacks in order to maintain its integrity, confidentiality, trustworthiness, and reliability.
- d. Under the Cyber TIG Plan, we will establish a new physical node at NUS, called the CyberSG TIG Collaboration Centre. This new Centre has three aims:
  - i. to integrate CSA's existing initiatives;
  - ii. to explore new talent and innovation initiatives; and
  - iii. to bring together industry, end users, investors, trade and professional associations, cyber professionals and government agencies.
- 17. In addition, we aim to complement the Cyber TIG Plan with enhanced cybersecurity research to deepen the foundation for future innovations.
  - Last year, CSA launched the "National Cyber Labs Scholarship" to offer local talents the opportunity to pursue Master's studies in cybersecurity and perform research at two of our cybersecurity research labs.
  - b. Singapore has built up cybersecurity research infrastructure, such as the National Cybersecurity R&D Laboratory at NUS, and the iTrust Labs at the Singapore University of Technology & Design.
- 18. These initiatives have laid the foundation for research, but we want to provide more structure for how research will be carried out, and offer opportunities to translate the research findings into commercial products.
  - a. [Announcement] Therefore, the second initiative I am announcing today is the "CyberSG R&D Programme Office", established by CSA and hosted by NTU.
  - b. The Office will catalyse cybersecurity research by administering calls for research challenges in areas of strategic importance. It will also seek to translate this research into commercial products. This will



provide a structured path for researchers to contribute to the ecosystem by finding solutions to specific problem statements, encourage the translation of research directly into market development.

19. The Cyber TIG Plan and the CyberSG R&D Programme Office are like the wings of an eagle. What about the wind beneath the wings? Well, the Government will be setting aside \$110M to support these two initiatives to grow our cybersecurity ecosystem. This clearly demonstrates our strong commitment and belief in the critical importance of cybersecurity.

### **Conclusion**

- 20. To conclude, Singapore is a natural gateway to the cybersecurity market in the region and Asia Pacific.
- 21. With our efforts to grow our local cybersecurity ecosystem, we will be strengthening this position; and in time, fortify our position as the cybersecurity hub in this region.
- 22. In doing so, we will not only afford valuable opportunities for talent and businesses, but also make the cyberspace in this region and beyond a safer one. Thank you.

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