



Singapore's Safer Cyberspace Masterplan 2020 Media Release: Annex A – Additional Information on Key Initiatives

Securing our Core Digital Infrastructure

1. Securing Singapore's 5G networks

The Infocomm Media Development Authority (IMDA), together with CSA, will work with the Mobile Network Operators (MNOs) to apply Security-by-Design principles in developing Singapore's 5G networks.

As part of ongoing cybersecurity enhancement measures to be adopted for 5G networks, IMDA and MNOs will also establish a 5G Security Programme for technology exploration and research to better protect our 5G networks against cyber threats and vulnerabilities.

2. Strengthening cybersecurity of cloud services

IMDA, together with CSA, is working with Cloud service providers, industry certification bodies, industry associations, professional bodies, academia and Small and Medium Enterprise (SME) representatives to review and update the Multi-Tier Cloud Security (MTCS) standard to mitigate the latest security concerns in Cloud Native environments. The updated MTCS standard will be published in late-2020.

3. Cybersecurity Labelling Scheme

Please refer to the attached media factsheet for more details.

4. Leveraging National Digital Identity (NDI) trusted services for Identity Assurance and Authentication

The Government will continue to enhance the cybersecurity of our Information and Communications Technology and smart systems. These applications and tools include the NDI's trusted services, such as MyInfo and SingPass Login. Besides using these NDI services for transactions with the Government, enterprises are also encouraged to leverage them to augment their own identity assurance and authentication processes.

Safeguarding our Digital Activities

5. Artificial Intelligence (AI)-enabled Cyber Fusion Platform

CSA will introduce an AI-enabled Cyber Fusion Platform to facilitate the automation of threat detection and analysis. This will allow CSA to swiftly triage high-priority cyber



evidence that may be warnings of impending malicious cyber activities, correlate evidence across all cybersecurity information sources, and conduct the requisite investigations with enhanced efficiency.

6. Internet of Things (IoT) Threat Analytics Platform

CSA will work with our partners to set up an IoT Threat Analytics Platform. This will provide CSA with information on, and analysis of, the global IoT threat landscape. Through this analysis, CSA can better detect impending, large-scale IoT attacks and assess the impact before they happen.

7. Internet Cyber Hygiene Portal

CSA will develop an Internet Cyber Hygiene Portal. The Portal will provide cyber guides and toolkits housed in a single location at CSA's webpage, making it easier for enterprise users to access self-help resources and adopt cyber best practices. It will also incorporate cyber health lookup tools that help enterprise users to assess their domain, email and connectivity cyber health.

8. Security-as-a-Service (SaaS) cyber solution

CSA is collaborating with local cybersecurity industry partners to design an architecture for an integrated and automated SaaS solution that incorporates all the 'Cybersecurity Essentials'¹, to better protect enterprise users from malicious cyber activities. The SaaS solution will be made available to SMEs under the Productivity Solutions Grant of Enterprise Singapore and IMDA's SMEs Go Digital programme.

Empowering our Cyber-Savvy Population

9. Resources and Toolkits for Enterprises

CSA will develop and promulgate targeted resources and toolkits for the following three groups of enterprise stakeholders: enterprise leaders, cybersecurity teams and employees. The resources will be tailored according to their different knowledge needs and roles in the enterprise. An example of a resource that enterprises and organisations will be able to leverage is the Exercise-in-a-Box Singapore tool, which aims to provide a safe environment for our enterprises and organisations to exercise and test their response to a variety of cyber-attack scenarios.

¹ The 'Cybersecurity Essentials' are: (1) Know your Assets; (2) Allow only Authorised Software to Work; (3) Timely Patching and Updating; (4) Giving the Right Admin 'Passes'; (5) Detect Breaches Promptly; (6) Access Control; and (7) Encrypt your Crown Jewels.



10. SG Cyber Safe Trustmark

Cybersecurity continues to be viewed as a business cost that detracts from the enterprise bottom-line, with no clear return on investment. To lead the shift in thinking away from cybersecurity as a cost, to cybersecurity as a competitive advantage, there is a need to help identify and profile enterprises that meet pre-determined cybersecurity measures, so that they can be considered favourably in the market.

To this end, the Government will roll out the SG Cyber Safe Trustmark by 2021. The Trustmark adoption will be voluntary. With the Trustmark, enterprises can demonstrate that they have put in place certain levels of cybersecurity, and clients can select enterprises with the appropriate security assurance. Further details will be provided in 2021.

11. Customised Outreach Programmes for Different Demographics

CSA's GoSafeOnline Community Outreach Programme provides bite-sized and actionable advice to keep everyone secure in the digital domain. CSA also supported IMDA's SG Digital Office in training about 1,000 Digital Ambassadors on cybersecurity, as part of their outreach efforts to engage seniors and stallholders to go digital. CSA will partner IMDA and MOE to include cybersecurity activities in the Code for Fun programme for upper primary school students.

**Singapore's Safer Cyberspace Masterplan 2020 Media Release:
Annex B – Infographic on Safer Cyberspace Masterplan**

Overview of the Safer Cyberspace Masterplan



<p>3 STRATEGIC THRUSTS</p>	<p>Securing our Core Digital Infrastructure</p>	<p>Safeguarding our Cyberspace Activities</p>	<p>Empowering our Cyber-Savvy Population</p>
<p>7 FOCUS AREAS</p>	<ul style="list-style-type: none"> Protecting the Internet Architecture in Singapore Securing User Devices and Endpoints Safeguarding Enterprise Applications 	<ul style="list-style-type: none"> National Detection and Analysis of Malicious Cyber Activities Enabling Enterprises to Protect Themselves from Cyber Threats 	<ul style="list-style-type: none"> Raising Awareness and Changing Attitudes on Cybersecurity Enhancing Cyber Adoption
<p>11 KEY INITIATIVES</p>	<ul style="list-style-type: none"> Secure Singapore's 5G networks Strengthen cybersecurity of Cloud services Cybersecurity Labelling Scheme Leverage National Digital Identity trusted services for identity assurance and authentication 	<ul style="list-style-type: none"> Human-AI collaboration for swift detection and response Early detection and response to impending IoT attacks Internet Cyber Hygiene Portal Security-as-a-Service cyber solution 	<ul style="list-style-type: none"> Cybersecurity resources and toolkits for enterprises Raise community awareness of cybersecurity SG Cyber Safe Trustmark