Opening Remarks by Minister for Communications and Information S Iswaran at the Milken Institute Asia Summit 2020 Panel Session – "The Race to Capture the Global 5G Market" on 9 December 2020

Distinguished Guests Ladies and Gentlemen

- 1. Let me start by wishing everyone a warm welcome and greetings from Singapore.
- 2. COVID-19 has made the anticipated digital future a stark current reality. The pandemic has reinforced the imperative for businesses and individuals to be digitally ready. Digital technology creates new opportunities for individuals and businesses, enhances competitiveness and productivity, and critically in today's context, supports business and social continuity in turbulent conditions.

5G Foundations for A Digital Future

3. If our economic resilience and competitiveness lies in digitalisation, then its foundation rests on 5G. Its higher bandwidth, lower latencies and dynamic network capabilities will catalyse a wave of transformation across industries and unlock novel applications. According to the Global System for Mobile Communications (GSMA), the number of global Internet of Things (IoT) connections between 2019 and 2025 will more than double to almost 25 billion. New products and services in IoT, as well as other areas like autonomous vehicles and robotics, and augmented reality will create new revenue streams that are expected to add US 2.2 trillion dollars to the global economy by 2034.

Infrastructure

4. What must we do to realise these gains? The supply side is key – which means investments in infrastructure. In Asia, cities such as Hong Kong, Seoul, Tokyo, and Shenzhen have already introduced 5G networks. Singapore too is investing in the development of a nationwide secure and resilient, world-class 5G communications network. With the 5G spectrum awarded to the Mobile Network Operators (MNOs) in Jun 2020, we are on track for two full-fledged 5G standalone networks covering at least half of the country by end-2022, and full nationwide coverage by end-2025.

Use Cases

- 5. But equally important is the demand side, in other words, developing viable use cases. Singapore's vision is to be a global front-runner for innovation in 5G applications and services. To catalyse 5G innovation, the Singapore Government has set aside US 30 million dollars in June 2019 to further support 5G trial use cases, develop open live testbeds and fund 5G R&D.
- 6. For example, the Infocomm Media Development Authority (IMDA) and Maritime Port Authority of Singapore (MPA) are collaborating with Airbus on Smart Port operations for our maritime industry, conducting coastal 5G trials to assess the safety and efficiency of unmanned aerial vehicles. For consumers, we are collaborating with Razer, a technology company headquartered in Singapore and the US, on the region's first 5G cloud gaming trial. In the area of smart mobility and smart estates, we are trialling 5G for the deployment of autonomous vehicles.

Cybersecurity and Resilience

7. Both the supply- and demand-sides must be undergirded by robust security arrangements. The unprecedented connectivity enabled by 5G will substantially increase the cyber threat attack surface. In Singapore, we have built in comprehensive security and resilience requirements for our 5G network operators. We adopt a security-by-design approach and emphasise vendor diversity for resilience. Additionally, our regulator is partnering with our MNOs to establish a 5G Security Testbed Programme for technology exploration to better protect us from current and emerging 5G network cyber threats and vulnerabilities.

Conclusion

- 8. Let me conclude. The success and sustainability of our digitalisation efforts hinges critically on close collaboration between industry, community partners and government. These partnerships are critical in ensuring a secure and resilient 5G infrastructure and compelling use cases that will position us well to realise the full potential of the global 5G opportunity. It also calls for cross-border partnerships to build interoperable systems to secure a thriving, secure and inclusive digital future for all.
- 9. We in Singapore look forward to working with all global partners from the public and private sectors in this important endeavour. I wish everyone a fruitful discussion ahead. Thank you.