

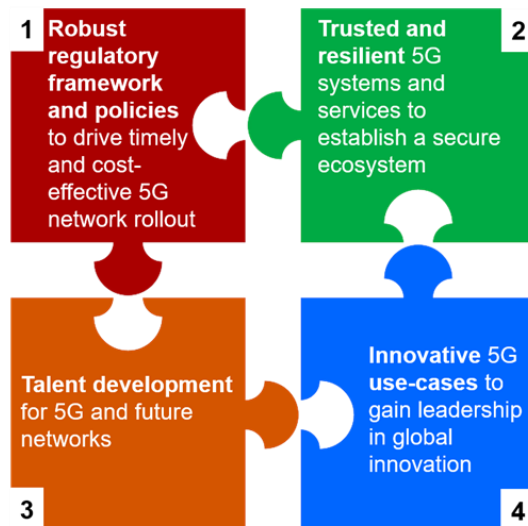
## Fact Sheet

EMBARGOED TILL AFTER DELIVERY OF MINISTER'S OPENING SPEECH  
AT INNOVFEST UNBOUND, 27 JUNE 2019, 0945 HRS

### **LAUNCH OF SINGAPORE'S 5G INITIATIVE FOR AN OPEN AND INCLUSIVE 5G INNOVATION ECOSYSTEM**

5G mobile technology will be a key enabler to support the development of new innovative applications and services to power Singapore's Digital Economy.

To achieve Singapore's goal to be a front runner for innovation in secure 5G applications and services, the Infocomm Media Development Authority's ("**IMDA**") initiative will focus on four key strategic areas.



IMDA has established a practical and robust regulatory framework and policies, and is encouraging transformative trials. IMDA has previously announced the Public Consultation in May 2019. In addition, IMDA aims to build up an open and inclusive 5G innovation ecosystem that will facilitate the development of key 5G use cases.

In developing Singapore as a 5G innovation hub, Mr S Iswaran, Minister for Communications and Information, will announce on 27<sup>th</sup> June 2019 at the Smart Nation Innovations Week (SNI Week) that Singapore, as a start has set aside \$40 million to support 5G research and

innovation. This announcement will focus on (4) developing innovative 5G use-cases, the other three strategic areas will be covered in due course.

This will support:

- 5G technology trials to demonstrate transformative impact of 5G;
- Creation of a series of open testbeds to enable research and innovation; and
- Research and development in 5G, for example, cybersecurity

## **1. 5G Innovation Early Adoption Trials**

IMDA will be exploring early trials in clusters such as Maritime Operations, Urban Mobility, Smart Estates, Industry 4.0, Consumers Applications, and Government Applications. These clusters have been selected for their potential to enhance Singapore's economic competitiveness and with market potential for worldwide 5G applications and services.

IMDA will work closely with sector leads, telecommunications operators and technology companies, offer funding support, 5G trial licences and technical inputs to facilitate the development of innovative 5G applications and services, and sustainable 5G enterprise use-cases.

### **Maritime**

- IMDA has partnered sector leads, Maritime & Port Authority of Singapore (“**MPA**”) and PSA, to identify problem statements and explore the deployment of 5G technologies for the maritime sector, to support use cases such as drones, autonomous vessels and remote tele-operations of port equipment.
- In March, IMDA and PSA issued a Technology Call to develop use-cases at Panjang Terminal as a possible 5G test site. IMDA has awarded the 5G Technology Call to two applicants, Singtel and M1, who will collectively deploy two strategic approaches. PSA is looking to address their connectivity needs, supporting remote tele-operations of port equipment, crane automation and

enhancements to Autonomous Guide Vehicles (AGV) operations, amongst others. The trials are expected to progressively be conducted from 3Q 2019, lasting about 18 months.

### **Industry 4.0**

- To accelerate Singapore's Industry 4.0 transformation, A\*STAR, JTC and Singtel will deploy 5G at A\*STAR's Advanced Remanufacturing and Technology Centre (ARTC). This will enable businesses to integrate 5G with digital technologies such as the Internet of Things (IoT), artificial intelligence and robotics to create innovative solutions that can help them operate more efficiently. For instance, to develop a new solution that could improve the accuracy in tracking the location of automated guided vehicles on the factory floor and thus, improve safety and productivity.
- ARTC consortium member National Instruments, a leader in 5G testing and prototyping, will work to bring these solutions to manufacturers. Hexagon, another member of the ARTC consortium, will work with ARTC and Singtel to use 5G technology to enable a seamless transfer of real-time production quality data to smart factories and suppliers worldwide, including those based in Singapore.
- IMDA will be working with such consortium to meet objectives of the 5G initiative programme for Industry 4.0.

To further encourage innovative use-cases, Singapore-based enterprises can apply to tap on the 5G funding. The application period is open immediately till May 2020.

## 2. 5G Open Testbeds

IMDA, will work with Institutes of Higher Learning, technology companies and other government agencies, will develop a series of open testbeds for both government and industry use. These testbeds will help to foster collaboration and capability development for 5G applications and services, helping accelerate the growth of the ecosystem. The first testbed will be at PIXEL in One-North.

### PIXEL

- IMDA's PIXEL building, will be the first open testbed to serve as a shared 5G Living Lab for the One-North tech and media start-up community. Targeted to be ready in 1H 2020, the PIXEL open testbed will enable them to experiment with 5G applications and use cases across tech and content.
- PIXEL will primarily facilitate use cases in immersive media and casual and/or serious games. PIXEL will progressively extend its support to other use cases, such as content streaming, Internet-of-Things and drones.

## 3. Research and Development

IMDA, Cyber Security Agency of Singapore (“**CSA**”) and NRF will support research and development in 5G Cybersecurity. More research funding to support other areas of 5G research, such as in communications networks, will be announced at a later date.

### **About Infocomm Media Development Authority (IMDA)**

*The Infocomm Media Development Authority (IMDA) leads Singapore's digital transformation with infocomm media. To do this, IMDA will develop a dynamic digital economy and a cohesive digital society, driven by an exceptional infocomm media (ICM) ecosystem – by developing talent, strengthening business capabilities, and enhancing Singapore's ICM infrastructure. IMDA also regulates the telecommunications and media sectors to safeguard consumer interests while fostering a pro-business environment, and enhances Singapore's data protection regime through the Personal Data Protection Commission.*

For more news and information, visit [www.imda.gov.sg](http://www.imda.gov.sg) or follow IMDA on Facebook [IMDAsg](#) and Twitter [@IMDAsg](#).

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