

## Fact Sheet

### Quantum-Safe:

Building on the success of its inaugural Quantum Safe Communications Workshop in 2018, IMDA and the National University of Singapore (NUS) - Centre for Quantum Technologies (CQT) will be offering a selection of exciting activities to build quantum-related capability in Singapore.

A second Quantum-Safe Communications Workshop will be held in the coming months. Overseas and local experts will share international trends on quantum developments, as well as practical tips on the challenges on deployment of Quantum Key Distribution (QKD). QKD enables two parties to produce a shared random secret key only known to them for encrypting and decrypting messages. It also allows the two communicating parties to detect the presence of a third party trying to gain knowledge of the key. If a third party is detected, the two communicating parties can replace the compromised key with a new secret key.

Other activities being explored includes training programmes on quantum technologies, covering QKD, Post-Quantum Cryptography and Quantum Computing, for government agencies and industry. The technical training will equip our local engineering talent with quantum technology knowledge to prepare them for future deployments.

IMDA plans to also pilot QKD trials with local industry players to gain technical understanding and explore possible regulatory needs for implementation.