

CC-01-03

## **A quantum-safe network testbed for versatile use cases and applications: National Quantum-Safe Network, Singapore**

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### **Abstract**

In this talk, I will introduce the initiative, and efforts have been recently made in the National Quantum-Safe Network (NQSN) in Singapore. NQSN is a nationwide collaborative platform, and a field-deployed testbed aimed at demonstrating and verifying quantum-safe solutions towards industry applications & use cases. NQSN links up academic, public and private members, targets industry-oriented trials for quantum key distribution (QKD) network with different QKD protocols, post-quantum cryptography (PQC) and classical symmetric key technologies. The NQSN testbed has a star-type QKD network topology, deployed over the existing production-grade fiber infrastructure, featuring multi-QKD protocols and versatile applications & use cases in different Open Systems Interconnection (OSI) layers from various industry players.