



Optical transport with security against quantum computer

Abstract

We introduce two technologies, (1) highly secure optical transport against quantum computer, and (2) highly precise anomaly detection for optical transport. We demonstrate the low latency of the 8K uncompressed movie play which is transported on the secure optical transport network with Post-Quantum Cryptography.

Features

- Optical transport with security by Post-Quantum Cryptography and Quantum Key Distribution
- Our cryptographic technology (NTRU) is adopted by the final round of NIST PQC competition

Application Scenarios

- Real-time movie transport including intellectual properties or privacy/personal information
- Low-latency communication like as the remote control in mobility, factory, or hospital field

Roadmaps

- We will research, develop, and standardize our low-latency and power-effective cryptography technology. We aim for high-throughput, low-latency, power-effective, long-term secure and long-term trusted optical transport network.

Collaboration Partners

- Toshiba Digital Solutions Corporation

Exhibitors

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

xKD: 量子鍵配送 (QKD) または
耐量子計算機暗号 (PQC) による鍵交換 (PQKD) など
xKD: Quantum Key Distribution(QKD) or
Post-Quantum Cryptography(PQC)-based Key Distribution(PQKD)

