

Quantum key distribution research and development in NEC

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Abstract

Quantum cryptography is a cryptographic method that can protect information in the ultra-long term without the risk of being deciphered in the future, and is expected to be applied to many important mission-critical systems. NEC is engaged in various research and development toward the commercialization of quantum key distribution.

This presentation first shows overview of NEC's QKD related activities, then introduction of CV-QKD research and field trials of QKD. CV-QKD method can be used over existing optical fibers and is expected to be inexpensively implemented. NEC and the partners are developing CV-QKD prototype and proceed evaluation. NEC and the partners also conduct field trials of QKD in some important application areas.
