

Satellite-based QKD R&D and commercialization trends

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Abstract

In recent years, the development of quantum key distribution (QKD) and cryptographic techniques have been promoted worldwide. Also in Japan, various QKD research and development projects are being conducted, including a publicly solicited R&D project by Japanese government. SKY Perfect JSAT Corporation (SJC), Asia's largest satellite operator, participated in 2 Ministry of Internal Affairs and Communications(MIC) R&D projects with National Institute of Information and Communications Technology(NICT) and private companies from 2018 to the end of March 2024.

This presentation describes latest satellite-based QKD R&D and commercialization trends in several countries around the world.

The concepts, requirements, and demonstration results of the MIC R&D projects will also be presented.

In addition, SJC's future business development prospects for satellite-based QKD will also be introduced.