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International Telecommunication Union
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Recommendation

ITU-T Y.3826 (09/2024)

SERIES Y: Global information infrastructure, Internet protocol aspects, next-generation networks, Internet of Things and smart cities

Quantum key distribution networks

Integration of quantum key distribution network and user network supporting end-to-end modern cryptography services – Framework

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Recommendation ITU-T Y.3826

Integration of quantum key distribution network and user network supporting end-to-end modern cryptography services – Framework

Summary

It is challenging to integrate a quantum key distribution network (QKDN) and a user network to support end-to-end (E2E) modern cryptography services to users including mobile objects (i.e., autonomous cars, mobile phones, etc.). Recommendation ITU-T Y.3826 addresses this issue and specifies architectural reference models, high-level and functional requirements.

History*

Edition	Recommendation	Approval	Study Group	Unique ID
1.0	ITU-T Y.3826	2024-09-13	13	11.1002/1000/16134

Keywords

Integration, quantum key distribution (QKD), QKD network (QKDN), user network supporting end-to-end modern cryptography services (UNemc).

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FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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