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Recommendation

ITU-T Y.3828 (04/2025)

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 – Requirements for quality of service assurance

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Recommendation ITU-T Y.3828

Integration of quantum key distribution network and user network supporting end-to-end modern cryptography services – Requirements for quality of service assurance

Summary

It is challenging to integrate a quantum key distribution network (QKDN) and a user network to support end-to-end modern cryptography services for users including mobile objects (i.e., autonomous car, mobile phone, etc.). One of the main challenges is an implication on the end-to-end quality of service assurance. To address this issue, Recommendation ITU-T Y.3828 specifies architectural reference models and high-level and functional requirements for quality of service (QoS) assurance for integrated QKDN and user network supporting end-to-end modern cryptography (UNemc) services.

History *

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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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