

Quantum Key Distribution (QKD) and Cyber Security

4 SEPTEMBER, 2024

AGENDA

Programme of the 3rd Training Event on Quantum Key Distribution (QKD) and Cyber Security

09:00 – 09:30	Registration
5m	Opening Remarks
5m	Overview of the Two-Day HellasQCI Training
10m	Welcoming Remarks by the European Commission
45m	Keynote speech
10m	HellasQCI project overview and synergies with EuroQCI Dr. Ilias Papastamatiou, HellasQCI Project Coordinator
10:45 – 11:00	Coffee Break
20m	Why QKD?
20m (2 x 10)	<u>EuroQCI Projects</u> PETRUS Nostradamus
1h 20m	<u>National QCIs (panel)</u> QCI-CAT (Austria) CYQCI (Cyprus) Lux4QCI (Luxembourg) PRISM (Malta) Pionier-Q (Poland) PTQCI (Portugal) RoNaQCI (Romania)
13:00 – 14:00	Lunch break
20m	QKD Architecture: Quantum Layer
20m	QKD Architecture: Key Management Layer

Quantum Key Distribution (QKD) and Cyber Security

4 SEPTEMBER, 2024

AGENDA

20m	QKD Architecture: Application Layer
60m	Space session
16:00-16:15	Coffee Break
60m	Business session / Commercial solutions Single Quantum ThinkQuantum
17:15	End of day 1

Quantum Key Distribution (QKD) and Cyber Security

5 SEPTEMBER, 2024

AGENDA

09:30 30m	Introduction to PQC, PQC Transition
30m	Authentication in QKD
45m	“Demo of QKD Networks”
11:15 – 11:30	Coffee Break
45m	Extracting and Managing Keys from the QKD (lab)
45m	Using AES 256 and Pseudo-OTP for File Encryption (lab)
45m	QKD-PQC: Securing Key Transfers for Application Layer Utilization
13:00 – 14:00	Lunch break
45m	Polarization encoded QKD
20m	Demonstration
45m	HellasQCI Use Cases / Cybersecurity
16:00	End of Day 2