# Digital Tech Q-Secure Net

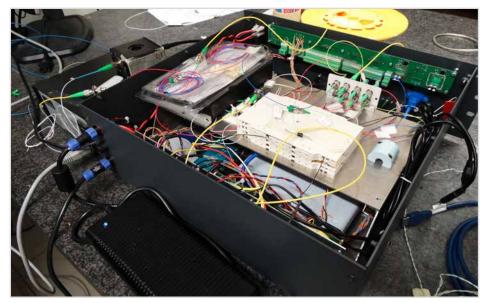


## **PRODUCT LAUNCH**

**PARTNERS:** Italtel (Italy), UPM (Spain), Telefonica (Spain), CEFRIEL (italy), Politecnico di Milano (italy), CNR (italy)







# Unconditionally secure communication

Q-Secure Net provides quantum secure communication over metropolitan fiber-optic network with Quantum Key Distribution (QKD). Novel blockchain application for finance market is the first case. Q-Secure Net improves the value of the service provider networks enabling QKD in a cost-effective and easy to implement way. It provides a telecom-ready solution, integrated within network operation and management, to ensure quantum secure E2E communications. Q-Secure Net improves communication security with a complete end-to-end solution for encryption keys distribution for critical services (e.g. finance, military, ballott, intelligence, sensible data applications) and privacy enhancement.

In a market dominated by foreign technology Q-Secure Net represents the first EU made solution for total security.



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- Fully EU-made
- Ready for any telecom network
- End-to-end quantum security
- Multiple use cases



- Optical network Service Providers (secure infrastructure, secure services delivery)
- Defense (secure communications)
- Finance (secure distributed transactions)
- Corporates, Public Administration (secure video conferences and document transfer)



- Trial with Telefonica
- Contacts with major European telcos
- With partners: Politecnico di Milano, CNR, Telefonica, UPM, Cefriel



#### 2020

PoC demonstrations

#### 2021

 Integrated Quantum Random Number Generator (QRNG), cost and size reduction

#### 2022

Cost and size optimization



Quantum nodes represent the key technology that can act indifferently as transmitters, receivers and passthrough. The solution is a costeffective original polarizationencoded QKD, differentiating from other QKD schemes (continuous variable, entangled qBit, phaseencoded QKD). It is compatible and easily deployable in current meshed metro-networks and is WDM compatible. Each node can be virtualized and easily inserted into a managed SDN network. It will keep on your business competitiveness.





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### Q-Secure Net is an innovation activity proudly supported by EIT Digital.

EIT Digital supports entrepreneurial teams from research and business organisations in launching new startups and new products in agile 12-month projects called innovation activities. These activities are embedded in EIT Digital's European ecosystem and receive a financial co-investment to package their technology, sign up customers and attract investors.



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