

OPEN QKD

Open European Quantum Key Distribution Testbed

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Coordinated by:



EU Project OpenQKD

European QKD Testbed Infrastructure:

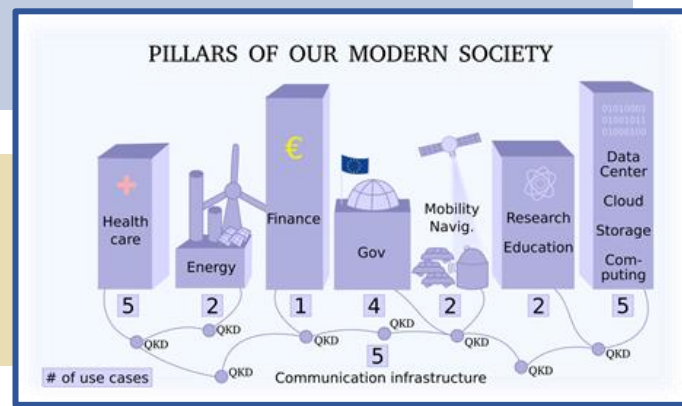
- Sep. 2019 – Feb. 2023, Project size: 18 M€

16 Testbeds and National Demo Sites:

Vienna, Madrid, Berlin, Poznan, Paris, Cambridge, Athens, Geneva, Padua, etc

- **Initial 32 QKD use-cases (UC):** Critical infrastructure, Telecommunication, Smart Grid, Health services, Cloud Services, Inter-governmental communication, High Performance Computing, Financial Services, etc.
- **Already 17 UC added** by existing and new partners

- More than 30 QKD systems in field deployments
- Free-space and simulation of satellite QKD
- Open calls to attract external partners



OPENQKD Objectives

Wide spectrum of 38 partners

- Telco operators
- QKD developers
- Suppliers of classical network equipment (encryption)
- End-users
- Academic groups

Key facts:

- Experimental testing platform to increase **TRL** of components, devices and systems
- Kick-start European QKD industry
- Demonstrate high maturity of technology
- Standardisation of interfaces
- Cooperation with end-users to demonstrate real world applications
- Pilot for pan-European quantum communication infrastructure

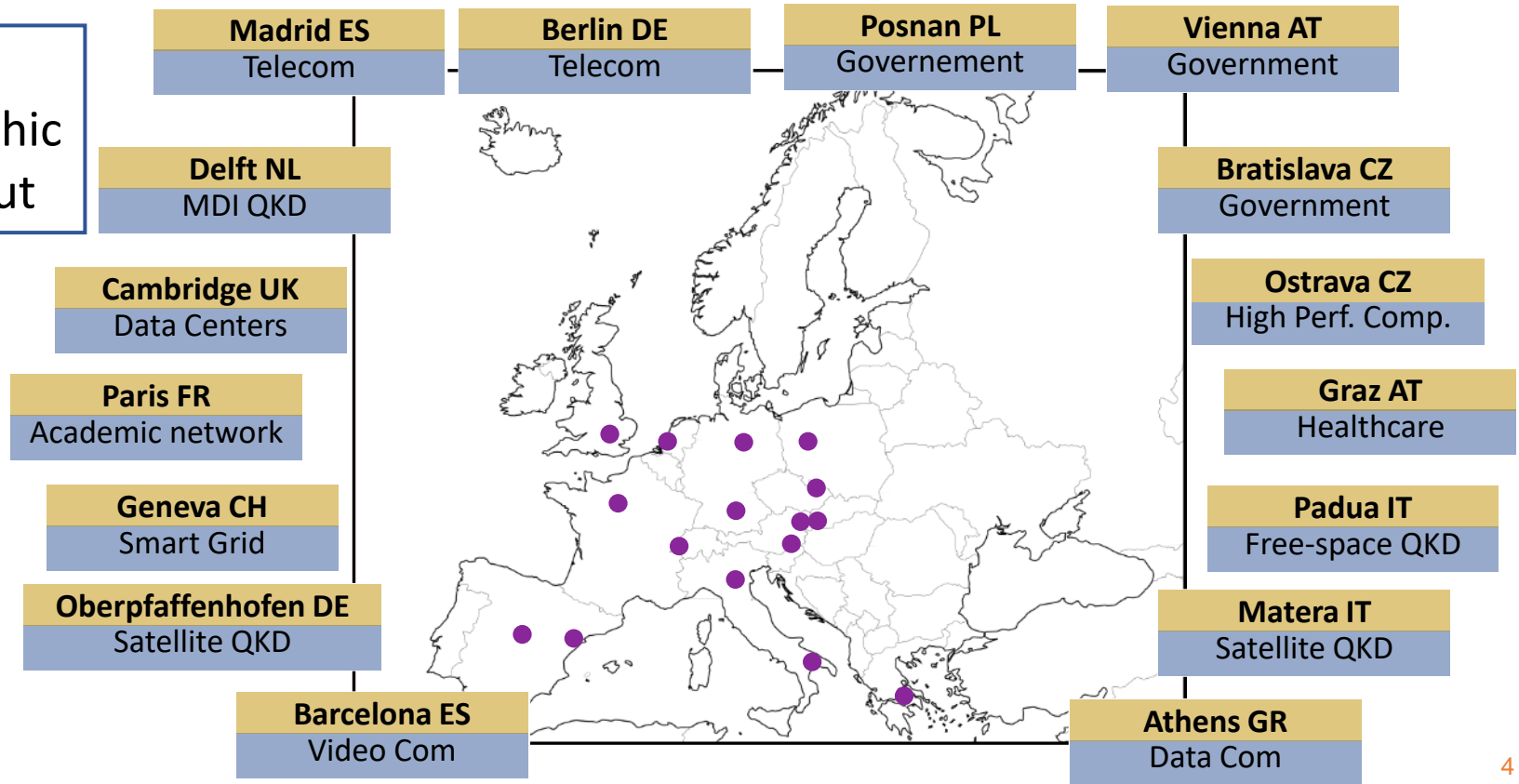


- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

HORIZON 2020 – WORK PROGRAMME 2014-2015
General Annexes

16 OPENQKD test sites

Large geographic reach-out



16 OPENQKD test sites



Graz AT
Healthcare

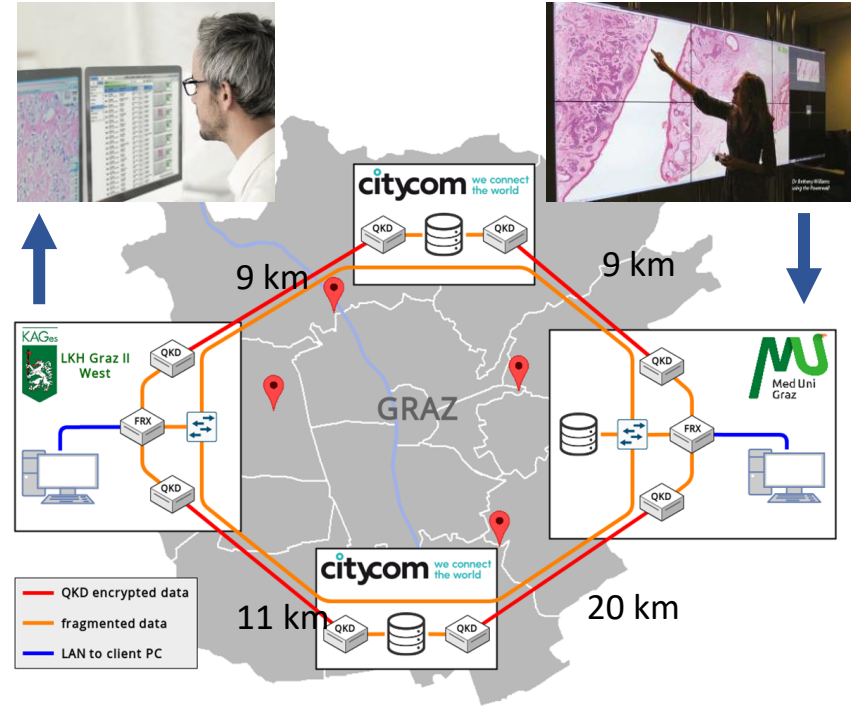
MEDICAL USE CASE IN GRAZ

Deployment finalized in Graz:

- ❑ Test of QKD links (4 from IDQ, 2 from Toshiba) and completed under realistic conditions
- ❑ Fiber infrastructure characterized
- ❑ Interface to encryptors (ADVA) implemented
- ❑ Storage solution by FragmentiX



Dry-run of optical network



Geographic layout of network nodes

Quantum Industry Board

- Industry discussion forum
- Up to date project info via newsletter
- Face-to-face meetings for QIB members

Register via:



bob@openqkd.eu

Open Calls

- 1.000.000 € to expand project's innovation power
- 2nd round open now
- Up to 80.000€ per mini-projects
- Applications, use-cases, technological development (HW & SW)
- 2 stage process, brief project idea at stage 1
- Deadline stage 1: **04.06.2021**

More information on: www.openqkd.eu/getinvolved