Participation in the REPMUS & NATO Dynamic Messenger 2023 (DYMS23) exercises

From left to right: Margarida Almeida (IT), Catarina Bastos (Deimos), Coronel Paulo Santos (Gabinete Nacional de Segurança), Nuno Ávila (Deimos), Daniel Pôças (IT).

Field Demonstration

Three of our partners, Quantum Communications Group (Instituto de Telecomunicações – Aveiro), Elecnor Deimos, and Gabinete Nacional de Segurança (GNS), participated in a field demonstration of a cutting-edge quantum-link CV-QKD system developed in the laboratory to exchange confidential information between a command center and a docked navy frigate. The REPMUS & NATO Dynamic Messenger 2023 (DYMS23) exercises were organized by the Portuguese Navy at the Operational Experimentation Center in Troia, Portugal.

In this issue: Participation in the REPMUS & NATO DYMS23 exercises; FCCN, IPTelecom, and Warpcom implement Secure Communication Infrastructure; EuroQCI - Spain; Roll-Up; Our partners, Brochure, and Upcoming Communications Activities.

About the project

> The Portuguese Quantum Communication Infrastructure (PTQCI) project is the first land segment of the European Quantum Communication Infrastructure (EuroQCI) in Portugal and is the first step towards the integration in the European infrastructure.

> PTQCI should enable the deployment of highlysecure services based on Quantum KeyDistribution (QKD).

FCCN, IPTelecom, and Warpcom implemented a Secure Communication Link based on Quantum Technologies

Secure Communication Link connecting two points, on a 14-kilometer route, in Lisbon.

FCCN, IPTelecom and Warpcom, partners in the Portuguese Quantum Communications Infrastructure – PTQCI project, joined forces to implement a modern secure communications link, through a system that combines a quantum cryptographic technology with network and security solutions, connecting two points, on a 14-kilometer route, in Lisbon.

A Quantum Key Distribution (QKD) system was used to perform the activity to guarantee the security of the generation of cipher keys between two points. The exercise highlights the importance of the technology for data protection and encryption and for strengthening the communication infrastructure in Portugal.

"This demonstration is not only evidence of technological progress but also a materialization of collaborative innovation. It demonstrates what can be developed when experts in the field come together to open new frontiers in data security and quantum technology", says Bruno Gonçalves, from Warpcom.

The FCCN, IPTelecom, and Warpcom teams have plans to follow the implementation of quantum network technology in a national context, through integration tests with different QKD system solutions from different traditional network and security manufacturers.

The demonstration was carried out within the scope of the Portuguese Quantum Communications Infrastructure – PTQCI project with the support of the EuroQCI program.

EuroQCI - Spain

On November 28th, Catarina Bastos from Deimos participated in the "Quantum Communication Innovation Forum", an event organized by the EuroQCI-Spain consortium.

The PTQCI project was discussed at the "EuroQCI National Projects" roundtable, in the "European Quantum Communications Ecosystem" session, at the BAT B Accelerator Tower in Bilbao, Spain.
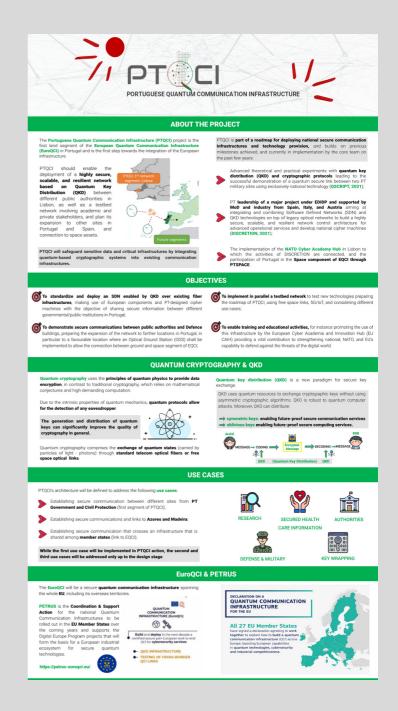

Quantum Communications Innovation Forum, in Bilbao, Spain.

PORTUGUESE QUANTUM COMMUNICATION INFRASTRUCTURE

PTQCI PROJECT ROLL-UP

This roll-up was developed as a support material to present the PTQCI project in presentations, meetings, events, and conferences.
The main goal is to demonstrate the project's purpose, the practical applications, the use cases, and the activities to be developed during the project's lifetime.

Download the roll-up here!

Let's meet our partners!

"We develop technologies that profit from the peculiarities of quantum theory to do new things or to improve the way we do things".

Quantum Communications Group - Instituto de Telecomunicações (Aveiro)

"We explore how quantum mechanics can touch the communications industry and feed innovation in our products".

Altice Labs

"We aim for the highest quantum communications levels of performance in Europe, and we integrate quantum key distribution in secure networks".

Elecnor Deimos Engenharia

BROCHURE

PTQCI PROJECT BROCHURE

This brochure was developed as a support material to present the PTQCI project.

The main goal is to share the flyers with the partners to collaborate with the dissemination of the project.

Download the brochure here!

Upcoming Communication Activities

> **Institucional Video**

> **Podcast**

> **Project Stationary Materials**

> **Workshop: Quantum Communications Network**

PTQCI 1ˢᵗ network segment, Lisboa

Future segments

Consortium's partners

GNS — Gabinete Nacional de Segurança PORTUGAL

it — instituto de telecomunicações

altice labs

deimos

warpcom

IP Telecom

TÉCNICO LISBOA

ISEL — INSTITUTO SUPERIOR DE ENGENHARIA DE LISBOA

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FCCN

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