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

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, with the purpose of guaranteeing 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 a 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.