

CC-05-08

DemoQuanDT: The quantum communication testbed for Germany

Oleg Nikiforov

Deutsche Telekom Technik GmbH

Abstract

The national research project DemoQuanDT aims to demonstrate the first advanced quantum communication link in Germany. It will connect Bonn, the former capital, to Berlin, today's capital, with intermediate trusted nodes in several relevant locations. The goal is to implement a carrier-grade solution with real, hardened QKD devices, key storages and state-of-the-art symmetric encryptors and decryptors. These will be subjected to functional and security tests. Specific performance evaluations and vendor benchmarks will be conducted. DemoQuanDT is DT's most relevant QKD project and is intended to verify a future 'highly-secure transport service' for critical communication in Germany. DemoQuanDT is carried out in collaboration with ADVA Optical Networking, Rohde & Schwarz Cybersecurity, KEEQuant and universities and receives funding from the Federal Ministry for Research and Education.