Project outputs will be validated in three use cases:



Online banking



Secure QR Cryptographic Algorithms for TPM

FutureTPM Main Goals



Activity tracking





Device management





Project Coordinator:

Scientific/Technical Lead: University of Surrey

Scientific/Technical Lead: Dr. Thanassis GIANNETSOS Technical University of Denmark Anker Engelunds Vej 1 Bygning 101A 2800 Kgs. Lyngby Denmark





Horizon 2020 research and innovation programme under grant

Project: Total cost: 4,868,890 € EC contribution: 4,868,890 € Project start: 1st January, 2018 Duration: 36 months



FutureTPM: Future Proofing the Connected World A Quantum-Resistant Trusted Platform Module





Main

The **FutureTPM project** is aimed at designing and developing a Quantum-Resistant Trusted Platform Module (TPM). FutureTPM will provide a new generation of TPM-based solutions, including hardware, software and virtualization environments, incorporating robust and physically secured Quantum-Resistant cryptographic primitives. This will allow long-term security, privacy and operational assurance for future ICT systems and services. FutureTPM solutions will also improve the security of Hardware Security Modules, the Trusted Execution Environments, Smart Cards, and the Internet of Things.

Secure quantum-resistant cryptographic algorithms for the TPM



Goals

Design validation using formal security analysis



Implementation for hardware, software, and virtual TPM

Real-world applications to tested industrial use-cases



Standardization within TCG, ISO/IEC and ETSI