

New primitives and protocols for functionalities of future hybrid classical-hybrid and quantum networks

Horizon Europe

● IN ATTESA

Codice

HORIZON-CL3-2027-02-CS-ECCC-04

Ambito

Internazionale

Località

Europa

Curatore

Marlene Faria

DETTAGLI FINANZIARI

Tipo di supporto

Fondo perduto

Intensità Massima di Aiuto

100%

Budget

4M€

Valore di Progetto Ammissibile

Up to 4M€

DATE E SCADENZE

Data di Pubblicazione

12 dicembre 2025

Data di Apertura

2 marzo 2027

Deadline

15 settembre 2027 alle ore 17:00 GMT+2

DESCRIZIONE

Objectives

This call aims to advance the foundations and practical applications of quantum cryptography for future hybrid classical-quantum and fully quantum networks. The objective is to develop new cryptographic primitives and protocols that go beyond Quantum Key Distribution (QKD), addressing both theoretical and practical aspects of quantum information processing and its integration with classical cryptography. The call targets legal entities established in EU Member States and Associated Countries, with participation restricted to those not controlled by non-eligible countries or entities. Proposals should bring together quantum scientists and researchers in post-quantum cryptography (PQC) with experience in real-world, applied cryptography and an interest in quantum protocols and new paradigms for future networks.

Funding

The action provides a non-refundable grant in the form of a lump sum, covering up to 100% of eligible costs for Research and Innovation Actions (RIA). The total budget for this topic is 4000000 euros, with one grant expected to be awarded for the full amount. Eligible costs and financial rules are defined in the Horizon Europe lump sum decision and related documents.

SPESE AMMISSIBILI

- Personnel Costs
- Travel costs
- Equipment costs
- Other goods, works and services costs
- Subcontracting
- Indirect Costs

BONUS E MAGGIORAZIONI

- Balanced consortia including quantum scientists and applied cryptography experts
- Roadmap development for quantum cryptography and network functionalities

IDONEITÀ

Modalità di Candidatura

Aggregata / Partenariato

Settori Idonei

- ICT e Software
- Industria
- Altro

Tipologie Aziendali

- Microimpresa
- PMI
- Small Mid-Cap
- Mid-Cap
- Grande impresa
- Enti privati non profit
- Enti pubblici

Tipi di Azione

- Research on new quantum cryptographic primitives and protocols beyond QKD
- Development of hybrid classical-quantum network security solutions
- Analysis and benchmarking of quantum vs classical cryptographic approaches
- Security proofs and composable security analysis
- Development of a quantum cryptography and networks roadmap
- Integration of post-quantum cryptography (PQC) with quantum protocols
- Investigation of quantum information processing tasks and their cryptographic applications
- Research and Innovation Action

DETTAGLI PROGRAMMA UE

ID Bando
HORIZON-CL3-2027-02-CS-ECCC-04

Cluster
Cluster 3: Civil Security for Society

Destinazione
-

Modalità di Presentazione
single-stage

Contributo UE
€4,000,000.00

Progetti Previsti
1

Regola dell'Intensità di Aiuto
Up to 100% of eligible costs for Research and Innovation Actions (RIA)

LINK UFFICIALI

Regolamento Ufficiale

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-CL3-2027-02-CS-ECCC-04>

Pagina Grantavia

<https://grantavia.com/it/incentives/new-primitives-and-protocols-for-functionalities-of-future-hybrid-classical-hybrid-and-quantum-networks>

Video Informativo

<https://www.youtube.com/shorts/46sBAgRpL5o>

Prenota un incontro

<https://bookings.cloud.microsoft/book/Prenotaunappuntamento@epsa.com/?ismsaljsauthenabed>