

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

Horizon Europe

● PENDENTE

Código

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

Âmbito

Internacional

Localização

Europa

Curadoria

Marlene Faria

DETALHES FINANCEIROS

Tipo de apoio

Fundo Perdido

Taxa Máxima de Financiamento

100%

Dotação

4M€

Valor Elegível do Projeto

Up to 4M€

DATAS E PRAZOS

Data de Publicação

12 de dezembro de 2025

Data de Abertura

2 de março de 2027

Deadline

15 de setembro de 2027 às 17:00 GMT+2

DESCRIÇÃO

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.

DESPESAS ELEGÍVEIS

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

BÓNUS E MAJORAÇÕES

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

ELEGIBILIDADE

Modalidade de Candidatura
Consórcio / Copromoção

Setores Elegíveis

- TIC & Software
- Indústria
- Outro

Tipologia de Beneficiário

- Micro
- PME
- Small Mid-Cap
- Mid-Cap
- Grande
- Entidades privadas sem fins lucrativos
- Entidades públicas

Tipos de Ação

- 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

DETALHES DO PROGRAMA UE

ID da Chamada
HORIZON-CL3-2027-02-CS-ECCC-04

Cluster
Cluster 3: Civil Security for Society

Destino
-

Modo de Submissão
single-stage

Contribuição UE
€4,000,000.00

Projetos Esperados
1

Regra de Taxa de Financiamento
Up to 100% of eligible costs for Research and Innovation Actions (RIA)

LINKS OFICIAIS

Regulamento Oficial

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

Página no Grantavia

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

Vídeo Informativo

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

Agendar reunião

<https://calendly.com/filipa-silva-epsa/reuniao>