Deep Programmability and Secure Distributed Intelligence for Real-Time End-to-End 6G Networks

Fact Sheet

Project Information

DESIRE6G
Grant agreement ID: 101096466

DOI
10.3030/101096466

EC signature date
22 November 2022

Funded under
Digital, Industry and Space

Total cost
€ 6 227 918.75

EU contribution
€ 5 874 905.00

Coordinated by
UNIVERSITEIT VAN AMSTERDAM
Netherlands

Start date
1 January 2023

End date
31 December 2025

Project description

Scaling up mobile communication for mission-critical applications

The next generation of mobile communication networks must surpass current 5G capabilities to meet increasing demands for real-time transfer of important data in support of mission-critical tasks. Such networks must therefore provide high-capacity data transfer with extreme accuracy and negligible delay while hosting multiple tenants. The EU-funded DESIRE6G project aims to design and validate a zero-touch control, management and orchestration platform able to support applications that require extreme ultra-reliable low-latency communications. The design will feature near real-time autonomic networking and a cloud-native data plane layer to support
multitenancy, backed by an extensive monitoring system. It will be tested in two situations using extended reality and a digital twin application.

**Fields of science**

- **engineering and technology** > **electrical engineering, electronic engineering, information engineering** > **information engineering** > **telecommunications** > **telecommunications networks** > **mobile network** > **5G**
- **natural sciences** > **computer and information sciences** > **internet** > **internet of things**
- **natural sciences** > **computer and information sciences** > **software**

**Keywords**

- serverless computing
- programmable data plane
- multi-agent systems
- blockchain
- software security
- extreme URLLC

**Programme(s)**

- [HORIZON.2.4 - Digital, Industry and Space](#) [MAIN PROGRAMME]

**Topic(s)**

- [HORIZON-JU-SNS-2022-STREAM-B-01-01 - System Architecture](#)

**Call for proposal**

- [HORIZON-JU-SNS-2022](#)

**See other projects for this call**

**Funding Scheme**

- [HORIZON-JU-RIA - HORIZON JU Research and Innovation Actions](#)

**Coordinator**

2 of 11
UNIVERSITEIT VAN AMSTERDAM

Net EU contribution

€ 693,410,00

Address

Spui 21
1012WX Amsterdam
Netherlands

Region
West-Nederland > Noord-Holland > Groot-Amsterdam

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

Participants (14)

ERICSSON MAGYARORSZAG KOMMUNIKACIOS RENDSZEK KFT

Hungary

Net EU contribution

€ 491,625,00

Address

Magyar tudosok korutja 11
1117 Budapest

Region
Közép-Magyarország > Budapest > Budapest

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

TELEFONICA INVESTIGACION Y DESARROLLO SA
Spain

Net EU contribution
€ 388 575,00

Address
Ronda de la comunicacion s/n distrito c edificio oeste i
28050 Madrid

Region
Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 43 175,00

MELLANOX TECHNOLOGIES LTD - MLNX
Israel

Net EU contribution
€ 483 750,00

Address
Yokneam ilit industrial zone - hermon building
20692 Yokneam

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
ERICSSON ARASTIRMA GELISTIRME VE BILISIM HIZMETLERİ ANONIM SIRKETI
Türkiye

Net EU contribution
€ 272 250,00

Address
Resitpasa mah katar cad 4/2 itu t. kentari 2-b bl. sariyer
34469 Istanbul

Region
İstanbul > İstanbul > İstanbul

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 30 250,00
Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 39 625.38

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ACCELLERAN

Belgium

Net EU contribution

€ 396 000.00

Address

Kievitplein 20 bus 4.2
2018 Antwerpen

SME
Yes

Region

Vlaams Gewest > Prov. Antwerpen > Arr. Antwerpen

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 44 000.00

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TAGES

France

Net EU contribution

€ 365 625.00

Address
83 bd sadi carnot
06110 Le cannet

SME
Yes

Region
Provence-Alpes-Côte d’Azur > Provence-Alpes-Côte d’Azur > Alpes-Maritimes

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 40 625,00

UNIVERSITAT POLITECNICA DE CATALUNYA

Spain

Net EU contribution
€ 406 875,00

Address
Calle jordi girona 31
08034 Barcelona

Region
Este > Cataluña > Barcelona

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

OULUN YLIOPISTO
Finland

Net EU contribution
€ 320 000,00

Address
Pentti kaiteran katu 1
90014 Oulu

Region
Manner-Suomi > Pohjois- ja Itä-Suomi > Pohjois-Pohjanmaa

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 0,00

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UNIVERSIDAD CARLOS III DE MADRID

Spain

Net EU contribution
€ 362 500,00

Address
Calle madrid 126
28903 Getafe (madrid)

Region
Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 0,00
EOTVOS LORAND TUDOMANYEGYETEM

Net EU contribution
€ 365 000,00

Address
Egyetem ter 1-3
1053 Budapest

Region
Közép-Magyarország > Budapest > Budapest

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 0,00

CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI

Net EU contribution
€ 332 500,00

Address
Viale g. p. usberti 181a
43124 Parma

SME
Yes

Region
Nord-Est > Emilia-Romagna > Parma

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation Website
NEC LABORATORIES EUROPE GMBH  
Germany  
Net EU contribution  
€ 422 670,38  
Address  
Kurfursten-anlage 36  
69115 Heidelberg  
Region  
Baden-Württemberg > Karlsruhe > Heidelberg, Stadtkreis  
Activity type  
Private for-profit entities (excluding Higher or Secondary Education Establishments)  
Links  
Contact the organisation  
Participation in EU R&I programmes  
HORIZON collaboration network  
Other funding  
€ 46 963,37

SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO SANNA  
Italy  
Net EU contribution  
€ 217 500,00  
Address  
Piazza martiri della liberta 33  
56127 Pisa  
Region  
Centro (IT) > Toscana > Pisa  
Activity type
Higher or Secondary Education Establishments

Links

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

Last update: 28 November 2022

Permalink: https://cordis.europa.eu/project/id/101096466

European Union, 2023