Project Information

**6G-SHINE**

Grant agreement ID: 101095738

**DOI**

[10.3030/101095738](10.3030/101095738)

**Funded under**

Digital, Industry and Space

**Total cost**

€ 5 097 275,00

**EU contribution**

€ 4 667 179,00

**Coordinated by**

AALBORG UNIVERSITET

Denmark

Project Description

**6G solution design for extreme-pervasiveness wireless connectivity**

Several vertical and consumer entities, such as robots, vehicles and production modules, have extreme communication requirements in terms of latency, reliability or data rates – currently still majorly supported via wired connections. The EU-funded 6G-SHINE project will design pioneering solutions for in-X subnetworks, short-range low-power radio cells to be installed in a vast set of vertical and consumer entities to support high-demand communication requirements wirelessly. The project will exploit the opportunities offered by the peculiar deployment characteristics of such short-range subnetworks to deliver a highly performant and cost-efficient radio design, bringing wireless connectivity to an unprecedented level of pervasiveness. 6G-SHINE will analyse the designed solutions through simulations and – for selected technologies – over demonstrator platforms.
Fields of science

natural sciences > computer and information sciences > internet > internet of things
engineering and technology > electrical engineering, electronic engineering, information engineering > information engineering > telecommunications > telecommunications networks
engineering and technology > electrical engineering, electronic engineering, information engineering > information engineering > telecommunications > radio technology

Keywords

subnetworks, URLLC, PHY, MAC, radio resource management, RIS, wireless architectures

Programme(s)

HORIZON.2.4 - Digital, Industry and Space - MAIN PROGRAMME

Topic(s)

HORIZON-JU-SNS-2022-STREAM-B-01-03 - Communication Infrastructure Technologies and Devices

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
AALBORG UNIVERSITET

Net EU contribution
€ 731 750,00

Address
Fredrik bajers vej 7k
9220 Aalborg

Region
Danmark > Nordjylland > Nordjylland

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 (10)

NOKIA DENMARK AS

Net EU contribution
€ 204 806,00

Address
Orestads boulevard 73
2300 Copenhagen

Region
Danmark > Hovedstaden > Byen København

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
UNIVERSIDAD MIGUEL HERNANDEZ DE ELCHE
Spain
Net EU contribution
€ 353 257,50
Address
Avenida de la universidad s-n
03202 Elche
Region
 Este > Comitat Valenciana > Alicante/Alacant
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

SONY EUROPE BV
Netherlands
Net EU contribution
€ 343 875,00
Address
Taurusavenue 16
2132 LS Hoofddorp
Region
West-Nederland > Noord-Holland > Groot-Amsterdam
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV

Germany

Net EU contribution
€ 602 025,00

Address
Hansastrasse 27c
80686 Munchen

Region
Bayern > Oberbayern > München, Kreisfreie Stadt

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

Other funding
€ 0,00

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM

Belgium

Net EU contribution
€ 627 160,00

Address
Kapeldreef 75
3001 Leuven

Region
Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type
Research Organisations
CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI

Italy

Net EU contribution
€ 322 125,00

Address
Viale g. p. usberti 181a
43124 Parma

Region
Nord-Est > Emilia-Romagna > Parma

Activity type
Higher or Secondary Education Establishments

APPLE TECHNOLOGY ENGINEERING BV & CO KG

Germany

Net EU contribution
€ 300 125,00

Address
Karlstr. 77
80335 Munchen

Region
Bayern > Oberbayern > München, Kreisfreie Stadt

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
€ 128 625,00

COGNITIVE INNOVATIONS PRIVATE COMPANY
Greece
Net EU contribution
€ 324 000,00

Address
Kifisias 125-127
11524 Athina

SME
Yes

Region
Αττική > Αττική > Κεντρικός Τομέας Αθηνών

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
€ 36 000,00

ROBERT BOSCH GMBH
Germany
Net EU contribution
€ 518 305,50
Robert-bosch-platz 1
70839 Gerlingen-schillerhoehe

Region
Baden-Württemberg > Stuttgart > Ludwigsburg

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

Other funding
€ 57 589,50

KEYSIGHT TECHNOLOGIES FINLAND OY
Finland
Net EU contribution
€ 339 750,00

Address
Elektroniikkatie 10
90590 Oulu

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

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
€ 37 750,00

Partners (1)

INTERDIGITAL EUROPE LTD
United Kingdom

Net EU contribution

€ 0,00

Address

64 great eastern street
EC2A 3QR London

Region

London > Inner London — East > Hackney and Newham

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

€ 0,00

EC signature date 18 November 2022
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European Union, 2023