



How to fund innovation and global collaboration

AMR Virtual Mission, 10-12 May 2021

- UKRI Introduction
- Horizon Europe Introduction
- Horizon Europe AMR Funding Opportunities

To keep up to date with the latest Horizon Europe health funding news please sign up for our newsletter <u>here</u>

Presented by: Jo Frost ncp-health@innovateuk.ukri.org

Other UK National Contact Points / National Contact Points for other countries



HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)

UK Research and Innovation

We work with the government to invest over £7 billion a year in research and innovation by partnering with academia and industry to make the impossible, possible.

Through the UK's nine leading academic and industrial funding councils, we create **knowledge** with impact.

Innovate UK drives productivity and economic growth by supporting businesses to develop new ideas







Horizon Europe info is based on DRAFT Work Programme and is subject to change

Horizon Europe Introduction

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HORIZON EUROPE

HE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)

What is a National Contact Point (NCP)?

UK NCP network: Team of sector specific public servants whose role it is to provide free support to UK participants to Horizon Europe

International NCP network: support in Europe and the rest of the World

NCP services vary in each country/sector, but typically include:



Katie Dingley
UK Health NCP
for academia



Jo Frost
UK Health NCP
for industry

Linked in



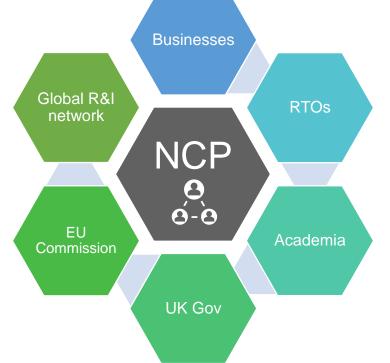
Informing, awareness raising – on Horizon Europe and other EU programmes



Assisting, advising and training – to improve the quality of Horizon Europe proposals



Signposting and cooperation – direct to relevant support and work with each other to support consortium development







Please sign up for our newsletter <u>here</u> for the latest Horizon Europe health funding opportunities news

European Framework Programmes

- EU research and innovation funding programmes (FPs)
- Began in 1984 and each lasts for 7 years

Horizon 2020 ran from 2014 until 2020

The previous Framework Programme (FP) with a total budget of €80 billion.

Horizon Europe will run 2021 to 2027

- The 9th FP and successor to Horizon 2020 with a **€95.5 billion budget**
- Work Programmes due to be published in May 2021 (tbc) although a few calls have already been launched.



The UK has agreed to Associate to Horizon Europe





UK 'Association' means continued UK participation

EU confirmation of UK participation

European Commission Q&A on the UK's Participation in Horizon Europe

"UK participants will have the **same rights as EU participants**..."

"UK entities are eligible for funding at the same rates and under the same conditions"

"They can lead project consortia"

Can UK entities take part in the first calls for proposals of Horizon Europe?

Yes. UK entities including universities, research centres, scientists, innovative businesses, industry, etc. will have full rights to participate in the first calls for proposals of Horizon Europe as soon as they are published on the <u>European Commission's website</u>.

This is also true for calls which may be published before the adoption of the Horizon Europe Regulation, such as early COVID-19 calls or those of the European Research Council (ERC) and the European Innovation Council (EIC), apart from the EIC Fund (see below).

In duly justified exceptional cases, restrictions may apply and these will be clearly specified in the calls for proposals.

The 'Associated Countries' concept is not new

- Horizon 2020 had 16 Associated Countries: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia,
 Iceland, Israel, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Tunisia, Turkey, Ukraine
- Horizon Europe Associated Countries: exact list is tbc





Eligibility

Eligibility for funding is usually (unless otherwise stated in the call):

- Any type of legal entity established in EU Member State (MS) or Associated Country (AC)
- Legal entities from many Low & Middle Income Countries (LMICs) if country listed in the Horizon Europe Programme Guide
- International European research organisations
- You can also get funding for organisations in other higher income countries occasionally:
 - If it is specified in your call topic, or
 - If their participation is essential for the project.

Eligibility for participation is usually (unless otherwise stated in the call):

legal entities from outside EU MS/AC (known as 'third countries') can often participate too, although they would normally need to
fund their own participation unless one of the above exceptions applies

Further info: Work Programme 2021-2022 General Annexes (Section B – Eligibility)





Horizon Europe structure

€53.8bn

Horizon Europe Webinars

Intro to Horizon Europe: recording, slides, FAQs
Overview of Horizon Europe Clusters - Webinar Series

For info on opportunities for Health researchers across Horizon Europe see the 'related funding' section here

THREE PILLARS FOR IMPLEMENTATION

€24.9bn



Pillar I EXCELLENT SCIENCE



Marie Skłodowska-Curie

Research Infrastructures



Clusters

Pillar II
GLOBAL CHALLENGES &
EUROPEAN INDUSTRIAL
COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre**



€13.4bn

European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

- €95.5bn total funding agreed for 2021-2027
- Budget figures exclude UK and other Associate Country contributions so will be higher
- Others likely to associate include Switzerland, Norway & Israel
- Canada, Japan, Australia etc. Interested status (TBC)









Horizon Europe AMR Funding Opportunities - Examples



HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION

PROGRAMME (2021 – 2027)

Horizon Europe

AMR Opportunities in Pillar II (€53.8 bn 2021-2027)

€53.8bn

Horizon Europe Webinars

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European Research Council

Marie Skłodowska-Curie

Research Infrastructures



- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre**



European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system



The 2021-2022 Work Programmes for each area of Horizon Europe list the call topics



Horizon Europe – Pillar II – Cluster 1: Health Overview (€8.3 billion 2021-2027)

Draft Health Work Programme for 2021-2022 (~€1.75 billion)

Deadlines tbc and depend on topic: 21 Sept 21, 1 Feb 22, 21 April 22



Staying healthy in a rapidly changing society

- Diet and health (obesity)
- Ageing and demographic change
- Mental health

- Digital empowerment in health literacy
- Personalised prevention
- Al to predict disease risk



Living and working in a health-promoting environment

Environmental, occupational and socio-economic risk factors to health, e.g.

- indoor & outdoor air pollution, chemicals, non-ionizing radiation (EMFs)
- urbanisation, climate and other environmental changes
- socio-economic inequalities, working environments



Tackling diseases and reducing disease burden

- Better diagnostics, personalised treatment
- New and advanced therapies for NCDs
- Scientific evidence, policy, legal frameworks
- Innovative health technologies
- Understanding diseases
- Infectious disease threats



Ensuring access to innovative, sustainable and high-quality health care

- Fair access to high quality, sustainable healthcare for all citizens
- Innovative, feasible, implementable, financially sound scalable solutions (for governance, financing, human and physical resources, health service provision and patient empowerment)



Unlocking the full potential of new tools, technologies and digital solutions for a healthy society

Tools, technologies and digital solutions for medical devices and improved health

- considering safety, effectiveness, appropriateness, accessibility,
- comparative value-added and fiscal sustainability, as well as
- ethical, legal and regulatory issues



Maintaining an innovative, sustainable and globally competitive health industry

- Market access of innovative tech. (medical, pharmaceutical, biotech, digital)
- Novel methodologies and metrics, and support for regulatory authorities
- Safe and clinically validated tools, technologies and services
- Greener pharmaceuticals and technologies

Horizon Europe – Pillar II

Example 2021-2022 topics of interest to AMR researchers

Pillar II - Cluster 1 'Health' (Draft Work Programme as at March 2021, we understand there have only been minor changes since this draft)

- Vaccines 2.0 developing the next generation of vaccines
 (HORIZON-HLTH-2022-DISEASE-06-03-two-stage, page 84 of draft)
- Development, procurement and responsible management of new antimicrobials (HORIZON-HLTH-2021-IND-07-02, p152 of draft)

Partnerships

Preparatory work (the calls listed below)

Partnership of research and innovation funders established (by call in Work Programme)

Partnership holds joint calls

Researchers and innovators can apply for funding Countries involved depend on partnership and call

- A roadmap towards the creation of the European partnership on One Health antimicrobial resistance (OH AMR)

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 - (HORIZON-HLTH-2021-DISEASE-04-05, page 76 of draft)
 - Will start ~2024/2025 and will follow on from current JPI AMR
- Building a European partnership for pandemic preparedness new, start date tbc (HORIZON-HLTH-2021-DISEASE-04-06:, page 79 of draft)





Horizon Europe – Pillar II Example 2021-2022 topics of interest to AMR researchers

Pillar II - Cluster 2 'Culture, Creativity and Inclusive Society' (Draft Work Programme as at 21 April 2021)

- Politics and governance in a post-pandemic world (HORIZON-CL2-2021-DEMOCRACY-01-05, p16 of draft)
- Global governance for a world in transition: Norms, institutions, actors (HORIZON-CL2-2022-DEMOCRACY-01-09, p31 of draft)
- The role of perceptions, formed by traditions, values and beliefs, in shaping European societies and politics in the 21st century (HORIZON-CL2-2022-HERITAGE-01-03, p54 of draft)

Pillar II - Cluster 3 'Civil Security for Society' (Draft Work Programme as at Jan 2021)

- Improved understanding of risk exposure and its public awareness in areas exposed to multi-hazards (HORIZON-CL3-2021-DRS-01-01, p139 of draft)
- Enhanced assessment of disaster risks, adaptive capabilities and scenario building based on available historical data and projections

(HORIZON-CL3-2021-DRS-01-03, p144 of draft)

• Developing a prioritisation mechanism for research programming in standardisation related to natural hazards and/or CBRN-E* sectors

(HORIZON-CL3-2021-DRS-01-05, p148 of draft)

• Improved quality assurance / quality control of data used in decision-making related to risk management of natural hazards, accidents and CBRN* events

(HORIZON-CL3-2022-DRS-01-03, p159 of draft)

*CBRN (/CBRN-E) = chemical, biological, radiological, nuclear (and explosive) threats





Horizon Europe – Pillar II

Example 2021-2022 topics of interest to AMR researchers

Pillar II - Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment' (Draft Work Programme as at April 2021)

Enabling sustainable farming:

- Reaching the farm to fork target: R&I scenarios for boosting organic farming and organic aquaculture in Europe (HORIZON-CL6-2021-FARM2FORK-01-01, p143 of draft)
- Animal welfare 2.0 (HORIZON-CL6-2021-FARM2FORK-01-05, p151 of draft)
- Vaccines and diagnostics for priority animal diseases (HORIZON-CL6-2021-FARM2FORK-01-06, p153 of draft)
- Enhancing biosecurity in terrestrial livestock production (HORIZON-CL6-2022-FARM2FORK-01-03, p197 of draft)
- Ecology of infectious animal diseases
 (HORIZON-CL6-2022-FARM2FORK-02-03-two-stage, p236 of draft)

Enabling sustainable fisheries and aquaculture:

• Biosecurity, hygiene, disease prevention and animal welfare in aquaculture (HORIZON-CL6-2022-FARM2FORK-01-06, p203 of draft)

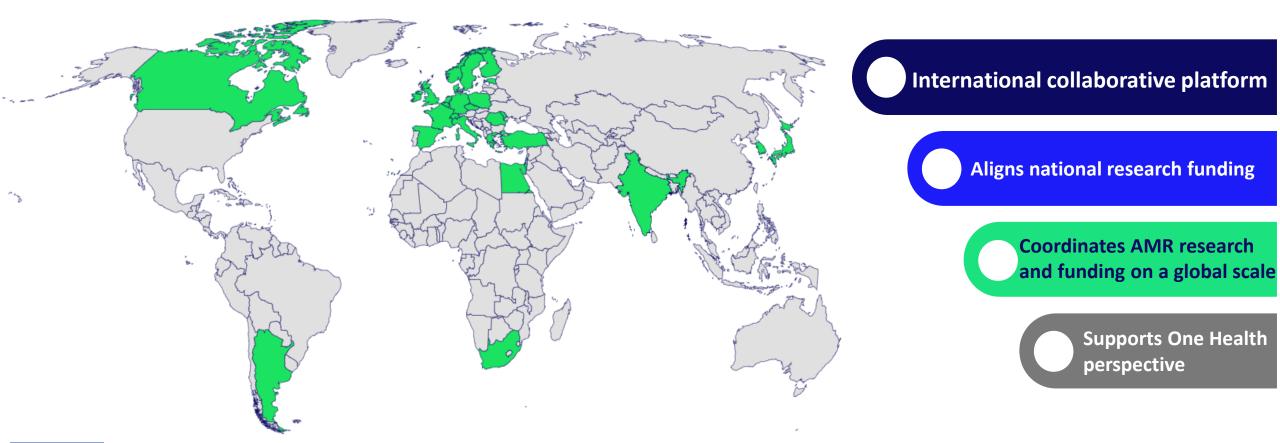
Targeted International Cooperation (i.e. cooperation with countries outside Europe):

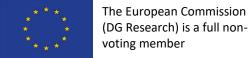
- One Health approach for Food Nutrition Security and Sustainable Agriculture (FNSSA) proposals must involve African organisations (HORIZON-CL6-2021-FARM2FORK-01-18, p187 of draft)
- Agro-ecological approaches in African agriculture systems proposals must involve African organisations (HORIZON-CL6-2022-FARM2FORK-01-12, p220 of draft)
- Support for international research on infectious animal diseases (HORIZON-CL6-2022-FARM2FORK-01-15, p228 of draft)





JPIAMR: A global organisation



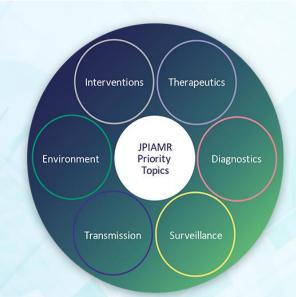


Like more info? https://www.jpiamr.eu/ JPIAMR Newsletter sign-up https://www.jpiamr.eu/newsletter-subscription Next call will be on AMR Theraputics – Recent workshop/scoping



SRIA: Strategic Research and Innovation Agenda





Therapeutics



Discovery of new antimicrobials and therapeutic alternatives, and the improvement of current antimicrobials and treatment regimens

Diagnostics



Development and improvement of diagnostics to improve the use of antimicrobials and alternatives to antimicrobials

Surveillance



Optimisation of surveillance systems to understand the drivers and burden of antimicrobial resistance in a One Health perspective

Transmission



Understanding and preventing the transmission of antimicrobial resistance

Environment



The role of the environment in the persistence, selection and spread of antimicrobial resistance

Interventions



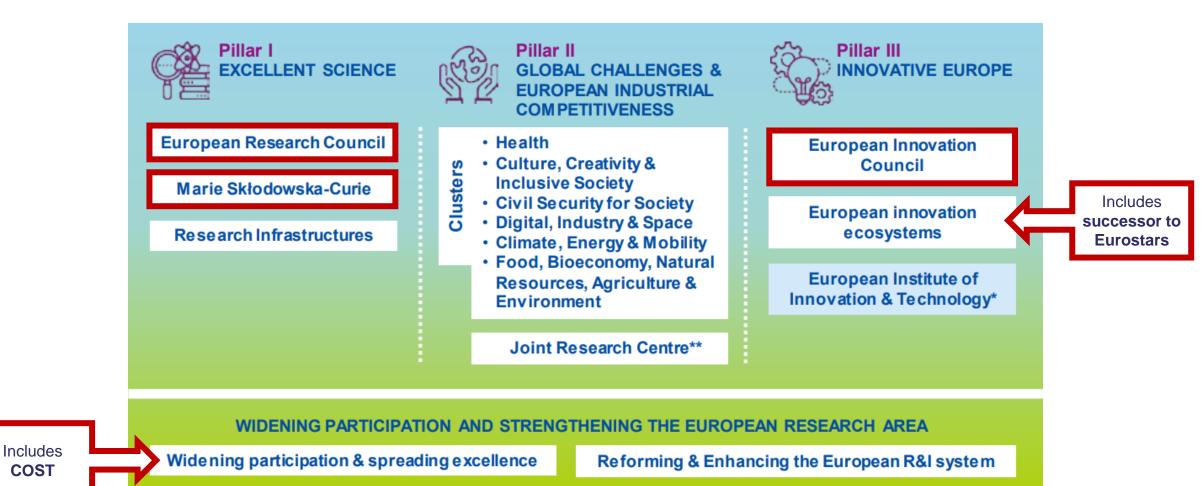
Investigation and improvement of infection prevention and control measures in One Health settings

Horizon Europe Main 'bottom-up' opportunities

Horizon Europe Webinars

Intro to Horizon Europe: recording, slides, FAQs
Overview of Horizon Europe Clusters - Webinar Series

For info on opportunities for Health researchers across Horizon Europe see the 'related funding' section here





For a more detailed slide set on opportunities for Health researchers across Horizon Europe see the 'related funding' section here



Horizon Europe - Pillar I - European Research Council (ERC) €16 Billion 2021-2027

- Long term funding of ground-breaking curiosity lead, investigator-driven 'frontier research'
- Funds a Principal Investigator (PI) and their team.
- Across ALL research fields completely bottom-up
- Projects are selected for funding purely based on the excellence (of the PI and of the research project)
- Main types of funding:
 - Starting Grants
 - Consolidator Grants
 - Advanced Grants
 - Synergy Grants



Like more info? UK National Contact Point: erc-uk@ukro.ac.uk / website / events. Contact Points in other countries ERC Website including page on grant schemes / newsletter (sign up at the bottom of the ERC Website)

Horizon Europe - Pillar I - European Research Council (ERC) Summary of main calls 2021 and 2022

ERC Grant	Objectives	Maximum amount and duration of the grant	2021 Call Opening and Closing Dates	2022 Tentative Call Opening and Closing Dates	
Starting Grant	Support for excellent Principal Investigators who are starting their own independent research team or programme. Principal Investigator should be between > 2 and ≤ 7 years post PhD	Up to EUR 1 500 000 for 5 years. Additional funding available	Call is open Deadline: 8 Apr 2021	Call opens: 23 Sept 2021 tbc Deadline: 13 Jan 2022 tbc	
Consolidator Grant	Support for excellent Principal Investigators at the career stage at which they may still be consolidating their own independent research team or programme. Principal Investigator should be between > 7 and ≤ 12 years post PhD	Up to EUR 2 000 000 for 5 years. Additional funding available	Call is Open Deadline: 20 Apr 2021	Call opens: 19 Oct 2021 tbc Deadline: 17 Mar 2022 tbc	
Advanced Grant	Support for excellent Principal Investigators at the career stage at which they are already established research leaders with a recognised track record of research achievements. No specific criteria on stage post PhD for Principal Investigator	Up to EUR 2 500 000 for 5 years. Additional funding available	Call opens: 20 May 2021 Deadline: 31 Aug 2021	Call opens: 20 Jan 2022 tbc Deadline: 28 Apr 2022 tbc	
Synergy Grant	Support for a small group of two to four Principal Investigators to jointly address ambitious research problems that could not be addressed by the individual Principal Investigators and their teams working alone. No specific criteria on stage post PhD Principal Investigators	Up to EUR 10 000 000 for 6 years. Additional funding available (information based on 2020 call details)	No call in 2021 Work Programme	Call opens: 15 July 2021 tbc Deadline: 10 Nov 2021 tbc	
Proof of Concept	All Principal Investigators in an ERC frontier research project, that is either ongoing or has ended less within time frame stipulated in work programme are eligible to participate.	Financial contribution awarded as a lump sum for a defined period. To be set in work programme.	Various dates, earliest deadline 14 Oct 2021 tbc		

Like more info? UK National Contact Point: erc-uk@ukro.ac.uk / website / events. Contact Points in other countries ERC Website including page on grant-schemes / newsletter (sign up at the bottom of the ERC Website)



Horizon Europe - Pillar I - Marie Skłodowska-Curie Actions (MSCA) €6.6 Billion 2021-2027

Are you looking for excellent researchers and innovators?

Do you want to develop new and strengthen existing collaborations?



- Marie Skłodowska-Curie Actions (MSCA) are completely bottom up and open to all areas of research at all stages - from basic frontier research to near market uptake
- Provide funding for all researcher career stages as well as managerial, administrative or technical staff

MSCA aim to:

- Enhance the career development and training of researchers and innovators
- Promote international, inter-sectoral and interdisciplinary collaboration and mobility
- Bridge academic and non-academic sectors in and outside of Europe
- Promote sharing of knowledge and ideas from research to market (and vice versa)
- Foster a shared culture of R&I that welcomes and rewards creativity and entrepreneurship





Horizon Europe - Pillar I - Marie Skłodowska-Curie Actions (MSCA) €6.6 Billion 2021-2027

Open to all areas of research and innovation



MSCA Doctoral Networks

- Provides full funding for an international consortium to train a group of PhD students
- Provides recruited researchers with training through research
- Mobility is key intersectoral, interdisciplinary and international!



MSCA Staff Exchange Scheme

- Funds short-term exchanges of personnel between academic, industrial and commercial organisations throughout the world
- Funds consortium based research and innovation projects
- Project implemented through the secondment of staff for a period between 1 and 12 months



MSCA Post Doctoral Fellowships

- Provides full funding for an individual postdoctoral researcher
- **Mobility is key** intersectoral, interdisciplinary and international!
- Training through research and innovation
- Opportunities for European or internationally hosted fellowships with opportunities for secondments

NEW: Extra 6 months funding for fellow to spend time in non-academic setting



MSCA COFUND Doctoral and Fellowship Programme

- Collaborative funding through a mono beneficiary scheme
- Training through research and innovation
- Mobility is key intersectoral, interdisciplinary and international!
- EC provides a contribution to the funding for a cohort of PhD students or Post-Docs





Horizon Europe - Pillar I - Marie Skłodowska-Curie Actions (MSCA) €6.6 Billion 2021-2027

Year	Action	Estimated opening*	Estimated deadline*	
2021	Doctoral Networks	18 May 2021	16 November 2021	
	Postdoctoral Fellowships	18 May 2021	15 September 2021	
	Staff Exchanges	7 October 2021	9 March 2022	
	COFUND	12 October 2021	10 February 2022	
	MSCA and Citizens (covers 2 editions)	17 June 2021	7 October 2021	
2022	Doctoral Networks	3 May 2022	15 November 2022	
	Postdoctoral Fellowships	13 April 2022	14 September 2022	
	Staff Exchanges	6 October 2022	8 March 2023	
	COFUND	11 October 2022	9 February 2023	
	MSCA and Citizens	No call foreseen in 2022		

^{*}Dates to be confirmed with the adoption of the Work Programme

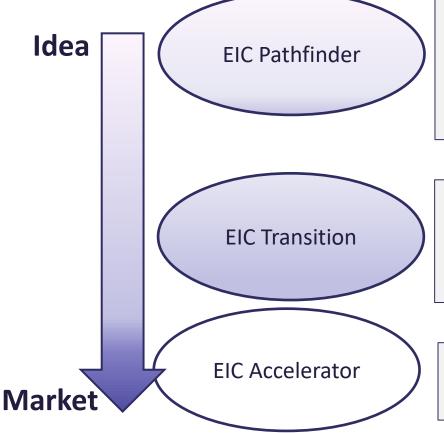




Horizon Europe – Pillar III – European Innovation Council (EIC)

(European Innovation Council – brings together H2020 Future and Emerging Technologies with SME Instrument)

'Integrated, agile support across the full R&D spectrum from early stage research to scale-up'



Pathfinder Open (bottom up, no pre-defined topics)

Advanced research to develop the scientific basis to underpin breakthrough technologies, oriented around 'gatekeepers':

- Radical technology vision
- Breakthrough target
- Novel interdisciplinary

Collaborative, ~€3M (no cap), 100%

Transition Open (bottom up, no pre-defined topics)

Validate technologies and develop business plans for specific applications, builds on EIC Pathfinder projects and ERC Proof of Concept projects.

Single entity or collaborative, ~€2.5M (no cap), 100%

Accelerator Open (bottom-up, no predefined topics)

Pathfinder Challenges (top-down in specific technology areas) 2021 topics include

- Aware inside
- Tools for brain activity
- Cell and gene therapy
- Green hydrogen
- Living materials

Transition Challenges (top-down in specific tech. areas) 2021 topics

- Medical technology and devices: from lab to patient
- Energy harvesting

Challenges can be single/mono beneficiary, €4M, 100%

Accelerator Challenges 2021 topics:

- Strategic Health and Digital Technologies
- Green Deal Innovations for Economic recovery

Like more info? Pathfinder UK contact: dora.meredith@innovateuk.ukri.org
Transition/Accelerator UK contact: genevra.kirby@innovateuk.ukri.org
National Contact Points in other countries

Innovate UK

Medical Research Council

2021 Work Programme

EIC Applicants' Day recording &

presentations / EIC website /

UK based organisations can access the majority of the EIC (except the EIC Fund part of the EIC Accelerator). See: Commission Q&A on UK participation in Horizon Europe

Horizon Europe – Pillar III – European Innovation Council (EIC)

Table 1. Summary of main calls in 20218

			Open calls (Section II)		Challenge driven calls (Section III)			
	Who can apply	What for	Call deadline(s)	Indicative Budget (EUR million)	Challenges	Call deadline(s)	Indicative Budget(EUR million)	
EIC Pathfinder	Consortia of at least three different independent legal entities (e.g. research organisations, universities, SMEs, industry) established in at least 3 different eligible countries. Single applicants or small consortia (two partners) may be able to apply for Pathfinder Challenges according to the call specifications.	Grants of up to EUR 3 million (open) or EUR 4 million (challenge driven) (or more if properly justified) to achieve the proof of principle and validate the scientific basis of breakthrough technology (TRL 1-4)	19 May 2021	168.00	 Awareness inside Tools to measure & stimulate activity in brain tissue Emerging Technologies in Cell Gene Therapy Novel routes to green hydrogen production Engineered living materials 	27 October 2021	132.00	
EIC Transition	Single applicants (SMEs, spin-offs, start-ups, research organisations, universities) or small consortia (two to 5 partners). Applications must build on results from eligible Pathfinder, FET or ERC Proof of Concept projects	Grants of up to EUR 2.5 million (or more if properly justified) to validate and demonstrate technology in application-relevant environment (TRL 4 to 5/6) and develop market readiness	22 September 2021	59.60	Medical devices Energy harvesting and storage technologies	22 September 2021	40.50	
EIC Accelerator	Single Start-ups and SMEs (including spin-outs), individuals (intending to launch a start-up/SME) and in exceptional cases small mid-caps (fewer than 500 employees)	Blended finance: up to EUR 2.5 million grant component for technology development and validation (TRL 5/6 to 8); EUR 0.5 - 15 million investment component for scaling up and other activities.Grant only/grant first under certain conditions. Investment component only for small mid-caps or as follow up to grant only (i.e. for SMEs, including start-ups)	Any time (short applications) Full applications by 9 June 2021 and 6 October 2021	592.50	Strategic Health and Digital Technologies Green Deal innovations for the economic recovery	Any time (short applications) Full applications by 9 June 2021 and 6 October 2021	495.10	

Horizon Europe – Pillar III **European Innovation Ecosystems (EIE)**

Likely to fund the successor to the Eurostars programme

- Eurostars is a joint programme between Eureka and the European Commission
 - It is co-funded from the national budgets of participating Eureka member countries
- Funds transnational, market-oriented, collaborative R&I projects
 - Projects must be initiated and driven by Research and Development performing SMEs
 - Normally bi-annual calls which are open in scope (next call opens July and closes Oct 2021 tbc)
- There are over 45 Eureka member countries including the UK
 - 36 of these countries take part in the Eurostars programme including non-European countries such as Canada, South Korea and South Africa
- Projects can be both bilateral and multilateral
 - For example a UK SME collaborating with an SME/other organisations from any other participating Eureka member country (does not have to be an SME from an EU Member State)
- The rules about which countries and which types of organisations are funded are explained in the call documents.
- Taking part in a Eurostars project can help growth, innovation, open new global markets and lead to greater business success
- ~1/3 of projects centre around Health and Life Sciences, 1/3 of projects centre around the Data and ICT economy, and a 1/3 are mix of several other sectors

Other Eureka funding schemes

- Globalstars Funds projects involving Eureka and non-Eureka countries each call specifies the countries involved
- **Network Projects**
- **Eureka Clusters**







Horizon Europe - Widening participation and strengthening the European Research Area (ERA)

Includes:

- COST (European Co-operation in Science and Technology):
 - COST Open Call (regular deadlines, next deadline 29 Oct 2021 12pm CET)
 - Open to all areas of research and innovation (bottom-up)
 - Funding to set up interdisciplinary research and innovation networks in Europe and beyond
 - Funding for organising meetings, training schools, short term scientific missions or other networking
 - Networks run for 4 years and help to build capacity.
 - Funds global networking of nationally-funded research.
 - You can also join the existing COST actions
 - e.g. European Network for Optimisation of Veterinary Antimicrobial Treatment website / newsletter
- **ERA Talent Platform** for career development of researchers, with particular focus on talented researchers and opening new career trajectories for them in academia, industry and business.
 - The new platform will build on the existing <u>EURAXESS</u> platform which supports researcher mobility and career development
 - Includes info on jobs, funding, career development, <u>partnering</u>, practical info on living and working in Europe and beyond including the UK, EURAXESS national portals include the <u>UK</u> Portal run by the British Council)









Horizon Europe info is based on DRAFT Work Programme and is subject to change

Thank you

Extra slides for reference only

- General (UK Association. Useful definitions)
- European Institute of Innovation and Technology (EIT)
- JPI AMR
- Other 'Partnerships' in Horizon Europe Health
- Eureka



To keep up to date with the latest Horizon Europe health funding news please sign up for our newsletter <u>here</u>

Presented by: Jo Frost ncp-health@innovateuk.ukri.org

Other UK National Contact Points / National Contact Points for other countries

HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)



UK 'Association' means continued UK participation

- The UK has agreed to associate to Horizon Europe
- UK entities will have equivalent participation rights to those from Member States*
 - Only two very rare exceptions:
 - The equity fund part of the EIC Accelerator, as the UK decided not to take part in this
 (the UK can still take part in the rest of the EIC including the grants part of the EIC Accelerator)
 - Work Programme level exclusions only in exceptional and justifiable cases (e.g. some Defence & Security)
- UK entities can lead projects as coordinator
- UK experts can continue to take part in peer review (register as an expert <u>here</u>)
- The UK can also still participate in the governance of Horizon Europe (e.g. Programme Committees)
- The 'Associated Countries' concept is not new
 - Horizon 2020 had 16 Associated Countries including Israel, Switzerland and Norway





Some definitions

- Work Programme combined calls for proposals for the whole thing (excluding Institutionalised partnerships who do their own)
- Cluster a major problem space. There are six in total. Cluster 1 is health
- Destination a way of breaking down the Cluster to manageable chunks with a common theme,
 e.g., decarbonisation of transport
- **Topic** a specific call for proposals with its own scope, budget, etc. Often (but not always) more than one project will be funded.
- The Portal the <u>EU Funding & Tenders Portal</u> where all information needed to participate can be found
- PIC Participant Identification Code a unique identifier for each participating legal entity
- LEAR Legal Entity Appointed Representative a single person at the top for each organisation, often Chief Finance Officer or similar (buck stops with them)
- Coordinator The lead participant for a proposal and project who brings the team together, submits the proposal and manages delivery of the project









Info based on DRAFT Work Programme and is subject to change

Extra slides for reference only - European Institute of Innovation and Technology (EIT)

HORIZON EUROPE

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)

Horizon Europe – Pillar III – European Institute of Innovation and Technology Knowledge and Innovation Communities (EIC KICS)

(€3 billion 2021-2027)

- The EIT brings together business, education and research bodies to create an environment conductive to innovation and entrepreneurship in Europe
- It funds 8 long-term partnerships, KICs, each with a focus on a different societal challenges:

EIT Climate-KIC

innovation for climate action

EIT InnoEnergy

pioneering change in sustainable energy

EIT Digital

for a strong digital Europe

EIT Manufacturing

leading manufacturing innovation is Made by Europe

EIT Food

addressing sustainable supply chains from resources to consumers

EIT RawMaterials

developing raw materials into a major strength for Europe

EIT Health

together for healthy lives in Europe

EIT Urban Mobility

smart, green and integrated transport

New KICs for Culture and Creative Industries and Water, Marine and Maritime Sectors and Ecosystems are anticipated in 2022/3 and 2026 respectively

- Calls for projects starting this year have already closed but calls for projects starting in 2022 are open or due to be open later this year and you can apply to become a partner at any time
- Calls for proposals are primarily open for existing partners. However, non-partners are able to participate



Like more info? UK NCP sharon.mchugh@innovateuk.ukri.org

Useful links: EIT Website / Link to all EIT KICS / All EIT Opportunities EIT Health / EIT Health Opportunities / EIT Health Events







Info based on DRAFT Work Programme and is subject to change

Extra slides for reference only - JPI AMR



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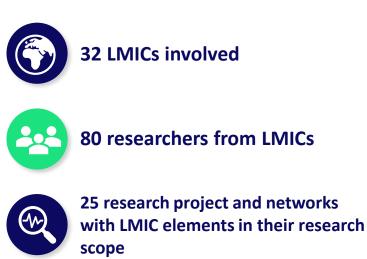
Overview of JPIAMR supported research





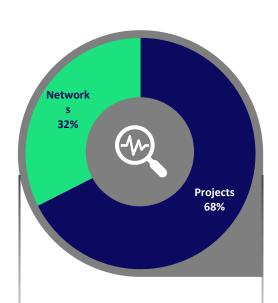




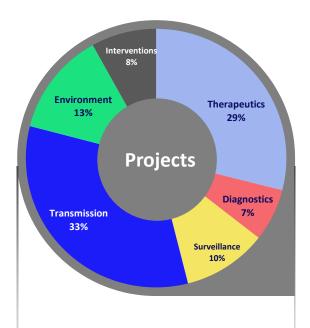




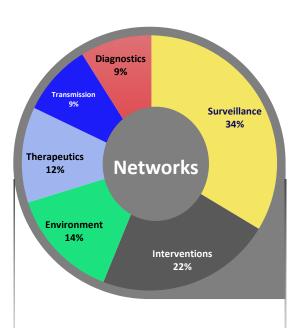
JPIAMR: A global One Health AMR Research Funder



- Supported 79 research projects and 38 research networks
- Invested >100 M€



33% of investment in research projects is in Transmission followed by Therapeutics (29%)



34% of investment in research networks is in Surveillance followed by Interventions (22%)



Dashboard on JPIAMR supported research projects and networks

JPIAMR Supported Research Projects and Networks Dashboard

Click and select multiple criteria for interactive analyses throughout the dataset. Press F5 to clear selections.

Total sum awarded (M€)

80.16

Number of project(s)

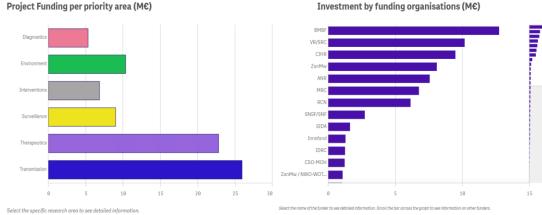
99

Number of researcher(s)

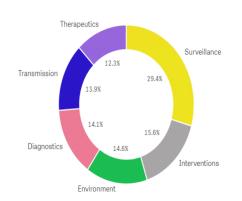
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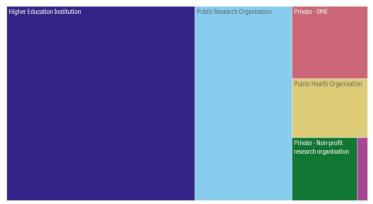


Projects per priority area



Select the specific research area to see detailed information.

Researchers in different types of research organisations



Select the specific type of research organisation to see detailed information.

Research projects details

Title of the project Q	Name of the researcher	Country	Organisation Q	Project information Q	Start date of the project Q	End date of the project Q	ORCID Id
A digital antimicrobial stewardship smartphone application to combat AMR: the	Annelies Verbon	Czech Republic	Charles University	https://www.jpiamr.eu/project/ab- assistant/	9/1/2017	8/31/2020	https://orcid.org/000
A digital antimicrobial stewardship smartphone application to combat AMR: the	Annelies Verbon	Czech Republic	Charles University	https://www.jpiamr.eu/project/ab- assistant/	2/1/2018	1/31/2021	https://orcid.org/000
A digital antimicrobial stewardship smartphone application to combat AMR: the	Annelies Verbon	Czech Republic	Charles University	https://www.jpiamr.eu/project/ab- assistant/	2/1/2018	1/2/2022	https://orcid.org/000
A digital antimicrobial stewardship smartphone application to combat AMR: the	Annelies Verbon	The Netherlands	Erasmus MC University Medical Center	https://www.jpiamr.eu/project/ab- assistant/	9/1/2017	8/31/2020	https://orcid.org/000
A digital antimicrobial stewardship smartphone application to combat AMR: the	Annelies Verbon	The Netherlands	Erasmus MC University Medical Center	https://www.jpiamr.eu/project/ab- assistant/	2/1/2018	1/31/2021	https://orcid.org/000
A digital antimicrobial stewardship smartphone	Annelies Verbon	The Netherlands	Erasmus MC University Medical Center	https://www.jpiamr.eu/project/ab- assistant/	2/1/2018	1/2/2022	https://orcid.org/000

Search by project acronym

Click and select multiple criteria for interactive analyses throughout the dataset. Press **F5** to clear selections.



Search by role of the researcher





Info based on DRAFT Work Programme and is subject to change

Extra slides for reference only
- Other 'Partnerships' in Horizon Europe
Health

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Horizon Europe – Health - Partnerships

Partnerships bring together the European Commission and private and/or public partners together to tackle pressing challenges

9 <u>European 'Partnerships'</u> in Health are <u>proposed for the first half of Horizon Europe</u> (with further partnerships in later years)

Instuitionalised Partnerships

- These partnerships (once established by the European Commission) will hold calls for proposals. First calls are expected ~Q4 of 2021.
 - Innovative Health Initiative successor to the Innovative Medicines Initiative but also broadened to include prevention, diagnostics, treatment and disease management incl. Pharma, Biotech, MedTech, Vaccines, Radiological, Electromedical and the Healthcare IT Industry. Subscribe to the IMI newsletter here.







Horizon Europe – Health - Partnerships

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 - EU-Africa Global Health (EDCTP3) to reduce the burden of infectious diseases & strengthen research capacities. Newsletter...
- UK based orgs. are eligible for funding from calls by the Innovative Health Initiative (IMI3) and Global Health Partnership (EDCTP3)

Co-funded Partnerships

• Jointly funded calls where the EU partners with research funders and other public authorities in some MS/AC/other countries.

Preparatory work (e.g. CSA for some partnerships)

Partnership of research funders established (by call in Work Programme)

Partnership holds joint calls (researchers and innovators can apply for funding)

- Countries involved depend on each partnership (and call) so UK eligibility for calls run by each Health Co-funded partnership is tbc.
 - Chemicals Risk Assessment
 - European Partnership European Research Area (ERA) for Health Research
 - Health and Care Systems Transformation
 - Personalised Medicine
 - One Health/AMR Antimicrobial Resistance (AMR)
 - Rare Diseases
 - Pandemic Preparedness (new)





European Partnership on	Info	Related 2021/2022 Work Programme Topics	Work Programme Year	Partnership Start Year
Assessment of Risk of Chemicals (PARC) (replaces EJP Human Biomonitoring)	Draft proposal	Partnership establishment: HORIZON-HLTH-2021-ENVHLTH-03-01: European Partnership for the Assessment of Risks from Chemicals (PARC) Cofund with EC contribution of €200 million	2021	2022
Transforming Health & Care Systems (replaces AAL, JPI Ageing)	Draft proposal	Partnership establishment: HORIZON-HLTH-2022-CARE-10-01: European Partnership on Transforming Health and Care Systems Cofund with EC contribution of €100 million	2022	2023
Fostering a European Research Area (ERA) for Health (replaces ERA-CVD, EuroNanoMed, JPI HDHL)	Draft proposal (May 2019)	Partnership establishment: HORIZON-HLTH-2022-DISEASE-03-01: European Partnership Fostering an ERA for Health research – Placeholder Cofund with EC contribution of €30 million for initial stage? This partnership might deploy large scale investigator initiated clinical studies (tbc)	2022?	?
Personalised Medicine (replaces ICPerMed and the linked ERA-PerMed)	Draft outline (May 2019)	Preparatory work: HORIZON-HLTH-2021-STAYHLTH-01-04: A roadmap for personalised prevention	2023	2023
Rare Diseases (replaces JPI Rare Diseases, ERA- NET Rare Diseases)	<u>Draft outline</u> (May 2019)	?	2023	2024
One Health AMR (replaces JPI AMR, ERA-NET Rare Diseases)	Draft outline (May 2019)	Preparatory work: HORIZON-HLTH-2021-DISEASE-04-05: A roadmap towards the creation of the European One Health antimicrobial resistance partnership (OH AMR)	2023/24	2024/25
Pandemic Preparedness (new initiative)		Preparatory work: HORIZON-HLTH-2021-DISEASE-04-06: Building a European Research and Innovation Partnership for Pandemic Preparedness	?	?

Кеу:

Preparatory work (e.g. CSA for some partnerships)

Partnership of research funders established (by call in Work Programme)

Partnership holds joint calls

(researchers and innovators can apply for funding)





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Extra slides for reference only

- Eureka



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EUREKA

The world's largest network for international co-operation in R&D and Innovation, present in over 40 countries

The Military of the state of th



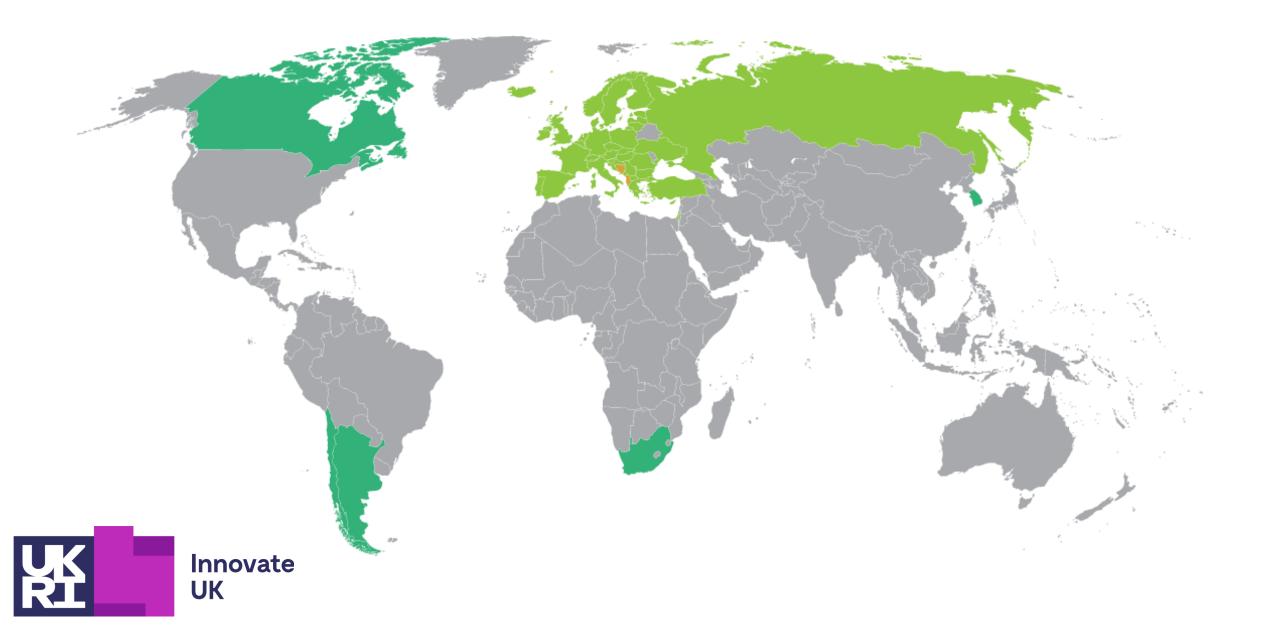
What is EUREKA?

- Established in 1985 to support cross border business-led R&D and Innovation
- Trusted framework facilitating bilateral and multilateral collaboration
- Involves 44 countries with the potential to expand and to work with other countries
- Supports globalisation of businesses with innovative ideas





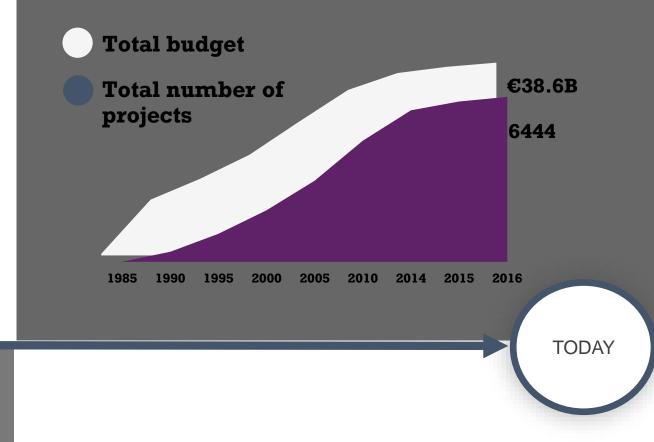
The Global Reach of the EUREKA Network

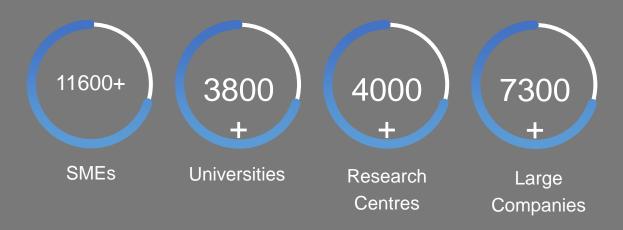




More than €38 billion invested

1985





More than 6400 projects launched



Impact

Strengthened commercial position of participating companies



69%

Enter new markets



68%

Improved market shares



67%

Increased exports



69%

Increase in research staff



64%

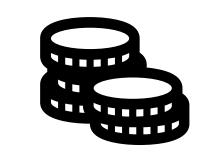
Increase in general staff



62%

Overall improvement in competitive position

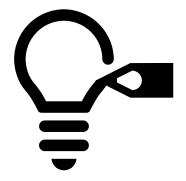
EUREKA Characteristics



Market-oriented nature



Bottom-up approach



Innovative product, process or service

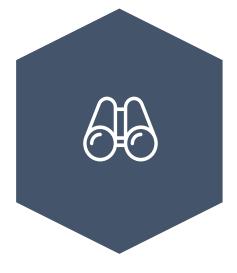


Global cooperation

Motives for participation



International co-operations 70%+



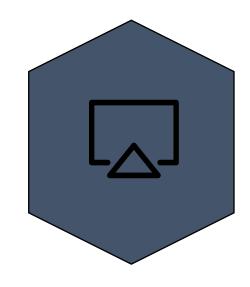
New business opportunities 60%+



High degree of flexibility



Freedom to create consortia



Strong bottom-up approach



EUREKA Instruments



EUREKA NETWORK PROJECTS

enable bottom-up bilateral and multilateral projects between any country in the EUREKA Network in any area.



EUREKA EUROSTARS

enables collaborative projects (2 cut off dates per year) in any area with projects led by Small and Medium Enterprises (SMEs).



EUREKA CLUSTERS

are industry driven publicprivate partnerships which build communities and convene projects between SMEs and large industry in specific technology and market areas.



EUREKA GLOBALSTARS

calls enable collaborative projects between any country in the EUREKA Network and countries outside the EUREKA Network in any area.





EUREKA Network Projects



Innovative product, process or service with a civilian purpose



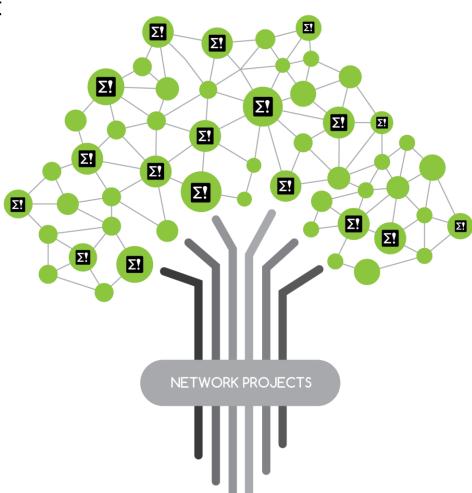
Participants from at least two EUREKA countries



No thematic restrictions but projects need to reflect market demand



National evaluation procedures & funding



A typical Network project is...



3 participants



countries



average duration

28 months



Eurostars is...



Joint programme between EUREKA and EU



Dedicated to R&Dperforming SMEs



Market-oriented



Bottom-up



International cooperation

Eurostars II Countries



Bulgaria

Belgium

Canada

Croatia

Cyprus

Czech Republic

Denmark

Estonia

Finland

France









Iceland



Ireland



Israel



Italy



Latvia



Lithuania



Luxembourg



Malta



Spain

Sweden



Switzerland

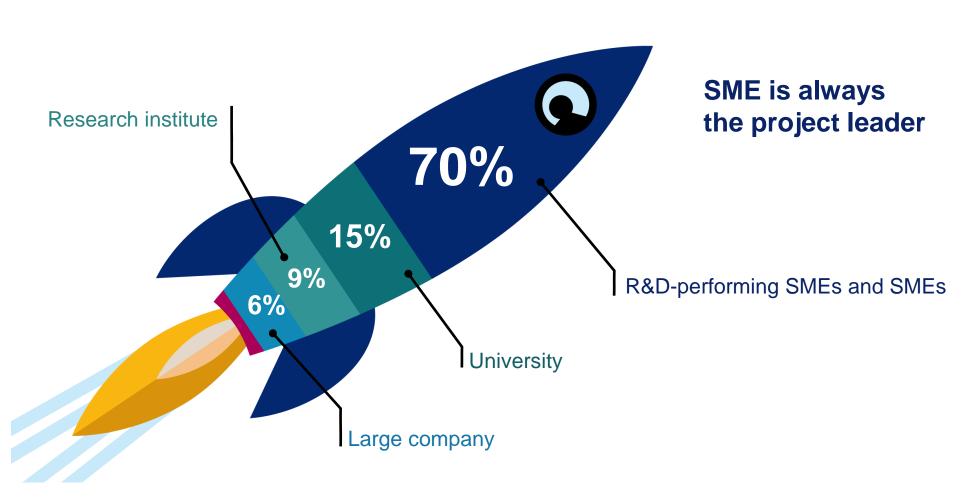


Turkey



United Kingdom

SMEs in the driving seat



A typical Eurostars project is...



3-4 participants



2-3 countries



30 months



UK Eligibility

- In the UK, only SMEs are eligible for funding.
- The project must be led by a research-performing SME, one that:
- invests 10% or more of its turnover into research, or
- has 10% of its full-time equivalent staff working on research activities, or
- has 5 or more full-time staff working on research activities, if the SME has 100 or fewer employees, or
- has 10 or more full-time staff working on research activities, if the SME has more than 100 employees
- UK subcontracting is capped at 20% of the UK partner eligible costs.
- You must follow:
- the <u>Eurostars eligibility criteria</u> and
- these Innovate UK criteria at the competition application deadline and throughout your project

Factors for success

- Be technologically ambitious while remaining realistic define a methodical approach in line with partnership, budget and time limit set for the completion of the project and the marketing of its results.
- Point out the innovative nature of the proposal submitted present new industrial applications and their impact on the sector and relevant markets.
- Describing the technology is the easy bit... Who are you? Describe the benefits
 of this partnership, the added value of each partner? Focus on the project
 methodology (objectives, means, results) and an appropriate and realistic cost
 breakdown. Analyse the risks and how you will mitigate these.
- Promote the key elements the evaluators are looking for and ask an objective party to read it. Proof-read it – this is the cheapest way of making it better.
- Don't allow yourself to be surprised by anything Do your homework and speak to your National Project Coordinator (NPC).

Factors for success

- Be available Allow time for necessary preparation (partner search, project proposal, consortium agreement...)
- Build up a « win-win » cooperation Show complementarities and added value of trans-national partnership during and after the project
- Show partnership's ability to meet its commitments Demonstrate each party's management, scientific and technical skills as well as its available financial resources for the project
- Set clear, measurable and verifiable objectives Define success indicators for technological performance as well as the commercial and financial targets to achieve
- Demonstrate clearly why the projects should be financed Highlight the risks and the strategic character of the project in terms of expected commercial and financial impact, show value for money.

EUREKA Clusters



Industry led initiatives

Medium term
Strategically significant
International ecosystem of
R&D&I actors



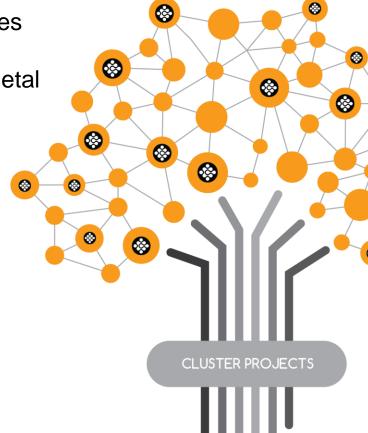
Fostering European competitiveness

Develop generic technologies and standards Address economic and societal challenges



Large number of participants

Major European industries Large SME participation (30–50% of partners) Research organisations and academia



Cluster projects are...



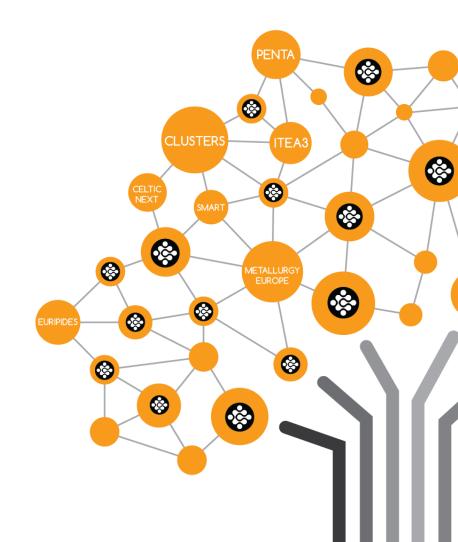
Open to global cooperation

Covering the full value chain to create innovative solutions

Bottom-up

Helping SMEs to scale up in consortia with large industry

Market-oriented



A typical Cluster project is...



2-14 participants



countries







ICT and telecommunications



Smart electronic systems

EUREKA Clusters



Low carbon energy technologies





metallurgy



Micro & nanoelectronics enabled systems and applications



Advanced manufacturing



Existing UK engagement in clusters

 UK currently participating in PENTA, Celtic next and SMART Clusters, though participants can self fund other Cluster participation.

Example Eligibility for recent PENTA call:

- To lead a project as a UK based organisation you must:
 - be a <u>business</u>, of any size
 - involve at least one UK based <u>micro, small or medium sized</u> <u>enterprise</u> (SME)
- You can also collaborate with other UK based businesses of any size and UK based research organisations.
- Research organisations must be able to show how they will exploit the results of the project to grow the wider electronics, sensor and photonics sector in the UK. Research organisations cannot lead on an application.

Subcontractors

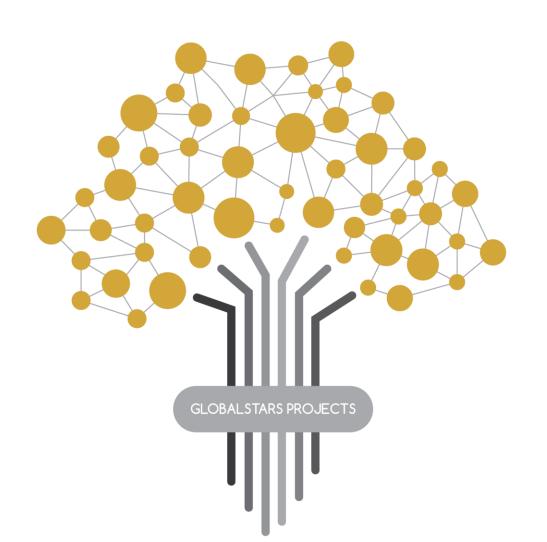
 Your project can include subcontractors but they must not account for more than 20% of the total eligible project costs of the UK partners.







EUREKA Globalstars



is a flexible, reliable, lean and fast instrument allowing global cooperation for EUREKA countries in a variable geometry.



EUREKA Globalstars

In today's global economy, openness to international cooperation is becoming increasingly important. The industry, and especially the SMEs, in Europe and the associated member countries need to access new and emerging markets









EUREKA GLOBALSTARS calls eligibility criteria



Call collaboration between at least 2 EUREKA members and a GlobalStars partner country (or group of GlobalStars partner countries) outside the EUREKA Network.



Or alternatively: Call collaboration between 1 EUREKA member and 1 associated country and a GlobalStars partner country (or group of GlobalStars partner countries) outside the EUREKA Network.



On project level in the call, the minimum required number of participants should be 2 independent organisations, 1 organisation from a EUREKA member or associated country and 1 organisation from a GlobalStars partner country.

UK engagement in EUREKA





Ben Morris
National
Project
Coordinator



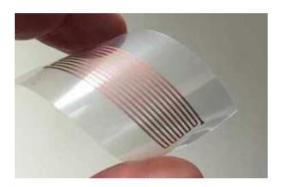
UK government representation by the UK Government department, Business Energy & Industrial Strategy (BEIS).

Case studies

Case study

Promethean: nanoparticle products go into full-scale production

Nottingham University spin-out builds on €10 million multipartner EU project to enter global market in novel inks, paints and coatings.







Videntifier project

Helping international police forces investigating crime and terrorism

Programme: Eurostars and E!nnoVest

Innovation:

- · Combines high-end computer vision techniques with blazingly fast database search
- · Automatically compares huge amount of visual content in a fraction of the time it takes a human
- Identifies victims, perpetrators, and locations of crimes using large database
- Supports the process of scanning seized storage devices
- Uses visual fingerprints a single point within an image that captures mathematical characteristics related to contrast and shape

Partners: Videntifier, Forensic Pathways, IRISA

Countries involved:







Total R&D Investment: €1,183,220

Impact:

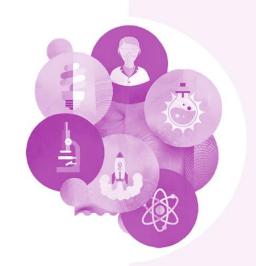
- Credibility of EUREKA helped Videntifier to be appointed main tech provider to Interpol's International Child Exploitation database
- The project led to securing private investment and the company has subsequently grown in staff
- Technology deployed to globally to major law enforcement organisations including Korean National Police Agency, EUROPOL and the UK Home Office
- The company has expanded beyond the law enforcement domain to copyright protection and content monetisation
- Sold license to Facebook in the largest single company transaction to date in February



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Thank you

To keep up to date with the latest Horizon Europe health funding news please sign up for our newsletter <u>here</u>



Presented by: Jo Frost ncp-health@innovateuk.ukri.org

Other UK National Contact Points / National Contact Points for other countries

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