



RESEARCHERS IN MOTION



## Funding & Grants Part I

# Horizon Europe

EU RESEARCH & INNOVATION PROGRAMME  
(2021 – 2027)

Prof. dr Miroslav Trajanović

Regional Training of ESCs and ECPs for Capacity Building  
Region 3: Estonia, Hungary, Latvia, Lithuania, Moldova, Poland  
Central European Regional Training-Poznan, Poland  
25 November 2021



# What is Horizon Europe

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- It is European Commission **€95.5 billion** programme investing in research and innovation for seven years (2021-2027), including Euratom, with the aims :



to strengthen the EU's scientific and technological bases



to boost Europe's innovation capacity, competitiveness and jobs



to deliver on citizens' priorities and sustain our socio-economic model and values

**€4.1 billion** are proposed to be allocated for defence research, in a separate proposal for a European Defence Fund

# HORIZON EUROPE

# EURATOM

## SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

*Exclusive focus on  
defence research  
& development*

Research  
actions

Development  
actions

## SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

*Exclusive focus on civil applications*



**Pillar I**  
EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



**Pillar II**  
GLOBAL CHALLENGES &  
EUROPEAN INDUSTRIAL  
COMPETITIVENESS

Clusters

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

Joint Research Centre



**Pillar III**  
INNOVATIVE EUROPE

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

Fusion

Fission

Joint  
Research  
Center

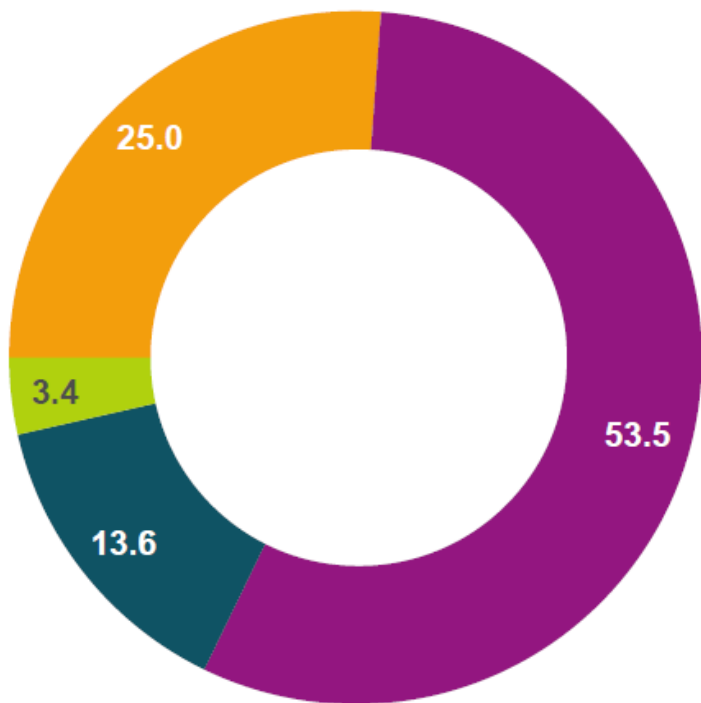
\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

# Budget

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## Political agreement December 2020

€ billion in current prices



■ Excellent Science

■ Global challenges and European ind. comp.

■ Innovative Europe

■ Widening Part and ERA



# Budget

## HORIZON EUROPE: STRUCTURE FUNDING - €95.5 billion



# Pillar I: Excellent Science

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## European Research Council

Frontier research by the best researchers and their teams

**€16 billion**

## Marie Skłodowska-Curie Actions

Equipping researchers with new knowledge and skills through mobility and training

**€6.6 billion**

## Research Infrastructures

Integrated and inter-connected world-class research infrastructures

**€2.4 billion**

# Pillar I: Excellent Science

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- European Research Council
  - groundbreaking, high-gain/high-risk research
  - any field of research
  - independent researchers of any age from anywhere in the world
  - the ERC welcomes applications from Principal Investigators hosted by private for-profit research centres



# Pillar I: Excellent Science

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- **Marie Skłodowska-Curie Actions**
  - MSCA Doctoral Networks
  - MSCA Postdoctoral Fellowships
  - MSCA Staff Exchanges
  - MSCA Co-funding of regional, national and international programmes
  - MSCA and Citizens (Researchers' Night)
  - MSCA Support





# Pillar I: Excellent Science

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- Research Infrastructures
  - Developing, consolidating and optimising the European research infrastructures landscape, maintaining global leadership
  - Enabling an operational, open and FAIR EOSC ecosystem
  - Research infrastructure services to support health research, accelerate the green and digital transformation, and advance frontier knowledge
  - Next generation of scientific instrumentation, tools and methods
  - Network connectivity in Research and Education - Enabling collaboration without boundaries



Pillar II - Clusters

# GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS:

boosting **key technologies** and solutions underpinning **EU policies & Sustainable Development Goals** (6 clusters and JRC – non-nuclear direct actions)

Health

Culture,  
Creativity &  
Inclusive  
Societies

Civil  
Security for  
Society

Digital,  
Industry &  
Space

Climate,  
Energy &  
Mobility

Food,  
Bioeconomy,  
Natural  
Resources,  
Agriculture &  
Environment

€53.5 billion



# Budget

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<b>Cluster 1</b>	<b>Health</b>	<b>€8.246 billion</b> (including €1.35 billion from NGEU)
<b>Cluster 2</b>	<b>Culture, Creativity &amp; Inclusive Societies</b>	<b>€2.280 billion</b>
<b>Cluster 3</b>	<b>Civil Security for Society</b>	<b>€1.596 billion</b>
<b>Cluster 4</b>	<b>Digital, Industry &amp; Space</b>	<b>€15.349 billion</b> (including €1.35 billion from NGEU)
<b>Cluster 5</b>	<b>Climate, Energy &amp; Mobility</b>	<b>€15.123 billion</b> (including €1.35 billion from NGEU)
<b>Cluster 6</b>	<b>Food, Bioeconomy, Natural Resources, Agriculture &amp; Environment</b>	<b>€8.952 billion</b>
	<b>JRC (non-nuclear direct actions)</b>	<b>€1.970 billion</b>

Pillar III

## INNOVATIVE EUROPE:

stimulating **market-creating breakthroughs** and **ecosystems** conducive to innovation

### European Innovation Council

Support to innovations with breakthrough and market creating potential

The budget: **€10.6 billion**, incl. up to **€527 million** for ecosystems (including NGEU – Recovery Fund parts dedicated to EIC).

### European innovation ecosystems

Connecting with regional and national innovation actors

### European Institute of Innovation and Technology (EIT)

Bringing key actors (research, education and business) together around a common goal for nurturing innovation

**circa €3 billion**

Next Generation EU (NGEU) fund is a EU economic recovery package to support member states impacted by the COVID-19 pandemic.



# European Innovation Council

Support to innovations with breakthrough and disruptive nature and scale up potential that are too risky for private investors (**70% of the budget earmarked for SMEs**)

**European  
Innovation Council –  
a one-stop-shop**

- Helping researchers and innovators create markets of the future, leverage private finance, scale up their companies
- Innovation centric, risk taking & agile, pro-active management and follow up
- Mostly 'bottom up', but also targeting strategic challenges
- EIC Programme Managers to develop visions for breakthroughs and steer portfolios

Complementary instruments bridging the gap from idea to market

## **PATHFINDER**

R&I grants  
(from early technology  
to proof of concept)

## **TRANSITION**

R&I grants  
(proof of concept to  
pre-commercial)

## **ACCELERATOR**

Grants & investment (via EIC Fund) for  
single SMEs & start-ups  
(from pre-commercial to market & scale-up)



# European Innovation Ecosystems (EIE)

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- **CONNECT** - Interconnected Innovation Ecosystems
- **SCALEUP** - Elevating the scalability potential of European business
- **INNOVSMES** - Partnership on Innovative SMEs



# European Institute of Innovation and Technology (EIT)

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- independent EU body
- increases Europe's ability to innovate by nurturing entrepreneurial talent and supporting new ideas
- strengthening sustainable innovation ecosystems
- fostering the development of entrepreneurial and innovation skills and support the entrepreneurial transformation of EU universities
- bringing new solutions to global societal challenges to the market



EIT (KNOWLEDGE & INNOVATION COMMUNITIES)

InnoEnergy

Climate

Digital

Food

Health

Raw Materials

Manufacturing

Urban Mobility

Cultural and Creative Industries

Part

# Widening Participation & Strengthening the European Research Area (ERA):

## Widening Participation and Spreading Excellence

- Teaming, Twinning, ERA Chairs,
- European Cooperation in Science and Technology (COST)
- Boosting National Contact Points' (NCPs) activities, pre-proposal checks and advice
- Brain circulation
- Excellence initiatives:-
- Possibility for entities from widening countries to join already selected collaborative R&I actions
- Recognition of participation
- Matchmaking services

€2.96 billion



## Reforming and enhancing the EU R&I system

- Strengthening the evidence base for R&I policy
- Foresight
- Support for policy makers to the ERA development
- Support to national R&I policy reform, including Policy Support Facility
- Attractive researcher careers and links with higher education
- Open science, citizen science and science communication
- Gender equality
- Ethics and integrity
- Support to international cooperation
- Scientific input to other policies
- Support to the Programme implementation
- Support for National Contact Points
- Support to dissemination & exploitation

€0.44 billion





# Widening Participation and Spreading Excellence

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- There is a growing **disparity** between countries and regions in terms of R&I performance, which calls for fully mobilising research, innovation and technological capacities in **less developed regions**.
- Less advanced countries eligible for hosting the coordinator of widening actions are Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and **all Associated Countries**
- **Associated Countries:** Albania, **Armenia**, Bosnia and Herzegovina, Faroe Islands, North Macedonia, Georgia, Moldova, Montenegro, Serbia, Tunisia, Turkey and Ukraine.

# Development based on smart specialisation

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- Article 181(2) of the Treaty on the Functioning of the European Union specifically points out that, a well-integrated yet tailored set of Union measures is needed, combined with reforms and performance enhancements at national and regional level (through **smart specialisation strategies**)

# Widening Participation and Spreading Excellence

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# D1- IMPROVED ACCESS TO EXCELLENCE

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- Teaming for Excellence
- Twinning Western Balkans
- Twinning
- Excellence Hubs
- European Excellence Initiative (EEI): Strengthening capacity for excellence in higher education institutions and surrounding ecosystems
- Support for R&I policy making in the Western Balkans
- Hop On Facility

# Widening instruments

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Actions	Consortium structure	Policy objectives
<b>TEAMING</b>	Main beneficiary + 1 or 2 strategic advanced partners	Develop <b>role models</b> to <b>stimulate excellence, new investments and reforms</b>
<b>TWINNING</b>	Main beneficiary and network of partnering organisations	Develop excellence in a chosen domain, increase <b>visibility and upskill staff</b>
<b>ERA CHAIRS</b>	One host organisation to the selected ERA chair with optional partner organisation	Help excellent scientists to <b>become game changers</b>
<b>COST*</b>	Cross-border scientific network	Help excellent researchers and innovators <b>get access to the European and international networks</b>

\* European Cooperation in Science and Technology (COST)

# **D2 - ATTRACTING AND MOBILISING THE BEST TALENTS**

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- ERA Chairs
- Fostering balanced brain circulation (BBC) - ERA Fellowships (Postdoctoral Fellowships)
- Fostering balanced brain circulation (BBC) - ERA Talents

# D3-REFORMING AND ENHANCING THE EU RESEARCH AND INNOVATION SYSTEM

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- **PRIORITIZING INVESTMENT AND REFORM**
  - Support for policy makers
- **IMPROVING ACCESS TO EXCELLENCE**
  - Towards a Europe-wide training and networking scheme for research managers
- **TRANSLATING R&I RESULTS INTO THE ECONOMY**
  - new macro-economic modelling concept, R&I intensive IP management
- **DEEPENING THE EUROPEAN RESEARCH AREA**
  - Open science, FAIR data practice, open access, Societal trust in science, STE(A)M roadmap, gender equality, ethics

# Where to find Work programmes

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<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents;programCode=HORIZON>

- Select in **Filter by programme:** Horizon Europe
- Press the **button** Expand all



# Exercises in groups (virtual rooms)

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- 1<sup>st</sup> group – real room (NH Poznan Hotel)
- 2, 3 and 4 group – virtual rooms
- Task (10 minutes for group work and 10 minutes for reporting)
- A researcher from your institution has asked you for advice. He has an idea for the project but does not know which work program is appropriate.
- Your answer should include:
  - The name of the work program from the Horizon Europe
  - Call name
  - Call opening and closing dates
- Choose a reporter who will explain the answer after the exercise

# Project 1

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- Project Title: Births, mothers and babies: prehistoric fertility in the Balkans between 10000 – 5000 BC
- The BIRTH project will investigate the key biological and cultural mechanisms affecting fertility rates resulting the Neolithic Demographic Transition, the major demographic shift in human evolution. We integrate skeletal markers with micro-nutritional and macro-scaled cultural effects on fertility rates during the Early-Middle Holocene (10000-5000 BC) in the Central Balkans.

# Project 2

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- Accounting for aerosols in climate change forecasts
- The aim of the project is to improve the relevance of future climate change scenarios by developing a way to account for aerosols - minute particles in the atmosphere - and their effect on global warming.

# Project 3

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- Capacity building of **University of Latvia** in the area of bioinformatics



**LATVIJAS**  
**UNIVERSITATE**  
ANNO 1919

# Project 4

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- The nano materials industry in Latvia is expanding strongly but lacks highly skilled personnel. The Vice-Rector of Riga Technical University wants to form doctoral studies in the field of nanomaterials, but there are not enough quality professors. How could the Horizon Europe framework help him?

# Work in the groups

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# Advice to researchers on finding a partner for a project

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- Use Partner Search tool (Funding & tender portal)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/partner-search>

- Search by Involvement in EU funded programmes
  - Define appropriate keywords, topics, past call name, framework (eg. Horizon Europe, Erasmus...)
- Search by Organisation details
  - Define organization name, organization type, country, city or PIC number

# Example

Keywords: bioinformatic, big data

Topic: wine manufacturing

ORGANISATION NAME ↕	ORGANISATION TYPE ↕	ORGANISATION STATUS ↕	COUNTRY ↕	CITY ↕	#PROJECTS ▼
FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	Non-governmental organization	VALIDATED	Germany	MUNCHEN	2
QUEEN MARY UNIVERSITY OF LONDON	Higher or secondary education establishment	VALIDATED	United Kingdom	LONDON	1
VIESOJI ISTAIGA VILNIAUS UNIVERSITETO LIGONINE SANTAROS KLINIKOS	Public organisation	VALIDATED	Lithuania	VILNIUS	1



# Enterprise Europe Network partner search tool

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- Large database of business opportunities
- Filter the ones in which one is searching for partners “To collaborate with/co-develop with (research and development)”
- EEN website:  
<https://een.ec.europa.eu/partners>

# Other opportunities

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- Publish your profile on the partner search platforms
- Exploit conferences & brokerage events
- Consult NCP
- Google
- ResearchGate or similar platforms

# Additional advice on project partners

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- Horizon Europe supports only excellent researchers and innovators
- Consider the call specific limitations concerning:
  - minimum and maximum number
  - type of organization (RPO, SME, non-profit organizations ...)
  - geographical distribution (e.g. ... from three countries ..
  - belonging to specific groups of countries or regions (e.g. widening countries, countries of the Western Balkans)
  - financial capacity of the organization

# Question and answers

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**Q** & **A**

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Thank you for your participation

[miroslav.trajanovic@gmail.com](mailto:miroslav.trajanovic@gmail.com)