Accelerator Middle Layer – EU Funding opportunities

Annika Thies
Head of EU Project Office, DESY
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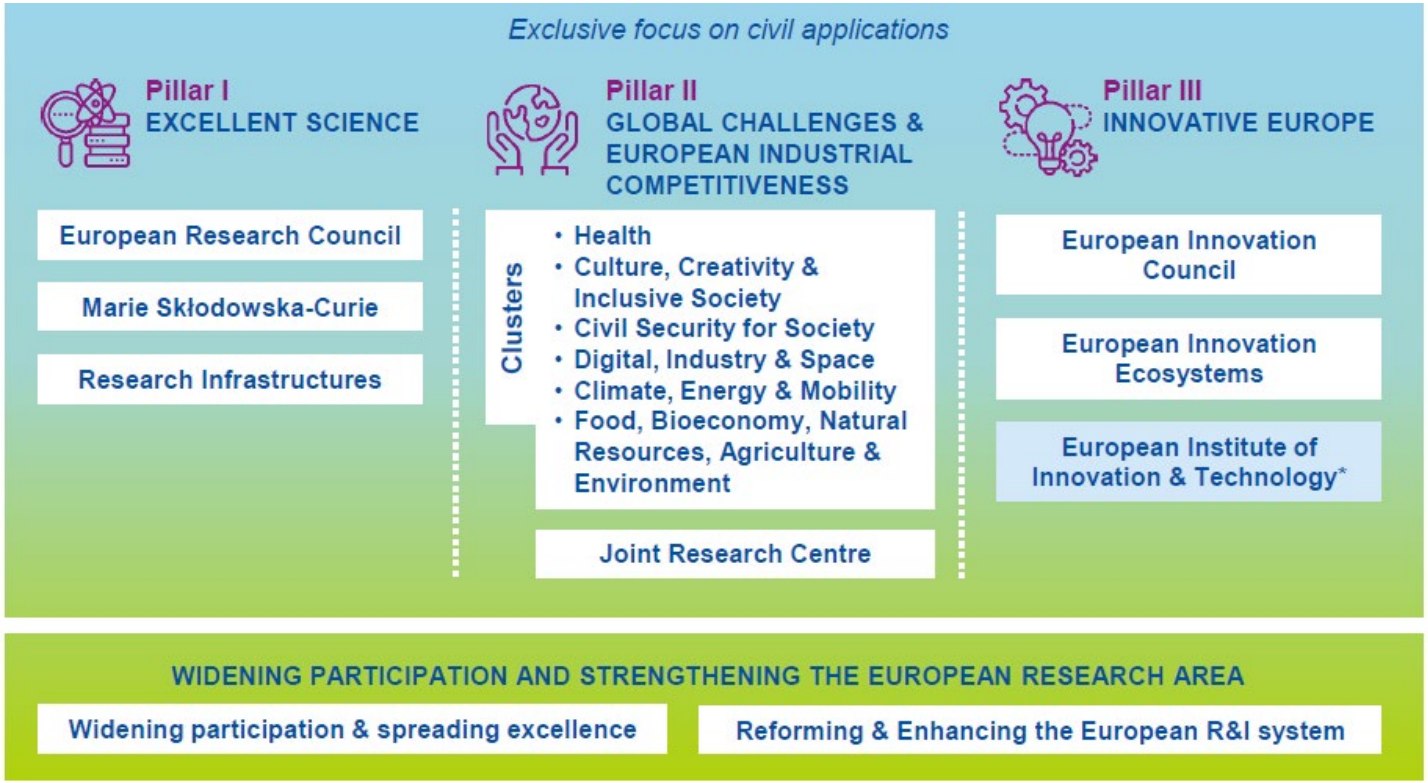
HELMHOLTZ SPITZENFORSCHUNG FÜR GROSSE HERAUSFORDERUNGEN

DESY.

1. Horizon Europe

- Duration: 2021-2027
- Budget: 95,5 billion €
- Worlds' largest RnI funding programme
- Focus on UN Sustainable Development Goals + competitiveness
- Focus on impact



Horizon Europe

Key features of the different funding opportunities

Main interest: need funding for human resources and coordination

- Funding for frontier research + benchmark: ⟹ **European Research Council (ERC)**
- Funding for research infrastructures: design studies, RI technology development, providing access, developing RI services ⟹ **Research Infrastructures (RI)**
- Funding for frontier technology development ⟹ **European Innovation Council (EIC)**
- Funding for doctoral networks + postdocs ⟹ **Marie Skłodowska-Curie Actions (MSCA)**
- Funding for collaborative research to adress global challenges (e.g. develop new materials for batteries or to replace plastics..) ⟹ **Global Challenges, Pillar II**
- Funding to help partners in EU countries with less competitive research systems ⟹ **Widening**

1.1 ERC — Funding Schemes

Main feature of all ERC grants: completely novel research idea, not incremental, far beyond state of the art

Researchers of any nationality and from all scientific disciplines are eligible to apply to the ERC

StG
Starting Grants
(2–7 years after PhD)
up to €1.5 Million
for 5 years
+ up to €1 Million

CoG
Consolidator Grants
(7–12 years after PhD) up to €2 Million
for 5 years
+ up to €1 Million

AdG
Advanced Grants
10 years track record
up to €2.5 Million
for 5 years
+ up to €1 Million

SYG
Synergy Grants
2–4 PIs at any career stage up to €10 Million for 6 years +up to €4 Million

no PhD related eligibility requirements

Proof of Concept
Top-up funding for ERC grant holder:
bridging gap between fundamental research & earliest stage of marketable or social innovation
lump sum €150,000

1.2 Marie Skłodowska-Curie Actions (MSCA): 5 funding lines

Postdoctoral Fellowships (PF)

Support to excellent postdoctoral researchers

Find out more

Doctoral Networks (DN)

Doctoral programmes in and outside academia incl. joint & industrial doctorates

Find out more

COFUND

Co-funding doctoral and postdoctoral programmes

Find out more

Staff Exchanges (SE)

Support for research and innovation staff exchanges

Find out more

MSCA and Citizens

Public outreach events (European Researchers' Night, Researchers at School)

Find out more

MSCA-Doctoral Networks: Brief Overview

- **Scope:** supports **European networks of institutions for the structured training of doctoral students to** enhance their scientific and general competences within an excellent international, interdisciplinary and intersectoral research and training programme
- **Participation:** participation of academic and non-academic sectors; at least **three independent legal entities,** each established **in a different EU Member State (MS)** or Horizon Europe Associated Country (AC) and with at least one of them established in an EU MS. Should **no partner be entitled to award a doctoral degree**, a university entitled to award a doctoral degree **must be added as an associated partner** or an associated partner linked to a beneficiary. **Participation of the non-academic sector is considered essential**
- **Funding:** **Not more than 40% of the EU contribution** may be allocated to beneficiaries **in the same country** or to any one International European Research Organisation or International Organisation
- **Staff funded by SE:** **researchers at any career stage,** and **administrative, technical or management staff** involved in research and innovation activities, **any nationality, return to their sending organisation after the secondment**

MSCA Doctoral Networks 2024, opened 29 May 2024, **deadline: 27 November 2024**

MSCA-Staff Exchange: Brief Overview

- **Scope:** supports **joint research programmes** between institutions from the **academic and non-academic sectors**, as well as between **institutions within and outside Europe**, to strengthen **partnerships** and promote the **transfer of knowledge,** through exchange of **researchers**, **technical and management staff**
- **Participation:** if all participating **organisations are from the same sector** (academic or non-academic), at least one must be from a non-associated **Third Country**
- **Funding:** **four years** for the **mobility** of seconded staff **from 1 month to 1 year; top-up allowance** for seconded staff receives, costs for **research, training and networking activities; management and indirect costs**
- **Staff funded by SE:** **researchers at any career stage,** and **administrative, technical or management staff** involved in research and innovation activities, **any nationality, return to their sending organisation after the secondment**
- **Next call:**

  MSCA Staff Exchanges 2024, opens 10 October 2024
  Deadline: 05 March 2025

MSCA-COFUND: Brief Overview

- **Scope:** provides funding for regional, national and international programmes (already existing or planned) for **training and career development**, through **co-funding mechanisms**
- **2 types: Doctoral** Programmes **& Postdoctoral** Programmes, up to **5 years,** researchers can be of **any nationality,** minimum of **3 months, postdocs** should **not already be permanently employed** by the organisation hosting them
- **Who can apply?: a single legal entity** (mono-beneficiary action), additional partners are included
- **Funding: maximum of €10 Mio per call:**
  - **a fixed amount** as equivalent to the minimum researchers' salary
  - a long-term leave allowance and special needs allowance, **if applicable**
  - **funding can be combined with other third or other third-party funding**, but not with other funds from Horizon Europe
- **Next call:**

  MSCA COFUND 2024
  Deadline: 26.9.2024

MSCA-Doctoral Network: Unit Contribution

Country correction coefficient applies to the living allowance

MSCA Doctoral Networks	Contributions for recruited researchers per person-month					Institutional unit contributions per person-month	
	Living allowance	**Mobility allowance**	**Family allowance** (if applicable)	**Long-term leave allowance** (if applicable)	**Special needs allowance** (if applicable)	**Research, training and networking contribution**	**Management and indirect contribution**
	EUR 4010	EUR 710	EUR 660	EUR 4720 x % covered by the beneficiary	requested unit[125] x (1/number of months)	EUR 1600	EUR 1200

MSCA-COFUND: Unit Contribution

Country correction coefficient applies to the living allowance

MSCA COFUND	Contributions for recruited researchers and institutional contributions per person-month			
	COFUND allowance		Long-term leave allowance (if applicable)	Special needs allowance (if applicable)
	Doctoral programmes	EUR 3300	EUR 3300 x % covered by the beneficiary	requested unit[159] x (1/number of months)
	Postdoctoral programmes	EUR 4700	EUR 4700 x % covered by the beneficiary	

MSCA-SE: Unit Contribution

Country correction coefficient applies to the living allowance

MSCA Staff Exchanges	Contributions for seconded staff members per person-month		Institutional contributions per person-month	
	Top-up allowance	Special needs allowance (if applicable)	Research, training and networking contribution	Management and indirect contribution
	EUR 2710	requested unit[151] x (1/number of months)	EUR 1300	EUR 1000

1.3 Research Infrastructures

Work programme 2025 under discussion at the moment – first indications on structure:

Destination 1: Consolidation and evolution of research infrastructures, research infrastructure services, and technology development

- 1.1. Consolidation and evolution of research infrastructures (RIs)
- 1.2. RI services to support large research domains, societal challenges and EU priorities
- 1.3. Next generation of scientific instrumentation, tools, methods, and advanced digital solutions of Ris and fostering innovation and co-creation with industry

Expected impact: Reinforced EU resilience with respect to the availability of critical technical RI components, considering that RI operations rely in many cases on technical components or material for which Europe is strongly dependent on third countries.
More robust RI innovation ecosystems, building also on activities funded in the past on the development of RI technology roadmaps and co-creation activities with industry.
Accelerated digitalisation of RIs throughout their entire life cycle.
Greening of RIs, by advancing and accelerating the reduction of the environmental footprint of RIs operations, while at the same time contributing to increasing their resilience towards energy crises or other resource restrictions such as water.

Research Infrastructures

Main expected outcomes: [..]

1.3. Next generation of scientific instrumentation, tools, methods, and advanced digital solutions of RIs and fostering innovation and co-creation with industry

- New instrumentation, tools, methods and solutions for RI upgrades, fostering the resilience of the RI landscape and EU autonomy.
- Stable RI innovation ecosystem that will also build on activities funded in the past on the development of RI technology roadmaps and co-creation activities with industry, including exploration of applications of RI innovations outside the scientific market, via proof-of-concept support.
- Digitalisation of RIs instruments, fostering high FAIR data productivity by RIs, promoting FAIR data literacy and sovereignty of FAIR research data, and harnessing the potential of AI, in synergy with the EOSC objectives and actions.
- Greening of RIs, targeting both specific domains or technologies and bottom-up actions, including e.g. sharing of best practices, implementation of technological solutions, adapting internal processes, evolution of access modes, and supporting advanced communities to incorporate greening challenges and explore synergies with other communities notably for transversal technologies like ICT, robotics or AI.
- Identification of commonalities in technology needs across different types of infrastructures and domains, laying the ground for common technology development.

Research Infrastructures

Past example for a potentially relevant call:

- AR/VR-empowered digital twins for modelling complex phenomena in new RI application areas, HORIZON-INFRA-2024-TECH-01-04

- Expected Outcome:
  - Availability of advanced modelling and prediction capabilities aimed at industrial, scientific or policy end users on fundamental, complex and socio-economically relevant real-life phenomena, including consideration of the possibility to replace, where appropriate, the need for physical experiments and interventions by using digital twins.
  - Enhanced competitiveness and improved effectiveness of European RIs;
  - Better integration of RIs into local, regional and global innovation and decision support systems

Next calls: ?? We'll know more soon – EC and EU Member state delegates meeting on 9.7.

2. European Cooperation in Science and Technology (COST)

- The European Cooperation in Science and Technology (COST) is an EU-funded programme which provides researchers and innovators with funding to set up interconnected, interdisciplinary and collaborative research networks in Europe and beyond.
- By focusing on and funding these network activities, COST Actions supports investigators from the academic and non-academic sectors in setting up their individual research networks to investigate a research topic of their choice for four years.
- According to the COST Association, proposals for collaborative research projects submitted to EU framework programmes – such as Horizon Europe – which follow COST Actions, have significantly higher success rates in these programmes.

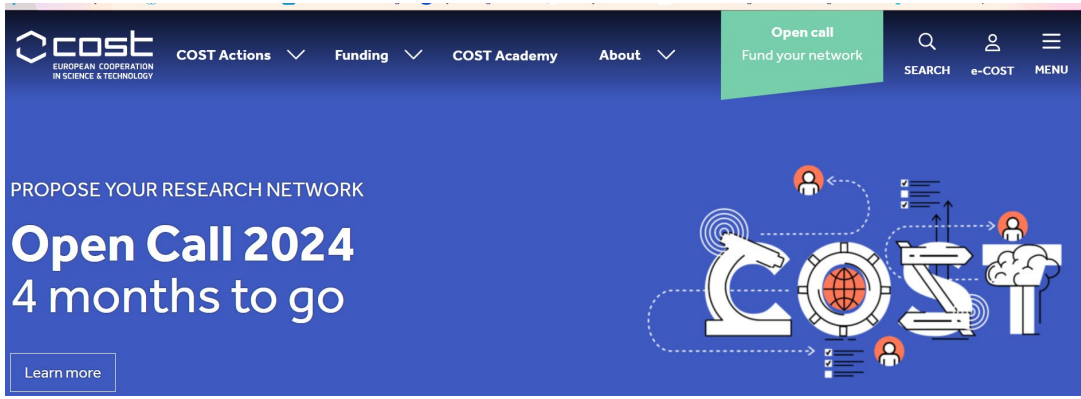
Who can be funded by COST?

- Researchers and innovators from the academic and non-academic sectors, from all research fields, can participate in a COST Action. This includes: universities, research institutions, SMEs, Industry.

What is funded by COST?

- COST Actions provide funding for networking activities in a wide range of scientific topics within the research networks, such as organising:
  - conferences
  - meetings
  - training schools
  - short scientific exchanges
  - other networking activities in a wide range of scientific topics

  The aim of these activities is to support the research network in targeting complex ideas in a concerted and targeted approach.
- COST does not fund basic research.
- **Budget:** Estimated 125.000 € in first year, average of 150.000 €/year for following 3 years



Open Call
for new COST Actions

Collaborative science and technology networks steering the circulation of knowledge worldwide

1. Idea & Team

Bottom-up approach: propose your innovative idea on a specific challenge leading to an S&T breakthrough

You must be at least seven peers from seven COST Members, of which half are Inclusiveness Target Countries

2. Proposal & Submission

Submit online your anonymous proposal via the e-COST platform
Info and guidelines:
www.cost.eu/opencall

Collection date 2024

October 23 noon CEST

Watch our video 'Tips for submitting a winning COST Action proposal'
https://youtu.be/IRWq_JagZTA

3. Evaluation & Selection

Independent External Experts and ad-hoc Review Panels carry out the evaluations of proposals

The COST Scientific Committee makes the selection of proposals based on the evaluations

4. Approval & Launch

The decision of approval and four-year funding for new Actions relies on the COST Committee of Senior Officials

New COST Actions kick off in the autumn of 2025 with the first meeting of the Management Committee

cost EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Funded by the European Union

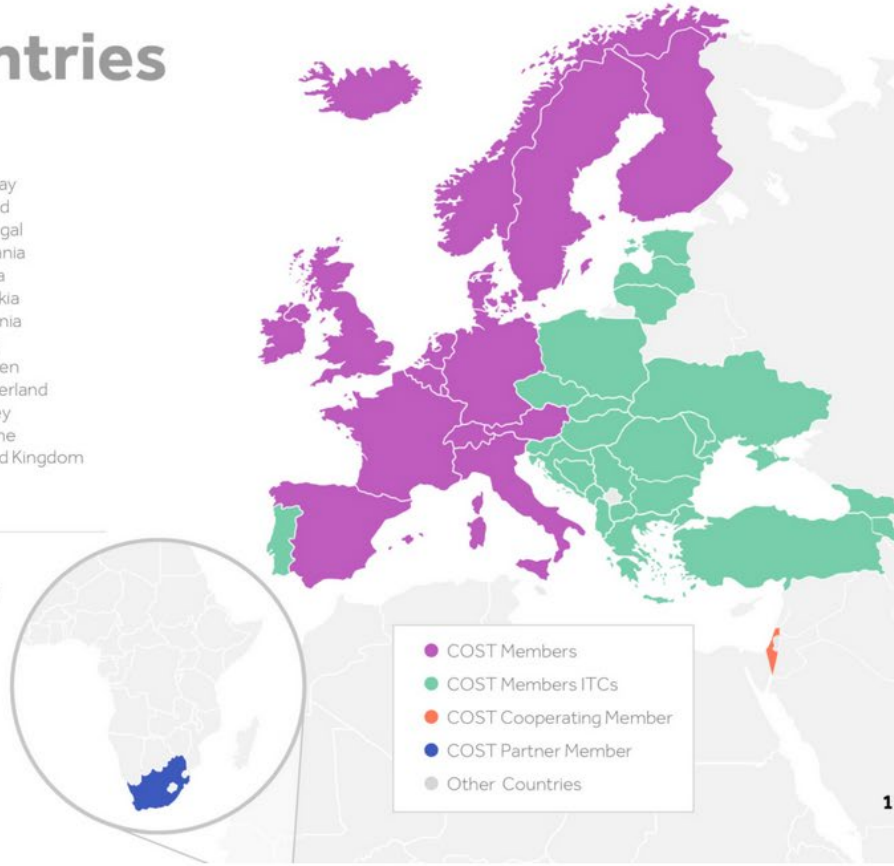
COST Member Countries

41 COST Members

- Albania
- Armenia
- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Georgia
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- The Republic of Moldova
- Montenegro
- The Netherlands
- The Republic of North Macedonia
- Norway
- Poland
- Portugal
- Romania
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom

1 Cooperating Member
- Israel

1 Partner Member
- South Africa



cost EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

Details II

Last funding round 2023:

- 60 Projects funded
- 50% of all Actions cover at least two fields of science and technology, while 17% cover at least three fields.
- Natural sciences lead the way as the most represented field of science (47%), followed by Social Sciences (37%), Engineering and Technology (27%), Medical and Health Sciences (23%), Humanities (23%) and Agricultural Science (12%).
- The **success rate** for applications in this Open Call (OC-2023-1) was 11.5%.

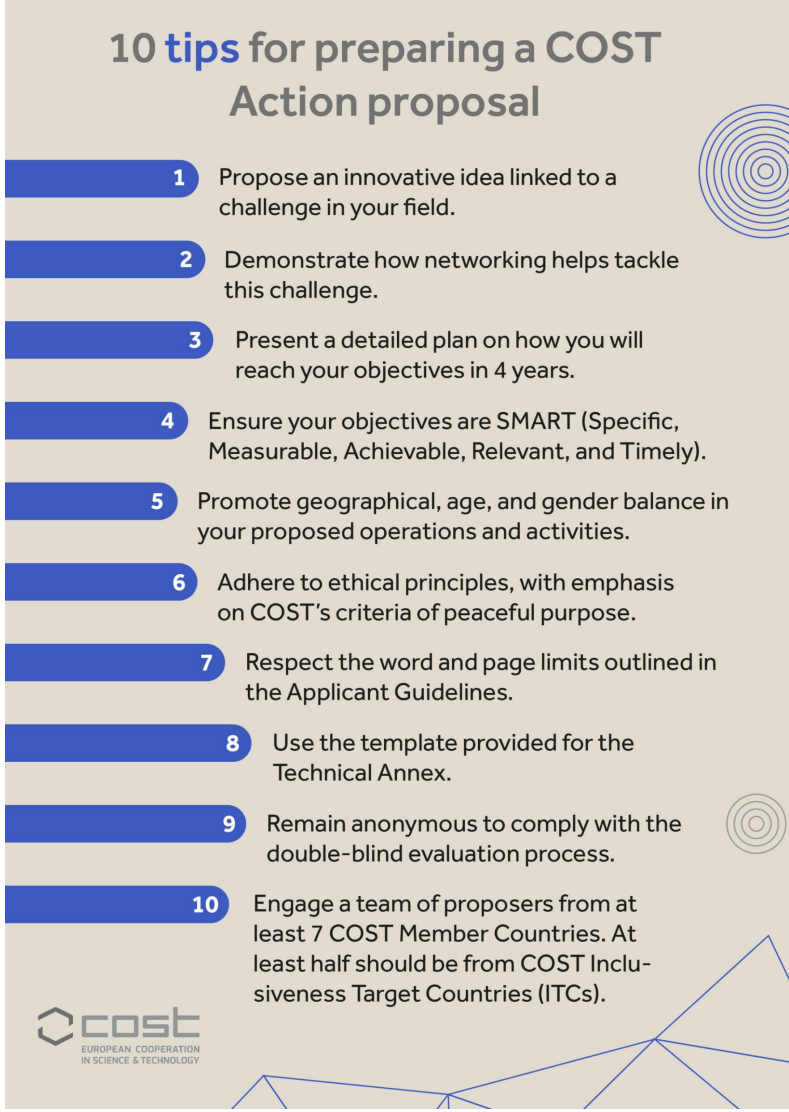
18% of main proposers are Young Researchers and innovators

37% of main proposers are women

63% of the proposals feature participants from industry/ SMEs

32% of main proposers come from an Inclusiveness Target Country (ITC)

55% of the future networks have attracted participants from all over the world



Thank you for your attention -
Questions & comments welcome!