

# Backing visionary entrepreneurs

Support for deep tech innovators

EIC Info Day – 1 October 2024, London

*Keith Sequeira, Head of EIC Unit, European Commission, DG Research and Innovation*

European  
Innovation  
Council



# Some words from Mario Draghi

*“First – and most importantly – Europe must profoundly refocus its collective efforts on closing the innovation gap with the US and China, especially in advanced technologies.”*

*“Public sector support for R&I is inefficient due to a lack of focus on disruptive innovation and fragmented financing, limiting the EU’s potential to reach scale in high-risk breakthrough technologies.”*

*“Universities and other research institutions are central actors in early-stage innovation, generating breakthrough research and producing new skills profiles for the workforce.”*

# What's holding back EUROPEAN INNOVATION?



## PERFORMANCE

- Strong research performance *not translated into innovation*
- *Lack of breakthrough / disruptive innovations* that create new markets



## FUNDING & INVESTMENT

- Financing gaps
- “valleys of death”
  - In Transition from lab to enterprise
  - Scaling up for high-risk innovative start-ups



## ECOSYSTEM

- Many national & local ecosystems, but fragmented at European level
- Need to include all regions and all talent (especially female)



# What makes *EIC UNIQUE*?

## 01. A European DARPA

- **Focus on disruptive** high risk breakthrough technologies
- **Innovator friendly:** flexibility to apply at any time with a short pitch (video pitch, slide deck, 5 page form)
- **EIC “Program Managers”** to develop visions, proactively manage projects, steer portfolios (based on experience of US DARPA, ARPA-E, BARDA, etc.)

## 02. EU Unicorn Factory

- **Focus on high risk,** disruptive startups & SMEs with scale up potential
- **EIC Fund set to become largest early stage** VC investor in Europe, crowding in other investors.
- **Flexible follow up funding** (“Transition”) to create business opportunities out of research results.



## 03. An upgraded Innovation Community

- **EIC Community** a box full of exciting business acceleration services and an extensive innovation ecosystem is waiting for EIC beneficiary
- **EIC Forum** bringing together innovation ecosystem actors from across Europe
- **Horizon Europe “innovation ecosystems” program** to support networking and joint initiatives between ecosystem actors
- **Partnerships** with European Institute of Innovation & Technology (EIT), European Research Council (ERC) and others.

## DIVERSE PERSPECTIVES OF INNOVATORS

- Entrepreneurs, investors, researchers, innovation ecosystem, innovation experts
- Diversity of geography (17 nationalities), technologies/ sectors (Green, Health, Digital), Gender



## EIC PRIZES

- Women innovators
- Capital of innovation
- Innovation procurement
- Social innovation



## SEAL OF EXCELLENCE

Fast track to other funding



## EIC ACCELERATOR SERVICES

- Mentors, coaches
- Global partners
- Innovation ecosystems
- EIC Community Platform



## EIC ACCELERATOR

- For single companies
- Grants up to **€2.5 million**
- Equity up to **€15 million** or above
- To enter the market & scale-up (TRL 6-9)



## EIC TRANSITION

- For consortia & single companies
- Grants up to **€2.5 million**
- To develop business cases (TRL 4-6)



## EIC PATHFINDER

- For consortia
- Grants up to **€4 million**
- To research technology breakthroughs (TRL 1-4)



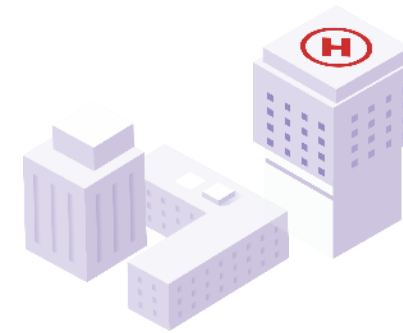
# EIC

## WHO CAN APPLY & WHAT FOR?

### PATHFINDER

Consortia of at least 3 different independent legal entities established in at least 3 different eligible countries.

Additionally, single applicants or small consortia (2 partners) for EIC Pathfinder Challenges only.



Grants of up to €3 million (open) or €4 million (challenges, or more if duly justified)

*To achieve the proof of principle and validate the scientific basis of breakthrough technology (Technology Readiness Levels 1-4)*

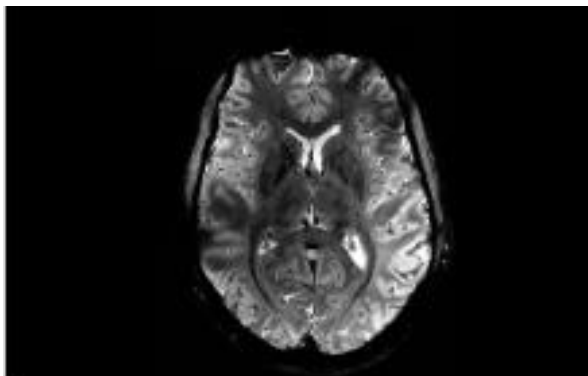
Access to Business Acceleration Services,  
Booster grants

# The EC Pathfinder

- Funds research to develop the scientific basis to underpin breakthrough technologies
- Supports the earliest stages of scientific, technological or deep-tech R&D
- Aims to build on new, cutting-edge directions in science and technology to disrupt a field and a market or create new opportunities
- Realises innovative technological solutions to identify, develop and scale upbreakthrough technologies and disruptive innovations in Europe

**Aroma project** with partners from FR, CH, DE, NL and UK (University of Glasgow)

- Accurate, Reliable and Optimised functional MAgnetic resonance imaging at unprecedented field strength (11.7 teslas) for unique exploration of the human brain.
- The ultra-detailed anatomical information will support diagnostic and health care for neurodegenerative diseases such as Alzheimer's and Parkinson's.



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## Pathfinder project CATCHER

The Observer Science

**'It was an accident': the scientists who have turned humid air into renewable power**

Tesla speculated electricity from thin air was possible - now the question is whether it will be possible to harness it on the scale needed to power our homes



Lightning over the Golden Gate Bridge, San Francisco, September 2017. Photograph: Josh Edelson/AFP/Getty Images

**Ned Carter Miles**

Sun 2 Jul 2023 11:00 BST

# EIC Portfolio Management

- Selection of portfolio of projects with commonalities (Pathfinder Challenges)
- Development of common roadmap with cross cutting activities (data, results, innovation opportunities, regulatory barriers, etc)
- Steered by EIC Programme Manager





**Iordanis Arzimanoglou**

*Biotechnology & Health*

**Enric Claverol-Tinturé**

*MedTech & Medical Devices*

**Francesco Matteucci**

*Materials for Energy & Environment*

**Antonio Marco Pantaleo**

*Energy Systems*

**Stella Tkatchova**

*Space systems & technologies*

**Samira Nik**

*Quantum tech & electronics*

**Franc Mouwen**

*Architecture engineering construction technologies*

**Ivan Stefanic**

*Food chain technologies, novel & sustainable food*

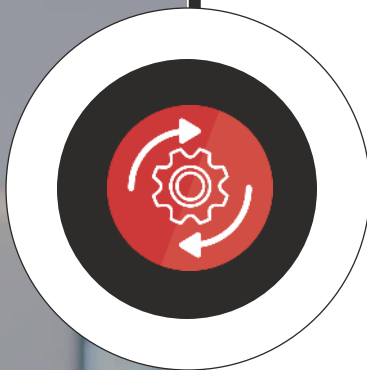
**Isabel Obieta**

*Responsible electronics*

**Carina Faber**

*Renewable energy conversion & alternative resource exploitation*

**EIC  
PROGRAMME  
MANAGERS**



# TRANSITION

Grants of up to €2.5 million to validate and demonstrate technology in application-relevant environment (Technology Readiness Levels 4 to 5/6) and develop market readiness.

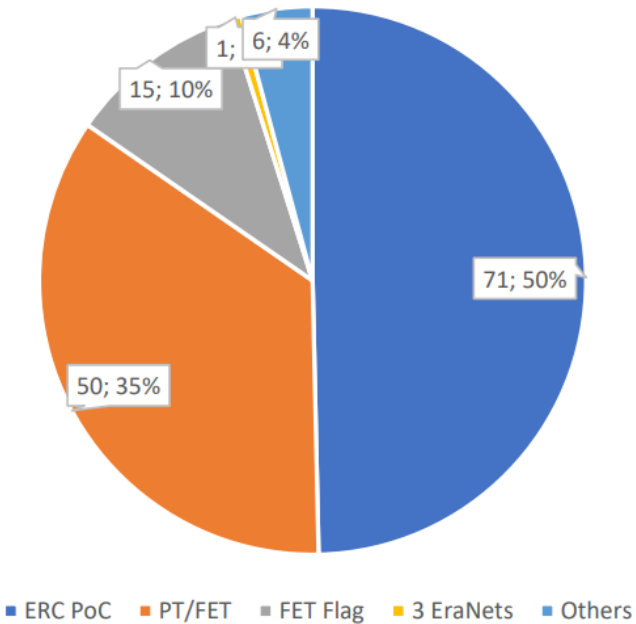
Access to Business Acceleration Services, booster grants, Fast Track to EIC Accelerator

Single applicants (SMEs, spin-offs, start-ups, research organisations, universities) or small consortia (less than 5 partners, trans-national if more than 2)

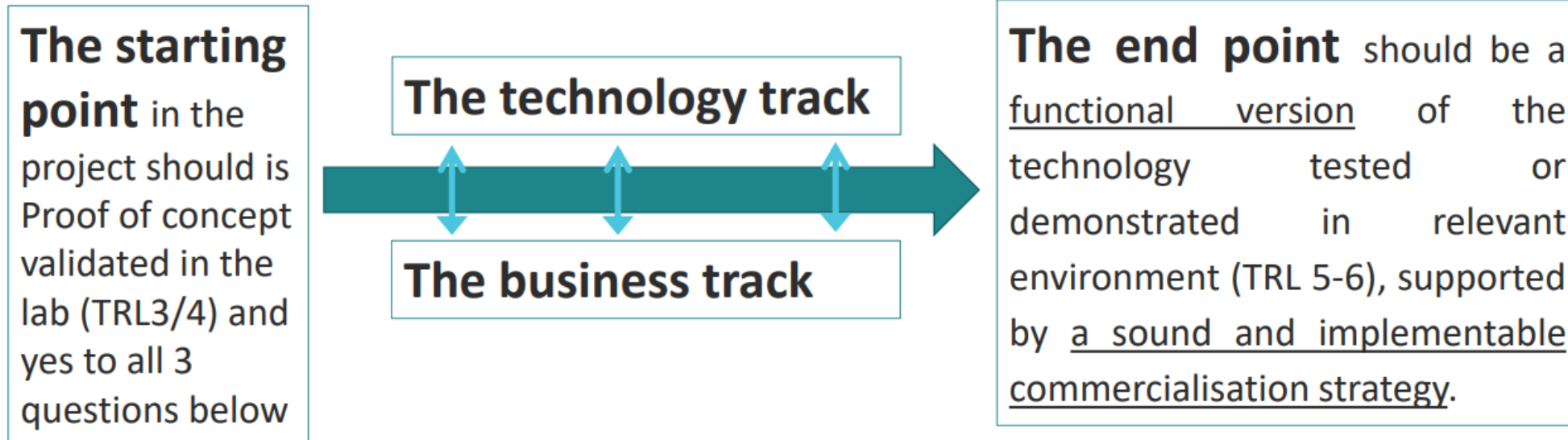
Proposals must **build on eligible EU-funded project results:**

- EIC Pathfinder (or predecessor Horizon 2020 Future & Emerging Technology)
- ERC Proof of Concept
- Horizon Europe clusters (pillar 2) or Horizon 2020 predecessors (societal challenges, industrial technologies)

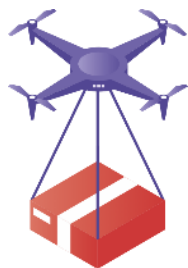
Overall 2021-2023



# EIC Transition

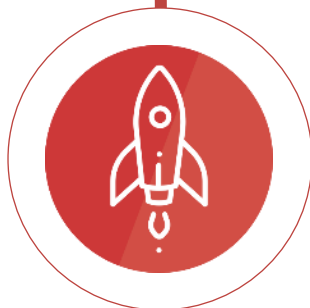


- Do you have a novel technology, with proof of concept
- Have you conducted early explorations of potential market and competition
- Do you have a motivated and diverse team to take forward to the next steps



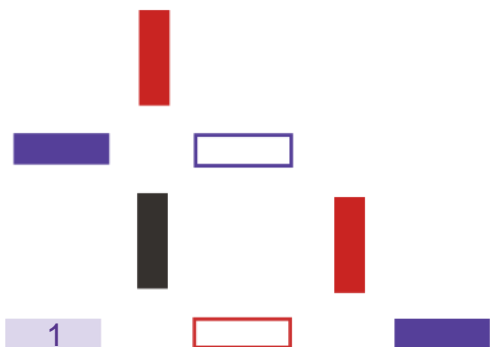
**Grants for up to €2.5 million for developing your innovation (TRL 6 to 8)**

Also Investments of €0.5 up to €15 million in the form of direct equity or convertible loans for scaling up your innovation and attracting co-investors



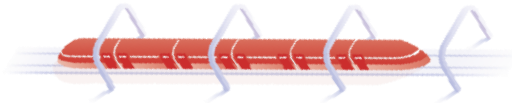
## EIC ACCELERATOR

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 499 employees)



# EIC BUSINESS ACCELERATOR PROCESS

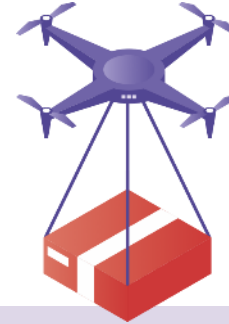
## Step 1



### IDEA PRESENTATION

- Applicants have a disruptive / deep tech idea with a potential to scale up. Submissions of short proposals are possible at any time. Evaluation by remote evaluators within 4 weeks.

## Step 2



### SUBMISSION

- Successful step 1 applicants submit their full proposal to regular cut-off deadlines, to be assessed by remote evaluators.
- To help you draft your full proposal, you will be entitled to receive 3 days of remote coaching from the EIC Business Acceleration Services.

## Step 3



### PITCH

- Successful Step 2 applicants will pitch their innovation in front of EIC Jury Members. If selected, applicants will be awarded funding.
- If not selected, applicants will be awarded a Seal of Excellence to help you secure funding from other sources as well as get support from EIC Business Acceleration Services.

# EIC CALLS OVERVIEW 2024

Call deadlines and Challenge topics for 2025 to be published soon



EIC PATHFINDER



EIC TRANSITION



EIC ACCELERATOR

## OPEN

### DEADLINES

- 7 March 2024
- Spring 2025

- 18 September 2024
- Autumn 2025

- Short Applications: Continuous
- Full Applications: 13 March 2024; 3 October 2024; Spring + autumn 2025

### INDICATIVE BUDGET

- **€ 136 MILLION (2024)**

- **€ 94 MILLION (2024)**

- **€ 375 MILLION (2024)**

## CHALLENGES

### DEADLINES/CUT-OFFS

- 16 October 2024
- Autumn 2025

- Short Applications: Continuous
- Full Applications: 13 March 2024; 3 October 2024; Spring + autumn 2025

### INDICATIVE BUDGET

- **€ 120 MILLION**

- **€ 300 MILLION (2025)**

### CHALLENGES (2024)

- 'Solar-to-X' Devices
- Towards cement and concrete as a carbon sink
- Nature inspired alternatives for food packaging and films
- Nanoelectronics for energy-efficient smart edge devices
- Strengthening the sustainability and resilience of EU space infrastructure

- Human centric generative AI
- Virtual worlds and augmented interaction
- Enabling the smart edge & quantum tech components
- Food from precision fermentation and algae
- Monoclonal antibody-based therapeutics for emerging viruses
- Renewable energy sources (RES) and their whole value chain

# EIC IMPACTS (from Impact Report 2023)

## CROWDING IN INVESTMENT

- Over **€1bn** of investment mobilised for deep tech investment under Horizon Europe
- **280** unique co-investors
- Leverage effect of **€3.5** of co-investment for every € invested via the EIC Fund
- Wider portfolio attracting over **€12bn** of follow-on investment
- **>150** companies achieving Centaur valuation or above

## SUPPORTING CRITICAL TECHNOLOGIES

- **> €500m** for projects and companies developing or integrating developments in **Artificial Intelligence**
- **~ €350m** in support of **Biotechnology and Biomanufacturing** in areas ranging from Industrial Biotechnology to Healthcare Biotech.
- **~ €500m** in support of **Chips Act** through funding for Quantum Technologies and Semiconductors.
- **>150** projects with a clear focus on the development and use of **Advanced Materials**

## SUPPORTING STARTUPS & SMEs

- Companies in receipt of support see employment growth of **35%** and **65%** revenue growth in the 2 years following EIC support
- **> 500** companies supported under the Accelerator since 2021
- **19%** female CEOs amongst Accelerator beneficiaries
- **>100** companies have received investment and a total of **> 200** have received investment decisions following due diligence

## PIPELINE OF TECHNOLOGY BREAKTHROUGHS

- **> 300** early-stage research projects with Challenge based portfolios in areas such as energy storage, cell & gene therapies
- **~1700** unique innovations emerging from wider portfolio
- **140** projects commercialising research results with **50%** originating from the ERC



# Dr Chris Stabile-Barnett



The UK's innovation agency

# Background

## Experiences

Academia and industry R&D and Innovation activities.

European Union Framework Programmes FP6, FP7, H2020, Horizon Europe, EIC programmes, Eureka Eurostars.

*Evaluation, Technical Reviews, Expert Panel Reviews, Innovation Radar*

European member state Innovation-related funding activities

Innovate UK evaluations, project monitoring provision

# Evaluating EIC proposals

My evaluation does not seek to kill your proposal from the start.

I commence my evaluation on the basis that the proposal has the potential to be funded.

Identified weakness within the proposal will impact my evaluation and the case that I can make for funding support.



# What am I looking for as an evaluator?

## The storyboard

1. Innovation that is clearly game-changing/disruptive/creating new markets
2. Innovation that answers the need and demand from industry or society
3. Innovation where the time is right for development and impact
4. High risk and in need of significant investment to succeed
5. A significant business opportunity and potential to scale-up
6. Obvious business/societal impacts and pipeline opportunities
7. A realistic business opportunity and business growth potential
8. A logical and coherent plan to deliver the product to the next phase of development

# What am I looking for as an evaluator?

Innovation that is clearly game-changing/disruptive

1. What is the problem that needs to be addressed and why?
2. How does your innovation significantly advance the current state of the art?
3. **I need to see the evidence to substantiate your claims**
4. Why is there a demand and need for your innovation
5. **I need to see the evidence for this need and demand using credible data**
6. Who are the competitors or competitor technologies – **Be realistic**

# What am I looking for as an evaluator?

## Why is the time right for your innovation

1. What is the current TRL of your innovation ?
2. What will the TRL be at the end of your project ?
3. Is your TRL correct for the programme including the work plan activities ?
4. Does your innovation draw on wider technology developments to secure the impacts ?
5. **I need confirm the TRL is appropriate for the proposed development**

# What am I looking for as an evaluator?

## Why is the time right for your innovation

1. What is the business opportunity ?
2. What are the market dynamics ? – **I need the evidence**
3. What part of this market is relevant ? – **Be realistic**
4. How will you protect your innovation and secure the market penetration ?
5. Will this be a single innovation or provide pipeline opportunities ?
6. How will you translate opportunity into customers, sales and revenue ?
7. Do you have credible plans for business growth and scale-up ?

# What am I looking for as an evaluator?

## Why is the time right for your innovation

1. How are you going to achieve your objectives ?
2. Logical and coherent work plan – **Can you achieve the outputs within the timeframe**
3. Deliverables, milestones and project management – **Are these realistic**
4. Are the potential risks reasonable and any mitigations appropriate ?
5. Has the proposed team and any third parties, the expertise and experience needed ?
6. **I need to be confident that the plan is realistic, credible and achievable.**

# Thank you



The UK's innovation agency

