



Innovate  
UK

# EIC Pathfinder Challenge

## Biotechnology for Healthy Ageing

Claire Griffin  
UK's NCP for EIC and EIE

4 December 2025



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# EIC Pathfinder Challenges 2026

## PATHFINDER CHALLENGES



Advanced Materials for Miniaturised Energy  
Harvesting Systems

€ 32 million



Biotechnology for Healthy Aging

€ 32 million



DeepRAP: Deep Reasoning, Abstraction  
& Planning towards trustworthy Cognitive AI  
Systems

€ 32 million

**Indicative call budget € 96 million**



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## Pillar 1 EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



## Pillar 2 GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- 1 Health
- 2 Culture, Creativity and Inclusive Society
- 3 Civil Security for Society
- 4 Digital, Industry and Space
- 5 Climate, Energy and Mobility
- 6 Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



## Pillar 3 INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute  
of Innovation and Technology

## WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

# Pillar 3 - Innovative Europe

## Supporting and Connecting Innovators Across Europe

- Europe has solid research and industrial base
- Yet it 'could do better' at strengthening the use of scientific excellence and industrial prowess to accelerate innovation and turn innovative SMEs into Technology Giants.
- Focus on supporting the development of disruptive and market-creating innovations and on enhancing European Innovation Ecosystems

Pillar III

# INNOVATIVE EUROPE:

European  
Innovation  
Council



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**

# Six Strategic Goals for the EIC

- To be investor of choice for those with visionary ideas
- To crowd in €30-50 B investment into European **Deep-tech**
- To pull through high-risk technologies in critical areas for society and open strategic autonomy
- To increase the number of **European Unicorns** and Scale-Ups
- To **catalyse innovation impacts** from European public **research** and innovation
- To achieve operational excellence

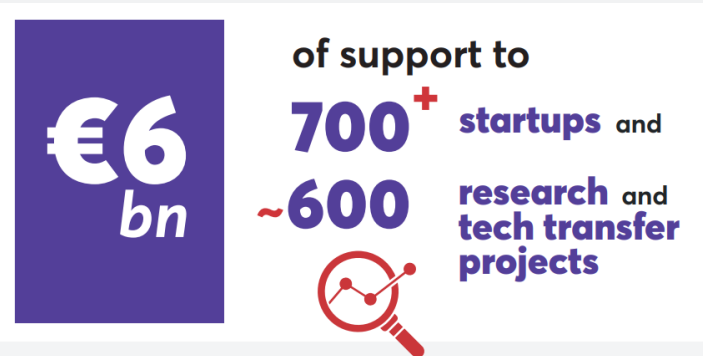
# What is deep-tech?

- Technology that is based on cutting edge scientific advances and discoveries
- Is characterised by the need to stay at the technological forefront by constant interaction with new ideas and results from the lab
- NOT – High-tech which refers to R&D intensity
- Unicorn – private company valued at over 1B€



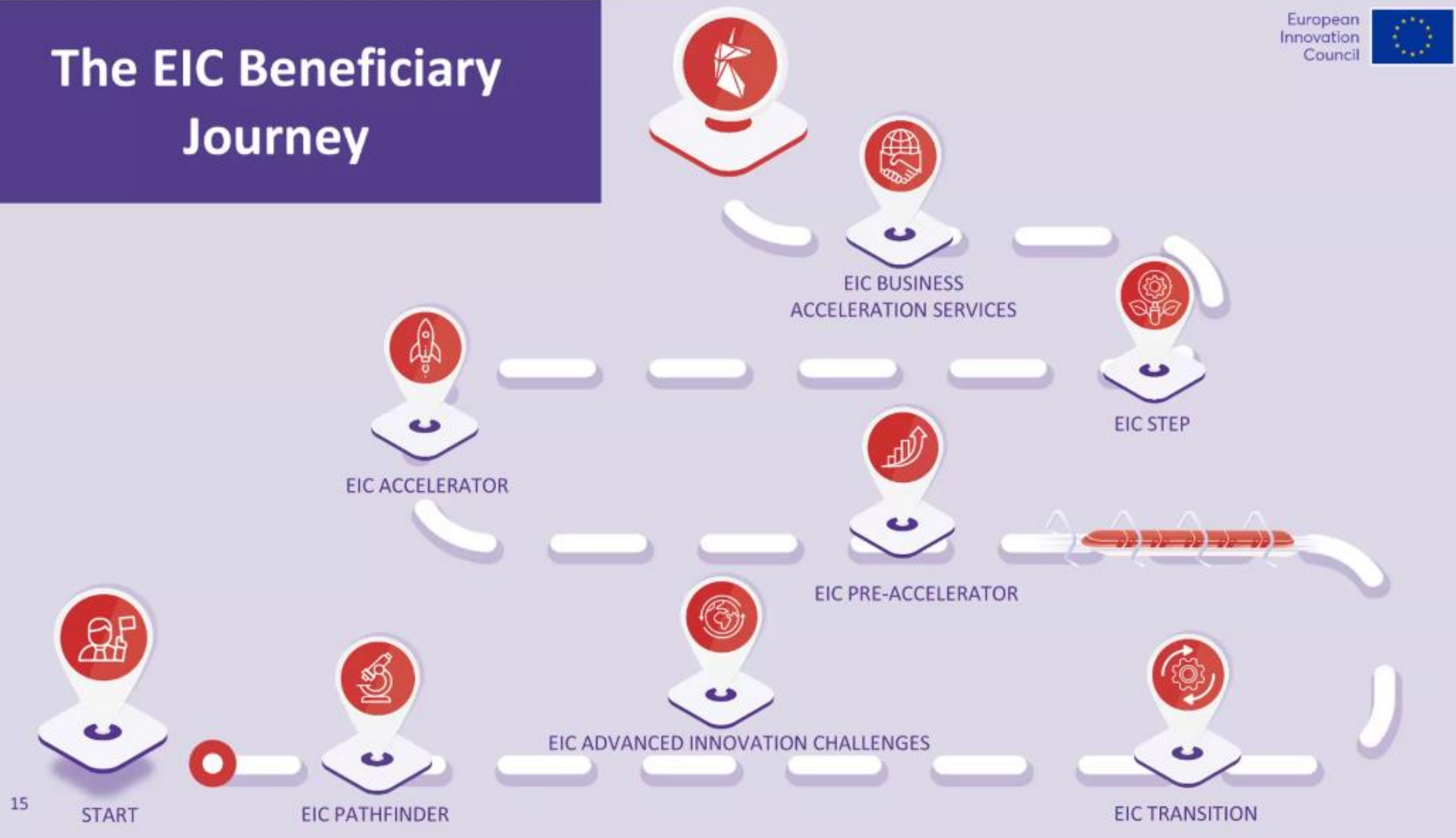
# EIC Impact Report 2025

- [EIC Impact Report 2025](#)
- Generating new technologies from EU's research base
  - Translating research into market-ready innovations
- EIC Pathfinder & EIC Transition projects have spawned over 1300 innovations and had led to the creation of more than 100 spinout companies
- Includes ~100 projects that are commercialising results from ERC





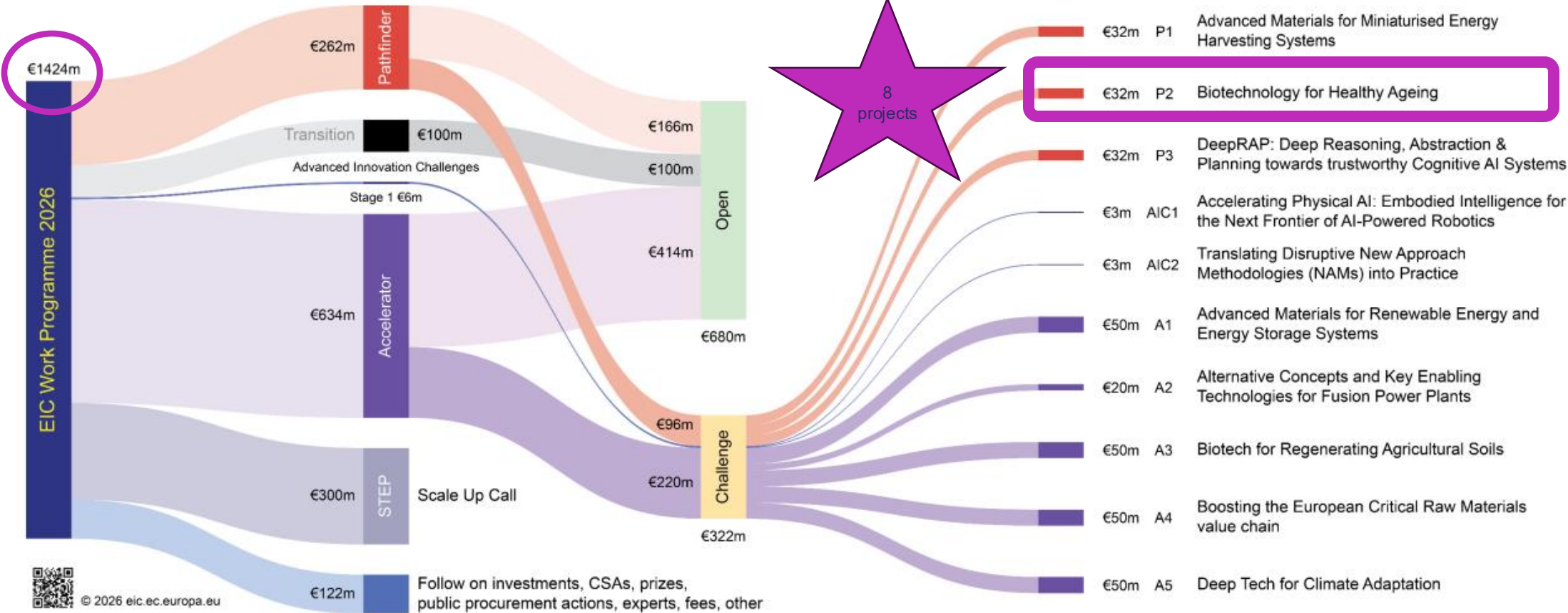
# The EIC Beneficiary Journey



# What is the EIC 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 & technology** to disrupt a field and a market or create new opportunities
- Realises innovative technological solutions to **identify, develop and scale-up breakthrough** technologies and disruptive innovations in Europe

# EIC Work Programme Budget 2026



# Backing visionary entrepreneurs

European  
Innovation  
Council





# EIC Pathfinder Open vs Challenge

## EIC Pathfinder Open

to support **projects in any field** of science, technology or application without predefined thematic priorities ('bottom-up')

## EIC Pathfinder Challenges

to support **coherent portfolios** of projects within predefined thematic areas with the aim to achieve specific objectives for each Challenge

# EIC Pathfinder Challenges 2026

## PATHFINDER CHALLENGES



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# EIC Pathfinder Challenges - Intro

- Build on new, cutting-edge directions in science and technology
- Disrupt a market or create a new opportunities by realising innovative technological solutions grounded in high-risk/high-gain research and development
- Establish a portfolio of projects for each Challenge that explore different perspectives, competing approaches or complementary aspects
- Proactively steered by EIC Programme Managers



# Why Apply

- Realise an ambitious vision for **radically new technology**, with potential to create new markets and/or to address global challenges
- **Early-stage development of future technologies** – Low TRLs
- Based on high-risk/ high-gain science-towards-technology breakthrough research (including deep-tech)
- Research must provide the **foundations of the technology** you are envisioning

# EIC Programme Manager

- Follow on LinkedIn and listen to their ‘Tech Talks’
- Establishes a common roadmap
- Proactively steers the portfolio towards the goal of each challenge
- Projects are expected to:
  - Interact and exchange
  - Remain flexible & reactive
  - Progress together toward goals



# Call statistics EIC Pathfinder 2021-2025

Open	eligible proposals	funded proposals	EU contribution	success rate
2021	868	60	183.1 M€	6,9%
2022	858	66	206.5 M€	7,7%
2023	783	62	186.9 M€	7,9%
2024	1110	45	137.3 M €	4,1%
2025	2069	44	140.7 M €	2,1%
<b>Total</b>	<b>5688</b>	<b>277</b>	<b>854,5 M €</b>	<b>4,9%</b>
Challenges	eligible proposals	funded proposals	EU contribution	success rate
2021	403	42	146.9 M€	10,4%
2022	436	49	182.7 M€	11,2%
2023	365	46	168.2M€	12,3%
2024	401	32	119,6 M€	8,0%
2025	in evaluation	~30 @ 4M but 667 submitted	indicative 120 M€	~4.5%
<b>Total</b>	<b>1605</b>	<b>169</b>	<b>617.4M€</b>	<b>10,5%</b>

# EIC Pathfinder Challenges 2026



# EIC Pathfinder - Expected outcomes

- As defined in the respective challenge
- Top-level scientific publications
- Adequate formal protection of the generated IP, as well as an assessment of relevant aspects related to regulations, certification and standardisation
- Projects are encouraged to involve and empower key actors that have potential to become future leaders
- Empower female researchers and achieve gender balance among work package leaders

# Who can apply?

- **Single** legal entity
  - From MS or AC
  - Unless otherwise specified in specific Challenge
- Consortia of **two entities**
  - Independent legal entities from two different MS or AC
- **Consortia of three or more entities**
  - At least three legal entities, independent from each other and each established in a different countries
    - At least one legal entity established in a MS
    - At least two other independent legal entities, each established in different MR or AC
- What is a **Legal entity** - universities, research organisations, SMEs, startups, natural persons. In single beneficiary projects, mid-caps and larger companies will not be permitted.

# Need to know

- Deadline – 28 October 2026
- Application form will be available before call opens
  - 28 July 2026
  - 30 page proposal Part B
  - Use the correct version!
- Up to 4M€ per proposal
  - Does not preclude you to request larger amounts if duly justified
  - Or if stated in the specific Challenge
- Funding rate 100% of eligible costs
- Eligible costs will take form of Lump Sum
  - [EU Funding & Tenders Portal](#)



# EIC Pathfinder 2026 Challenges Guide



Will provide more info about:

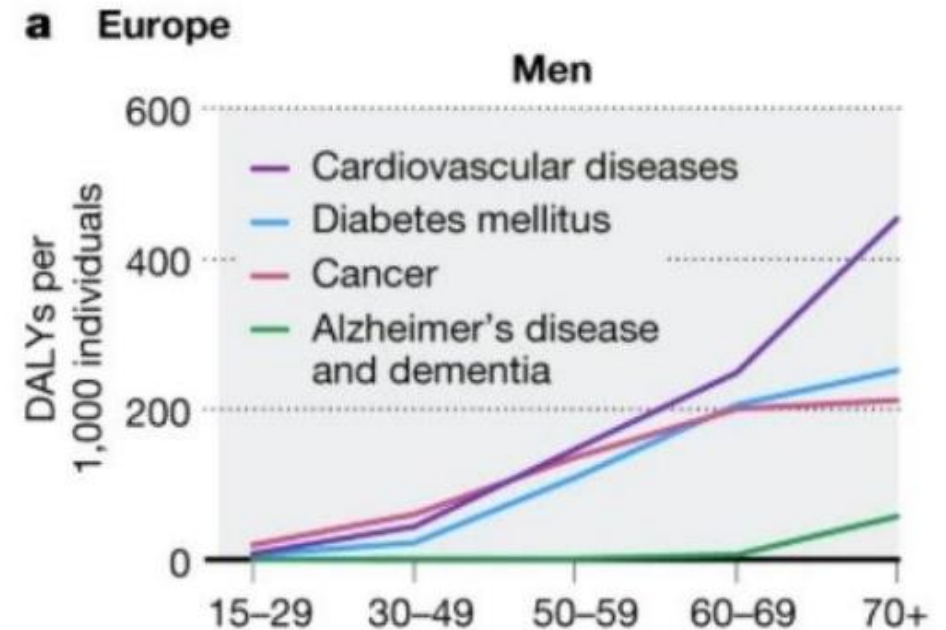
- Objectives of the Challenge
- Technical information underpinning the objectives
- Portfolio Considerations used for the final selection of proposals to be funded.
- Strategic plan for challenge & Common roadmap
- Read in conjunction with EIC 2026 Work Programme!
- [EIC Pathfinder Challenges 2026 - European Innovation Council](#)

# EIC Programme Manager

- Orsolya Symmons
- Follow on LinkedIn and listen to their 'Tech Talks'
- Read the relevant Challenge Guides!!!!
- Establishes a common roadmap
- Proactively steers the portfolio towards the goal of each challenge
- Projects are expected to:
  - Interact and exchange
  - Remain flexible & reactive
  - Progress together toward goals

# Background to BioTech for Healthy Ageing

- By 2050 share of age 85+ in EU expected to more than double
- Extended life expectancy is not matched with longer healthy life
  - EU lifespan: 81.1 yrs
  - EU healthspan: 63 yrs
- Many diseases are age-related
- Multimorbidities increase with age



# Tangible Biopharmaceutical solutions for healthy ageing

- Over past decades, research has identified hallmarks and cellular mechanisms of ageing
- Translating these insights into clinical interventions has had a low success rate due to difficulty of:
  - Translating approaches from model systems
  - Identifying when to intervene
  - Rigorous validation; and
  - End-to-end considerations of implementation (i.e. the delivery of an intervention)

# EIC Pathfinder Biotech for Healthy Ageing Specific Objectives

One of the three following areas:

1. An innovative preventative or therapeutic biotechnology-based or pharmaceutical intervention
  2. A bio-marker based tool
  3. A New Approach Methodology (NAM)
- ALL proposals should **consider biological sex and gender**\*-specific determinants in their development, with reproductive ageing also in scope.

[\\*Gender in EU research and innovation - European Research Executive Agency](#)

# Biotech for Healthy Ageing - Objective 1

**Innovative preventative or therapeutic biotechnology-based or pharmaceutical intervention that prevents, delays or reverts the onset of a specific age-related disease. Such projects must address all of the following objectives:**

- develop an intervention that targets a fundamental molecular or cellular process of ageing, such as the hallmarks of ageing
- assess the generalisability of the intervention (showing that it is applicable more broadly to ageing-related traits beyond the primary indication targeted) by assessing the impact of the intervention on another distinct trait related to ageing
- demonstrate proof of concept by carrying out an interventional study in a vertebrate animal model of ageing that is physiologically aged. Projects are also encouraged to include **small-scale interventional clinical studies** but must at a minimum anticipate how the intervention could be feasibly tested in a clinical setting, and
- develop a plan for exploitation, which considers ethical and societal perception, economic viability and regulatory approval. **At least two of these areas**, considered most relevant for the intended application, must be assessed in greater depth, suitably informing the project's technology development and contributing to the portfolio activities.

# Biotech for Healthy Ageing - Objective 2

**A biomarker based tool** to enable the responsible deployment of ageing-related interventions, taking into consideration the following:

- Based on previously identified potential biomarker candidates or ageing clocks. All types of biomarkers are welcome, for example digital, molecular or physiological biomarkers (such as frailty measurements), combinations of biomarkers & multimodal biomarkers); as well as biomarkers for different applications (e.g. predictive, diagnostics). **Biomarker discovery is explicitly excluded**
- Integrate different measurements of multiple molecular, anatomic, physiologic, biomechanical or biochemical traits, as appropriate, to comprehensively capture the ageing process (i.e. **it should not exclusively measure a single parameter/hallmark of ageing**)
- Biomarker signature should enable a clear linkage between clinical features & mechanisms of ageing
- Signature should be robust to inter-individual & intra-individual variability in ageing to provide actionable, personalised insights
- Assessed in an initial retrospective study to establish PoC. Applicants must therefore **convincingly demonstrate** access to suitable longevity cohorts
- Selection of biomarkers & development should prioritise **deployment feasibility &** actively incorporate feedback from **potential users**.



# Biotech for Healthy Ageing - Objective 3

- **A New Approach Methodology (NAM)** that goes beyond the current state-of-the art to enable the future development of interventions for healthy ageing. The NAM should:
  - robustly capture the aged status of the system & the systemic/integrative nature of ageing (i.e. it should **capture more than 1 molecular or cellular aspect of ageing, and more than 1 tissue type**)
  - be benchmarked against a relevant animal model of ageing, &
  - be tested in the setting of a clearly specified use case (e.g. development of an intervention; as **pre-clinical model in a regulatory setting**).

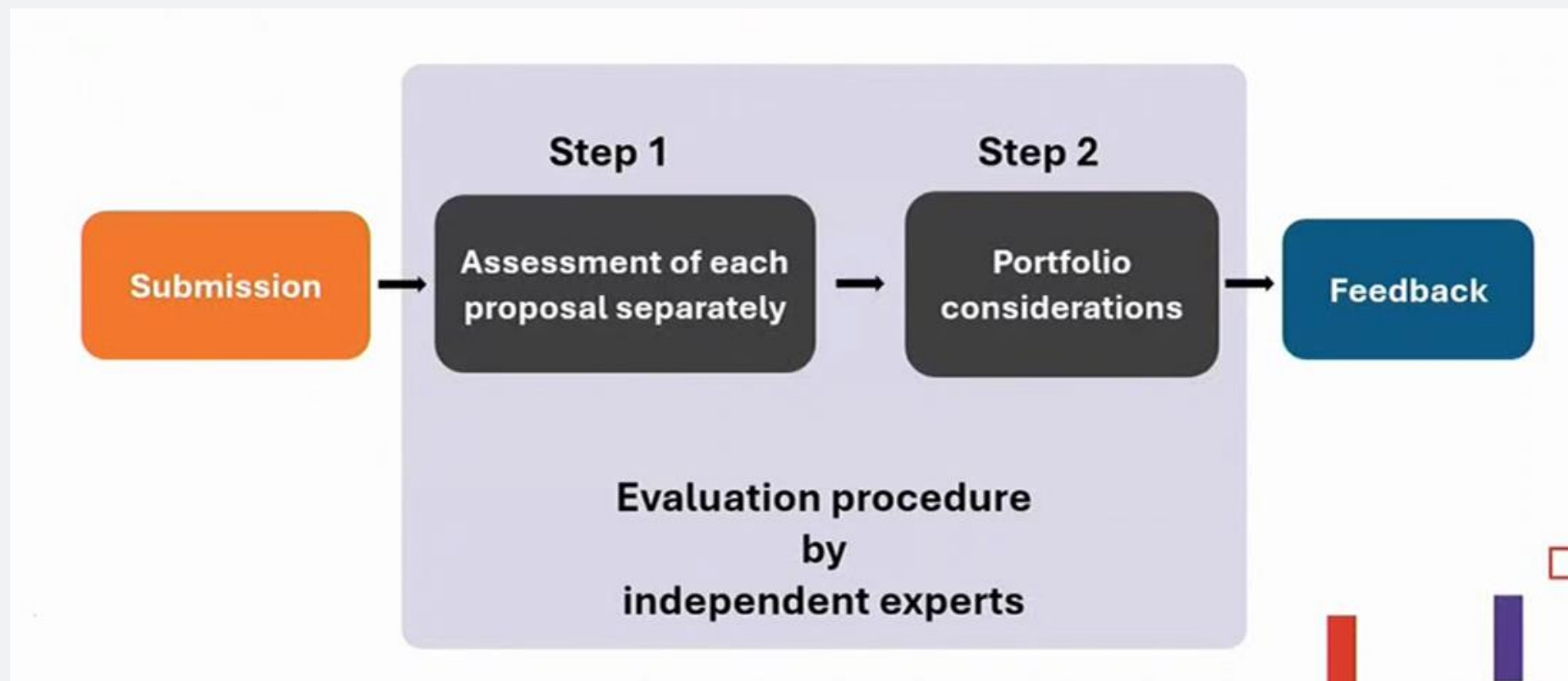
# Outside the Scope of EIC Pathfinder Biotechnology for Healthy Ageing Challenge

- Precision Nutrition
- Development of novel ageing clocks
- Wellness Applications
  
- Will **NOT** be funded

# Biotech for Healthy Ageing - Expected Outcomes

- **Ambitious** proposals will deliver the following outcomes:
  - Proof-of-concepts (**TRL3 completed**) of biotechnology-based or pharmaceutical interventions that prevents or delays the onset of, or reverts, an age-related disease in a vertebrate model system, based on the hallmarks of ageing, taking into consideration practical challenges of implementing such an intervention
  - **Tools to facilitate** development or adoption of the interventions above, such as proof-of-concept validation of biomarker signatures or suitable pre-clinical models
  - **Approaches to address the shared regulatory hurdles & societal challenges** linked to ageing-related interventions, thereby facilitating their adoption.

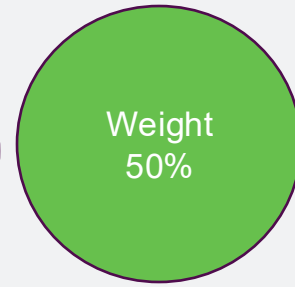
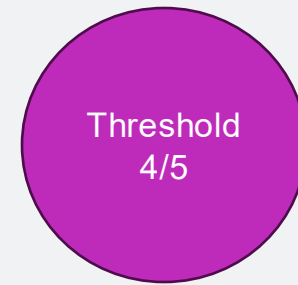
# How is proposal funding determined



# Step 1: Assessment of each proposal separately

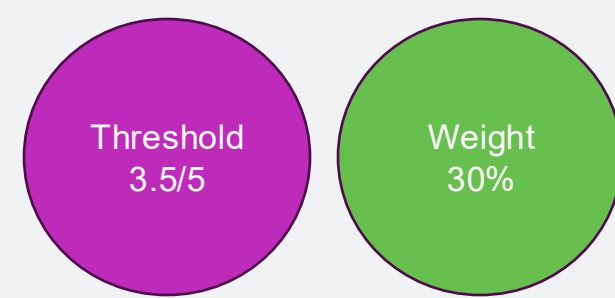
- At **least 3** EIC expert evaluators evaluate & score each proposal individually wrt award criteria
- After individual evaluation – consensus group to agree common position on comments & scores (introduced in 2024)
- Evaluation Committee will check consistency across the evaluation of each individual proposal & finalise the scores & comments for all proposals.
  - EIC expert evaluators & **EIC Programme Managers**

# Award Criterion - Excellence



- Objectives & relevance to the challenge
  - Are they **clear**
  - Contribution to overall goal and **specific objectives** of the Challenge
- Novelty
  - To what extent is **ambitious** & goes beyond the state-of-the-art?
- Plausibility of the methodology
  - Sound?
  - Underlying concepts, models, assumptions, appropriate consideration of the gender dimension in research content, & the quality of open science practices

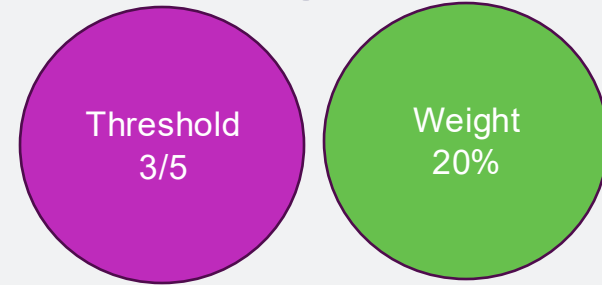
# Award Criterion - Impact



- **Potential impact**
  - Credible pathways to achieve expected outcomes & impacts of the Challenge
  - Would successful completion of the project contribute to this
- **Innovation potential**
  - How realistic is proof of principle for demonstrating impact of technology of the Challenge
  - Adequate protection of results & other exploitation measures
  - Societal, economic or environmental impact
  - Empowering key actors with potential to lead translating research into innovations
- **Communication & dissemination**
  - Suitable proposed measures to maximise expected outcomes & Impacts
  - Addressing global challenges & establishing new markets



# Award Criterion – Quality & efficiency of the implementation



- Work plan
  - **Coherent** & effective to achieve project objectives
    - work plan – work packages, deliverables, milestones, timelines etc)
    - **Risk mitigation**
- Allocation of resources
  - Appropriate & effective (person months & other cost items)
  - To work packages & consortium members
- Quality of the applicant/consortium
  - To what extent does the applicant / do **all** consortium members have the necessary **capacity** & high quality expertise for performing the project tasks

# Step 2: Portfolio Considerations

- See [Challenge Guide](#)
- All proposals that meet threshold defined in award criteria will be considered in Step 2
- Mapping of proposals in categories based on objectives & goal of the Challenge
  - Building blocks or subsystems, technical areas &/or competing technologies, platforms, applications areas, risk level, size & TRL
- Suitable portfolio of projects – portfolio considerations
  - Selected by evaluation committee
  - Coherent with the scope & specific objectives, to the development of a variety of advanced materials applied to a range of miniaturised energy harvesting modules & final integrated systems
  - Include 10 person months
- Evaluation committee may also propose minor adjustments

# Portfolio approach

## Biotech for Healthy Ageing

- Ensure a coverage of projects developing interventions, biomarkers & NAMs, considering the following for portfolio composition:
  - **Interventions:** no more than 5 projects. The portfolio should collectively address variety molecular & cellular processes related to ageing, PLUS variety of different age-related diseases
  - **Biomarkers:** no more than 3 projects. Projects will capture different application areas (diagnostic, predictive, prognostic biomarker), with preference to the inclusion of at least one diagnostic biomarker)
  - **NAMs:** No more than 2 projects. Projects will capture a diversity of approaches to assess aged status in NAMs, different tissues or cell types & different use cases.

# Mutual Learning Biotech for Healthy Ageing

- Selected consortia will benefit from **mutual learning**, & **exchange of expertise**
- Consortia encouraged to collaborate to address the following shared challenges faced by all ageing interventions:
  - **Scientific:** preclinical models; Biomarkers of healthy/unhealthy ageing
  - **Path to Market:** Defining suitable regulatory pathways
  - **Societal:** Acceptance & role of preventative / therapeutic interventions, Need for improved longevity literacy.
- Programme Manager will guide projects to develop and agree on a **strategic plan for portfolio**

# Strategic Plan for the Portfolio

- Plan will **integrate the activities** and milestones of the individual projects into a set of specific objectives and activities across and beyond the projects
- Will be updated on a yearly basis in light of emerging results or issues during the implementation.
- The objectives can be revised, for instance based on projects' unexpected achievements, new technology trends, external inputs (other projects, new calls...).
- Strategic plan will include activities on the **transition to innovation** and **commercialisation**, and to stimulate business opportunities.

# Expected Impacts

## Biotech for Healthy Ageing

- Accelerate the development & uptake of clinically validated interventions that target the root cause of multiple age-related morbidities.
- Deliver the following impacts:
  - Biotechnology-based interventions for healthy ageing
  - Accelerate the implementation of personalised care in ageing based on molecular phenotyping
  - Recommendations for regulatory pathways addressing ageing as a target to inform developers, regulators, & other decision makers;
  - Improve citizen literacy on longevity.
- Recommended that each project has a **duration of 5 years**

# Categories

## Biotech for Healthy Ageing

- All proposals will be mapped to one of the following categories & subcategories:
  - Interventions
  - Bio-marker based tool
  - New Approach Methodology
- You are expected to make a self-assessment of how your proposal maps to the categories used for portfolio building
  - Draft Table in Challenge Guide



# Interventions & sub-categories

- Interventions that prevent, delay or revert the onset of a specific age-related disease:
  1. Purpose of intervention, i.e. for prevention, delay or reversion of age-related disease
  2. Targeted molecular or cellular process of ageing, e.g. cellular senescence, loss of proteostasis, deregulated nutrient sensing, inflammaging....
  3. Targeted age-related disease area, e.g. neurodegenerative diseases, musculoskeletal diseases, cardiovascular diseases, ....
  4. Type of validation: what vertebrate animal model of ageing is used? Is a clinical study foreseen?, ...

# Biomarker-based tool & sub-categories

1. Application area, e.g. predictive, diagnostic, ....
2. Type of biomarker(s), e.g. digital, molecular, physiological, combination of biomarkers, multimodal biomarker, ...
3. Type of measurement(s), e.g. molecular, anatomic, physiologic, biomechanical, biochemical
4. Link to what molecular or cellular process of ageing captured, e.g. cellular senescence, loss of proteostasis, deregulated nutrient sensing, inflammaging....
5. For what clinical feature or intervention
6. Cohort used for validation

# New Approach Methodology & subcategories

1. Way to capture the aged status of the system, e.g. by maintaining features of source tissue age, by conditioning reprogrammed cells to robustly represent different ages, in silico modelling of different aged status...
2. Type of tissue(s) and/or organs captured by NAM, e.g. neuronal, cardiac, skin, muscle...
3. Way to benchmark, i.e. comparison with what animal model and measurement of what physiological traits
4. Use case foreseen to test the NAM, e.g. in drug discovery, as pre-clinical model in a regulatory setting

# Portfolio Considerations - Biotech for Healthy Ageing

Balanced and impactful portfolio will adhere to following principles:

- **Diverse** representation of different types of intervention
- **Diverse** representation of different types of biomarkers
- **Diversity** of New approach methodologies
- From the highest ranked proposal, a portfolio of proposals will be selected based on the portfolio considerations, **ensuring coverage of the categories and diversity and commonality among the proposals.**
- This implies that if the evaluation committee considers that a highly ranked proposal does **not have a commonality with other proposals, it might not be selected for the portfolio.**
- Proposals which the evaluation committee considers to be **very similar to a proposal already included in the portfolio might not be selected.**
- Consequently, this means that the **projects selected for funding after the second step are expected to differ from the ranking list established from the first step**

# Diverse representation of different types of intervention

- Preventing, delaying or reverting age-related traits
  - targeting different age-related diseases and molecular or cellular processes of ageing
- Ensure that the portfolio collectively captures all three types of interventions, if possible, and covers different molecular or cellular processes of ageing and a broad spectrum of age-related diseases, allowing for a diverse impact of age-related health interventions.
- **No more than 5 projects**
- The selection may be further guided by the availability of projects in the categories “Biomarkers” and “New Approach Methodologies” to ensure commonalities across the three categories.

# Diverse representation of different types of biomarkers

- To inform the application of age-related interventions
- **No more than 3 projects**
  - represent different types of biomarkers and different types of measurements
- Possible commonalities with projects in the “Interventions” category by assessing what molecular or cellular processes of ageing are captured by the biomarkers or what clinical features are addressed.
- Preferably, at least one project developing a diagnostic biomarker

# Diversity of New Approach Methodologies

- For future development of interventions
- No more than 2 projects
- Capture different approaches to assess aged status in NAMs, different tissues or cell types and different use cases.
- May also take into consideration possible commonalities with projects in the other categories,
  - E.g. 'interventions' wrt use cases, or
  - Commonalities with projects in the "Biomarkers" e.g. benchmarking.



# Governance through Steering Committee & Working groups

**Steering Committee** representing each project

- Regular meetings & exchanges
- Identify collaborations on specific technical aspects
- Exchange of information, best practices, strategies etc

Four Working groups - organise & implement activities

**WG1** – Scientific & technological synergies

**WG2** – Market Deployment

**WG3** – Ethical & societal considerations

**WG4** – Outreach & Communication

# Opportunities in Pillar 2

Holding Slide for Jo Frost  
UK National Contact Point  
– Horizon Europe (Health)



# Bid Writers & Consultants

# EIC Board Observations on the use of Consultants

- [EIC Board observations on the use of consultants for the EIC applications - European Innovation Council](#)
- Applicants are free to seek consultancy services
- BUT success is possible without them
- Highlights the main support options, such as National Contact Points (NCPs), University TTOs, insights from previous applicants, BAS & Enterprise Europe Network (EEN)
- [Code of Conduct](#) - ethical standards – verify adherence
- Read the small print

# Working with Consultants/ bid writers

- Read the small print
- Contract considerations – be cautious of exclusivity clauses, IP rights & the nature of consultancy contracts
- Assess their capabilities, compare multiple offers, consider sector specific expertise & ensure compliance with Code of Conduct.
- Be aware of success rates
- Applicants must remain engaged & responsible for applications

# Business Acceleration Services (BAS)

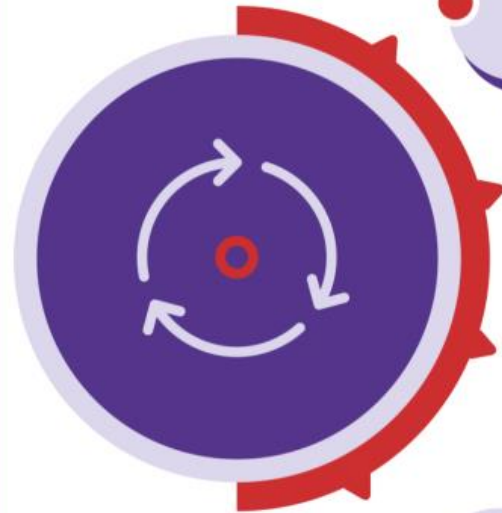
# BAS Aims for EIC

- View is - Financial Support is beginning of journey
- Mechanisms to help bring innovations to the market & grow your business
- Some are compulsory
- All are worth considering
- [BAS - European Innovation Council - European Commission](#)



# Additional opportunities for EIC Pathfinder Awardees

Projects  
or their  
beneficiaries  
funded through  
EIC Pathfinder  
& EIC Transition  
are eligible to  
apply for



**EIC Booster grants** of up to €50,000 to undertake complementary activities

**EIC Transition** to transform their research results into innovation on the market

EIC Accelerator support via the **Fast Track** scheme

a wide range of **Business Acceleration Services**, including coaching and networking

**Coaching for Transition projects becomes mandatory!!!**

# Thank you!

## Pillar 3 – Innovative Europe

Claire Griffin  
UK's NCP for EIC & EIE

4 December 2025

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UK Research  
and Innovation

# Questions?

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