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Agenzia per la Promozione della Ricerca Europea

Elementi chiave di una proposta competitiva EIC Pathfinder Challenge

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EIC Pathfinder Challenges - introduction

- Build on **new, cutting-edge directions in science and technology**;
- Disrupt a market or create 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**

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Expected project outcomes

- Expected outcomes defined in the respective Challenge
- Project results should include **top-level scientific publications** as well as an **adequate formal protection of the generated Intellectual Property as well as an assessment of relevant aspects related to regulation, certification, and standardization**;
- Projects are encouraged to involve and empower within their teams **key actors** that have the potential to **become future leaders** in their fields such as excellent early-career researchers or promising high-tech SMEs, including start-ups;
- Project particularly encouraged to **empower female researchers** and achieve **gender balance** among the work package leaders.

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Pathfinder Challenge Guides

- **Challenge Guides** will provide more information about:
  - **Objectives** of the Challenges
  - **Technical information** underpinning the objectives
  - **Portfolio considerations** used for the final selection of proposals to be funded
- Challenge Guides are published on the EIC Pathfinder Challenges page

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**

Have a look to:
Info day on Pathfinder Challenges with Programme Managers in **March 2026**

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Advanced Materials for miniaturised Energy Harvesting Sytstems

- **Nr of connected sensors and internet of things is rising and** affecting strongly energy consumption and CO2 emissions
- **Strong impact on sustainability:** if we use batteries, we need to change each day around **80 millions of batteries (10 trillions by 2027)**

We need to find solutions to reduce energy consumption and develop sensors that are energetically autonomous and sustainable

To do that we need a new generation of advanced materials to implement highly efficient miniaturized energy harvesting systems with performances higher than the existing ones

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Advanced Materials for miniaturised Energy Harvesting Systems

- **Specific Objectives (all should be addressed)**
  - The development of innovative advanced materials for energy harvesting, harnessing new physical/ chemical phenomena, leading to a radical shift in application range and performance while reducing the reliance on Critical Raw Materials (CRMs)
  - The implementation of the advanced materials in a miniaturised energy harvesting module, e.g., miniaturised solar cells, thermoelectric generators, ...
  - Integration of the miniaturised energy harvesting modules in energetically autonomous systems (e.g. wireless integrated sensors)
  - Benchmarking the harvesting modules in a representative use case in a laboratory environment (TRL 4)
- **Expected Outcomes**
  - A new generation of advanced materials for miniaturised energy harvesting modules, and
  - Energetically autonomous systems at TRL 4.

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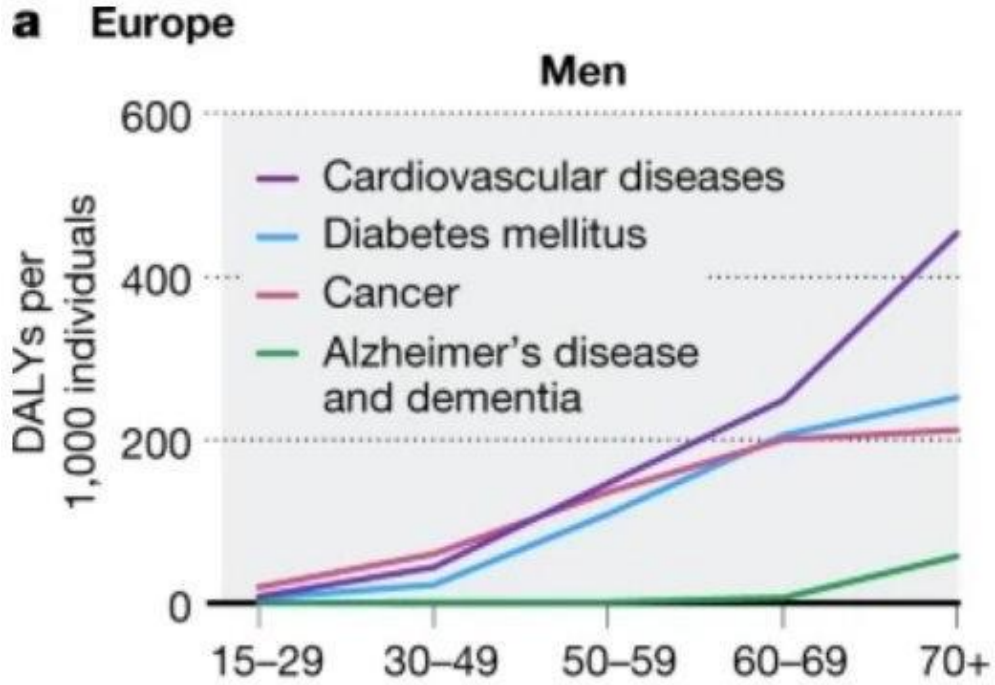
Biotechnology for healthy aging

- 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



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Biotechnology for healthy ageing

Specific Objectives

A proof of concept in one of the following 3 areas

1. **An innovative preventative or therapeutic biotechnology-based or pharmaceutical intervention** that prevents, delays or reverts the onset of a specific age-related disease
2. **A biomarker based tool** to enable the responsible deployment of ageing-related interventions
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.

Expected 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, and
- Approaches to address the shared regulatory hurdles and societal challenges linked to ageing-related interventions, thereby facilitating their adoption.

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

Building AI capabilities for trusted and responsible autonomy

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From prompting to intuitive interactions

Specific Objectives

Explore novel approaches, including combinations of existing techniques (i.e. neuro-symbolic AI), or the creation of entirely new frameworks that go beyond current, traditional, deep learning and reinforcement learning paradigms for one or more of the following capabilities:

- Deep Reasoning
- Deep Abstraction
- Deep Planning

Expected Outcomes

- Models and/or architectures that handle multimodal data and knowledge, uncertainty, and can be trained and deployed with constrained computational resources
- Provable trustworthiness mechanisms ensuring explainability, transparency, fairness, risk evaluation, security and alignment with ethical and legal standards
- The developed capabilities integrated in a cognitive AI system (reaching TRL4) performing complex real-world tasks (e.g., scientific discovery, decision support, problem solving) as well as simulations at a scale.

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Can you apply? (1)

- **Single legal entities** established in a Member State or an Associated Country (mid-caps and larger companies will not be permitted)
- **Consortia of two entities** must be two independent legal entities from two different Member States or Associated Countries
- **Consortia of three or more entities** must include as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows:
  - at least one legal entity established in a Member State; and
  - at least two other independent legal entities, each established in different Member States or Associated Countries.
- The legal entities may for example be universities, research organisations, SMEs, start-ups, industrial partners or natural persons.

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Can you apply? (2)

- **Important: associated partners** are not considered for eligibility rules!
- Examples of **ineligible** consortia:
  - 2 organisations from FR & 1 organisation from DE
  - 2 organisations from PL & 2 organisations from IT
  - 2 organisations from FR, 1 organisation from DE & 1 organisation from CA
- Examples of **eligible** consortia:
  - 1 organisation from MT & 1 organisation from CZ
  - 1 organisation from ES & 1 organisation from AU
  - 1 organisation from EL,1 organisation from SE & 1 organisation from US

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What support will you receive if your proposal is funded? (1)

- A **grant** for a **Research and Innovation Action** to cover eligible costs
- EIC considers proposals with an EU contribution of **up to € 4 million** as appropriate (larger amounts possible, if duly justified)
- Total indicative budget for this call: **€ 96 million** (expected to be allocated in approximately equal shares across the Challenges)
- Successful applicants will receive tailor-made access to a wide range of **Business Acceleration Services** and interactions with **EIC Programme Managers** and other actions in the portfolio of projects selected

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What support will you receive if your proposal is funded? (2)

- Funding rate **100% of the eligible costs**
- Eligible costs will take the form of a **lump sum** and **the amount will be determined during the evaluation process**.
- Applicants must **propose the amount of the lump sum** based on their estimated project costs
- It is advised to include a **work package** dedicated to **portfolio activities** and allocate at least 10 person-month to it

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How to apply: how long does it take?

- You must submit your application via the **Funding and Tender Opportunities Portal** before the given deadline.
- You will be informed about the outcome of the evaluation within **5 months from the call deadline** (indicative).
- If your proposal is selected for funding, you can expect your **grant agreement to be signed by 8 months after the call deadline**.
- The call will open on 28 July 2026.
- The deadline to submit the proposal is **28 October 2026 at 17.00 CET**.

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Proposal submission (1)

- The Proposal Application Form is composed of **two parts**:

Part A
- to be filled online (no page limit)
- contains: administrative details, summarised budget and call specific questions.

Part B
- to be uploaded as a single document (page limit: max. **30** A4 pages – Section 1 to 3)
- contains: technical description of the project.

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Proposal submission (2)

- The **estimated budget** must be described in a **detailed budget table**. This will be used as a basis for justifying and/or fixing the **lump sum amount**.

- Template will be available on the Funding and Tender Opportunities Portal

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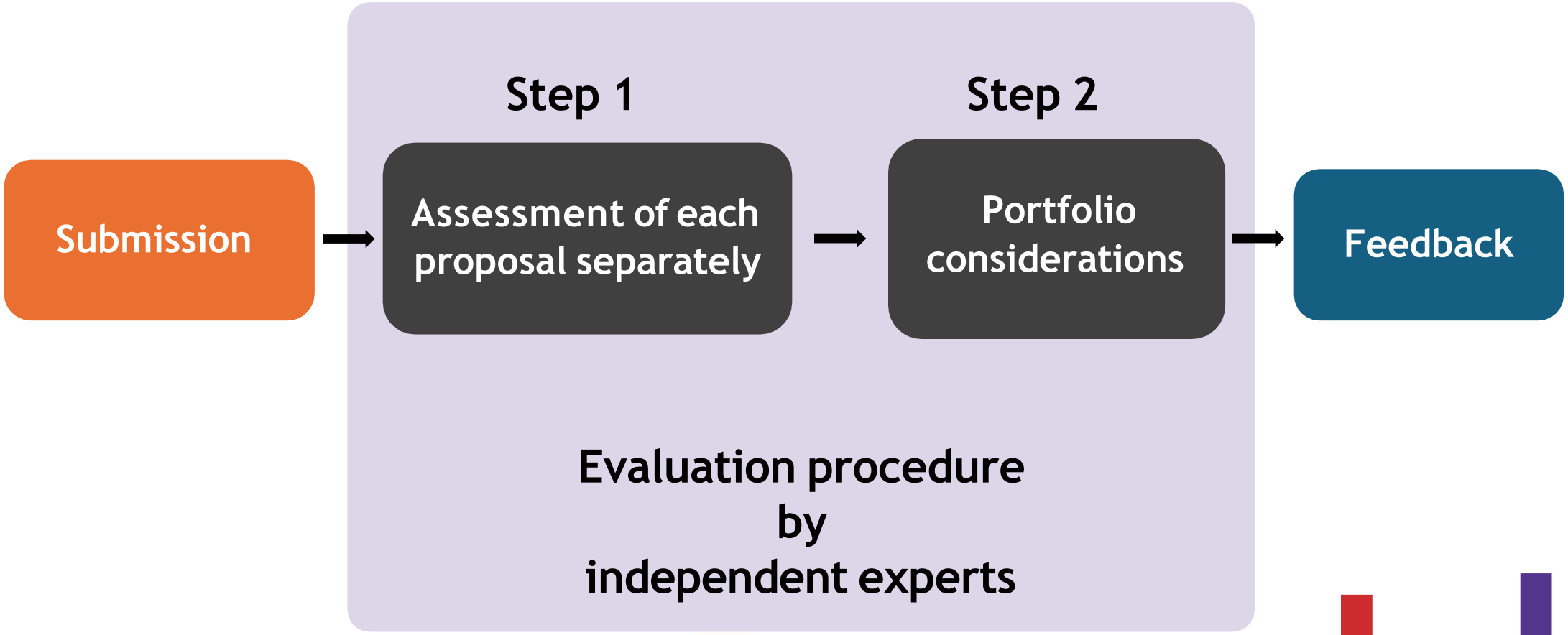
How is proposal funding determined?



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Step 1: Assessment of each proposal separately

- At least three EIC expert evaluators evaluate and score **each proposal individually** with respect to the award criteria

- After the individual evaluation, these evaluators will get together in a **consensus group** to agree on a common position on comments and scores.

- The **evaluation committee** (composed of EIC expert evaluators and EIC Programme Managers) will check consistency across the evaluation of each individual proposal and **finalise the scores and comments** for all proposals

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Award criterion “Excellence”

Threshold **4/5**

Weight **50%**

NEW

- **Objectives and relevance to the Challenge:** How clear are the project’s objectives? How relevant are they in contributing to the overall goal and the specific objectives of the Challenge?
- **Novelty:** To what extent is the proposed work ambitious and goes beyond the state-of-the-art?
- **Plausibility of the methodology:** How sound is the proposed methodology, including the underlying concepts, models, assumptions, appropriate consideration of the gender dimension in research content, and the quality of open science practices?

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Award criterion “Impact”

Threshold **3.5/5**

Weight **30%**

NEW

- **Potential Impact:** How credible are the pathways to achieve the expected outcomes and impacts of the Challenge? To what extent would the successful completion of the project contribute to this?
- **Innovation potential:** How realistic is the proof of principle for demonstrating the potential impact of the technology for the challenge? How adequate are the proposed measures for protection of results and any other exploitation measures to facilitate future translation of research results into innovations with positive societal, economic or environmental impact? How suitable are the proposed measures for involving and empowering key actors that have the potential to take the lead in translating research into innovations in the future?
- **Communication and Dissemination:** How suitable are the proposed measures, including communication activities, to maximise expected outcomes and impacts for raising awareness about the project results’ potential to establish new markets and/or address global challenges?

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Award criterion "Quality and efficiency of the implementation"

Threshold **3/5**

Weight **20%**

- **Work plan:** How coherent and effective are the work plan (work packages, tasks, deliverables, milestones, timeline, etc.) and risk mitigation measures in order to achieve the project objectives?
- **Allocation of resources:** How appropriate and effective is the allocation of resources (comprising person-months and other cost items) to work packages and consortium members?
- **Quality of the applicant/consortium (depends if mono or multi-beneficiaries):** To what extent does the applicant / do all the consortium members have the necessary capacity and high quality expertise for performing the project tasks?

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Step 2: Portfolio considerations

- All proposals that meet the thresholds defined in the award criteria will be considered in step 2
- **Mapping of proposals in categories** stemming from overall goal and specific objectives of the Challenge (e.g., building blocks or subsystems, technical areas and/or competing technologies, platforms, applications areas, risk level and stage of technology readiness level, size)
- A **suitable portfolio of proposals** to be selected by evaluation committee by applying **portfolio considerations** in order to propose for funding a coherent set of projects that will achieve expected outcomes and impacts of the Challenge and maximise their impact.
- Further information and details about categories and portfolio considerations to be detailed in **EIC Pathfinder Challenge Guides**, which will be topic and domain specific
- Evaluation committee may also **propose some minor adjustments** to the proposals

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Feedback to Applicants

- Applicants will receive an **Evaluation Summary Report** that will comprise of:
  - the **final score;**
  - **comments endorsed** by the evaluation committee;
  - **additional comments.**
- Applicants will also be informed about the **underlying portfolio considerations** in case their proposal was either retained for funding or not retained for funding while it received a score that was higher than other proposals retained for funding under the same Challenge.
- Comments on the detailed lump sum budget table will be provided in the Evaluation Summary Report only for proposals invited to grant agreement preparation (or placed in the reserve list) and ones rejected (in part) due to significant overestimation or underestimation of costs.

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What happens after a proposal is evaluated and retained for funding?

- Successful applicants will be contacted and supported by **Project Officer** and relevant **EIC Programme Manager** during grant preparation

- Planning of **portfolio activities** - all projects in the Challenge Portfolio are expected to collaborate with each other

- Start of preparation of **Challenge strategic plan**, which will define collective deliverables, activities and objectives of the portfolio of projects

- During the execution of the project: **continuous interaction** with Project Officer assigned to your project and the EIC Programme Manager assigned to the Challenge Portfolio of your project, who will oversee all the portfolio projects

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Pathfinder calls 2026 – Summary table

	Pathfinder Open	Pathfinder Challenges
Total budget	**€166 million**	**€96 million**
Proposals (indicative)	Up to €4 million or more if justified	Up to €4 million or more if justified
Funding rate	100% of eligible costs, lump sums	100% of eligible costs, lump sums
Opening	05 February 2026	28 July 2026
Deadline	12 May 2026 at 17.00 CEST	28 October 2026 at 17.00 CET
Length of proposal	22-page proposal (part B)	30-page proposal (part B)
Applicants	**Consortia:** min. 3 partners from 3 different Member States /Associated Countries of which at least 1 partner in a Member State	**Consortia:** • If 2 partners: from different MS/AC, • If 3+ partners: from min 3 different MS/AC of which at least 1 partner in a MS **Single legal entities** in a MS/AC

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