



# *Recomendaciones prácticas EIC Pathfinder and EIC Transition to Innovation*



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EIC main calls in 2023 - overview



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## 1. Haciendo memoria..... El EIC





EUROPEAN UNION

# HORIZON EUROPE

#HorizonEU

THE EU RESEARCH &  
INNOVATION PROGRAMME  
**2021 - 2027**



# Haciendo memoria ... El EIC

- ▶ El comisario de Investigación, Ciencia e Innovación, Moedas anunció su visión para la iniciativa EIC en junio de 2015.

«Mediante el Consejo Europeo de Innovación (EIC) apoyamos las tecnologías de vanguardia, futuras y emergentes, que son la clave para desvelar muchos de los secretos que nos llevarán a una sociedad y a un futuro mejores. Estamos invirtiendo en ideas innovadoras y en las personas que las ponen en marcha para crear los nuevos mercados del futuro».



<https://youtu.be/51uohQ0nwXc>, Pilot phase

<https://cutt.ly/uxYAIej>, EIC impact report to find out more about the EIC pilot

<https://eic.easme-web.eu/>, European Innovation Council (EIC) datahub

# Haciendo memoria ... El EIC

- ▶ Evento de lanzamiento del EIC 18/03/21 (ya no es un piloto), Ursula Von der Leyen, presidenta de la Comisión Europea.

«Los europeos somos muy buenos en hacer ciencia con dinero, pero no en hacer dinero con la ciencia».



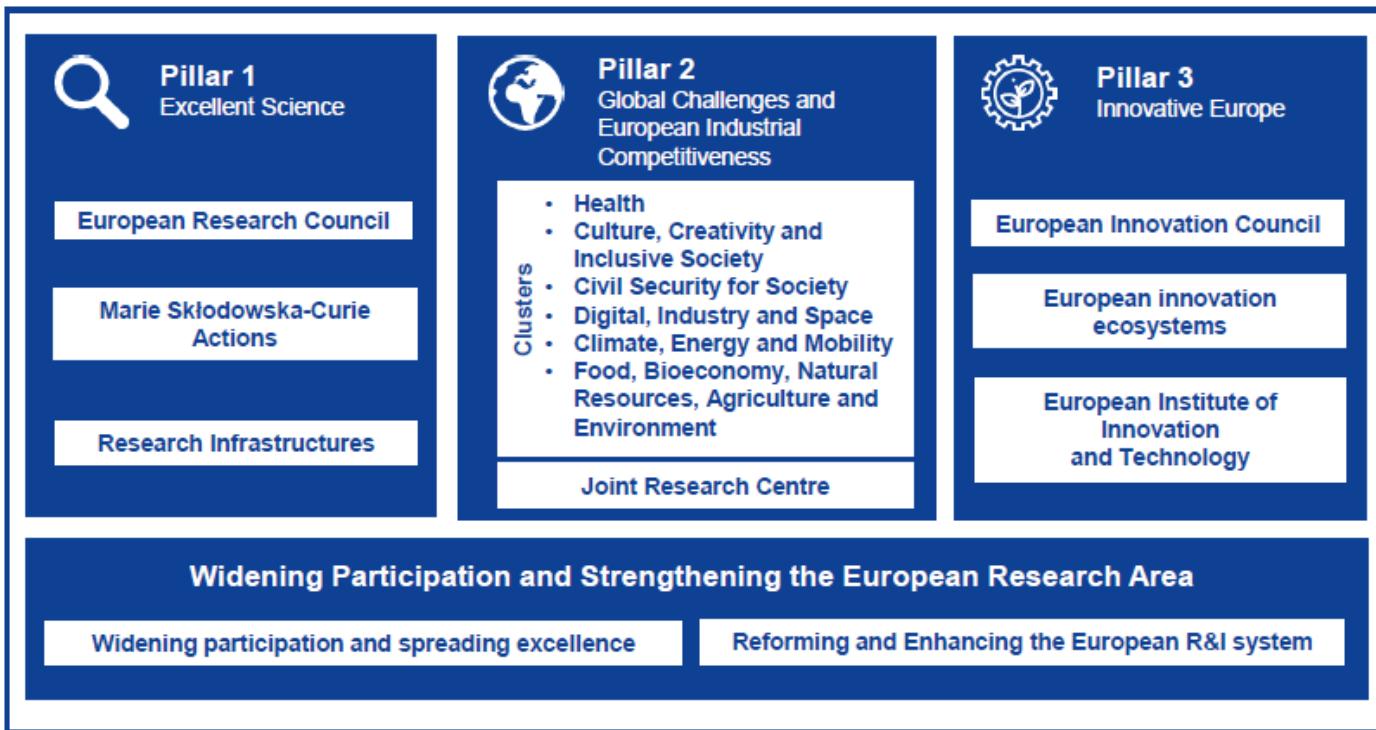
<https://www.youtube.com/watch?v=UeB-wPksDxk&t=76s> Launch ceremony of the European Innovation Council

# Haciendo memoria ... El EIC

- ▶ El EIC (Piloto 2018-2020) fue una ventanilla única para la financiación de la **innovación** en cualquier tecnología o sector, incluyendo innovaciones novedosas a nivel transversal.
- ▶ El EIC financia **high-risk, high-gain innovation** para crear los mercados del futuro. **EIC: from idea to market.**
- ▶ Objetivo => Strengthen breakthrough **innovations** and boost the number of **high-growth companies** (alta escalabilidad pro crecimiento y creación de empleo).
- ▶ **¡WP 2023 ya publicado!**



# Haciendo memoria ... El EIC

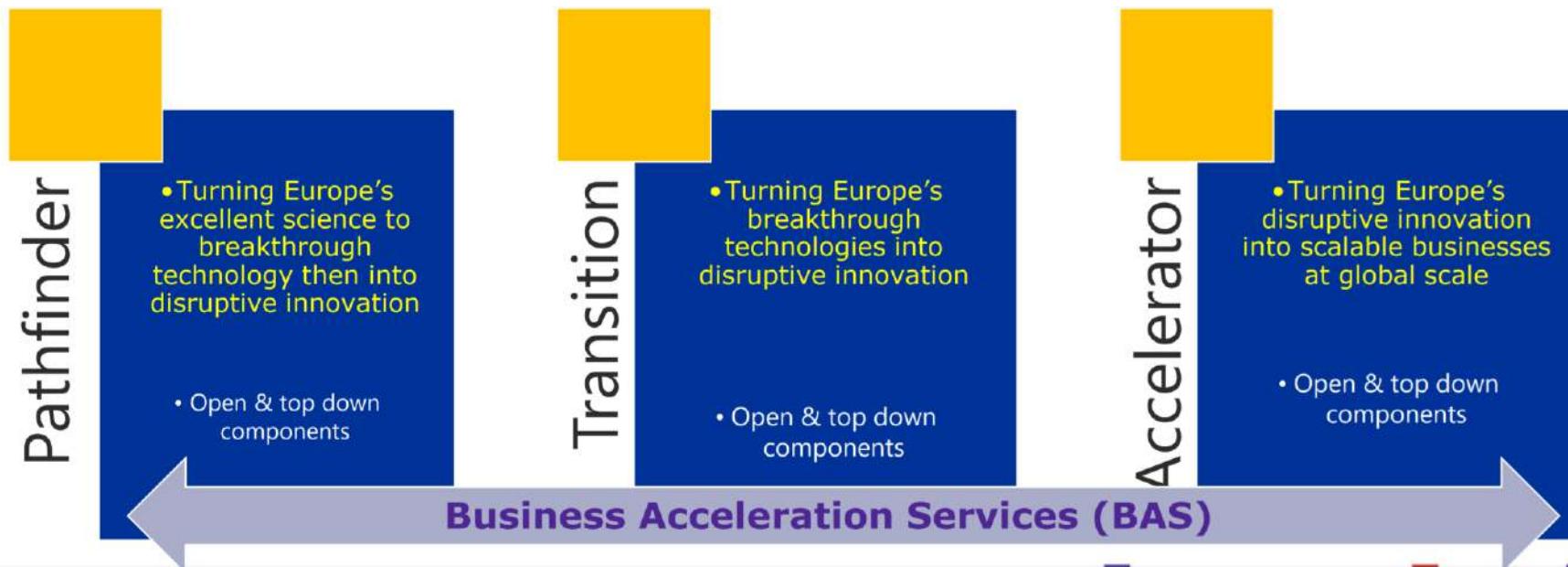


# Haciendo memoria ... El EIC

PILAR 1 – Excellent Science	25.011	PILAR 2 – Global challenges and European industrial competitiveness	53. 516	PILAR 3 – Innovative Europe	13.597
ERC – European Research Council	16.004	Clúster 1 - Health	8.246	EIC- European Innovation Council	10.105
MSCA - Marie Skłodowska-Curie Actions	6.602	Clúster 2 - Culture, Creativity and Inclusive Society	2.280	European innovation ecosystems	527
Research infrastructures	2.406	Clúster 3 - Security	1.596	EIT - European Institute of Innovation and Technology	2.965
		Clúster 4 - Digital Industry and Space	15.349		
		Clúster 5 - Climate Energy and Mobility	15.123		
		Clúster 6 – Food, bioeconomy, natural resources, agriculture and environment	8.952		
		JRC – Joint research centre	1.970		

Widening participation and strengthening the European Research Area	3.393	+ 5.000 M€ Next Generation EU
Widening participation and spreading excellence	2.955	+ 4.000 M€ (political agreement MFP)
Reforming and enhancing the European R&D system	438	

# Haciendo memoria ... El EIC



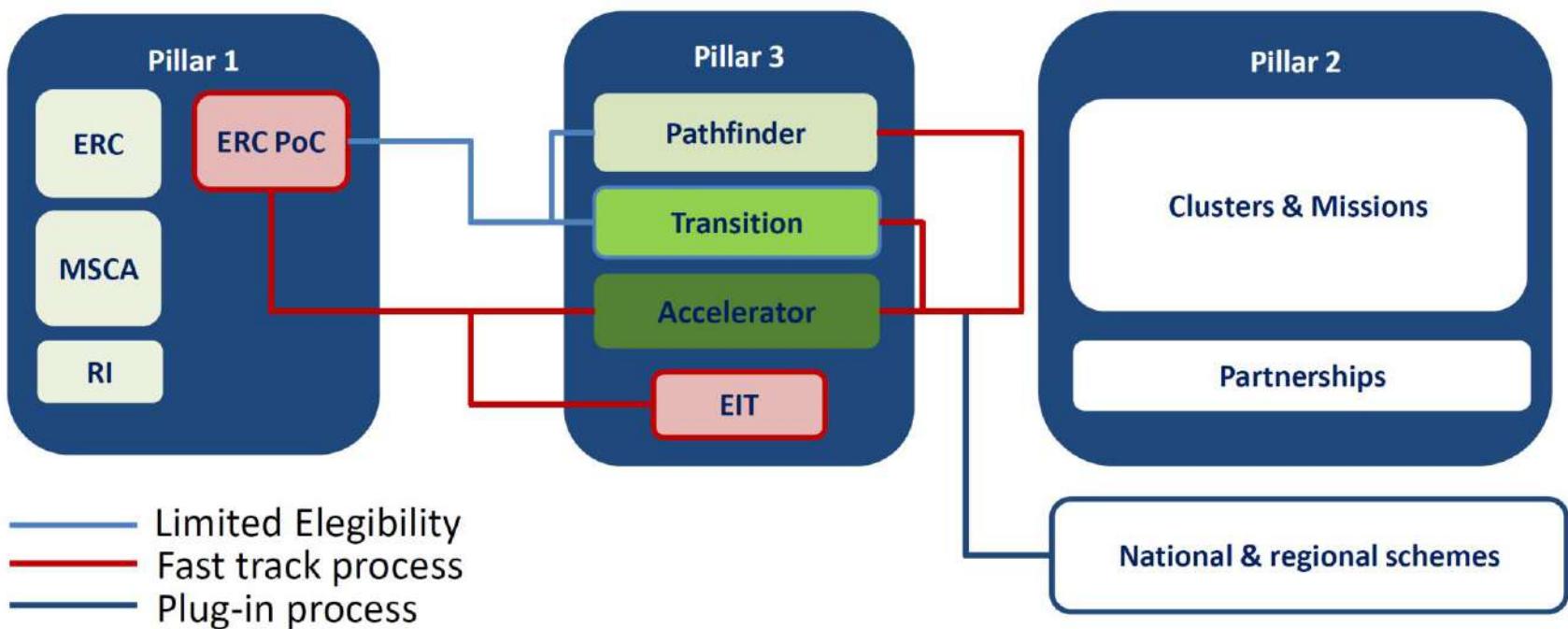
**EIC: From idea to market**

# Haciendo memoria ... El EIC

<https://youtu.be/X5ZAJS3psZI>



# Haciendo memoria ... El EIC



**EIC: Interactions with its environment**

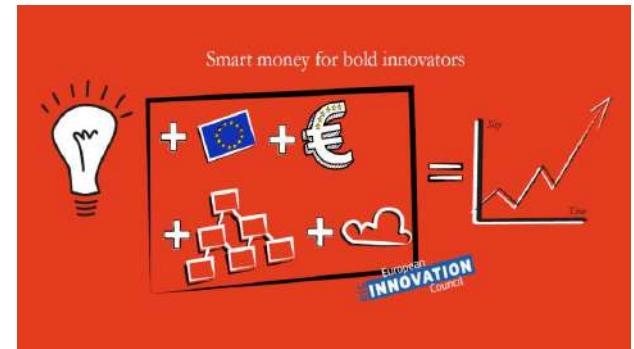
# Haciendo memoria ... El EIC

Pipeline of Opportunities	EIC funding scheme	Policy & economic drivers
<ul style="list-style-type: none"><li>• Scientific breakthroughs creating new technology opportunities</li><li>• Opportunities for innovations from ERC and EIC Pathfinder, etc</li></ul>	Pathfinder Transition	<ul style="list-style-type: none"><li>• Properties and limits of technology not understood</li><li>• Still significant effort to mature the technology and demonstrate it in relevant environment</li><li>• Lack of business case for specific technology applications</li><li>• Need to engage with commercial partners or design the venture to take the technology forward to commercialisation</li></ul>
<ul style="list-style-type: none"><li>• Start-ups/spinouts from EIC (Pathfinder, Transition), other parts of Horizon Europe (Fast Track), national programmes (Plug In)</li><li>• Opportunities from the market (start-ups, spinouts)</li></ul>	Accelerator	<ul style="list-style-type: none"><li>• EU policy objectives to be met by disruptive innovations</li><li>• Ensuring EU players in emerging strategic technologies</li><li>• Incumbents blocking the development of disruptive innovations</li></ul>

**EIC: Serves EU political priorities**

# Haciendo memoria ... El EIC

- ▶ Se centra en personas, empresas e instituciones de investigación con ideas para:
  - ▶ Productos, tecnologías, servicios, procesos y modelos de negocio **radicalmente nuevos e innovadores que supongan descubrimientos y avances importantes.**
  - ▶ Apertura de **nuevos mercados con el potencial de un rápido crecimiento** a escala mundial y europea (alto riesgo, necesidad de una inversión significativa)
  - ▶ **Potenciar la intersección** entre diferentes tecnologías, sectores industriales y disciplinas científicas.
- The overall objective of the EIC is to identify, **develop and deploy high risk innovations of all kind with a particular focus on breakthrough, market-creating and deep-tech innovations.** It aims to support the rapid scale up of innovative technologies and companies (mainly start-ups and SMEs) at EU and international level along the pathway from ideas to market. In this context the EIC is also an initiative contributing the EU technology sovereignty.



# Haciendo memoria ... El EIC



# Haciendo memoria ... El EIC

*“The 12 unicorns and 112 centaurs supported, and the over €10 billion investments attracted into European deep tech illustrate the growing impact of the European Innovation Council. Its work programme for 2023 will keep delivering funding for deep tech start-ups, increasing talent flows and improving Europe’s innovation ecosystem”.*

**Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth - 07/12/2022**

[EIC Impact report 2022](#)

[Stories: Europe broke records for Unicorns in 2021 – Discover who are the EIC-funded Unicorns and Centaurs](#)

# Haciendo memoria ... El EIC

**One stop shop** for breakthrough, deep-tech, market-creating innovators

- Open to all innovators, in any field, at any time
- Complemented by targeted funding on strategic challenges
- Highly competitive for Europe's high potential innovators

**Agile funding** from idea to investment

- Pathfinder for advanced research on emerging technologies
- Transition from lab to commercial setting
- Accelerator & EIC Fund to scale up innovations by start-ups & SMEs

**Building ecosystems** and communities

- Access to Business Acceleration Services (coaches, mentors, corporates, investors & knowledge partners)
- EIC Programme Managers to develop visions for breakthroughs, manage portfolios, and connect to ecosystems
- Crowding in other investors (VC, corporates, etc.)

**El EIC tiene como objetivo identificar y apoyar tecnologías de vanguardia e innovaciones para crear nuevos mercados y escalar internacionalmente**

# Haciendo memoria ... El EIC

- ▶ **Funding opportunities:** [https://eic.ec.europa.eu/index\\_en](https://eic.ec.europa.eu/index_en)
  - ▶ **EIC Pathfinder:** To support research teams to research or develop an emerging breakthrough technology (<https://cutt.ly/uxYltJY>).
  - ▶ **EIC Transition:** To mature a novel technology and develop a business case to bring it to market (<https://cutt.ly/HxYznL0>).
  - ▶ **EIC Accelerator:** Funding and investments through the EIC Fund for individual start-ups and small companies to develop and scale up game changing innovations (<https://cutt.ly/kxYzBMG>).
  - ▶ **EIC Business Acceleration Services:** All EIC supported projects and companies get access to coaching, mentoring, partnering and other EIC Business Acceleration Services (<https://cutt.ly/YxYxVDP>).
  - ▶ **European Innovation Ecosystems:** Specific support to enable innovation ecosystem actors to work together across Europe (<https://cutt.ly/ExYvT6k>).
  - ▶ **EIC Prizes:** Take the challenge and compete for an EIC Prize which rewards Europe's leading innovators (<https://cutt.ly/hxYmztL>).
  - ▶ **New additional funding opportunities in 2023!**

# EIC main funding opportunities 2023 (WP 2023)

 THREE MAIN FUNDING SCHEMES

EIC PATHFINDER	
Early-stage technology research	€343 million
Grants	< €4 million

 EIC Pathfinder Open 2023 (€179.5 million)  
Apply by 7 March 2023

 EIC Pathfinder Challenges 2023 (€163.5 million)  
Submissions open 20 June, close 18 October 2023

EIC TRANSITION	
Technology validation and spin-out	€128 million
Grants	< €2.5 million

 EIC Transition Open (€67.86 million) and Challenges (€60.5 million)  
Apply anytime from 1 March,  
cut-offs: 12 April 2023, 27 September 2023

EIC ACCELERATOR	
Commercialisation and scale-up	€1.13 billion
Grants	< €2.5 million
Equity investments	< €15 million

 EIC Accelerator Open (€612.98 million) and Challenges (€524.73 million)  
Apply anytime,  
cut-offs: 11 January 2023, 22 March 2023,  
7 June 2023, 4 October 2023

# EIC main funding opportunities 2023 (WP 2023)

 BUSINESS ACCELERATION SERVICES

For all EIC awardees, as well as selected applicants:

-  Access to coaches, mentors, expertise and training
-  Access to global partners (leading corporates, investors, procurers, distributors, clients)
-  Access to innovation ecosystem and peers
-  Support to test EIC innovations for potential clients

 NEW EIC ACTIONS

-  Next Generation Innovation talents scheme:  
researchers from other EU programmes (and Pathfinder) can do internships in EIC-funded companies
-  XIR scheme:  
EIC researchers can receive mentoring from experienced entrepreneurs and VCs
-  Business Acceleration Services (BAS)

# EIC main funding opportunities 2023 (WP 2023)

Call	Who can apply	What for	EIC Open		EIC Challenge	EIC Challenges	
			Deadlines	Indicative Budget (EUR million)		Deadlines/ Cut-offs	Indicative Budget (EUR million)
<b>EIC Pathfinder</b>	Consortia of at least three different independent legal entities <sup>7</sup> established in at least three different eligible countries. Additionally, single applicants or small consortia (two partners) for EIC Pathfinder Challenges only.	Grants of up to EUR 3 million (open) or EUR 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)	7 March 2023	179.50	- Clean and efficient cooling - Construction digitalisation - Precision nutrition - Responsible electronics - In-space solar energy	18 October 2023	163.50
<b>EIC Transition</b>	Single applicants (SMEs, spin-offs, start-ups, research organisations, universities) or small consortia (two partners) or consortia of three to five different independent legal entities established in at least three different eligible countries. Proposals must build on eligible EU-funded project results (see call text)	Grants of up to EUR 2.5 million to validate and demonstrate technology in application-relevant environment (TRL 4 to 5/6) and develop market readiness	12 April 2023 - 27 September 2023	67.86	- Micro-Nano-Bio devices - Environmental intelligence - Chip-scale optical frequency combs	12 April 2023 - 27 September 2023	60.50
<b>EIC Accelerator</b>	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)	Grant component below EUR 2.5 million for innovation activities (TRL 5/6 to 8); EUR 0.5 up to 15 million <sup>8</sup> investment component for scaling up and other activities. Grant only, grant first and investment only component under certain conditions, namely for non-bankable SMEs, including start-ups, which have already received a grant-only support.	Short applications: continuous  Full applications : - 11 January 2023 - 22 March 2023 - 7 June 2023 - 4 October 2023	611.75	- Biomarkers for cancer - Decontamination for pandemic management - Energy storage - New European Bauhaus - Quantum or Semiconductor components - Resilient agriculture - Space technologies and services	Short applications: continuous  Full applications : - 22 March 2023 - 7 June 2023 - 4 October 2023	523.49

# Índice de contenidos

## 1. Consejos prácticos - EIC Pathfinder



# EIC Pathfinder en Horizon Europe

## ► What is the EIC Pathfinder?

The EIC Pathfinder programme funds research to develop the scientific basis to underpin breakthrough technologies.

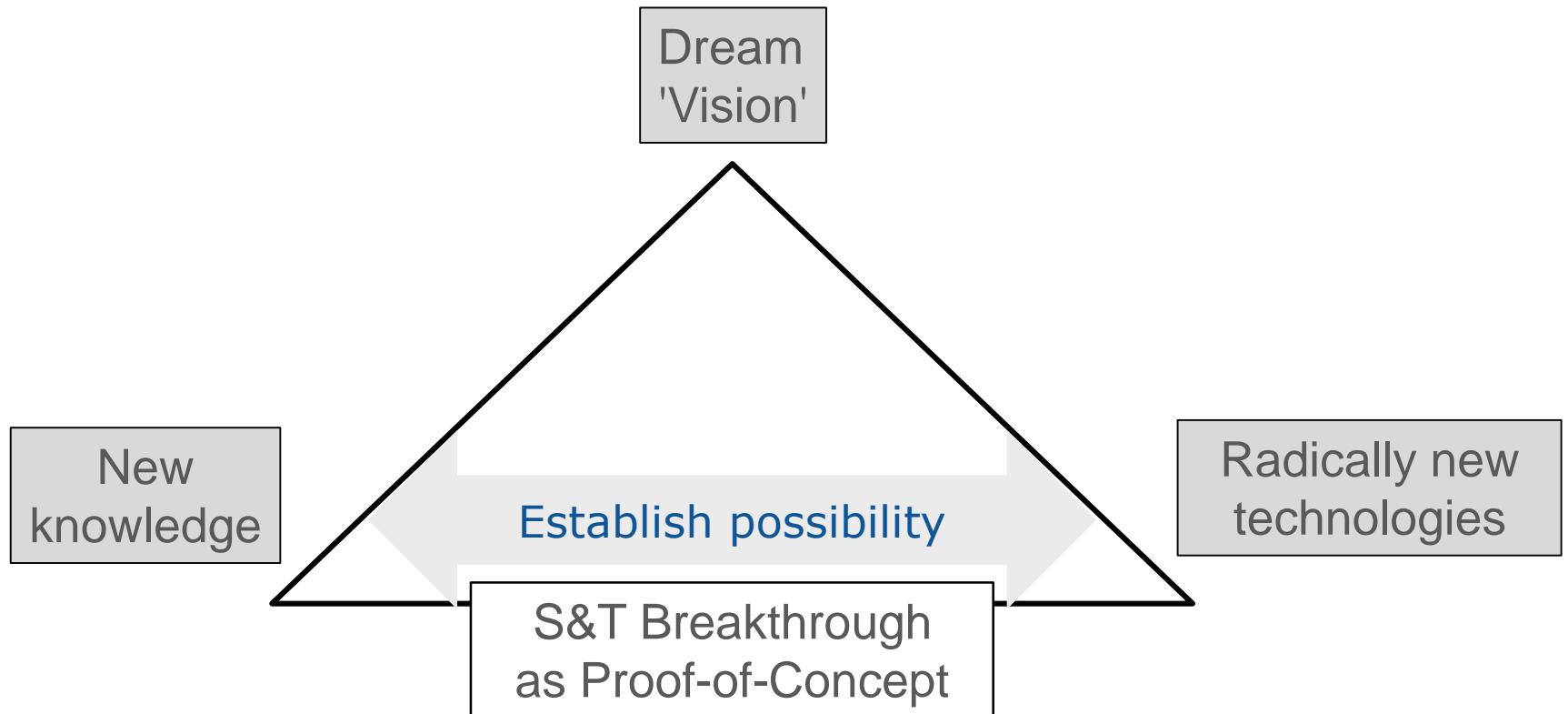
The EIC Pathfinder supports the **exploration** of bold ideas for **radically new technologies**. It welcomes the **high-risk / high gain** and **interdisciplinary** cutting-edge science collaborations that underpin **technological breakthroughs**.

# EIC Pathfinder - entender el programa

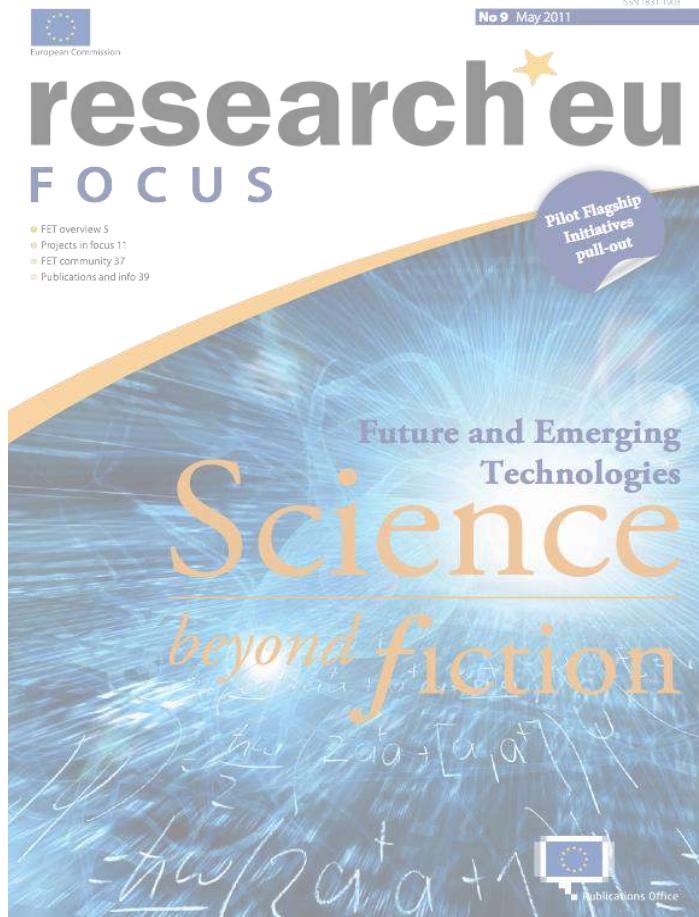


# Espíritu FET en H2020

**FET Research and Innovation Actions** support the early stages of research to establish a new technological possibility



# Future Emerging Technologies en H2020



“FET busca crear en Europa el medio para desarrollar una **colaboración multidisciplinar, responsable y dinámica** en tecnología futura y emergente desarrollando **nuevos ecosistemas en investigación e innovación**”.

“Se pretende crear las semillas de un futuro **liderazgo industrial** que afronte con garantías y de manera novedosa **los grandes desafíos sociales**”.

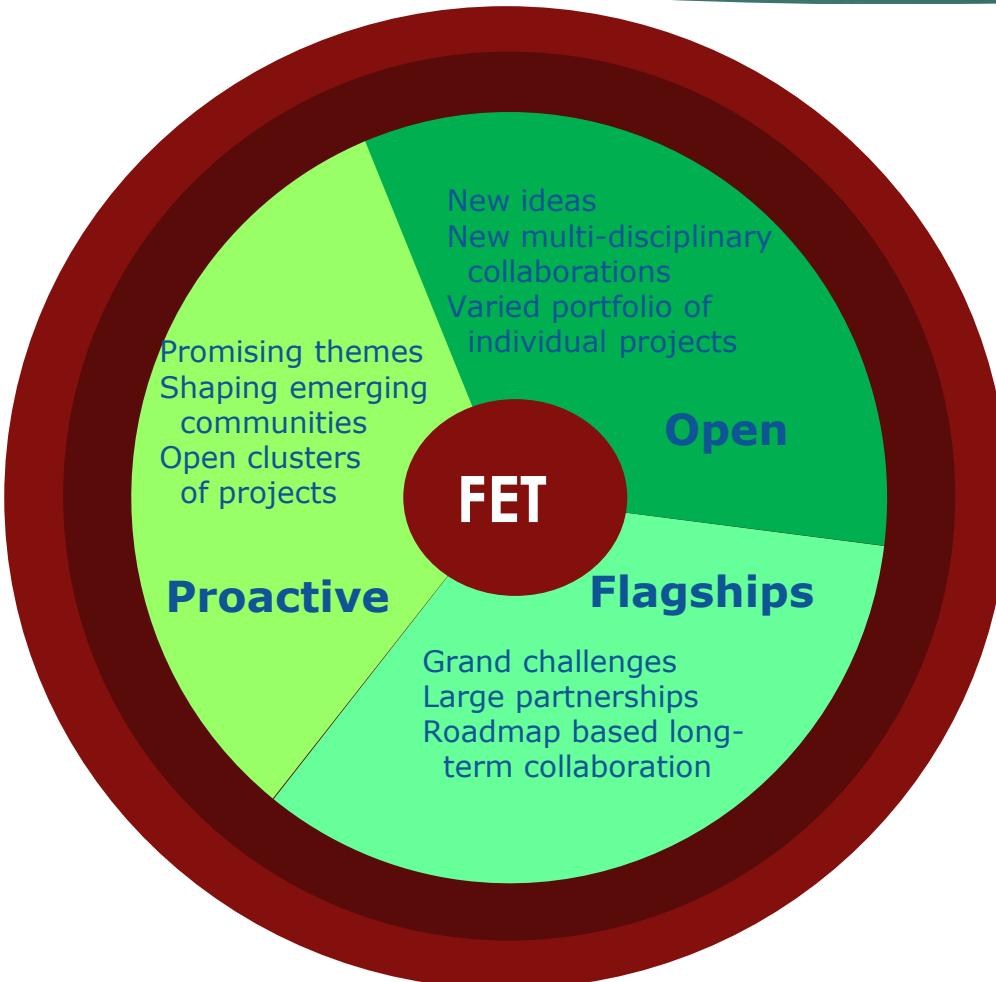
# Future Emerging Technologies en H2020

- ▶ Investigación más allá de lo que es conocido, aceptado o ampliamente adoptado.  
FET focuses on **research beyond what is known.**
- ▶ FET apoya **nuevas y visionarias** aproximaciones para desarrollar **nuevos enfoques** que abran nuevos caminos hacia posibilidades tecnológicas radicalmente nuevas.
- ▶ FET financia **colaboraciones interdisciplinares** fructíferas que busquen “cross-fertilisation” y **sinergias** entre disciplinas de vanguardia tanto científicas (ciencias de la vida, sociales, humanidades,...) como ingenierías.

Investigación de **riesgo**, que cree **nuevas ideas, conceptos y paradigmas** que supongan un **cambio radical** de las aproximaciones actuales.

**Transversalidad** y aplicación a **cualquier dominio de investigación**

# FET en Horizonte 2020 - cross-cutting issues



## New synergies and collaborations

- New interdisciplinary synergies linking sciences, technologies and the humanities
- Attracting new high-potential actors, e.g., high-tech SMEs and young researchers
- Programme synergies at European level
- International (global) cooperation

## Promoting new approaches and tools for doing science

- Exploring creative R&I methodologies
- Future generation computing to enable advanced simulation, data capture,...
- Digital Science and e-infrastructures

## Innovation

- European leadership for FETs
- Encouraging new ideas and actors
- Kick-starting new innovation eco-systems (small and large) around new technologies
- Delivery of new technology options and baselines to industry and spin-offs
- Digital science, open data for wider and faster transfer, spin-off and education

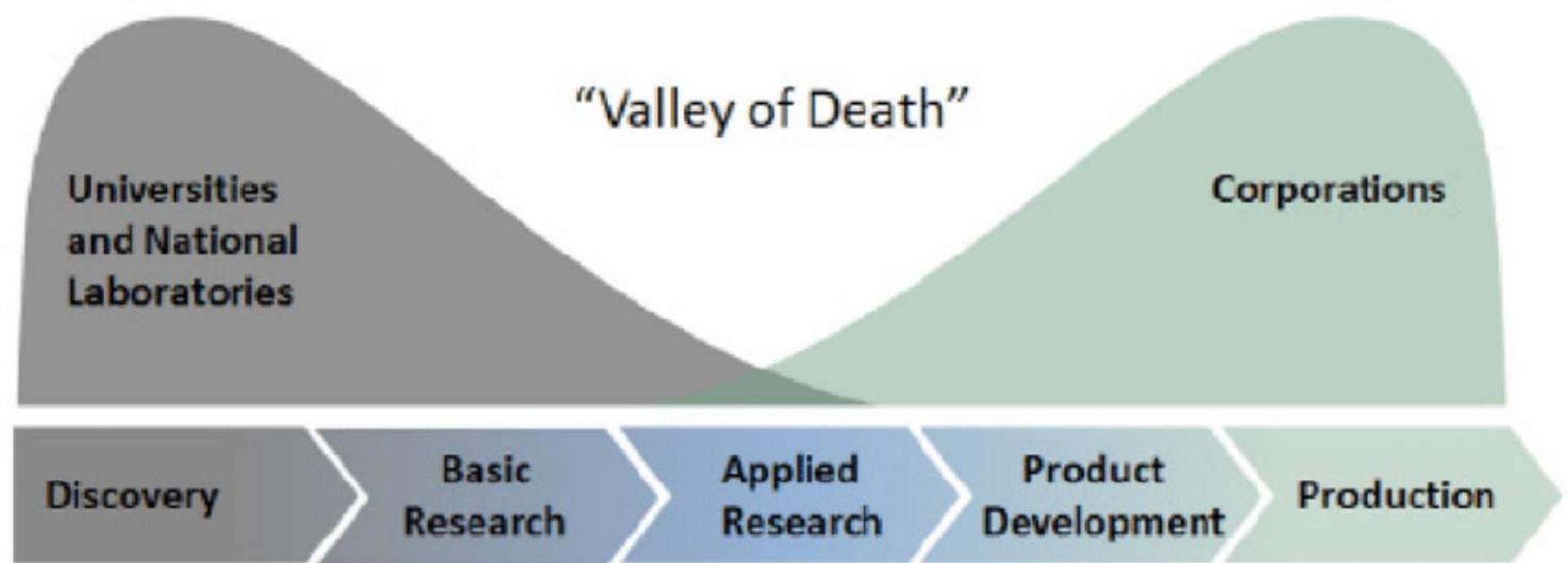
## Responsible research and innovation

- Social Sciences and Humanities are relevant
- Promoting societal debate and exchange
- FET Advisory Board and FET Observatory to capture views and needs widely
- Open access, open data policies
- Ethics of methods as well as of results

# EIC Pathfinder en Horizon Europe



# EIC Pathfinder en Horizon Europe



# EIC funding opportunities

## *EIC Pathfinder Open*

- ▶ **Open calls => bottom-up approach calls with no predefined topics**



✓ **EIC Pathfinder Open** => Any field of science, technology or application without predefined thematic priorities (*FET-Open en H2020*). 179,50M€ in 2023 (183M€ in 2022).

- Future technology with the potential to **generate a real change** in our way of living.
- Based on a **scientific discovery** that can make it become feasible.
- Developed under a interdisciplinary collaboration for each a **proof of principle** that would **validate** the basis of the technology.

**TO GENERATE NEW TECHNOLOGIES WITH HIGH INNOVATION POTENTIAL**

# EIC funding opportunities

## *EIC Pathfinder Open*

### ► **Ficha convocatoria 2023, [enlace Participant Portal](#)**



- RIA (**100% funding**)
- Up to **3M€** per proposal, **17 pages**
- **Collaborative project** (min. 3 participants from 3 MS or AC), **36 months on average\***.
- Aiming a proof of principle as project output (**TRL up to 4**).
- **Annex 7** defines special IP clauses (EIC policy of Open Access and IP rights)
- **Annex 6** defines extra 50K€ adhoc grants for complementary portfolio activities or to explore commercialisation paths"
- Interactions with EIC Programme Managers
- EIC Accelerator via Fast Track. EIC Transition.
- To participate in the 'Next Generation Innovation Talents' scheme
- **Deadline: 07/03/2023. Call already opened**

# EIC Pathfinder Open

- **Lo primero:** ¿para qué sirve el EIC Pathfinder OPEN?
- Las tres preguntas:
  - ¿Tienes una idea con visión de desarrollar una tecnología futura que pueda generar **un cambio real** en nuestras vidas?
  - ¿Contempla esa idea el logro de una **ruptura científica viable** que haga que ese desarrollo tecnológico sea posible?
  - ¿Imaginas una **colaboración interdisciplinar** con un grupo de investigadores e innovadores para desarrollar una **proof of principle** que pueda validar las bases de esta tecnología futura?

# EIC Pathfinder Open

- How FET transitioned into the EIC Pathfinder - by Jerzy Langer  
<https://ec.europa.eu/digital-single-market/en/news/how-fet-transitioned-eic-pathfinder-jerzy-langer>
- “EIC Pathfinder Open supports early stage development of (...) future technologies, based on high-risk/high-gain science-towards-technology breakthrough research (**‘deep-tech’**). This research must provide the foundations of the technology you are envisioning.”
  - Deep tech is technology that is based on cutting-edge scientific advances and discoveries.
  - Whereas ‘high tech’ is characterised by the complexity of technology integration, and thus driven by engineering, **deep tech** and is characterised by the need is science-driven to stay at the technological forefront by constant interaction with new ideas and results from the lab.
  - Deep tech is distinct from “high tech” which tends to refer only to R&D intensity.

La idea de “Deep tech” es la de identificar “**disruptive solutions**” que es la principal diferencia con el concepto de High tech. [See EIC Impact Report 2022](#).

# EIC Pathfinder Open

- “EIC Pathfinder Open involves **interdisciplinary** research and development”.
- “The expected outcome of your project is the **proof of principle** that the main ideas of the envisioned future technology are feasible, thus validating its scientific and technological basis. Project results should include top-level scientific publications in **open access**.
- TRL de 3 a 4: (En EIC Transition y EIC Accelerator el TRL esperado es superior)
  - TRL1 - basic principles observed
  - TRL2 - technology concept formulated
  - TRL3 - experimental proof of concept
  - **TRL4 - technology validated in lab**
  - TRL5 - technology validated in relevant environment
  - TRL6 - technology demonstrated in relevant environment
  - TRL7 - system prototype demonstration in operational environment
  - TRL8 - system complete and qualified
  - TRL9 - actual system proven in operational environment

En general continúa sin cambios el “enfoque FET” en el Pathfinder en HE

# EIC Pathfinder Open

- Innovations that significantly harm the environment (and therefore contravene the 'do not significant harm' principle of the EU Taxonomy Regulation), social welfare or that are primarily designed for military applications, or in other fields which are generally excluded from EU funding pursuant to Article 18 Horizon Europe Regulation, **will not be funded (see Annex 2)**. Research proposals within the scope of Annex I to the Euratom Treaty, namely those directed towards nuclear energy applications, must be submitted to relevant calls under the Euratom Framework Programme.
  - "Do no harm" principle. Projects are considered to significantly harm (taking into account, if appropriate, the production, use and end of life of their products and services): a) climate change mitigation, where the project leads to higher greenhouse gas emissions as compared to typical standards in similar economic activities sectors; b) the sustainable use and protection of water and marine resources, where the project is detrimental to the good status of bodies of water or marine waters; c) the circular economy, including waste prevention and recycling, where the project generates more waste or uses more natural resources (including non-renewable energy sources) as compared to typical standards in similar economic activities sectors, or where the long-term disposal of waste may cause significant and long-term harm to the environment; d) pollution prevention and control, where the project leads to a significant increase in the emissions of pollutants into air, water or land, as compared to typical standards in similar economic activities sectors; e) the protection and restoration of biodiversity and ecosystems, where the project is significantly detrimental to the conservation status and resilience of ecosystems, habitats and species.

# EIC Pathfinder Open

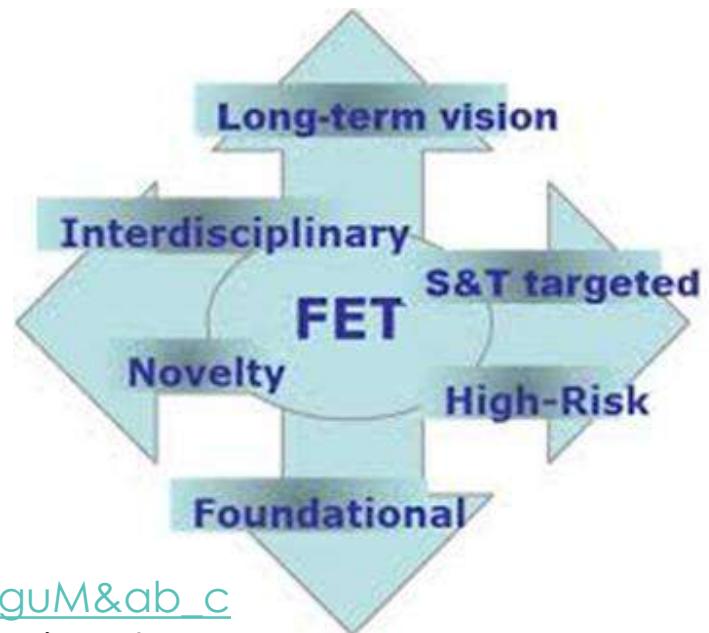
- Evaluación: Posibilidad de **rebuttal** (más claro en WP2023, pág. 23)
  - A rebuttal procedure after the remote phase (**1,5-2 months after the call deadline**) will provide you with the opportunity to reply **within eight calendar days** with a strict page limit (maximum two A4 pages) to the evaluators' comments. Your replies cannot be used to alter or add to the content of the proposals, but must strictly focus on responding to potential misunderstandings or errors by the evaluators. Your replies will be made available to the evaluation committee.
  - The evaluation committee, which will be composed of external independent experts different than those who evaluated the proposals remotely, will decide on the final score on the basis of the remote score and the outcome of its consensus discussions, taking into consideration the comments from the rebuttal procedure, if any.

# EIC Pathfinder Open Vs FET-Open en H2020 “Gatekeepers”

What it takes to succeed in FET OPEN

Timo Hallantie´s blog – Head of Unit FET / EIC Pathfinder

- **Long-term vision**
- **Scientific and technological breakthrough (target)**
- **Novelty**
- **Foundational**
- **High-risk**
- **Interdisciplinary**



[https://www.youtube.com/watch?v=t8dAJvoiguM&ab\\_channel=EUScience%26Innovation](https://www.youtube.com/watch?v=t8dAJvoiguM&ab_channel=EUScience%26Innovation) Vídeo promocional FET-Open

# EIC Pathfinder Open - Vs FET-Open en H2020 “Gatekeepers”

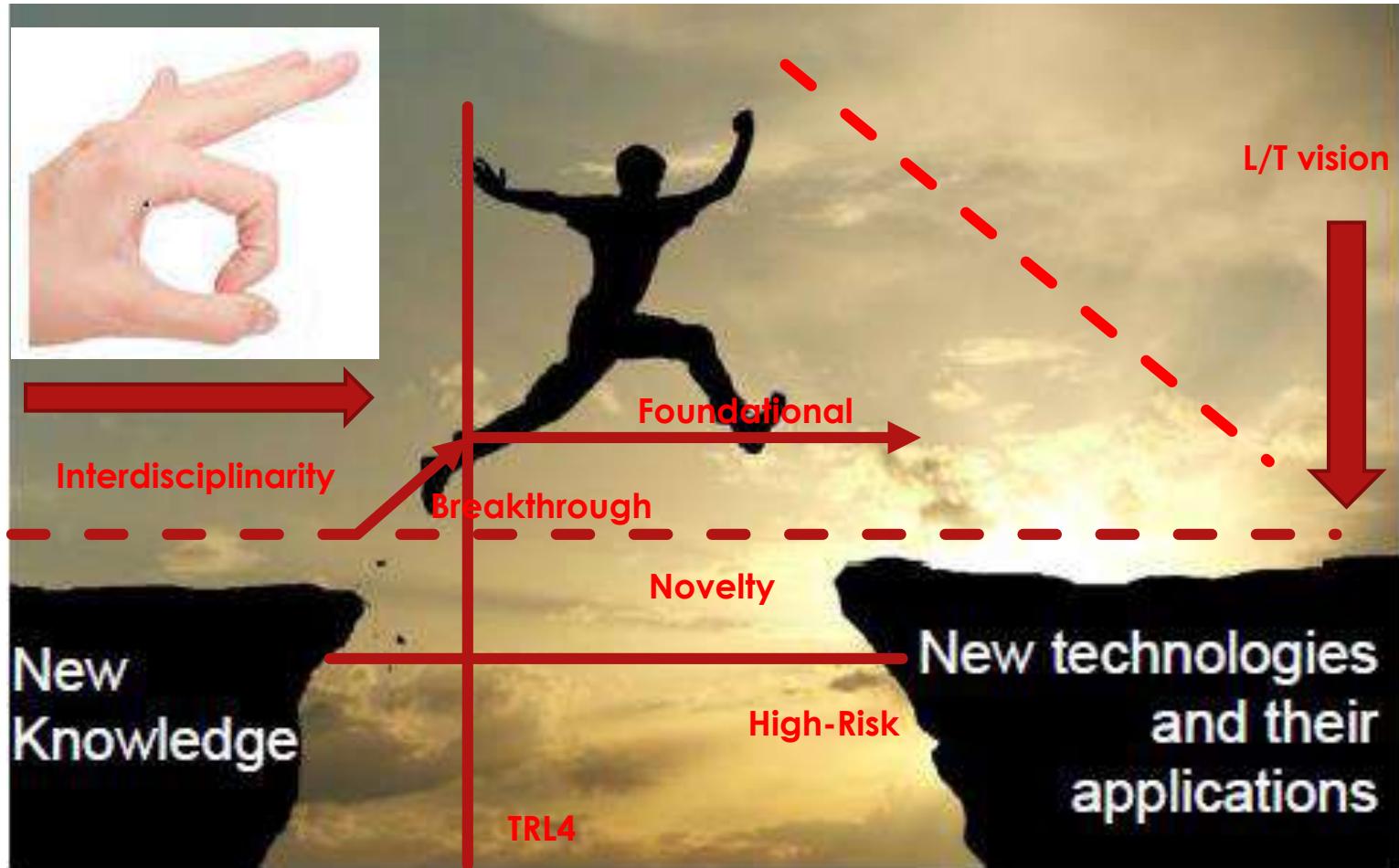
**Definición en página 21 WP EIC 2023:** Before applying to this call you should verify that your proposal meets all the following essential characteristics ('Gatekeepers'):

- Convincing **long-term vision** of a **radically new technology** that has the potential to have a **transformative positive effect** to our economy and society.
- Concrete, **novel** and ambitious **science-towards-technology breakthrough, providing advancement** towards the envisioned technology.
- **High-risk/high-gain** research approach and methodology, with concrete and plausible objectives.

EIC Pathfinder Open involves **interdisciplinary research and development**. By bringing diverse areas of research together, often with different perspectives, terminologies and methodologies, within individual projects and within a portfolio of projects, really new things can be generated and entirely new areas of research can be opened up. **It is up to you to compose the team that you need, that you can learn from, and that you can move forward with.**

# EIC Pathfinder Open - Principales novedades Vs FET-Open en H2020

## “Gatekeepers”



# EIC Pathfinder Open - La evaluación

## Compliance with Gatekeepers!!

## Contribution to WP impacts

### Excellence\*

**Long-term vision:** How convincing is the vision of a radically new technology towards which the project would contribute in the long term?

**Science-towards-technology breakthrough:** How concrete, novel and ambitious is the proposed science-towards-technology breakthrough with respect to the state-of-the-art? What advancement does it provide towards realising the envisioned technology?

**Objectives:** How concrete and plausible are the proposed objectives? To what extent is the high-risk/high-gain research approach appropriate for achieving them? 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?

**Interdisciplinarity:** How relevant is the interdisciplinary approach from traditionally distant disciplines for achieving the proposed breakthrough?

### Impact\*

**Long-term impact:** How significant are the potential transformative positive effects that the envisioned new technology would have to our economy, environment and society?

**Innovation potential:** How adequate are the proposed measures for protection of results and any other exploitation measures to facilitate future translation of research results into innovations? 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 measures to maximise expected outcomes and impacts, including communication activities, for raising awareness about the project results' potential to establish new markets and/or address global challenges?

### Implementation

**Quality of the consortium:** To what extent do the consortium members have all the necessary high quality expertise for performing the project tasks?

**Work plan:** How coherent and effective are the work plan (work packages, tasks, deliverables, milestones, time-line, etc.) and risk mitigation measures in order to achieve the project objectives?

**Allocation of resources:** How appropriate and effective is the allocation of resources (person-months and equipment) to tasks and consortium members?

Threshold: 4/5 P. 60%

Threshold: 3.5/5 P. 20%

Trheshold: 3/5 P. 20%

# EIC Pathfinder Open - La evaluación

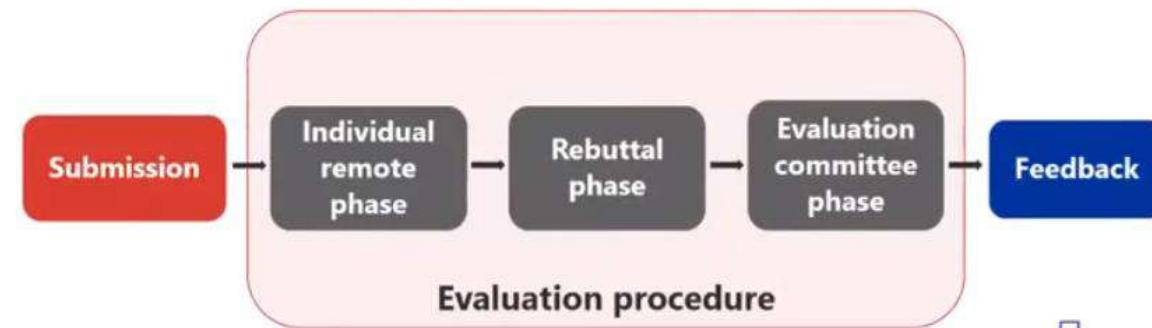
## Criterios de desempate (por orden)

- Higher score under the criterion Excellence;
- Higher score under the criterion Impact;
- Gender balance among the work package leaders as identified in the proposal;
- Number of applicants that are SMEs;
- Number of Member States and Associated Countries represented in the consortium;
- Other factors related to the objectives of the call to be determined by the evaluation committee.

# EIC Pathfinder Open - La evaluación

- Envío de solicitud a través del “**EU Funding and Tender portal**” antes de la **fecha límite: 7 de marzo de 2023**.
- Descargarse el “**template**” específico del EIC Pathfinder OPEN.
- Máximo de **17 páginas en las secciones 1-3 de la parte B**.
- **Resultados** después de **5 meses** tras la deadline.
- Si la propuesta se propone para financiar el proyecto se puede **firmar a los 8 meses de la deadline**.

How does the EIC decide if your proposal will be funded?



# EIC funding opportunities

## *EIC Pathfinder Challenges*

- ▶ **Challenge driven calls => top-down challenge-driven calls for tackling specific technology breakthroughs by portfolios of projects**



✓ **EIC Pathfinder Challenges** => Build on new, cutting edge selected directions in science and technology (*FET-Proactive en H2020*). 163,50 M€ in 2022 (167M€ in 2022).

- Disrupt a market or to create new opportunities by **realising innovative technological solutions** grounded in high risk/high gain research and development. **Proof of concept**.
- With each specific challenge call, the EIC will establish a portfolio (**and expected TRL up to 4**) of projects that explore different perspectives, competing approaches or complementary aspects of the Challenge, led by the **EIC Programme Managers**.

# EIC funding opportunities

## *EIC Pathfinder Challenges*

### ► Ficha convocatoria 2023 (20/06/2023)



- RIA (100% funding)
- Up to **4M€** per proposal, **25 pages**
- TRL and expected outcomes defined per challenge.
- Freedom in consortium design (1, 2, 3 or more). **If 1, mid caps and larger companies will not be permitted.**
- Managed by EIC PM as thematic portfolios
- **Annex 7** defines special IP clauses.
- **Annex 6** defines extra 50K€ adhoc grants for complementary portfolio activities or to explore commercialisation paths”
- To access to the EIC Accelerator via Fast track
- To participate in the ‘Next Generation Innovation Talents’ scheme
- **Deadline: 18/10/2023**

# EIC funding opportunities

## *EIC Pathfinder Challenges*

### ► Ficha convocatoria 2023



- **Challenges WP 2023:**

1. Clean and efficient cooling;
2. Architecture, Engineering and Construction digitalisation for a novel triad of design, fabrication, and materials;
3. Precision nutrition;
4. Responsible electronics;
5. In space solar energy harvesting for innovative space applications

# EIC Pathfinder Challenges

- **Specific objectives of each challenge described in Challenge guides:**
  - Detailed assessment of **state of the art** and related (existing) projects in the field;
  - **technical information** to underpin the objectives;
  - potential societal, economic, environmental **impacts** if the objectives are achieved;
  - Relevant references;
  - **No “Gatekeepers” as in Pathfinder Open.**
- **Challenge Guides available when call opens (available!)**

# EIC Pathfinder Challenges

European  
Innovation  
Council



*Challenge Guide – Clean and efficient Cooling*  
Last Update 06/01/2023

## PATHFINDER CHALLENGE

### CLEAN AND EFFICIENT COOLING CHALLENGE GUIDE

EIC Work Programme reference: HORIZON-EIC-2023-PATHFINDERCHALLENGES-01-01

Call deadline date: 18/10/2023 17.00 CET

EIC Programme Manager: Antonio Marco Pantaleo

The EIC will hold an Info Session on this Pathfinder Challenge call on 15th March 2023 between 09:30-12:00 CET. Participants can access the meeting as guests [here](#). Participation in the meeting, although encouraged, is optional and is not required for the submission of an application. A recording of this Info Session will be made available on the same URL. Notifications of additional dissemination events can be found at [Events \(europa.eu\)](#)

#### Table of Contents

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2.	The scope and objectives of the Challenge as defined in the Workprogramme .....	3
3.	Portfolio considerations for the evaluation of applications to the Challenge .....	5
4.	Implementation of the Challenge portfolio .....	7

## The challenge guide

[https://eic.ec.europa.eu/system/files/2021-06/Challenge%20Guide\\_Novel%20routes%20to%20green%20hydrogen%20production.pdf](https://eic.ec.europa.eu/system/files/2021-06/Challenge%20Guide_Novel%20routes%20to%20green%20hydrogen%20production.pdf)

Prepared annually by the EIC PM.

Identifies the state of the art of the challenge.

Clarify how the evaluation Will classify the proposals.

Anticipate the type of activities to be done as portfolio level.

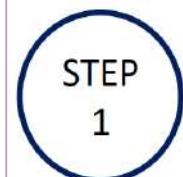
# EIC Pathfinder Challenges

- Programme Managers (temporary staff of the European Commission or its Executive Agencies): [https://eic.ec.europa.eu/eic-communities/eic-programme-managers\\_en](https://eic.ec.europa.eu/eic-communities/eic-programme-managers_en)
  - Are high level experts in their field that are appointed to work in the EIC for a limited duration **to develop visions for breakthrough technologies and innovations**, and to proactively manage portfolios of projects to achieve these breakthroughs.
  - Pathfinder projects may be requested by EIC Programme Managers **to actively share their preliminary findings and results with other relevant EIC projects (including within the same portfolio and EIC Fund vetted investors)**. To ensure full confidentiality, such sharing will be , bound by non-disclosure obligations regarding preliminary findings.
  - EIC takes a proactive approach of project and programme management to develop business and technology-based visions. It is assisted by **EIC Programme Managers**, , whose task is to identify, develop and implement such visions and to nurture potential market-creating innovation out of EIC funded projects and activities.
  - Reviews may also result in changes to ongoing or planned milestones and deployment of some **Business Acceleration Services** including additional coaching days and access to crucial expertise.

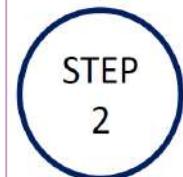
# EIC Pathfinder Challenges - La evaluación

Excellence	Impact	Implementation
<p><b>Objectives and relevance to the Challenge:</b> How clear are the project's pathways to achieve the expected outcomes objectives? How relevant are they in contributing to the overall goal and the specific objectives of the Challenge?</p> <p><b>Novelty:</b> To what extent is the proposed work ambitious and goes beyond the state-of-the-art?</p> <p><b>Plausibility of the methodology:</b> 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?</p>	<p><b>Potential impact:</b> How credible are the impacts of the Challenge? To what extent would the successful completion of the project contribute to this?</p> <p><b>Innovation potential:</b> 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?</p> <p><b>Communication and Dissemination:</b> 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?</p>	<p><b>Quality of the applicant/consortium (depends if mono or multi-beneficiaries):</b> To what extent do(es) the applicant/consortium members have all the necessary high quality expertise for performing the project tasks?</p> <p><b>Work plan:</b> How coherent and effective are the work plan (work packages, tasks, deliverables, milestones, time-line, etc.) and risk mitigation measures in order to achieve the project objectives?</p> <p><b>Allocation of resources:</b> How appropriate and effective is the allocation of resources (person-months and equipment) to tasks and consortium members?</p>
Threshold: 4/5 P. 60%	Threshold: 3.5/5 P. 20%	Threshold 3/5 P: 20%

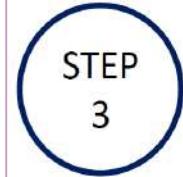
# EIC Pathfinder Challenges - La evaluación



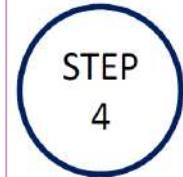
**STEP 1: Proposal submission F&T portal**  
Q4 2022



**STEP 2: Individual evaluation**  
*By independent experts*



**STEP 3: Proposal “classification”**  
*Following the specific challenge guide*



**STEP 4 – Evaluation committee**  
*Led by the EIC PM + ESR*

- 5 months for evaluation plus 3 for negotiations and signature of the GA as in Pathfinder Open.
- A bit different from Pathfinder Open, no rebuttal procedure.
- Programme Managers:  
[https://eic.ec.europa.eu/eic-communities/eic-programme-managers\\_en](https://eic.ec.europa.eu/eic-communities/eic-programme-managers_en)

# EIC Pathfinder Challenges - La evaluación (detalles)

## Step 1: Individual Remote phase

- EIC expert evaluators to assess **each application separately** against the defined award criteria:
  - Excellence
  - Impact
  - Quality and efficiency of the implementation.
- **Remote score** for each award criterion is the median of the evaluators' scores.
- **Overall remote score** is weighted sum of three median scores from three award criteria.
- All proposals that **meet the thresholds** to be considered in Step 2.

# EIC Pathfinder Challenges - La evaluación (detalles)

## Step 2: Evaluation committee phase

- Ranking list of proposals will be established based on:
  - the **evaluation scores** from the first step, as decided by the committee;
  - **each proposal's contribution** to the setting up of a consistent Challenge Portfolio of projects.
- **Portfolio considerations** to be detailed in Pathfinder Challenge Guide
- General principle: **categorisation of the proposals**, allocation of proposals to different components or categories, e.g.:
  - building blocks or subsystems
  - technical areas and/or competing technologies
  - risk level, size, budget.
- Evaluation committee to select a **suitable portfolio of proposals to be funded** from the highest scoring ones for each category or component
- Evaluation committee may also **propose adjustments** to the proposals.

# EIC Pathfinder - ¿encajo de verdad?

## ► **Aunque sean 17 págs (Open) 25 págs. (Challenges):**

- Comprobar otros WPs (de otros pilares) y otras calls del EIC. No sólo ICT.
- No ir aplicando a ver si suena la flauta.... **¡Peligro de quemadura!**
- FET Vs ERC: colaboración multidisciplinar, **ciencia y tecnología** son claves.
- ¡Que no se haya investigado el tema antes puede no ser suficiente (novedad)!
- FET no es sólo el objetivo final a largo plazo de un roadmap industrial (se requiere **multidisciplinariedad** y **novedad**).
- La visión a largo plazo es clave pero también **la idea realista** de cómo llegar donde queremos.
- Escribir una buena propuesta Pathfinder Open es como (o peor) escribir una buena publicación (Q1).

# EIC Pathfinder - ¿encajo de verdad?

- ¿**Voy a explotar en mercado a c/p?** Grado de innovación (**¡hay que decirlo!**)
- Expected impact: no cumplirlo todo per se sino **contribuir a ello**.
- No basta con ser bueno en Pathfinder hay que **diferenciarse del resto**.
- El investigador es el que conoce el **estado del Arte** y lo que realmente supone una idea rompedora con respecto a su tema de investigación que suponga un impacto clave.
- **La EC jamás financiará 2 veces lo mismo.**
- Una buena idea Pathfinder Open debe identificar **los primeros pasos para desarrollar una tecnología futura pero no para mejorar lo que ya existe!**
- Esos primeros pasos de una futura tecnología además deben tener un **componente disruptivo**, es decir, de hacerse una realidad debería **desplazar la tecnología actualmente existente**.

# EIC Pathfinder - ¿Comparaciones (odiosas)?

## Pathfinder vs ERC

- Proyectos monobeneficiarios/proyectos en consorcio
- Componente científico-tecnológico.
- Importancia del CV de los IP del proyecto.
- Diferencias de los criterios de evaluación y enfoque de las propuestas (ERC= criterio excelencia frente a los otros dos).



European Research Council

Established by the European Commission

## Pathfinder vs MSCA

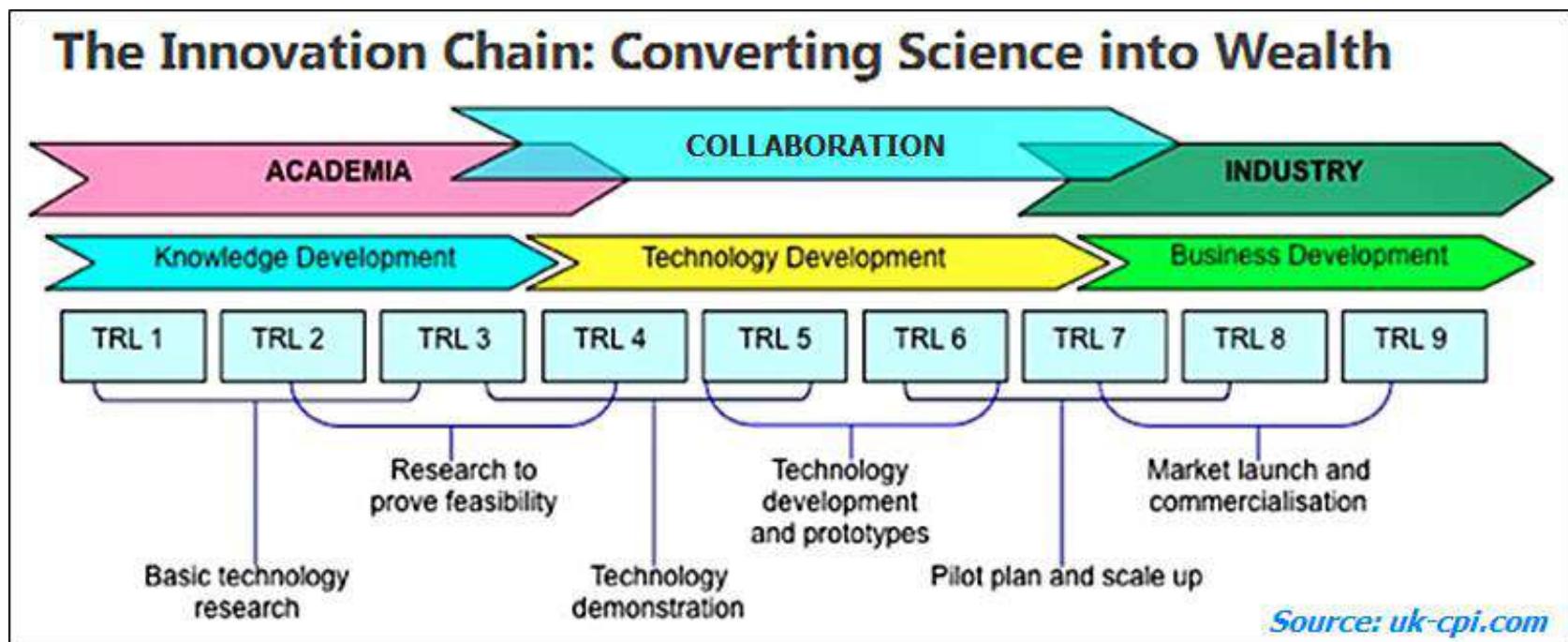
- Proyectos monobeneficiarios/proyectos en consorcio.
- Finalidades principales distintas  
(Movilidad&formación/identificación de tecnología futura).
- Importancia del CV de los IP del proyecto.



# EIC Pathfinder – Recomendaciones generales

- Importancia del **potencial innovador** :
  - Acciones específica adicionales para **estimular la explotación de resultados** de la investigación en proyectos FET. ¡**Innovation Launchpad desde 2016 y ahora EIC Transition!**
  - Fomento de la participación de **nuevos actores**: jóvenes investigadores excelentes, high-tech SMEs, mujeres, newcomers.
- **Investigación e Innovación Responsable (RRI)**: Compromiso con la sociedad: La investigación como algo abierto, creativo y cercano a la sociedad.
  - Actividades de **Outreach y Public engagement**
  - Integración en los proyectos de una **dimensión ética y de género**.
  - Desarrollo de **formal and informal science education**.
- **Acceso a los resultados de la investigación**. FET dentro ya estuvo dentro del **Open Research Data**. **FAIR Data Management**.
- Pathfinder abierto a la **colaboración** global.
- **The three O's**. Innovation, science, world.

# EIC Pathfinder - Technology readiness levels (TRLs)



# EIC Pathfinder - Technology readiness levels (TRLs)

- ▶ Technology readiness levels (TRL)
  - ▶ **TRL 1 –basic principles observed**
  - ▶ **TRL 2 –technology concept formulated**
  - ▶ **TRL 3 –experimental proof of concept**
  - ▶ **TRL 4 –technology validated in lab (para Pathfinder Open, en Challenges según challenge)**
  - ▶ TRL 5 –technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
  - ▶ TRL 6 –technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
  - ▶ TRL 7 –system prototype demonstration in operational environment
  - ▶ TRL 8 –system complete and qualified
  - ▶ TRL 9 –actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

# EIC Pathfinder - Qué es Pathfinder Open y qué no?

## WHAT IS FET-RESEARCH?

- it focuses on new ideas which are foundational and may have a transformative character,
- it is risky (possibility to fail),
- it is bottom-up (defined by researchers),
- it is interdisciplinary,
- it is purpose-driven and aims at technology development,
- it is collaborative and involves researchers from different countries.

## WHAT IS IT NOT?

- it is not mainstream research,
- it is not about small changes to existing models or approaches,
- it does not rely on track record alone,
- it is not pure basic science,
- it does not follow a policy agenda or pre-defined topics,
- it is not discipline-oriented research.

<https://www.fet-traces.eu/traces-wAssets/docs/FET Traces final report 2018.pdf>

# EIC Pathfinder – Recomendaciones generales

- No aplicar a muchos topics para ver si tengo suerte!!
- Quien evalúa puede no ser un gran experto en el tema.
- No dar nada por entendido ya que quien evalúa se basa sólo en aquello que lee (**lo que escribo es lo que cuenta**).
- Evaluadores en condiciones “**espartanas**”; 3-5 / día).
- Mucho texto no implica que se entienda mejor, ¡**enfoque!**
- **No** hacer servir un **inglés excesivamente técnico**.
- No incluir **lenguaje político**.
- Ojo con el marco legal vigente (Europeo y nacional).
- Evitar el uso del condicional, debemos mostrar determinación (**shall Vs will**).
- Mi propuesta **no es la Σ de “n” partes!**
- El evaluador debe comprobar las referencias.



# EIC Pathfinder –Recomendaciones generales

Escribir todo lo necesario para que el objetivo sea entendible (SMART).

Responder claramente a **los criterios de evaluación**.

**Claridad** en los resultados, métodos y deliverables.

Presentar una propuesta **compacta y consistente** (1 redactor).

Intentar **atraer la atención** (primeras páginas).

Encontrar un buen título/acrónimo y vigilar el **look & feel** .

Lenguaje **claro, simple y preciso**. Gráficos y tablas.

Repartir el esfuerzo durante toda la propuesta.

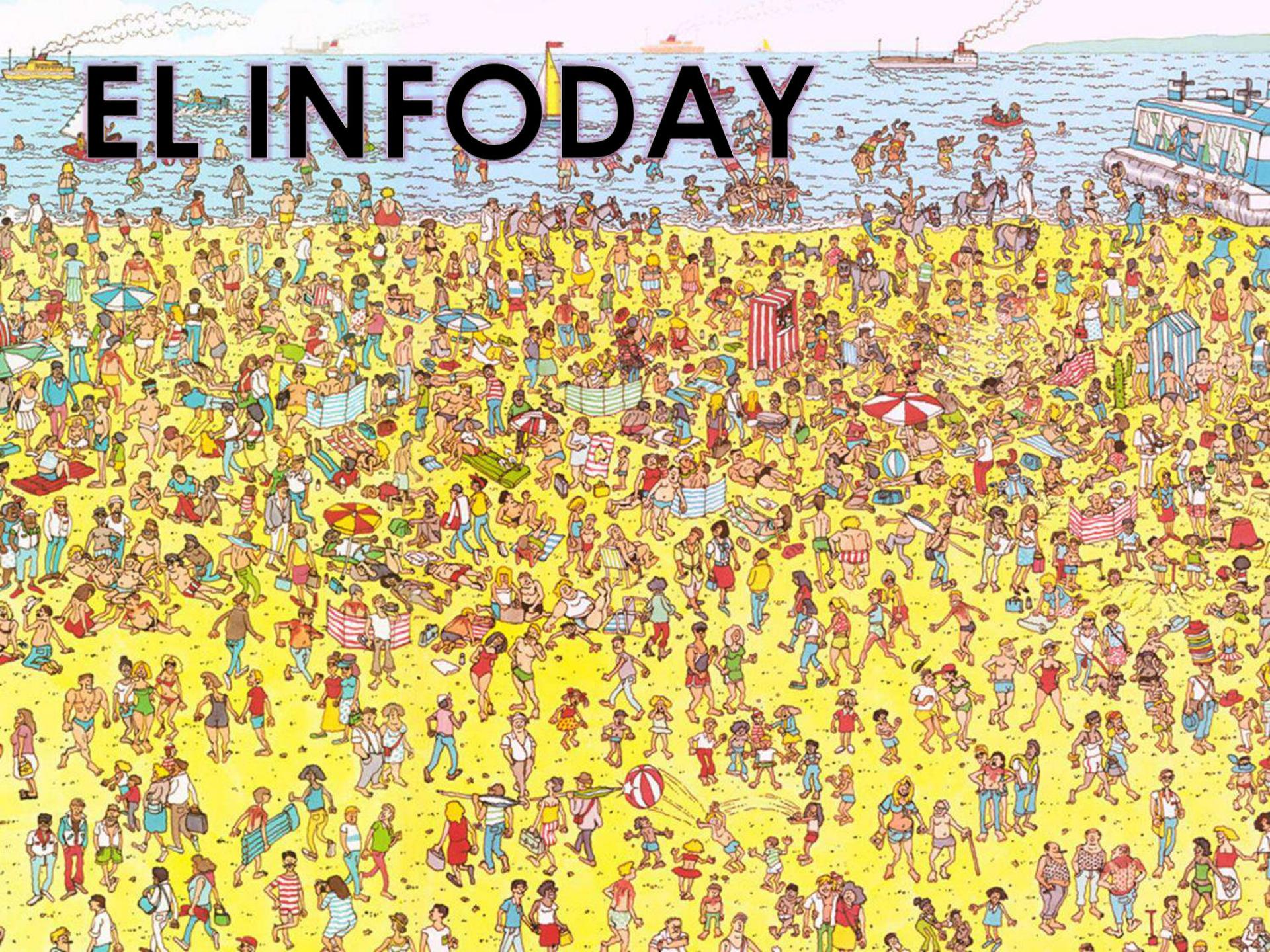
Maximizar el encaje con el topic (encaje total).

Consorcio convincente (roles).

[Open Science](#).



# EL INFODAY



# EIC Pathfinder – Recomendaciones generales

## ► Ejemplos de acrónimos sugerentes:

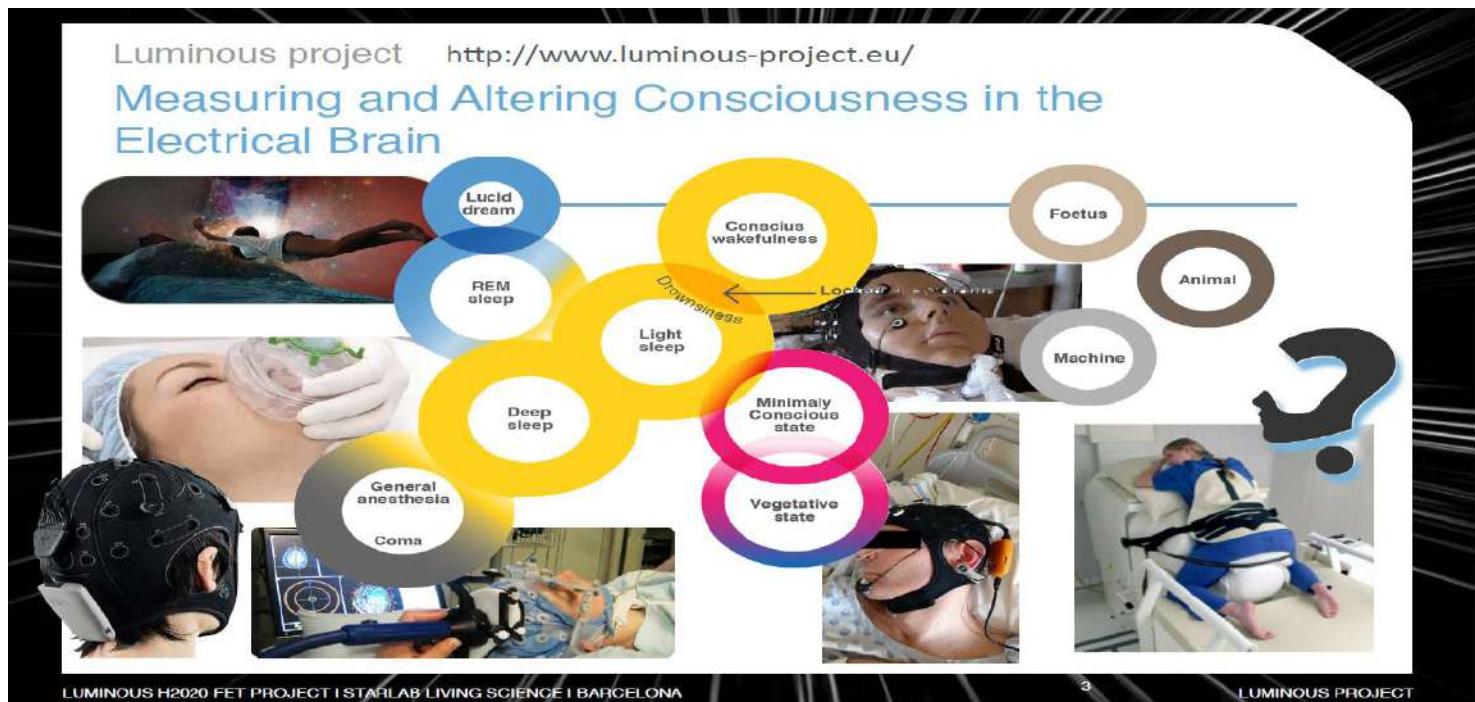
- NEA-TASHA: Novel Evolutionary and Agent-based – Techniques for Automated Safety and Hazard Analysis
- ADAM: Adaptation And Mitigation Strategies: Supporting European climate policy
- ALARM: Assessing LArge-scale environmental Risks with tested Methods
- AMEDEUS: Accelerate MEmbrane DEvelopment for Urban Sewage purification
- CONQUER: Contrast by Quadrupole Enhanced Relaxation
- DISCOVERER: DISruptive teChnOlogies for VERy low Earth oRbit platforms
- TRANSPIRE: Terahertz RAdio communication using high ANistropy SPIn torque REsonators

# EIC Pathfinder – Recomendaciones generales

- Importancia de incluir “**nuevos actores**”: SME (incl. start-ups), mujeres, jóvenes investigadores y newcomers.
- Importancia **criterios de desempate** Horizon Europe (ver los de Pathfinder Open).
- Importancia de los “**CVs**” en la propuesta (e-forms).
- Se espera que los proyectos tomen las medidas necesarias para proteger aspectos de **IPR**.
- **Confección del consorcio:**
  - ¿Incluir socio de tercer país, p.e USA? Participación de entidades de terceros países.
    - ✓ Financiado por UE.
    - ✓ No financiado pero proyecto sigue.
    - ✓ Socio con financiación propia.
    - ✓ Posible solución: Inclusión de un “Advisory Board”.
  - Socios UK?
  - Incluir empresa, PYME, socio industrial.

# Ejemplos de proyectos FET (aplicables a EIC Pathfinder OPEN)

**Ejemplo 1:** Idea rompedora que nadie ha intentado antes, rozando la “ciencia ficción”: Proyecto Luminous – Measuring and Altering Consciousness in the Electrical Brain. Coordinado por Starlab: <http://www.luminous-project.eu/>



# Ejemplos de proyectos FET (aplicables a EIC Pathfinder OPEN)

**Ejemplo 2:** Uso de tecnologías ya existentes para una finalidad y/o aplicaciones nuevas. Proyecto HELiCoid - Hyperspectral Imaging for Brain Cancer Detection – Coordinado por la ULPGC: <https://cordis.europa.eu/project/id/618080/es> <https://es.euronev>

The diagram illustrates the HELiCoid Project workflow for brain cancer detection using hyperspectral imaging. It shows a flow from a human eye diagram and color receptor graph through a surgical setting to a computer processing and analysis stage.

**Key components and steps:**

- 1. Hyperspectral Camera:** A camera mounted on a surgical microscope captures real-time images of the brain during surgery.
- 2. Data Processing:** The captured images are processed by a computer system to extract spectral information.
- 3. Machine Learning Model:** A flowchart shows the machine learning pipeline for training and validating the model using hyperspectral data and ground truth tumor segmentation.
- 4. Wireless Sensor:** A small sensor device is shown, likely used for monitoring physiological parameters or providing feedback to the system.
- 5. Final Output:** The system identifies brain tumors in real-time, distinguishing between normal brain tissue, tumor, and hypervascularized background.

**Annotations:**

- Human color receptor relative sensitivity:** A graph showing the sensitivity of "Green" and "Blue" receptors across different wavelengths (nm) from 400 to 500 nm.
- Eye diagram:** Anatomical labels for the eye including Eye lid, Lacrimal canu, Tear duct, Pupil, Iris, Cornea, Anterior chamber (aqueous humor), Posterior chamber, Suspensory ligaments, Ciliary body and muscle, Medial rectus muscle, and Right Eye (viewed from).
- Color receptor graph:** A graph showing Sensitivity vs. Wavelength (nm) for "Green" receptors (peaking around 500 nm) and "Blue" receptors (peaking around 450 nm).
- Normal Brain:** A green area representing normal brain tissue.
- Tumor:** A red area representing the tumor.
- Hypervascularized Background:** A blue area representing the hypervascularized background.

**Project Name:** HELiCoiD Project

**Assist the surgeon in the identification of brain tumours in real-time**

**HELiCoiD: Hyperspectral Imaging Cancer Detection**

December 5<sup>th</sup>, 2019

15

HELiCoiD

# Ejemplos de proyectos FET (aplicables a EIC Pathfinder OPEN)

**Ejemplo 3:** Idea rompedora basada en una tecnología ya existente pero con el uso de nuevos materiales/metodologías que consiguen crear una disrupción tecnológica. Proyecto SALBAGE. Coordinado por CSIC.

<https://www.salbageproject.eu/>



SALBAGE PROJECT  
H2020-FETOPEN-2016-2017 GA 766581



## The idea

- **Aluminium** is a very interesting material, widely available, recyclable and cheap.
- **Sulfur** is being studied with potential application as cathode in lithium batteries.
- The use and development of **new electrolytes** is needed. And we propose the use of Ionic Liquids and Deep Eutectic Solvents in a **polymerized** version.
- The combination of these elements in a battery **has never been tried before**.
- Its success would represent a scientific breakthrough in the energy storage field, with real impact in the society progress towards **more affordable and safer batteries**.
- It would lead to the development of a **new generation of batteries**.

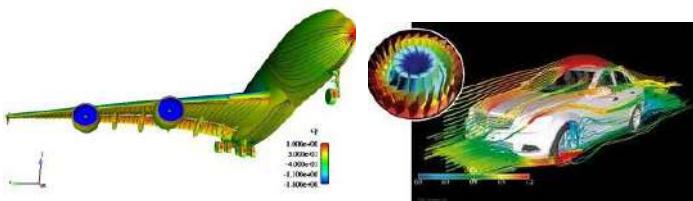
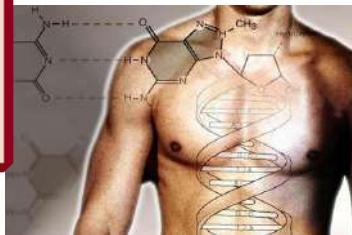
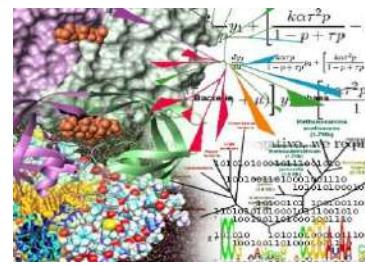
# EIC Pathfinder - Aplicabilidad futura

## EIC Pathfinder Open - addressing societal challenges



**Health, demographic change and well-being**

(Personalised medicine, pharma/bio-medical simulations, Virtual Physiological Human, Human Brain Project)



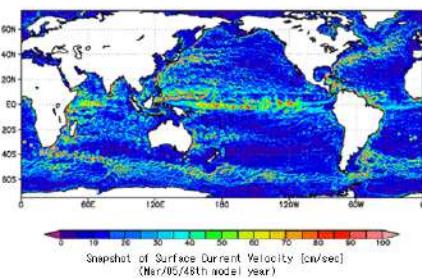
**Smart, green and integrated transport Engineering**  
(performance, sustainability, energy efficiency)



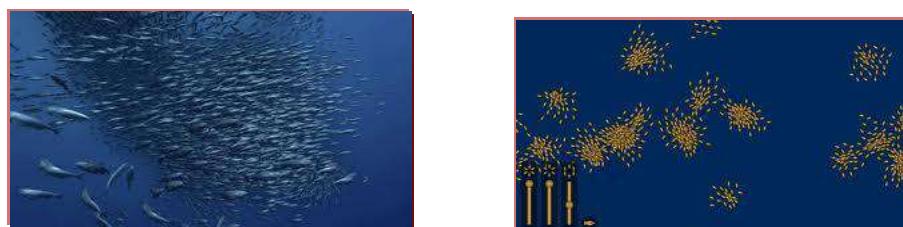
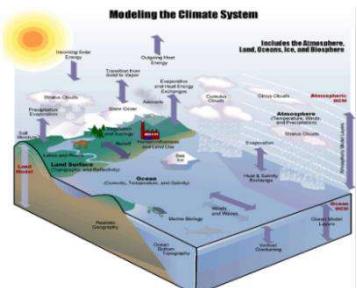
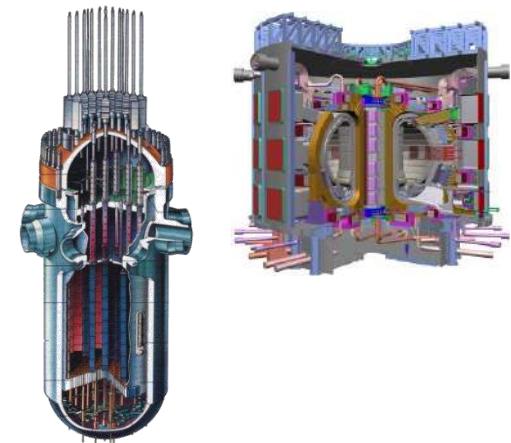
**Inclusive, innovative and secure societies**  
(Smart Cities, multivariable decision/analytics support)

# EIC Pathfinder Open - Aplicabilidad futura

## EIC Pathfinder Open- addressing societal challenges



**Climate action, resource efficiency  
and raw materials**  
(Simulators for Climate & Earth Sciences, Gas&Oil)



**Food security, sustainable agriculture,  
marine research and the bio-economy**  
(simulation of sustainability factors (e.g. weather forecast, stock  
plagues and diseases control, etc))

**Secure, clean and  
efficient energy**  
(Fusion, nuclear plant  
simulations)

# EIC Pathfinder Open - Template

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af\\_he-eic-pathfinder-open\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-eic-pathfinder-open_en.pdf)

=> Template disponible en Word (Participant Portal)

17 páginas, sin cover page.



**Horizon Europe Programme**

**Standard Application Form  
(HE EIC PATHFINDER OPEN)**

Application form (Part A)  
Project proposal – Technical description (Part B)

Version 8.0  
20 December 2022

# EIC Pathfinder Open - Template

- Parte A: **Application forms** (información administrativa, aspectos éticos, género, presupuesto, perfiles de investigadores, ...)
- Parte B: Project proposal – **Technical description**
  - **Step 1:** Logging in the Portal
  - **Step 2:** Select the call, topic and type of action in the Portal
  - **Step 3:** Create a draft proposal: Title, acronym, summary, main organisation and contact details
  - **Step 4:** Manage your parties and contact details: add your partner organisations and contact details.
  - **Step 5:** Edit and complete web forms for proposal part A and upload proposal part B
  - **Step 6:** Submit the proposal

# EIC Pathfinder Open - Template

## ■ Parte A: Gender equality plan

Application Forms		
Proposal ID XXXXXXXX	Acronym XXXXXX	Participant short name: XXXX
<b>Gender equality plan</b>		
<i>Only Public bodies, Higher education establishments and Research organisations must answer this question. Be aware that if the proposal is selected, having a Gender Equality Plan will be necessary before the grant signature.</i>		
Does the organisation have a Gender Equality Plan (GEP) covering the elements listed below?		
<b>Minimum requirements (building blocks) for a GEP</b>  Public GEP: formal document published on the institution's website and signed by the top management, addressing the following issues: <ul style="list-style-type: none"><li>- <b>Dedicated resources:</b> commitment of human resources and gender expertise to implement it.</li><li>- <b>Data collection and monitoring:</b> sex/gender disaggregated data on personnel and students and annual reporting based on indicators.</li><li>- <b>Training:</b> Awareness raising/trainings on gender equality and unconscious gender biases for staff and decision-makers.</li><li>- <b>Minimum areas to be covered</b> and addressed via concrete measures and targets:<ul style="list-style-type: none"><li>o work-life balance and organisational culture;</li><li>o gender balance in leadership and decision-making;</li><li>o gender equality in recruitment and career progression;</li><li>o integration of the gender dimension into research and teaching content;</li><li>o measures against gender-based violence including sexual harassment.</li></ul></li></ul>	<input type="radio"/> Yes	<input type="radio"/> No

Páginas 154 y 155 del WP2023:

- Each legal entity being a **public body**, a research organisation or a higher education establishment **must have a Gender Equality Plan**.
- A self-declaration will be requested **at application stage**, while the existence of the Gender Equality **Plan is checked before grant signature**.

# EIC Pathfinder Open - Template

## ■ Parte A: Perfiles personal investigador

Researchers involved in the proposal									
Title	First Name	Last Name	Gender	Nationality	E-mail	Career stage <sup>1</sup>	Role of researcher (in the project)	Reference Identifier	Type of identifier
			[Woman] [Man] [Non-binary]			[Category A – Top grade researcher] [Category B – Senior researcher] [Category C – Recognised researcher] [Category D – First stage researcher]	[Leading] [Team member]		[ORCID] [Researcher Id] [Other - specify]

<sup>1</sup> Career stages as defined in Frascati 2015 manual:

Category A – Top grade researcher: the single highest grade/post at which research is normally conducted. Example: 'Full professor' or 'Director of research'.

Category B – Senior researcher: Researchers working in positions not as senior as top position but more senior than newly qualified doctoral graduates (IsCED level 8). Examples: 'associate professor' or 'senior researcher' or 'principal investigator'.

Category C – Recognised researcher: the first grade/post into which a newly qualified doctoral graduate would normally be recruited. Examples: 'assistant professor', 'investigator' or 'post-doctoral fellow'.

Category D – First stage researcher: Either doctoral students at the IsCED level 8 who are engaged as researchers, or researchers working in posts that do not normally require a doctorate degree. Examples: 'PhD students' or 'junior researchers' (without a PhD).

# EIC Pathfinder Open - Template

## ■ Parte A: Información de los participantes

<i>Role of participating organisation in the project Applicants may select more than one option.</i>	
Project management	<input type="checkbox"/>
Communication, dissemination and engagement	<input type="checkbox"/>
Provision of research and technology infrastructure	<input type="checkbox"/>
Co-definition of research and market needs	<input type="checkbox"/>
Civil society representative	<input type="checkbox"/>
Policy maker or regulator, incl. standardisation body	<input type="checkbox"/>
Research performer	<input type="checkbox"/>
Technology developer	<input type="checkbox"/>
Testing/validation of approaches and ideas	<input type="checkbox"/>
Prototyping and demonstration	<input type="checkbox"/>
IPR management incl. technology transfer	<input type="checkbox"/>
Public procurer of results	<input type="checkbox"/>
Private buyer of results	<input type="checkbox"/>
Finance provider (public or private)	<input type="checkbox"/>
Education and training	<input type="checkbox"/>
Contributions from the social sciences or/and the humanities	<input type="checkbox"/>
Other Specify (50 character limit):	<input type="checkbox"/>

<i>List of up to 5 publications, widely-used datasets, software, goods, services, or any other achievements relevant to the call content.</i>	
Type of achievement	Short description
[Publication]	Key elements of the achievement, including a short qualitative assessment of its impact and (where available) its digital object identifier (DOI) or other type of persistent identifier (PID).
[Dataset]	Publications, in particular journal articles, are expected to be open access. Datasets are expected to be FAIR and 'as open as possible, as closed as necessary'.
[Software]	
[Good]	
[Service]	

<i>List of up to 5 most relevant previous projects or activities, connected to the subject of this proposal</i>	
Name of Project or Activity	Short description

<i>Description of any significant infrastructure and/or any major items of technical equipment, relevant to the proposed work</i>	
Name of infrastructure or equipment	Short description

# EIC Pathfinder Open - Template

## ■ Parte A: Presupuesto

# EIC Pathfinder Open - Template

## ■ Parte A: Ethics and Security

### *ETHICS SELF-ASSESSMENT*

If you have entered any issues in the ethics issue table, you must perform an ethics self-assessment in accordance with the guidelines "[How to Complete your Ethics Self-Assessment](#)" and complete the table below.

Ethical dimension of the objectives, methodology and likely impact	
<p>Explain in detail the identified issues in relation to:</p> <ul style="list-style-type: none"><li>– objectives of the activities (e.g. study of vulnerable populations, etc.)</li><li>– methodology (e.g. clinical trials, involvement of children, protection of personal data, etc.)</li><li>– the potential impact of the activities (e.g. environmental damage, stigmatisation of particular social groups, political or financial adverse consequences, misuse, etc.)</li></ul>	
Compliance with ethical principles and relevant legislations	
<p>Describe how the issue(s) identified in the ethics issues table above will be addressed in order to adhere to the ethical principles and what will be done to ensure that the activities are compliant with the EU / national legal and ethical requirements of the country or countries where the tasks are to be carried out. It is reminded that for <b>activities performed in a non-EU countries</b>, they should also be allowed in at least one EU Member State.</p>	

# EIC Pathfinder Open - Consejos prácticos

## Excellence 1/13

### 1.1 Long-term vision

- Describe your vision of the radically new technology, towards which the project would contribute in the long term.
- Describe the transformative positive effect that this radically new technology, if achieved in the long term, would have on our economy and society.

### 1.2 Science-towards-technology breakthrough

- Describe in concrete terms the science-towards-technology breakthrough of the project.
- Describe the relevant state-of-the-art and discuss the novelty and ambition of the proposed breakthrough with respect to it.
- Describe the contribution of the science-towards-technology breakthrough to the realization of the envisioned technology.

# EIC Pathfinder Open - Consejos prácticos

## Excellence 2/13

### 1.3 Objectives

- Describe the objectives of your proposed work. Are they concrete and plausible, measurable and verifiable? Are they realistically achievable within the duration of the project?
- Explain the appropriateness of the high-risk research approach for achieving the high gain objectives set in your project.
- Describe and explain the overall methodology, including the concepts, models and assumptions that underpin your work. Explain its suitability to deal with the considerable scientific and technological uncertainties of the project's objectives and how appropriate it is to enable alternative directions and options. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them.
- Describe how the gender dimension (i.e. sex and/or gender analysis) is taken into account in the project's research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.

# EIC Pathfinder Open - Consejos prácticos

## Excellence 3/13

### 1.3 Objectives

- Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives. If you believe that none of these practices are appropriate for your project, please provide a justification here.
- Research data management and management of other research outputs: Applicants generating/collecting data and/or other research outputs (except for publications) during the project must provide a short description on how the data/ research outputs will be managed in line with the FAIR principles (Findable, Accessible, Interoperable, Reusable)

### 1.4 Interdisciplinarity

- Describe the proposed interdisciplinary approach engaging contributions from different scientific and technological disciplines.
- Explain to what extent the combination of disciplines brings new scientific collaborations and how it contributes to the achievement of the proposed breakthrough.

# EIC Pathfinder Open - Consejos prácticos Excellence 4/13

## Algunas recomendaciones sobre 1.1 Long-term vision:

- ¿Está claramente definida la **visión a largo plazo**?
- ¿Se explica claramente el **avance rompedor** propuesto? Este avance puede estar relacionado con un problema que no se ha resuelto y la propuesta propone una idea como solución.
- Relación entre el objetivo rompedor (breakthrough) y la visión a largo plazo. La long term vision como base del breakthrough.

# EIC Pathfinder Open - Consejos prácticos

## Excellence 5/13

### Algunas recomendaciones sobre 1.1 Long-term vision:

- Visión a largo plazo (5-10 años) que permita desarrollar una nueva tecnología **más allá del estado del arte** (inexplorada) y de los *current foreseen technology roadmaps*.
- Importancia de explicar el **efecto transformador a todos los niveles** ¿qué tecno vamos a desplazar con nuestra idea inexplorada? ¿qué efecto sobre la sociedad/la industria va a tener? **i.e: tecnologías no invasivas para curar enfermedades.**
- La long term visión debe tener un enfoque científico y tecnológico claro.

# EIC Pathfinder Open - Consejos prácticos Excellence 6/13

## Algunas recomendaciones sobre 1.1 Long-term vision:

- Debemos demostrar qué se quiere (visión) en el futuro e **incluir ejemplos de aplicación**. También **si ha habido avances relacionados** relevantes que puedan demostrar la novedad de lo que planteamos.

Pregunta clave: ¿Hasta qué punto es un cambio de paradigma científico-tecnológico? ¿para qué y para quién va a servir? ¡EJEMPLOS REALES!

# EIC Pathfinder Open - Consejos prácticos Excellence 7/13

## Algunas recomendaciones sobre 1.2 Science-towards-technology breakthrough

- ¿Es **nueva** la propuesta de investigación? No puede ser una continuación de lo que se está haciendo ni un pequeño paso más en un recorrido que ya se está siguiendo.
- ¿Tiene la propuesta de investigación potencial para definir una **nueva línea de investigación** que pueda tener continuidad (en los próximos años) para poder alcanzar una tecnología completamente nueva?

# EIC Pathfinder Open - Consejos prácticos

## Excellence 8/13

### Algunas recomendaciones sobre 1.2 Science-towards-technology breakthrough

- **Hilo argumental** del estilo: 1) cuál es la necesidad, 2) cuál es la nueva idea/concepto de alto riesgo que se propone, 3) qué conocimiento nuevo se va a generar para ello.
- Nuestro punto de partida **no debe basarse en el background del consorcio**. Investigación no incremental.
- Importancia máxima del **análisis del State of the Art + roadmaps/agendas**. ¿**cómo lo supero**? [https://eic.ec.europa.eu/index\\_en](https://eic.ec.europa.eu/index_en)
- Descripción científica más exhaustiva y que demuestre la **novedad** del **breakthrough** propuesto. Explicar detalladamente (mucho más que en 1.1) el breakthrough a nivel científico-tecnológico. **Explicar mi idea a fondo**.

# EIC Pathfinder Open - Consejos prácticos Excellence 9/13

## Algunas recomendaciones sobre 1.2 Science-towards-technology breakthrough:

- ¿Por qué hasta ahora no se ha hecho? Y ¿Por qué ahora sí se va a poder hacer?
- ¿Cómo **sentamos las bases** que permitan el desarrollo paulatino de esa nueva tecnología o línea tecnológica (o nuevas) para su futura aplicabilidad?
- **Alcanzable** durante el proyecto (prueba de concepto en laboratorio TRL4)

**EIC Pathfinder Open no busca investigación incremental o de refinamiento sino rupturista. Ideas/conceptos radicalmente nuevos.**  
**Explicación detallada.**

# EIC Pathfinder Open - Consejos prácticos Excellence 10/13

## Algunas recomendaciones sobre 1.3. Objectives.

- Los objetivos deben ser SMART y muy claros/concretos. Evitar demasiados objetivos.
- Posibilidad de la consecución del breakthrough novedoso Vs barreras/obstáculos actuales. **¿Cómo los supero? Vs Implementation.**
- Relevancia de la **metodología** para la consecución de los objetivos planteados en el proyecto.
- La metodología propuesta es lo **suficientemente flexible** para permitir la exploración de direcciones alternativas y abre otras opciones posibles (en relación con los riesgos del proyecto). **Serendipia**. ¿Hay potencial para superar el riesgo/obstáculos con la conjunción de disciplinas?

# EIC Pathfinder Open - Consejos prácticos Excellence 11/13

## Algunas recomendaciones sobre 1.3. Objectives.

- Identificar riesgos/barreras/obstáculos principales. ¿Es mi proyecto factible a pesar de los mismos?
- Cuando sea relevante se debe considerar el análisis de la **dimensión de género**. (enlace recomendado: Gendere innovations: [http://ec.europa.eu/research/swafs/gendered-innovations/index\\_en.cfm?pg=home](http://ec.europa.eu/research/swafs/gendered-innovations/index_en.cfm?pg=home)). Incluir **aspectos y análisis de género en las temáticas de investigación** e innovación cuando sea apropiado y explicar en qué medida es relevante para el proyecto.

# EIC Pathfinder Open - Consejos prácticos Excellence 12/13

## Algunas recomendaciones sobre 1.4 Interdisciplinarity

- **Descripción “breve” de las disciplinas científicas** que intervienen en el desarrollo del avance científico propuesto
- ¿Hasta qué punto la idea principal necesita **combinar los conocimientos y metodologías de las diferentes disciplinas** que se proponen? ¿Cómo **interactúan** esas diferentes disciplinas?
- Incluir medidas para el **intercambio, aprendizaje mutuo** y avances en las **sinergias** de las disciplinas científicas involucradas con el fin de explorar **nuevas áreas de investigación conjunta**.
- Interdisciplinariedad como base para superar riesgos y conseguir el breakthrough

# EIC Pathfinder Open - Consejos prácticos

## Excellence 13/13

### Algunas recomendaciones sobre 1.4 Interdisciplinarity:

- Interdisciplinar/Multidisciplinar:
  - El término “**interdisciplinario**” es el tipo de trabajo científico que requiere metodológicamente de la **colaboración de diversas y diferentes disciplinas y la colaboración de especialistas procedentes de diversas áreas tradicionales**.
  - La **multidisciplinariedad** es una **mezcla no-integradora** de varias disciplinas en la que cada disciplina conserva sus métodos y suposiciones sin cambio o desarrollo de otras disciplinas (**sólo secuencial**).
- Los proyectos deben ir **más allá** del punto de vista tradicional **de colaboración secuencial de disciplinas. Cross-fertilization & scale economies**.
- Justificar la multidisciplinariedad mostrando las áreas de especialización de los socios **desarrollando sinergias** y cómo las diferentes disciplinas se interrelacionan en las diferentes actividades (Work packages) y **cómo ayudan en la mitigación de riesgos**.

**Los IPs deben de su “zona de confort” y desarrollos colaboraciones con entidades/disciplinas científicas nuevas.**

# EIC Pathfinder Open - Consejos prácticos

## Impact 1/7

### 2.1 Long-term impact

- Provide a narrative explaining how the project's results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project.
  - Describe the transformative positive effects that the envisioned new technology, if achieved in the long term, would have on our economy, environment and society. How significant these transformative effects are?
  - Describe any requirements and potential barriers - arising from factors beyond the scope and duration of the project - that may determine whether the desired outcomes and impacts are achieved. These may include, for example, other R&I work within and beyond Horizon Europe; regulatory environment; targeted markets; user behaviour. Indicate if these factors might evolve over time. Describe any mitigating measures you propose, within or beyond your project, that could be needed should your assumptions prove to be wrong, or to address identified barriers.

# EIC Pathfinder Open - Consejos prácticos

## Impact 2/7

### 2.2 Innovation potential

- Describe the exploitation measures to facilitate future translation of research results into innovations.
- Specify the strategy for the management of intellectual property, foreseen protection measures, such as patents, design rights, copyright, trade secrets etc. How these would be used to support exploitation?
- Explain the measures the consortium will implement for empowering key actors (such as excellent early career researchers or promising high-tech SMEs, including start-ups) that have the potential to take the lead in translating research into innovations.

# EIC Pathfinder Open - Consejos prácticos

## Impact 3/7

### 2.3 Communication and Dissemination

- Describe the dissemination and communication measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large) for raising awareness about the project's outcomes.

# EIC Pathfinder Open - Consejos prácticos

## Impact 4/7

### Algunas recomendaciones sobre 2.1 Long-term impact

- **Contribución científica y tecnológica concreta** a la fundación de una nueva y futura tecnología. Ligar con 1.1 Long-term visión.
  - ✓ ¿Será útil la nueva tecnología para la Sociedad ¿por qué?
  - ✓ ¿Qué efecto transformador tendrá si funciona? **La bola de cristal**
  - ✓ **Do not harm principle.**
  - ✓ Explicar ejemplos reales y proponer métricas o indicadores.
- Potencial de **impacto social o económico futuro**, creación de mercado, líneas de investigación, etc más allá del proyecto.
  - ✓ ¿Cómo la investigación va a contribuir a mejorar la competitividad europea o la calidad de vida en Europa? **Ojo USA y competidores.**
- Barreras, requerimientos y acciones de mitigación (during and ex post).



# EIC Pathfinder Open - Consejos prácticos

## Impact 5/7

### Algunas recomendaciones sobre 2.2 Innovation potential

- **Pseudo-estrategia de explotación/comercialización + IPR.**
  - ¿Todo open o protejo?
  - Detallar planes IPR y sostenibilidad futura! (**no sólo CA, ¿spin-off, patente?**)
  - Explicar ejemplos reales y proponer métricas o indicadores.
  - **Posibilidades de innovación (detallar). Roles concretos!**
- Impacto y capacitación de los **nuevos actores (jóvenes investigadores, SMEs, o participantes nuevos)** dirigido a desarrollar un liderazgo tecnológico futuro.
  - ¿Hay jóvenes investigadores en el consorcio? Especialmente se busca que los **IP puedan ejecutar la investigación a largo plazo.**
  - ¿Hay PYMEs en el consorcio con suficiente presupuesto que pueda aprovechar los resultados del proyecto y que pudieran trasladarlos a una realización innovadora y al mercado?
  - ¿Hay nuevos actores que normalmente están insuficientemente representados? P.e Mujeres.

# EIC Pathfinder Open - Consejos prácticos

## Impact 6/7

**Pregunta clave: ¿Es obligatorio que participen empresas/PYME en las propuestas?**

**El 60% de los proyectos financiados tienen al menos una PYME, el 76% un socio industrial.**

# EIC Pathfinder Open - Consejos prácticos

## Impact 7/7

### Algunas recomendaciones sobre 2.3 Communication and Dissemination

- Están las medidas “estandar” bien descritas y planeadas (**publicaciones científicas, website, Open access** . Hay medidas más allá de las “estandar” basadas en new media?)
- ¿Están las actividades de **dissemination&communication** claramente descritas para conseguir el impacto deseado? ¡**Roles!**
- Dissemination plan/Open research data to be linked to DMP.
- Incluir actividades para el **public/societal engagement**.

# EIC Pathfinder Open - Consejos prácticos

## Implementation 1/6

### 3.1 Work plan and allocation of resources (= tablas, tablas y más tablas)

- Brief presentation of the overall structure of the work plan
- Timing of the different work packages and their components (Gantt chart or similar)
- Graphical presentation of the components showing how they inter-relate (Pert chart or similar)
- Detailed work description:
  - ✓ List of work packages (table 3.1a).
  - ✓ Description of each work package (table 3.1b).
  - ✓ List of deliverables (table 3.1c).
  - ✓ List of milestones (table 3.1d).
  - ✓ **List of critical risks for implementation (table 3.1e).**
  - ✓ Summary of staff effort (table 3.1f) ..... ETC.

# EIC Pathfinder Open - Consejos prácticos

## Implementation 2/6

### 3.2 Consortium

- Describe the **expertise of the consortium members**. How it provides all the necessary knowledge and interdisciplinary approach and complementary contribution. And how it matches the project's objectives and tasks.
- Explain the role of each consortium member and its complementary contribution. If appropriate, show how this includes expertise in social sciences and humanities, open science practices, and gender aspects of R&I.
- Describe how the partners will have access to critical infrastructure needed to carry out the project activities.
- Other countries and international organisations: If one or more of the participants requesting EU funding is based in a country or is an international organisation that is not automatically eligible for such funding **explain why the participation of the entity in question is essential to successfully carry out the project**.

# EIC Pathfinder Open - Consejos prácticos

## Implementation 3/6

### Algunas recomendaciones sobre 3.1 Work plan and allocation of resources

- Hay incluida una descripción clara de las work packages, project reporting periods, tasks and deliverables? (tablas incluidas + Gantt chart)
- Presentación de las tareas mostrando como interactúan (mapas de red/diagrama de flujo, Pert).
- ¿Están los intermediate targets (milestones) bien definidos y son adecuados? properly defined and timely?
- **Ojo deliverables.... (públicos Vs confidenciales)**
- Organizational structure and the decision-making process (muy breve).

# EIC Pathfinder Open - Consejos prácticos

## Implementation 4/6

### Algunas recomendaciones sobre 3.1 Work plan and allocation of resources

- Reporting periods table.
- Table with critical risks identified and mitigating action/structure and the decision-making process (incl. table of milestones)

Description of risk (indicate level of likelihood: Low/Medium/High)	Work package(s) involved	Proposed risk-mitigation measures

# EIC Pathfinder Open - Consejos prácticos

## Implementation 5/6

### Algunas recomendaciones sobre 3.1 Work plan and allocation of resources

- Do the **person-months** allocated correspond to the proposed tasks to be performed?

	WPn	WPn+1	WPn+2	Total Person/ Months per Participant
Participant Number/Short Name				
ParticipantNumber/ Short Name				
Participant Number/ Short Name				
Total Person/Months				

- Is the necessary **equipment** present or properly described and budgeted?

# EIC Pathfinder Open - Consejos prácticos

## Implementation 6/6

### Algunas recomendaciones sobre 3.2 Consortium

- Cuenta el consorcio con la suficiente calidad para desarrollar las tareas propuestas con garantías. Essential infrastructure access.
- Está la ~~interdisciplinariedad complementariedad~~ bien reflejada en el consorcio: **¿Cómo se complementan los socios entre ellos?**
- ¿Está el consorcio equilibrado? ¿hay redundancia de actividades? ¿socios “relleno”?
- If applicable, how the project **benefits from any industry/SME involvement?**
- If applicable, why the participation of a entity from **“Other Countries or/and international organization”** is essential to carrying out the project.

# EIC Pathfinder Open - Consejos prácticos

Y..... ¿¿¿TODO ESTO EN 17 PÁGINAS????



# EIC Pathfinder Open - Consejos prácticos

Submission of Proposals - Google Chrome

Es seguro | https://ec.europa.eu/research/participants/submission/eforms/secure/editform?draftid=SEP-210512226&ticket=ST-12024269-UxUbIVwvBcPKRfxRx3oMimQnRPfNAdG9oPbse2zkdFeaFRIq88JG3GkWzg6x...

**Step 5**  
Edit Proposal

**H2020-FETOPEN-2018-2020**

USER NAME: Pablo FERNÁNDEZ  
TOPIC: FETOPEN-01-2018-2019-2020  
TYPE OF ACTION: RIA  
ACRONYM: ff  
DRAFT ID: SEP-210512226  
DEADLINE (Brussels Local Time): May 2018 17:00:00  
36 days left until closure

**Edit Proposals' Forms**

In this step you can edit the administrative forms and upload the proposal itself. [?](#)

**WARNING:** This proposal contains changes that have not yet been submitted...

**Administrative Forms**

Edit will open the forms. [?](#)

[edit forms](#) [view history](#) [print preview](#)

**Part B and Annexes**

In this section you may upload the technical annex of the proposal (in PDF format only) and any other requested attachments. [?](#)

Technical Annex Section 1-3 [upload](#) [X](#) [?](#)  
Technical Annex Section 4-5 [upload](#) [X](#) [?](#)  
Optional annex 3: Ethics Supporting Document(s) [upload](#) [?](#)

<< Step 4 - Parties [validate](#) [submit](#)

Visit our 'How to' user guide [↗](#)

Download Part B Templates [↗](#)

Version: 20180315\_1144\_Services Basic DIGIT FETOPEN SUPPORT TO SUCCESS (v.23.1.20.02222)

22:06 10/04/2018

# Índice de contenidos

## 3. EIC Transition



# EIC Transition en Horizon Europe

## ► What is the EIC Transition?

The EIC Transition programme supports the maturation and validation of novel technologies beyond proof of principle/concept (in-lab) and business activities to commercialisation.

EIC Transition aims at **maturing** both your **technology and business idea** **increasing its technology and market/business readiness levels**.

(1st attempt in H2020: FET Innovation Launchpad from WP2015-2016)

# EIC Transition en Horizon Europe

## ► 2 possible funding schemes

- **EIC Transition Open:** open funding (**bottom-up**) regarding any field of science, technology or application without predefined thematic priorities. 70,90M€ in 2022 (59,60M€ in 2021).
- **EIC Transition Challenges:** funding (**top-down**) for predefined thematic priorities aiming to establish portfolios of projects. 60,50M€ in 2022 (40,50M€ in 2021).

With no differences regarding the application requirements (consortium size, length of the proposal, upper funding limit, budget limit, expected results,...) and the evaluation procedure.

# EIC Transition en Horizon Europe

## ► Application is restricted for EIC Transition

The proposal must build **on results** (demonstrated proof of principle/concept = TRL3/4) **achieved within an eligible previous project**, such as: (**page 48 of WP2023**)

- EIC Pathfinder
- FETOPEN-RIA-2014-2015; FETOPEN-01-2016-2017; FETOPEN-01-2018-2019-2020;; FETPROACT-01-2016; FETPROACT-01-2018; FETPROACT-EIC-05-2019; FETPROACT-EIC-07-2020; FETPROACT-EIC-08-2020; FETPROACT-09-2020; FETOPEN-03-2018-2019-2020; FETFLAG-03-2018; FETFLAG-05-2020 H2020-FETFLAG-2014.
- ERC Proof of concept
- Projects resulting from a joint transnational call (both with and without EU co-funding) under any of the QuantERA, FLAG-ERA and ChistERA ERANETs.

# EIC Transition en Horizon Europe

## ► Application is restricted for EIC Transition

- If you are applying on the basis of an eligible project for which the **grant is still active**, you may apply if the project has been active **for at least 12 months** (i.e. the start date of the grant is more than 12 months **before the date of the selected EIC Transition call cut-off**).
- If you are applying on the basis of an eligible **project which has already been completed**, you may **apply within 24 months of the completion of the project** (i.e. the end date of the grant for the eligible project is less than 24 months **from the date of the selected EIC Transition cut-off**).

# EIC Transition en Horizon Europe

- ▶ Must I have been involved (as PI, participant, result owner, etc) in the previous eligible project?
  - Newcomers are more than welcome in EIC in general! **BUT:**
    - ✓ If you were part of the linked project which is the basis for the Transition => you **must confirm that you are the IPR owner or holder, or have the necessary rights to commercialise** the results of the linked project. **To be declared in page 1** of the proposal (possible ways: private agreement, private declaration).
    - ✓ If you were **NOT** part of the linked project which is the basis for the Transition => **To include in the proposal a commitment letter** from the relevant owner(s) of the result(s), which confirms the commitment of the owner of the linked project research result to negotiate with you fair, reasonable and non-discriminatory access to such results, including IPR, for the purpose of future commercial exploitation.

# EIC Transition en Horizon Europe

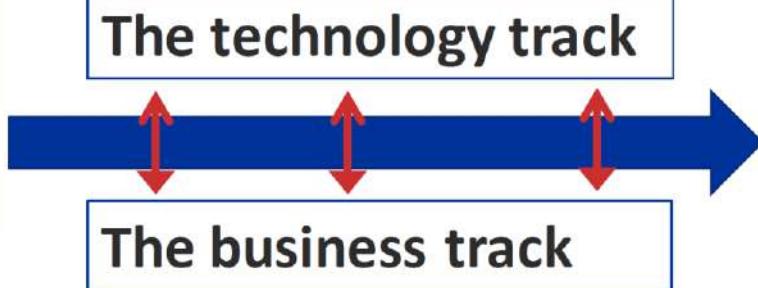
- ▶ Previous questions before the application
  - Is this **novel technology ready** for the next steps?
  - Have you performed **early market / competition explorations** ?
  - Do you have a **motivated and diverse team** for commercialisation?

# EIC Transition en Horizon Europe

## ► Pathways in EIC Transition

EIC Transition can support a number of **different pathways beyond fundamental research, from technology development and product design to business modelling and commercialisation strategy to reach the market.**

The starting point in the project should be Proof of concept validated in the lab (TRL3/4)



The end point should be a completely functional version of the technology tested or demonstrated in relevant environment (TRL 5-6), supported by a sound and implementable commercialisation strategy. BRL 1-3

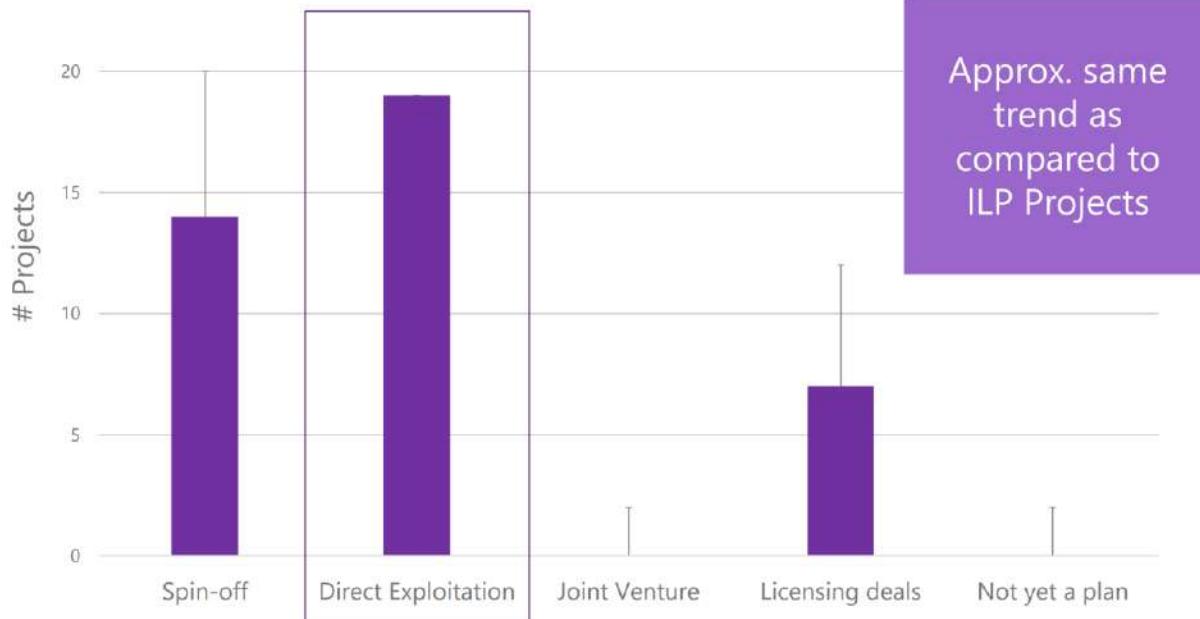
# EIC Transition en Horizon Europe

- ▶ Some possible pathways towards (page 47, WP EIC 2023)
  - A '**Transition to Technology**' for collaborative project **to further develop strategic and high impact technology** up to TRL 5/6. This may require a multi beneficiary approach (e.g. SMEs, RTOs and potential users / customers).
  - A '**Transition to Market**' for project **led by an SME/Start-up that identifies an opportunity** in the research results towards a specific market application. It may require, or lead to, a **license agreement** with the SME.
  - A '**Transition to Entrepreneurship**' for project driven by **entrepreneurial researchers** to turn research results into a viable product **by looking for a suitable business model or creating spin off company**.

# EIC Transition en Horizon Europe

- ▶ Some possible pathways towards (statistics 2022)

## Valorisation Pathways - Overview



# EIC Transition en Horizon Europe

## ► Activities to be performed in your EIC Transition proposal

- Further **technology development** on the results of a previous project and **market/business development** (i.e: market research, business case, prospects for growth, intellectual property protection, competitor analysis etc.), towards **market commercialization**.
- As for market/business development => to describe the **intended pathway and route to market** and **to specify milestones and KPIs** during the implementation to assess progress towards the market
- Follow user-centric methodologies to increase chances of the innovation's future success in the market.
- If the project is **not led by an SME or commercial partner**, the formation and spin out of a new company can be included as part of the activities.
- **Suitable mix (subject to the level of maturity of the technology)** of research, technology development and validation activities to increase the maturity of the tech (**up to TRL 5-6 and BRL 1-3**) towards **market commercialization**.

TRL and BRL?

# EIC Transition – TRL and BRL

## TRL: Technology Readiness Level

- 0** IDEA
- 1** BASIC PRINCIPLES OBSERVED
- 2** TECHNOLOGY CONCEPT FORMULATED
- 3** EXPERIMENTAL PROOF OF CONCEPT
- 4** TECHNOLOGY VALIDATED IN LAB
- 5** TECH. VALIDATED IN RELEVANT ENVIRONMENT
- 6** TECH. DEMONSTRATED IN RELEVANT ENV.
- 7** SYSTEM PROTOTYPE DEM. IN OPERATIONAL ENV.
- 8** SYSTEM COMPLETE AND QUALIFIED
- 9** ACTUAL SYSTEM PROVEN IN OPERATIONAL ENV.

## BRL: Business (or Market) Readiness Level

- 0** IDEA
- 1** BASIC NEED RESEARCH
- 2** NEEDS FORMULATION
- 3** NEEDS VALIDATION
- 4** SMALL SCALE STAKEHOLDERS OFFER
- 5** LARGE SCALE EARLY ADOPTER OFFER
- 6** PROOF OF TRACTION
- 7** PROOF OF SATISFACTION
- 8** PROOF OF SCALABILITY
- 9** PROOF OF STABILITY

# EIC – TRL and BRL



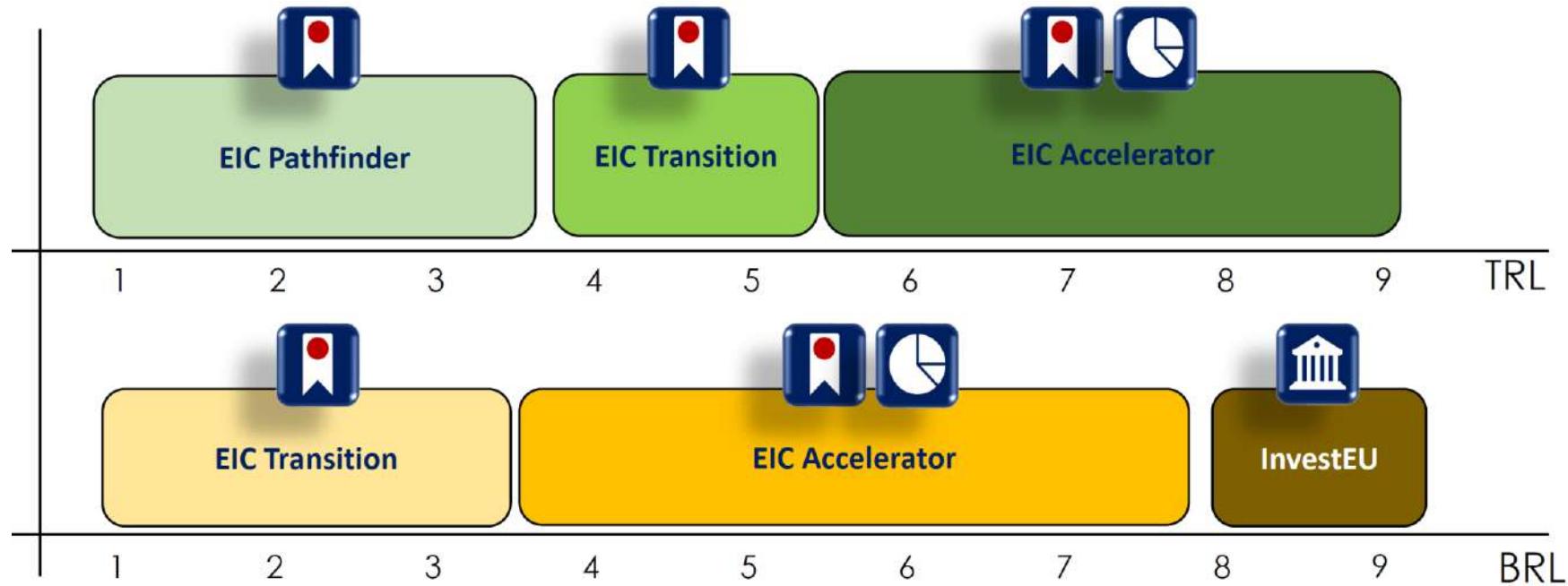
Grants



Equity



Debt



# EIC Transition en Horizon Europe

- ▶ What does BRL 3 implies in practice ?



What do you sell?

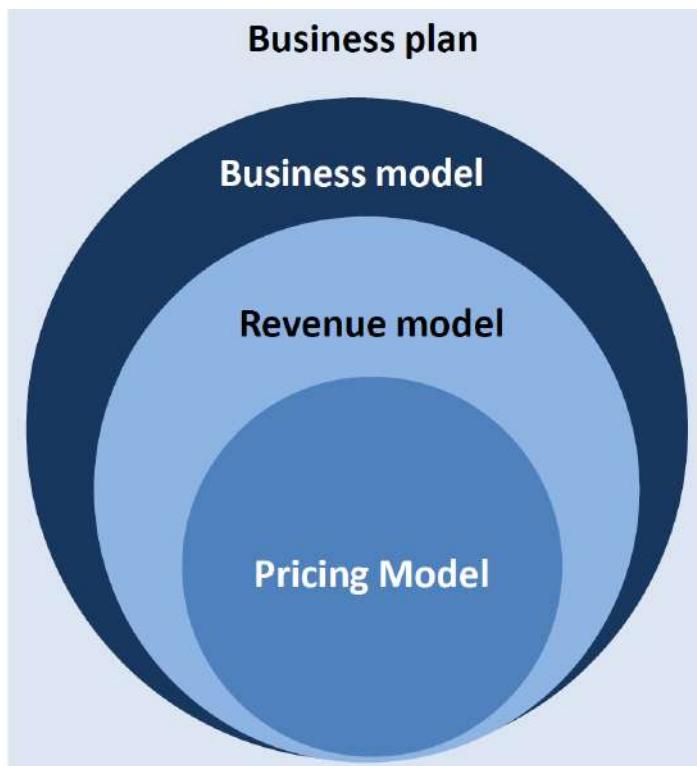
Who is the seller?

Who is the buyer?

Where is the profit?

# EIC Transition en Horizon Europe

- ▶ Key concepts in this BRL “state”?



**(BP) Business plan:**

How the business aims to progress.

**(BM) Business model:**

How the business generates value.

**(RM) Revenue model:**

How the business generates cash.

**(PM) Pricing model:**

How the business defines its prices.

# EIC Transition en Horizon Europe

## ► Expected outcomes of your EIC Transition proposal

- A technology that is demonstrated to be effective for its intended application => **TRL 5/6**
- A business model, its initial validation and a business plan for its development to market => **BRL 1-3**
- It is also expected that the intellectual property generated by your EIC Transition project **is formally protected** in an adequate way (**Annex 7**).
- **At the end** the project, **you should be ready for the next stage**, which can be to apply for EIC Accelerator (if you are a SME, including start-ups or spin-offs), to seek other investors or sources of funding, to enter licensing or collaboration agreements with third parties, or other routes to market deployment.

# EIC Transition en Horizon Europe

## ► Possibilities of participation

Mono-beneficiary or small consortia (no more than 5):

<b>2 beneficiaries</b>	<b>2 different countries</b>	<b>Beneficiaries</b> independent legal entities
<b>3 beneficiaries</b>	<b>3 different countries (min 1 Member State)</b>	<b>Countries</b> Member States or Associated countries
<b>4 or 5 beneficiaries</b>	<b>min 3 different countries (min 1 Member State)</b>	<b>Consortia</b> may include universities (TTOs), RTOs, SMEs, corporates, customer organisations, end users (e.g. hospitals, utilities, industry, regulatory bodies, regulatory bodies, public authorities)

# EIC Transition en Horizon Europe

## ► Possibilities of participation

Example: Consortia with Associated Partner UK/CH

Uni - University  
AE – Affiliated Entity



$\Sigma$	Coordinator	Participant 2	Participant 3	Participant 4	Participant 5	Associated Partners
1	University (DE)					Uni (CH) Uni (UK)
1	SME (FR) + AE Uni (FR)					
2	SME (HU)	SME (DE)				Uni (UK)
2	SME (IE)	Research Org. (FR)				Uni (UK)
4	Uni (NL)	SME (NL)	Research Org. (IT)	Uni (DE)		Uni UK)
4	SME (IT) + AE SME (IT)	Uni (IT) + AE- Research Org. (IT)	Uni (DE)	SME (ES)		Uni (UK)
4	Research Org. (DE)	SME (DE)	Univ (DE)	Univ (AT)	SME (ES)	SME (UK)

# EIC funding opportunities

## *EIC Transition Open*

► **Ficha convocatoria 2023**, [enlace Participant Portal](#), Budget 2023 67,86M €



- RIA (**100% funding**)
- **0,5-2,5M€** per proposal, **20 pages, 12- 36 months**
- **Aplication is restricted.** Possibilities to participate (**mono-beneficiary or small consortium**)
- TRL 4-6, BRL1-3
- **Annex 7** defines special IP clauses (EIC policy of Open Access and IP rights)
- **Annex 6** defines extra 50K€ adhoc grants for complementary portfolio activities or to explore commercialisation paths"
- **Annex 4** to access to the EIC Accelerator via Fast track
- Tailor-made access to a wide range of Business Acceleration Services and matchmaking events (page 84 WP EIC 2022).
- 2 cut-offs in 2023: 12/04/2023 and 27/09/2023.

# EIC funding opportunities

## *EIC Transition Challenges*

► **Ficha convocatoria 2023** - Budget 2023 60,50M €



- Topics (ya se han hecho Infodays, no challenge guides)
  1. Full scale Micro-Nano-Bio devices for medical and medical research applications.
  2. Environmental intelligences.
  3. Chip-scale optical frequency combs.

# EIC funding opportunities

## *EIC Transition Challenges*

### ► Ficha convocatoria 2023 - Budget 2023 60,50M €



- RIA (**100% funding**)
- **0,5-2,5M€** per proposal, **20 pages, 12- 36 months**
- **Aplication is restricted.** Possibilities to participate (**mono-beneficiary or small consortium**)
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# EIC Transition (O/C) - La evaluación

## Págs 53 a 55 WP2023

**Table 4. Award criteria for EIC Transition Open and Challenges at first evaluation step**

### **Excellence (Threshold: 4/5)**

Technological breakthrough: Does the technology have a high degree of novelty compared to other technologies available or in development? Does the technology indicate high potential business application?

Objectives: How credible and feasible are the objectives for the planned technology development? How credible and feasible are the objectives (and KPIs) for the planned business development process?

Additional Consideration for EIC Transition Challenges ONLY: How relevant are the proposal objectives in contributing to the specific objectives of the Challenge?

Methodology: Is the timing right for this technology/innovation (i.e., feasibility, technological readiness, unique selling points)?<sup>50</sup>

### **Impact (Threshold: 4/5)**

Credibility of the impacts: To what extent the expected impacts described are credible and realistic within the project and beyond?

Additional Consideration for EIC Transition Challenges ONLY: To what extent the proposed application contributes to the expected outcomes and impacts, set out in the Challenge?

Economic and/or societal benefits: To what extent does the proposed innovation have scale up potential including high capacity to gain or create new European or global markets? To what extent is the proposed innovation expected to generate other positive impacts (strategic autonomy, employment, societal or environmental etc.)?

Investment readiness and go to market strategy: To what extent the proposal and its activities contribute to make the technology and the team investment ready (including through IP protection and market validation)? Is there a convincing go to market pathway/strategy, including what regulatory approvals may be needed (if relevant), time to market, possible business and revenue model?

### **Quality and efficiency of the implementation (Threshold 3/5)**

Quality and motivation of the team: To what extent does the (project) team have the necessary high-quality capabilities and motivation to move decisively towards market. To what extent do the applicant(s) have the necessary expertise to create a unique commercial value from the emerging technology and develop an attractive business and investment proposition?

KPIs and Milestones: Are both milestones and KPIs present, relevant and clearly defined (measurable, timed, comparable etc.) to track progress along the pathway towards objectives? Have the main risks (e.g., technological, market, financial etc.) been identified, together with measures to mitigate in order to achieve the project objectives?

Workplan and allocation of resources: How appropriate and effective is the allocation of resources (person-months and equipment) in the workplan and work packages and project partners?

# EIC Transition (O/C) - La evaluación

## Págs 53 a 55 WP2023

**Table 5. Award criteria for EIC Transition Open and Challenges at second evaluation step (Jury interview)**

### **Excellence (GO/NO GO)**

Technological breakthrough: Does the technology/innovation – through its degree of novelty/disruptiveness and/or added value/value proposition for the users/customers – have the potential to create important new markets or significant impact in existing ones?

Objectives: How credible and feasible are the objectives for the planned technology development? How credible and feasible are the objectives (and KPIs) for the planned business development process?

Additional Consideration for EIC Transition Challenges ONLY: How relevant are the proposal objectives in contributing to the specific objectives of the Challenge?

Methodology: Is the timing right for this technology/innovation (i.e., feasibility, technological readiness, unique selling points)?

### **Impact (GO/NO GO)**

Credibility of the impacts: Is the incipient proposed business model sound? To what extent the expected impacts described are credible and realistic within the project and beyond?

Additional Consideration for EIC Transition Challenges ONLY: To what extent the proposed application contributes to the expected outcomes and impacts set out in the Challenge?

Investment readiness and go to market strategy: How appropriate are the plans to ensure the subsequent financing of the technology/ innovation (applying for an EIC Accelerator, private investment, patenting/licensing, etc.)?

### **Quality and efficiency of the implementation (GO/NO GO)**

Quality and motivation of the team: Does the team have the capability and motivation to implement the proposed technological innovation and market-related activities?

Risk assessment: Have the risk that might prevent the validation of the innovation in relevant application environment and/or market success been appropriately considered?

# EIC Transition (O/C) - La evaluación (detalles)

- **First remote evaluation phase by experts**
  - Average of the individual scores per criteria (excellence, impact, implementation)
  - Overall score sum of the three averages
  - Feedback 9 weeks after the call deadline
- **If successful, within 2x available budget, invited to a face-2-face interview**
  - You may bring only people mentioned in the proposal (Up to 5 pax)
  - Jury composed of max 6 members, may include 1 program manager
  - Convincingly pitch your proposal and answer clarifying questions
  - Recommends a Go/No Go, no change in the overall score
  - Invitation 13w and feedback 17 weeks after the call deadline
- **Grant agreement signed within 6 months from call closing.**

Project starting < 2-3M

# EIC Transition (O/C) - La evaluación (detalles)

## Seal of Excellence

- **Individual SME applicant invited to the interview** and not selected for funding will be awarded 'Seal of Excellence'.
- Applicants awarded the 'Seal of Excellence' will have access to **EIC Business Accelerator Services** and support to access other sources of funding.
- **Only** awarded to those applicants who give consent to **sharing** the data about their application with other eligible funding bodies



# EIC Transition – Recomendaciones

- Linked project and IPR declarations **must be reported on cover page of** the proposal.
- Applicants must **respect consortium composition** indicated in the Work Programme (e.g. maximum 5 beneficiaries)
- **Stronger** focus on maturity, preliminary business analysis and team creation is required. **Please provide convincing answer to:**
  - ✓ Is this novel technology **ready for the next steps** towards its maturation and validation in some specific applications?
  - ✓ Have you performed **early exploration of potential markets** for your innovation as well as **potential competitors**?
  - ✓ Do you envisage building a **motivated and diverse team** to develop the idea towards commercialisation?
- **TRL:** Level 3 is the starting point in the proposal, cannot be less! Level 4 is preferred as to avoid surprises due to technological risks. KPIs for the tech development are required.

# EIC Transition – Recomendaciones

- **Preliminary** Business and Market exploration must be **integral part** of the proposal. Thus:
  - ✓ **Describe** the intended pathway and route to market in your proposal, and to specify milestones and KPIs during the implementation of your project to assess progress towards the market.
  - ✓ **Including:** market research, business case, prospects for growth, intellectual property protection, competitor analysis etc.) and possibly aspects of regulation, certification and standardisation (if relevant), aimed at getting both the technology and the business idea investment-ready.
- Business Model validation and planning next steps **is equally important** to the technology development and cannot be delegated.

# EIC Transition – Recomendaciones

Applicants must provide clarity on aspects related to

- Technical **milestones**,
- **IPR** ownership,
- budget and allocation of resources,
- **technical** and **business** risks,
- current and expected **TRLs** at the end of the project,
- **interdependence** of work packages and tasks,
- the **future exploiting team**, and
- the **credibility of the business objectives**.

# Estadísticas EIC Transition 2022

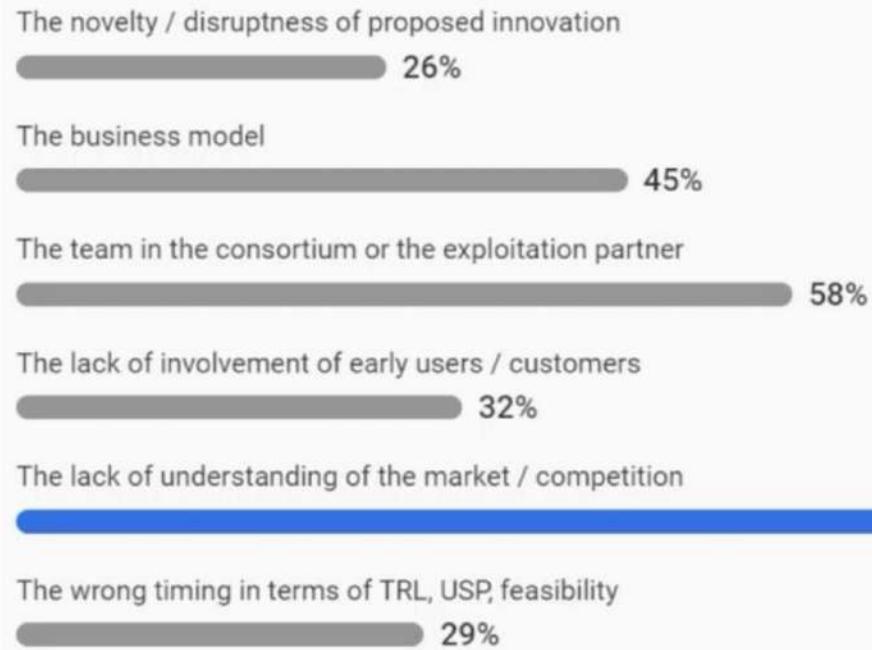
## EIC Transition Overall results 2022



# Estadísticas EIC Transition

## Major weaknesses of the NoGO proposals

European  
Innovation  
Council

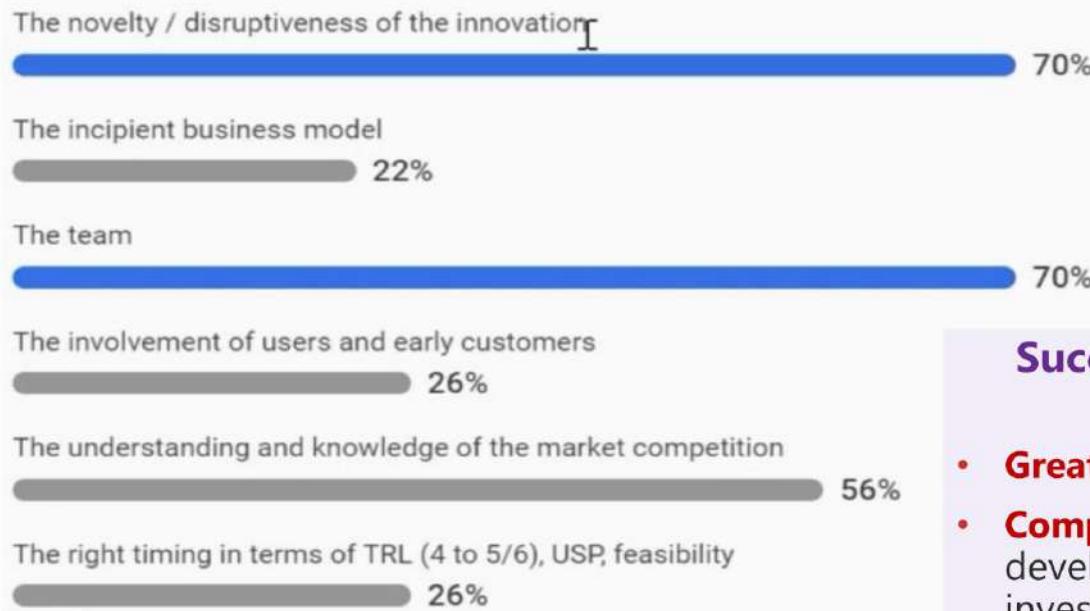


### Lessons

- **Know the market** you plan to enter
- **Know the competition** you will face
- **Know the problem** you are solving

# Estadísticas EIC Transition

## Major strengths of the GO proposals



**Succesful proposals have**

- **Great innovation**
- **Competent team** to develop technology and investigate market and business

# Índice de contenidos

## 4. Información y enlaces de interés

# Trending topics in innovation

**Disruptive Innovation** (Economic and social concept) A disruptive innovation is an innovation whose implementation significantly affects the way markets and society function. **Internet**

**Breakthrough Innovation** (Scientific and technological concept) A breakthrough Innovation is an innovation based on a scientific discovery or a radically new technology that has the potential to be a game changer in terms of science and technology and to have a significant impact on markets and society. **Mobile Phone**

**Market-creating Innovation.** A market-creating innovation is an innovation based on new ideas, products and business models that creates new market segment and new jobs. **Light Bulb**

**Deep Tech Innovation.** A Deep Tech innovation is an innovation featuring an intense R&D content with multiple interactions between a priori distinct scientific domains and requiring abundant and patient capital to face a high risk of failure, offset by a very high potential for gain. **GPS**

# Evento EIC online Info Day

## 13/12/2022

Work Programme 2023 - 13 December 2022

# THE EUROPEAN INNOVATION COUNCIL



Work Programme 2023  
Info Day

13 December 2022



# ERA-Nets

FLAG-ERA asociada a Human Brain Project & Graphene Flagship



QuantERA asociada a Quantum Flagship



CHIST-ERA asociada a ICT



## Consultas

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# Enlaces de interés (1/2)

**Horizonte Europa:** [https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en)

**Misiones:** <https://missions-get-involved.ec.europa.eu/>

**Portal Español Horizonte Europa:** <https://www.horizonteeuropa.es/>

**Proyectos financiados:** [http://cordis.europa.eu/projects/home\\_en.html](http://cordis.europa.eu/projects/home_en.html)

**F&T Portal:** <http://ec.europa.eu/research/participants/portal>

**New ERA:** [Communication: A new ERA for Research and Innovation](#)

**Platform to exchange FET Ideas:** <https://ec.europa.eu/futurium/en/digital4science>

**FET-Open funded projects:**

<https://ec.europa.eu/programmes/horizon2020/en/node/791>

# Enlaces de interés (2/2)

## **FET funded projects**

<https://ec.europa.eu/digital-agenda/en/fet-projects-portfolio> H2020

[http://cordis.europa.eu/fp7/ict/programme/docs/fp7-compendium-2012\\_en.pdf](http://cordis.europa.eu/fp7/ict/programme/docs/fp7-compendium-2012_en.pdf)

## **FAQ EIC**

[https://eic.ec.europa.eu/eic-frequently-asked-questions\\_en](https://eic.ec.europa.eu/eic-frequently-asked-questions_en)

## **Tips for applicants – Pathfinder**

[https://eic.ec.europa.eu/tips-applicants-pathfinder\\_en](https://eic.ec.europa.eu/tips-applicants-pathfinder_en)

## **FET newsletter**

[http://ec.europa.eu/newsroom/index.cfm?service\\_id=129](http://ec.europa.eu/newsroom/index.cfm?service_id=129)

## **Find your idea**

<https://ec.europa.eu/programmes/horizon2020/find-your-area>

## **European Innovation Council**

<https://ec.europa.eu/research/eic/index.cfm>

## **Horizon Europe webpage**

[https://ec.europa.eu/info/horizon-europe\\_en](https://ec.europa.eu/info/horizon-europe_en)

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# ¡Gracias!



# ¡Muchas gracias por su atención!

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