Horizon Europe

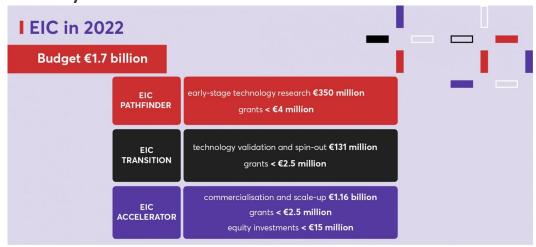


### EIC Pathfinder and EIC Transition to Innovation



### Índice de contenidos

- 1. European Innovation Council (EIC)
- 2. EIC Pathfinder
- 3. EIC Transition
- 4. Información y enlaces de interés







## Índice de contenidos

1. El European Innovation Council (EIC)



## European Innovation Council (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

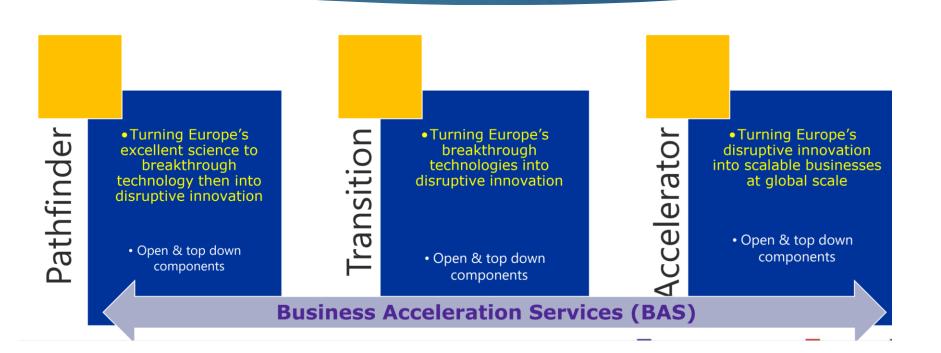
https://cutt.ly/uxYAIEi, EIC impact report to find out more about the EIC pilot

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

## El EIC dentro de Horizon Europe



## El ElC dentro de Horizon Europe



**EIC: From idea to market** 

## European Innovation Council (EIC)

https://youtu.be/X5ZAJS3psZI



## European Innovation Council (EIC)

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

## EIC main funding opportunities 2022 (WP 2022)

			EIC Open		EIC Challenges		
Call	Who can apply	What for	Deadlines	Indicative Budget (EUR million)	EIC Challenge	Deadlines	Indicative Budget (EUR million)
EIC Pathfinder	Consortia of at least three different independent legal entities <sup>14</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 (challenge driven) (or more if properly justified) to achieve the proof of principle and validate the scientific basis of breakthrough technology (TRL 1-4)	<b>4</b> May 2022	183	Carbon dioxide & Nitrogen management and valorisation  Mid-long term, systems-integrated energy storage  Cardiogenomics  Healthcare Continuum technologies  DNA-based digital data storage  Alternative Quantum Information Processing, Communication, and Sensing	(9 October 2022	167
EIC Transition	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 results from eligible EIC Pathfinder, FET or ERC Proof of Concept projects	Grants of up to EUR 2.5 million (or more if properly justified) to validate and demonstrate technology in application-relevant environment (TRL 4 to 5/6) and develop market readiness	4 May 2022 28 September 2022	70.9	Green digital devices for the future     Process and system integration of clean energy technologies     RNA-based therapies and diagnostics for complex or rare genetic diseases	4 May 2022 28 September 2022	60.5
EIC Accelerator	Single start-ups and SMEs (including spin-outs), individuals (intending to launch a start-up/ SME) and in exceptional cases small mid-caps (fewer than 499 employees)	Up to EUR 2.5 million grant component for technology development (TRL 5/6 to 9); EUR 0.5 up to 15 million <sup>15</sup> investment component for scaling up and other activities. Grant only/grant first under certain conditions. Investment component only for small mid-caps or as follow up to grant only.	Short applications: continuous Full applications: • 23 March 2022 • 15 June 2022 • 5 October 2022	630.9	Technologies for Open Strategic Autonomy     Technologies for 'Fit for 55'	Short applications: continuous Full applications: • 23 March 2022 • 15 June 2022 • 5 October 2022	536.9

## <u>Índice de contenidos</u>

### 2. 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.

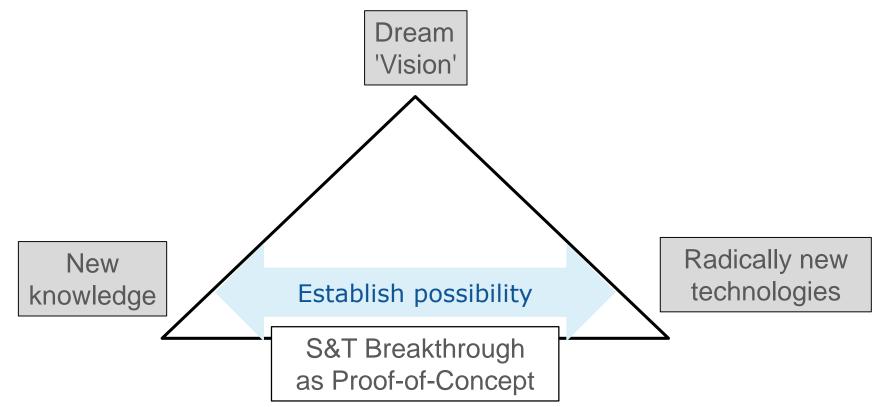
The EIC Pathfinder supports the **exploration** of bold ideas for **radically new technologies**. It welcomes the **high-risk / high gain** and **interdisciplinary** cutting-edge science collaborations that underpin **technological breakthroughs**.

### 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



### EIC Pathfinder Vs FET en H2020



## EIC funding opportunities EIC Pathfinder Open

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



**FIC Patfhinder Open** => Any field of science, technology or application without predefined thematic priorities (*FET-Open en H2020*). 183M€ in 2022 (163M€ in 2021).

- 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 interdisplinary collaboration tor 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 2022, 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"
- Annex 4 to access to the EIC Accelerator via Fast track
- Deadline: 04/05/2022. Call already opened

- 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 ha 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?

- How FET transitioned into the EIC Pathfinder by Jerzy Langer
   <a href="https://ec.europa.eu/digital-single-market/en/news/how-fet-transitioned-eic-pathfinder-jerzy-langer">https://ec.europa.eu/digital-single-market/en/news/how-fet-transitioned-eic-pathfinder-jerzy-langer</a>
- "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. <u>Ver report 2021</u>.

- "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

- 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.

- Evaluación: Posibilidad de rebuttal (más claro en WP2022, 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 - Principales novedades 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
- Breakthrough scientific and technological target
- Novelty
- Foundational
- High-risk
- Interdisciplinary



https://www.youtube.com/watch?v=t8dAJvoiguM&ab\_c hannel=EUScience%26Innovation Vídeo promocional FET-

Open

Gatekeepers in FET-Open (H2020)

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

**Definición en página 21 WP EIC 2022**: 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.

Gatekeepers in Pathfinder-Open (HE)

### EIC Pathfinder Open - La evaluación

Compliance with Gatekeepers!!

#### Contribution to WP impacts

#### **Excellence\*** Long-term vision: How convincing is the vision Long-term impact: How significant are the of a radically new technology towards which potential transformative positive effects the project would contribute in the long term? that the envisioned new technology would

#### Science-towards-technology breakthrough: How concrete, novel and ambitious is the proposed breakthrough with respect to the state-of-the-the proposed measures for protection of art? What advancement does it provide results and any other exploitation measures 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 Communication and Dissemination: How appropriate consideration of the gender suitable are the measures to maximise dimension in research content, and the expected quality of open science practices?

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

mpact\*

have to our economy, environment and society?

science-towards-technology Innovation potential: How adequate are to facilitate future translation of research results into innovations? How suitable are the proposed measures for involving and mitigation empowering key actors that have the achieve the project objectives? potential to take the lead in translating research into innovations in the future?

> and outcomes 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 measures in order

**Allocation** How resources: appropriate and effective the allocation of resources (personmonths 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 funding opportunities EIC Pathfinder Challenges

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



**FIC Pathhinder Challenges** => Build on new, cutting edge selected directions in science and technology (FET-Proactive en H2020). 167 M€ in 2022 (132M€ in 2021).

- 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 2022



- 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"
- Annex 4 to access to the EIC Accelerator via Fast track
- Deadline: 19/10/2022 (call not yet opened)

## EIC funding opportunities EIC Pathfinder Challenges

#### ► Ficha convocatoria 2022



#### Challenges WP 2022:

- 1. Carbon dioxide and nitrogen management and valorization;
- 2. Mid long term, systems integrated energy storage;
- 3. Cardiogenomics;
- 4. Towards the Healthcare Continuum: technologies to support a radical shift from episodic to continuous healthcare;
- 5. DNA based digital data storage;
- 6. Alternative Quantum Information Processing, Communication, and Sensing.

### EIC Pathfinder Challenges -Principales novedades Vs FET-Proactive en H2020

- 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 (16 June 2022)

### EIC Pathfinder Challenges -Principales novedades Vs FET-Proactive en H2020

proposals.



#### PATHFINDER CHALLENGE

#### Novel routes to green hydrogen production CHALLENGE GUIDE – PART I

EIC Work Programme reference: HORIZON-EIC-2021-PATHFINDERCHALLENGES-01-03

Call deadline date: 27/10/2021

Programme Manager: Francesco MATTEUCCI, Antonio Marco PANTALEO

Challenge page: https://eic.ec.europa.eu/calls-proposals/eic-pathfinder-challenge-

novel-routes-green-hydrogen-production\_en

# 1. About this document 2. Overall objective of the Pathfinder Challenge 3. Proactive portfolio management a. Allocation of projects into the Challenge Portfolio b. Portfolio objectives and roadmap c. Portfolio activities and EIC Market Place 4. Challenge Portfolio 5. Challenge Call text 15

The Appendices that are referred to in this document are common to the different Challenges and bundled in <u>Part II of the Challenge Guide</u>, published on the Challenge page on the EIC Website <a href="https://eic.ec.europa.eu/calls-proposals/eic-pathfinder-challenge-novel-routes-green-hydrogen-production">https://eic.ec.europa.eu/calls-proposals/eic-pathfinder-challenge-novel-routes-green-hydrogen-production</a> en.

### The challenge guide

https://eic.ec.europa.eu/system/files/2021-06/Challenge%20Guide\_Novel%20routes%20to%20green%20h ydrogen%20production.pdf

Prepared annually by the EIC PM.

Identifies the state of the art of the challenge.

Clarify how the evaluation Will classify the

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

## EIC Pathfinder Challenges -Principales novedades Vs FET-Proactive en H2020

- Programme Managers (temporary staff of the European Commission or its Executive Agencies): <a href="https://eic.ec.europa.eu/eic-communities/eic-programme-managers\_en">https://eic.ec.europa.eu/eic-communities/eic-programme-managers\_en</a>
  - 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

<b>Excellence</b>	<mark>Impact</mark>	Implementation
Challenge: How clear are the project's objectives? How relevant are they in contributing to the overall goal and the specific objectives of the Challenge?  Novelty: To what extent is the proposed	pathways to achieve the expected outcomes and impacts of the Challenge? To what extent would the successful completion of the project contribute to this?  Innovation potential: How 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	beneficiaries): To what extent do(es) the applicant/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 (personmonths and equipment) to tasks and consortium members?
Threshold: 4/5 P. 60%	Threshold: 3.5/5 P. 20%	Threshold 3/5 P: 20%

### EIC Pathfinder – Resumen convocatoria 2022

	Pathfinder Open	Pathfinder Challenges
Total budget	€183 million	€167 million
Proposals (indicative)	Up to €3 million	Up to €4 million
Funding rate	100% of eligible costs	100% of eligible costs
Opening	1 March 2022	16 June 2022
Deadline	4 May 2022 at 17.00 CET	19 October 2022 at 17.00 CET
Length of proposal	17-page proposal (part B)	25-page proposal (part B)
Applicants	Consortia: min. 3 partners from 3 different MS/AC (of which at least 1 partner in a MS)	<ol> <li>Single legal entities in a MS/AC (conditions apply)</li> <li>Consortia:         <ul> <li>If 2 partners: from different MS/AC, otherwise</li> <li>Min. 3 partners from 3 different MS/AC (of which at least 1 partner in a MS)</li> </ul> </li> </ol>

## EIC Pathfinder - ¿encajo de verdad?

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

- Comprovar otros WPs (de otros pilares).
- 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)!
- Pathfinder 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 - Recomendaciones

- Importancia del potencial innovador :
  - Acciones específica adicionales para estimular la explotación de resultados de la investigación en proyectos Pathfinder. 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.

## ElC **Pathfinder Open** - 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/traceswAssets/docs/FET Traces final report 2018.pdf

### EIC Pathfinder - Recomendaciones

- 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 ∑ de "n" partes!
- El evaluador debe comprobar las referencias.



### EIC Pathfinder -Recomendaciones

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 consis**tente (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.



### EIC Pathfinder - Recomendaciones

- 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.

## Estadísticas FET-Open H2020

Calls	Total # of eligible proposals	% proposals above threshold	Number of grants	Success rate	Total Budget (M€)
Sep-14	639	39%	24	3,8%	78,1
Mar-15	665	49%	11	1,7%	41
Sep-15	800	43%	11	1,4%	37,8
May-16	544	50%	23	4,2%	87,8
Jan-17	365	52%	26	7,1%	84,8
Sep-17	395	43%	27	6,8%	85,3
May-18	356	45%	38	10,7%	124
Jan-19	400	45%	53	13%	160
Sep-19	418	41%	50	12%	160
June-20	902	51%	58	6,6%	196
Total	5.484	46% (aprox)	321 (aprox)	6,7%	1.056M€

### Estadísticas Pathfinder Open HE

25 May 2021 was the first deadline of the EIC Pathfinder Open call. 56 funded projects, <a href="https://eic.ec.europa.eu/system/files/2021-11/PathfinderOpen-final.pdf">https://eic.ec.europa.eu/system/files/2021-11/PathfinderOpen-final.pdf</a>.

### **European Innovation Council Pathfinder Open**

Successful proposals | Cut-off 25 May 2021



### Estadísticas Pathfinder Challenges HE

Todavía no públicas. Los resultados se han comunicado hace poco.

Pathfinder Challenge	Proposals submitted *	Proposals retained **	EU contribution retained proposals	Average EU grant per retained proposal	Success Rate
1. <u>Awareness</u> Inside	34	8	29,4 M€	3,7 M€	23,32 %
2. Tools to <u>measure</u> and <u>stimulate activity</u> in <u>brain</u> tissue	113	8	30 M€	3,7 M€	7,22 %
3. Emerging Technologies in Cell & Gene Therapy	132	8	29 M€	3,6 M€	6,22 %
4. <u>Novel</u> routes to <u>Hydrogen</u> Production	97	8	28,1 M€	3,5 M€	8,10 %
5. Engineered Living Materials	27	7	28,8 M€	4,1 M€	25,23 %
TOTAL	403	39	145 M€	3,7 M€	9,89 %

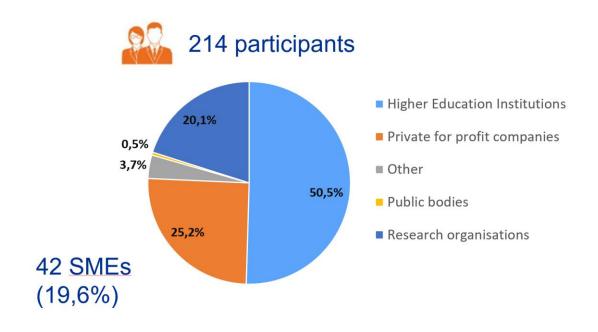
<sup>\*</sup> eligible and admissible proposals



<sup>\*\*</sup> in addition, there are 5 proposals for 19,6 M€ EU contribution on the reserve list

### Estadísticas Pathfinder Challenges HE

Todavía no públicas. Los resultados se han comunicado esta semana





## <u>Índice de contenidos</u>

### 3. EIC Transition



### 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)

- ▶ 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.

► 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:

- 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.

- ► 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).

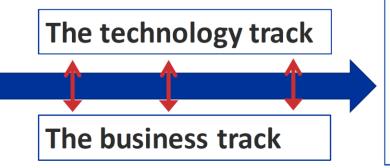
- Must I have been involved (as PI, participant, result owner, etc) in the previous eligible project?
  - Newcomers are more than welcome in EIC in general! BUT:
    - ✓ If you were part of the linked project which is the basis for the Transition => you must confirm that you are the IPR owner or holder, 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.

- 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?

### ▶ 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 is Proof of concept validated in the lab (TRL3/4)



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

- Some possible pathways towards (page 45, WP EIC 2022)
- 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.

- 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.

### EIC Transition – TRL and BRL

#### TRL: Technology Readiness Level

0	$\geq$	IDEA
1	$\geq$	BASIC PRINCIPLES OBSERVED
2	$\geq$	TECHNOLOGY CONCEPT FORMULATED
3	$\geq$	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	$\geq$	IDEA
1	$\geq$	BASIC NEED RESEARCH
2	$\geq$	NEEDS FORMULATION
3	$\geq$	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

PROOF OF STABILITY

▶ What does BRL 3 implies in practice ?



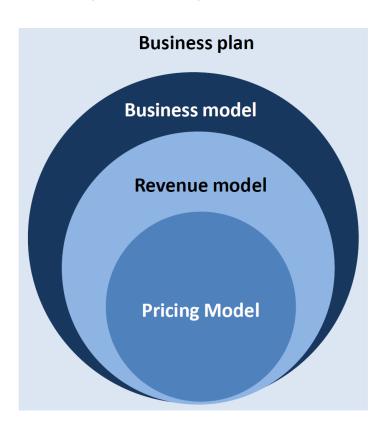
What do you sell?

Who is the seller?

Who is the buyer?

Where is the profit?

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.

### 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.

FROM TECH TO BUSINESS

### Possiblibilities of participation

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

- 2 Beneficiaries
- 2 **different** countries

 2 independent legal entities from two different Member States or Associated Countries

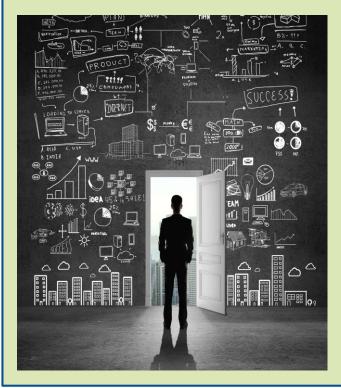
3 Beneficiaries
3 **different** countries

 3 independent legal entities from three different Member States or Associated Countries (of which at least 1 Member state)

- 4 or 5 Beneficiaries
  Min 3 **different** countries
- minimum 3 independent legal entities from minimum 3 different Member States or Associated Countries (of which at least 1 Member State)

## EIC funding opportunities EIC Transition Open

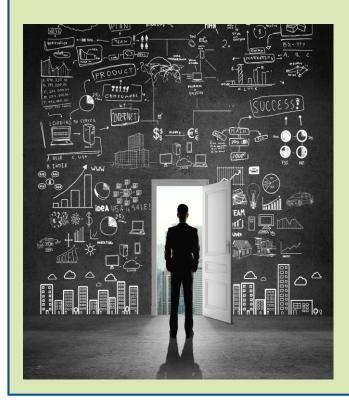
► Ficha convocatoria 2022, enlace Participant Portal, Budget 2022 70.86M €



- 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 2022: 04/05/2022 and 28/09/2022.

## EIC funding opportunities EIC Transition Challenges

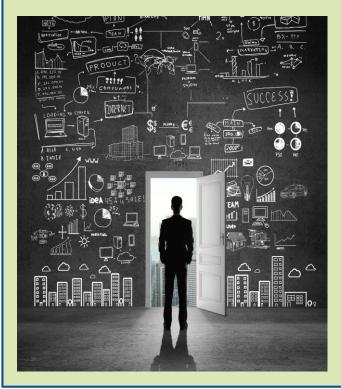
► Ficha convocatoria 2022 - Budget 2022 60.50M €



- Topics (page 54 to 60, WP EIC 2022): INFODAY 09/03/2022. There are no challenge guides.
  - 1. Process and system integration of clean energy technologies (50% of 2022 budget is reserved). Link to the call.
  - 2. RNA based therapies and diagnostics for complex or rare genetic diseases (25% of 2022 budget is reserved). Link to the call.
  - 3. Green digital devices for the future (25% of 2022 budget is reserved). Link to the call.

## EIC funding opportunities EIC Transition Challenges

► Ficha convocatoria 2022 - Budget 2022 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)
- 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 2022: 04/05/2022 and 28/09/2022.

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

Excellence	<mark>Impact</mark>	<b>Implementation</b>
technology have a high degree of novelty compared to other technologies available or in development? Does the technology indicate the potential for novel application?  Objectives: How credible and feasible are the objectives (and KPIs) for the planned technology development? How credible and feasible are the objective (and KPIs) for the planned business development process?  Methodology: Is the proposed	For EIC Transition Challenges ONLY: To what extent the proposed application has the potential to impact on the specific objectives set out in the Challenge?  Economic and/or societal benefits: To what extent does the proposed innovation creates substantial demand and new European or global markets? To what extent is the proposed innovation expected to generate other positive impacts (employment, societal, environmental, scientific, etc.)?  Investment readiness: To what extent the proposed measures contribute to make the project outcomes investment ready (including through IP protection, partnership or market validation)?	extent do the applicant(s) bring the necessary high-quality expertise, capabilities and motivation to move decisively towards innovation, create a unique commercial value from the emerging technology and develop an attractive business and investment proposition?  Milestones and Work plan: Are milestones adequately and clearly defined (measurable, timed, etc.) to track progress along the pathway towards objectives? How coherent and effective are the work plan (work packages, tasks, deliverables, timeline, etc.), the innovation methods and the risk mitigation methods, in order to reach the milestones and to achieve the project objectives?
Threshold: 4/5 P. 33%	Threshold: 4/5 P. 33%	Threshold: 3/5 P. 33%

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

- First remote evaluation phase by experts
  - <u>Average</u> 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.

## 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 – Resumen convocatoria 2022

### **EIC Transition Call 2022 cut-offs**

- Total budget: 130M€
  - Open: 70M€
  - Challenge Green Digital devices for the future: 30M€
  - Challenge Process & system integration of clean energy technologies: 15M
  - Challenge RNA-based therapies and diagnostics: 15M€
- **Publication and Opening:** 9 February respective 2<sup>nd</sup> March
- 1st cut-off Open and Challenges: 4th May
  - Interviews: planned for 2<sup>nd</sup> week of July (+/-) Results: last week of July
- 2<sup>nd</sup> cut-off Open and Challenges: 28<sup>th</sup> September
  - Interviews: planned for 1st week of December (+/-) Results: end of the year
- Part B, sections 1 to 3,= maximum **20** A4 pages including cover

## 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 surprised 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.

### Estadísticas EIC Transition 2021

Call	Submitted	Ineligible	Evaluated	Funded	Success rate
Transition Challenges	73	16	57	13	23%
Transition Open	219	46	173	29	17%
Total	292	62	230	42	18%

**10 SMEs received Seal of Excellence** 

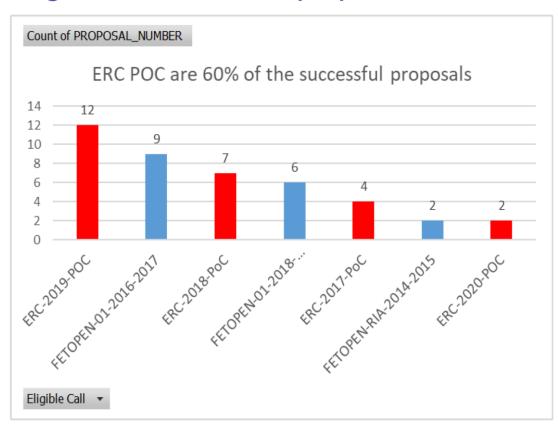
### Estadísticas EIC Transition 2021

### Reasons for ineligibility

Ineligibility & inadmissibility	Reason	Total proposal	Rate
Challenges	16	73	22%
Composition of consortium	5		
Incomplete	11		
Open	46	219	21%
Composition of consortium	29		
Incomplete	9		
non eligible linked project	8		
<b>Grand Total</b>	62	292	21%

### Estadísticas EIC Transition 2021

### Origin of the successful proposals



- 25 proposals selected for funding are originated by ERC Poc projects (60%)
- 17 proposals selected for funding are originated by FETOpen projects

## Índice de contenidos

4. Información y enlaces de interés

## Evento EIC online Info Day 22/02/22

EIC Infoday 02/2022 | European Commission (europa.eu)

EIC Info Day 2022



22<sup>nd</sup> February 2022

## Evento WP EIC 2022 Transition Challenges - online Info Day 09/03/22

EIC Infoday 03/2022 | European Commission (europa.eu)

## Watch the recording from the event and learn more



## Enlaces de interés (1/2)

Horizonte Europa: <a href="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</a>

Misiones: <a href="https://missions-get-involved.ec.europa.eu/">https://missions-get-involved.ec.europa.eu/</a>

Portal Español Horizonte Europa: <a href="https://www.horizonteeuropa.es/">https://www.horizonteeuropa.es/</a>

Proyectos financiados: <a href="http://cordis.europa.eu/projects/home\_en.html">http://cordis.europa.eu/projects/home\_en.html</a>

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: <a href="https://ec.europa.eu/futurium/en/digital4science">https://ec.europa.eu/futurium/en/digital4science</a>

### 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

#### **FAQ EIC**

https://eic.ec.europa.eu/eic-frequently-asked-questions en

### Tips for applicants <u>– Pathfinder</u>

https://eic.ec.europa.eu/tips-applicants-pathfinder\_en

#### **FET newsletter**

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

# EIC- El Sistema Español de Agentes

Luis Guerra (Representante EIC y punto nacional EIC Accelerator y Ecosistemas Europeos de Innovación)

luis.guerra@cdti.es

Centro para el Desarrollo Tecnológico Industrial (CDTI)

Esther Casado (Punto nacional EIC Accelerator y Ecosistemas Europeos de Innovación)

esther.casado@cdti.es

Centro para el Desarrollo Tecnológico Industrial (CDTI)

Lucía Iñigo (Punto nacional EIC Accelerator y Ecosistemas Europeos de Innovación)

<u>lucia.inigo@cdti.es</u>

Centro para el Desarrollo Tecnológico Industrial (CDTI)

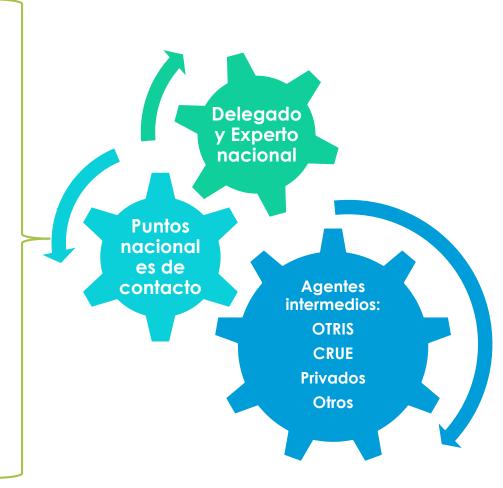
Enrique Pelayo (Punto nacional EIC Pathfinder/Transition) enrique.pelayo@cdti.es

Centro para el Desarrollo Tecnológico Industrial (CDTI)

Pablo Fernández (Punto nacional EIC Pathfinder/Transition)

pablo.fernandez.gonzalez@upc.edu

Universitat Politècnica de Catalunya (UPC)



# Novedades EIC Pathfinder 2022



¡Muchas gracias por su atención!

pablo.fernandez.gonzalez@upc.edu

