

European Innovation Council

EIC Pathfinder & Transition Info

Webinaari 7.4.2021

Klo 14-16

[Linkki EUTIn Tapahtuma sivulle](#)

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— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

Practicalities of the webinar 7.4.2021

- Presentations are in English
- We speak Finnish
- During the Q&A session questions can be raised also in English (responded in English)
- The session will be recorded, the recording will be available for two weeks
- **Please keep your microphones and cameras closed** (while not speaking)
- During the Q&A sessions you can ask the floor through the chat
- Materials will be posted on the EUTI web site, link will be sent to the participants

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AGENDA

- 14.00 Tervetuloa
- 14.05 **EIC:n taustat ja tavoitteet**, Prof. Marja Makarow
- 14.20 Q&A
- 14.30 **EIC Pathfinder**, Tuomas Katajarinne (SA), EIC NCP
- 14.50 Q&A
- 15.00 **EIC Transition**, Hannele Lahtinen (SA), komitean asiantuntija
- 15.20 Q&A
- 15.30 Tilaisuus päättyy



EIC in Horizon Europe

Backgrounds and objectives

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Prof. Marja Makarow, EIC Champion

- Director of Biocenter Finland
- Chair of Board of Technology Academy Finland awarding the Millennium Technology Prize for ground-breaking innovations
- Member of **EIC Advisory Board**, 9/2019 – 5 / 2021
 - Pathfinder Working Group, Member
 - EIC-ERC Working Group, Member
 - EIC-EIT Working Group, Chair
- Evaluator of the European Research Council ERC StG programme
 - Panel Member 2007-2010
 - Panel Chair 2011-2013
- Member of Governing Board of European Institute for Innovation and Technology EIT, 2012-2020

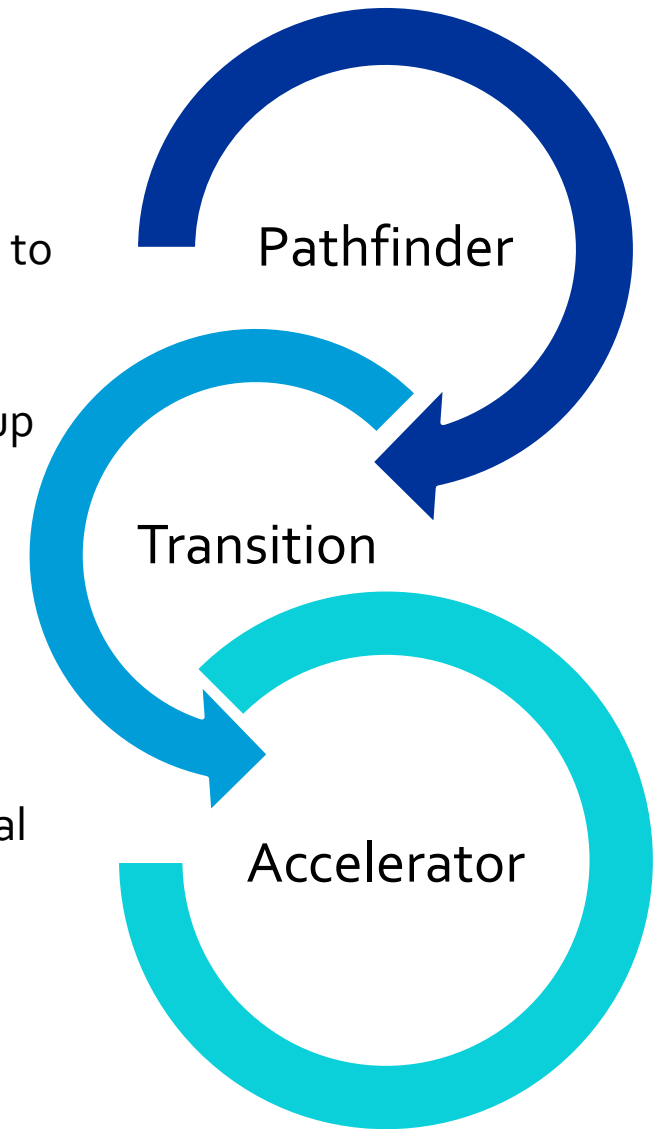
European Innovation Council EIC

Aim is to support Europe's growth by translation of **research excellence to innovation excellence** by supporting break-through technologies and ground-breaking innovations to scale up and become **global market leaders remaining in Europe**.

By embracing full innovation cycle from research (PF) and development (TR) to scale up of start-ups and SMEs (ACC):

- **Pathfinder:** research of breakthrough technologies - by multidisciplinary consortia of academic groups
- **Transition:** development of research findings to market readiness – by Pathfinder or ERC PoC grantees
- **Accelerator:** commercialisation and scale-up of deep-tech technologies - by individual start-ups/SMEs
- **Through all programmes:** Business acceleration services e.g. mentoring, coaching, networking

Funding mainly through **Bottom-up Open Calls**
Some **Thematic Calls** (e.g. **Green Deal challenges**)



EIC Advisory Board and its working method

- Task: strategy, programme's aims and content, synergies with ERC and EIT
- Expertise of Members:
 - Research, Innovation, Start-up creators, Large firms' leadership, Venture Capital
 - From public and private sectors, from Europe and USA
- Working groups:
 - Key Performance Indicators
 - EIC Pathfinder
 - EIC-ERC Collaboration
 - EIC-EIT Collaboration
 - Corporate Engagement
 - Europe's Technological Sovereignty
 - Venture Grants and Technical Due Diligence
 - Diversity of beneficiaries: Gender and Countries
 - Branding and Communication

Horizon Europe 2021 – 2027: Structure



Pillar 1 Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



Pillar 2 Global Challenges and European Industrial Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



Pillar 3 Innovative Europe

European Innovation Council

European innovation ecosystems

European Institute of Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

EIC – ERC collaboration under discussion in WG

To synergise science excellence with innovation excellence

- EIC Transition programme originally designed for Pathfinder grantees
- BUT: ERC Proof of Concept grantees could have access to EIC Transition funding
 - ERC PoC funding is for initial steps of pre-commercial development
 - Not ready for market access
 - EIC Transition funding is for maturation & validation of technology and development of business model and it could bridge gap between PoC and EIC Accelerator
 - 1st Workshop for all ERC PoC grantees on 29 March, other workshops for eligible ERC grantees to follow
- EIC Accelerator application process: first stage screening, then full application
- ERC grantees could be able to skip the 1st stage and access directly to full application
- Transition and Accelerator grantees benefit from EIC Programme Managers' support
 - High-level tech and inno experts to identify synergies between EIC projects > thematic portfolios
 - So far 4 PMs: Health & Biotech, Medical devices, Energy, Environment

EIC – EIT collaboration consolidated in MoU

- EIT creates innovation ecosystems that enhance mutual access between innovators, partners, companies, know-how and market opportunities
- EIT operates as cross-border Knowledge and Innovation Communities (KIC) with specific thematic foci
 - Climate, Digital, Food, Health, Energy, Manufacturing, Raw materials, Urban mobility
- EIT's ecosystem includes over 2000 partner organizations and covers Europe with >90 Innovation Hubs
 - Top universities and other research organizations, start-ups, SMEs, large companies, cities
 - Ecosystem accessible for EIC beneficiaries
- Structured cooperation between EIC and EIT started:
 - Fast track access for EIT-supported start-ups to Accelerator funding
 - EIT and EIC beneficiaries' mutual access to advisory services
 - EIT-supported companies' access to EIC Fund's equity opportunities
 - EIT and EIC together pay attention to women innovators and widening countries

EIC – Key messages

- Europe's most ambitious innovation initiative
- Unique in the world as it combines funding for frontier research on future technologies with funding for scaling-up of companies
- New EIC Fund is Europe's largest venture capital investor of deep-tech, currently with >3 B€ and crowding in of more investors going-on
- During 2018-2020 (pilot phase of EIC before Horizon Europe)
 - 5700 start-ups and SMEs supported
 - They raised 3 € of capital per 1 EIC €, > 5 B€ in total
 - Huge application pressure means huge need for EIC: in 2020 14,000 applications
- Executive Agency EISMEA WITH Council and President, like ERCEA
- Horizon Europe funding for research and innovation excellence: EIC 10 B€, EIT 3 B€ and ERC 16 B€

Deep tech researchers and innovators in Finland

DON'T MISS THE OPPORTUNITY!!

THANK YOU!

A close-up, high-contrast photograph of a microscope's objective lens. The lens is metallic and features a knurled ring for adjustment. Engraved on the lens are the specifications '100/1.25' and '160/0.17'. The background is a deep blue with out-of-focus light sources, creating a bokeh effect.

EIC Pathfinder

‘for advanced research on breakthrough /
game-changing technologies’

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European innovation ecosystems

European Institute of Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Pathfinder Open 1/2

- **Early-stage** interdisciplinary research and development of **new** technology discoveries from any field – **bottom-up approach**
- To achieve the 'proof of principle' and validate the scientific basis of breakthrough technology (TRL 1-3)
- Consortium of **min. 3 partners from 3** different eligible EU/AC **countries**
- Proposal max **17 A4 pages**
- EU grants (indicative) up to **3M€** (100%), 2021 call budget 168 M€
- 1-step submission, evaluation: 1) 4 external experts, 2) panel
- Call Opening: 8/4/2021
- Call DL: **19/5/2021**

Pathfinder Open 2/2

Gate Keepers:

- Convincing long-term vision of a radically new deep-tech
- Concrete, novel and ambitious science-towards-technology breakthrough
- High-risk/high-gain research approach and methodology

Evaluation:

- Excellence, Impact, and Quality
- Remote evaluation -> rebuttal (7 days) -> evaluation committee
- Outcome of call 5 months from call DL

Pathfinder Challenge 1/2

- Early stage research and development of **new** technology discoveries in **thematically predefined areas** (Health & Biotech; Digital & AI; Climate, Environment and Energy) and portfolio actions
- To achieve the proof of principle and validate the scientific basis of breakthrough technology (TRL 1-4)
- **Single legal entity or consortium of min. 2 partners** from 2 different MS/AC
- Proposal **max 25 A4** pages
- EU grants (indicative) up to **4M€**, 2021 call budget 132 M€
- 1-step submission, evaluation : 1) 4 external experts, 2) panel (taking into account the score and portfolio aspects)
- Call DL: **27/10/2021** (tbc)

Pathfinder Challenge 2/2

Challenges wp 2021:

1. Awareness inside: “awareness applicable to systems other than human”
2. Tools to measure & stimulate activity in brain tissue
3. Emerging Technologies in Cell & Gene Therapy
4. Novel routes to green hydrogen production
5. Engineered living materials

- ❖ Specific objectives of the challenge explained in the **Pathfinder Challenge Guide available after call opening** on the EIC website and [EU Funding & Tender portal](#)
- ❖ Principle ‘do no significant harm’ (Green Deal)

Evaluation Criteria, Pathfinder Open

- **Excellence (Threshold: 4/5, weight 60 %)**
 - Long-term vision; Science-towards-technology breakthrough; Objectives; Interdisciplinarity
- **Impact (Threshold: 3.5/5, weight 20 %)**
 - Innovation potential; Communication and Dissemination
- **Quality and efficiency of the implementation (Threshold 3/5, weight 20 %)**
 - Quality of the applicant/consortium; Work plan; Allocation of resources

Evaluation Criteria, Pathfinder Challenge

- **Excellence (Threshold: 4/5, weight 60 %)**
 - Relevance to the Challenge; Novelty; Plausibility of methodology
- **Impact (Threshold: 3.5/5, weight 20 %)**
 - Potential Impact; Innovation potential; Communication and Dissemination
- **Quality and efficiency of the implementation (Threshold 3/5, weight 20 %)**
 - Quality of the applicant/consortium [depends if mono or multi-beneficiaries]; Work plan; Allocation of resources

Novelties of Pathfinder Open & Challenge 1/2

All projects are eligible to apply for

- Up to **50 000 € additional grant** for complementary activities to explore potential pathways to commercialisation or portfolio activities:
 - see details from **Annex 6**
 - replacing H2020 FET Innovation Launchpad, no open calls
 - possible at any stage of a project implementation
 - not for research or activities that were already foreseen in the original project
- Transition funding (see the next part)
- Accelerator funding via the Fast-Track scheme
 - straight access to the 2-stage of evaluation (full proposal)
 - details given in **Annex 4**

Novelties of Pathfinder Open & Challenge 2/2

- **Proactive approach** of project and programme management **to develop business and technology-based visions**
- **Programme Managers (PMs)**: to identify, develop and implement such visions and to nurture potential market-creating innovation
- **Portfolio activities** are identified and developed by PMs in consultation with the beneficiaries of the actions in the Portfolio
- EIC funding for Pathfinder will apply provisions to ensure **open access to scientific publications** and **promote the uptake of results (Annex 7)**
- All projects must comply with the 'do no significant harm' principle of the [EU Sustainable Finance Taxonomy](#) (Green Deal)

EIC Transition

‘for transforming research results into
innovation opportunities’

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Transition Open & Challenge 1/3

- **To validate** and demonstrate **technology in application-relevant environment** (from TRL 3 to TRL 6) and **develop market readiness**
- To respond to the following questions:
 - ❖ Have you identified Pathfinder, FET or ERC Proof of Concept project results that could be the basis for ground-breaking innovations and new businesses?
 - ❖ Is this novel technology ready for the next steps towards its maturation and validation in some specific applications?
 - ❖ Do you envisage building a motivated and diverse entrepreneur-lead team to develop the idea and increase its market readiness?

EIC Advisory Board WG recommendation for Transition 2/3

- A '**Transition to Technology**' to advance research up to TRL 5/6. This involves mainly strategic technologies that need more time to mature while improving also the Market Readiness Level.
- A '**Transition to Market**' for projects led by an SME/Start-up with an interest in the results as single partner or in a small collaboration. The goal is to mature both the technology and market readiness
- A '**Transition to Entrepreneurship track** Many research projects produce "side results", often with higher TRL levels, that could be relatively quickly commercialized with the right "seed financing".
 - Transition will be one single flexible scheme that can encompass any of the above or others that include technology and market aspects.
 - There will be an open component and challenges (as for Pathfinder)

Transition Open and Challenge 3/3

- Funding up to **2,5 M€** (both Open & Challenge) for 3 yrs
- Indicative 2021 call budgets 59,6 M€ (Open) and 40,5 M€ (Challenge, from NGEU)
- Proposal **max 25 A4 pages**
- Call deadline, tbc: **22/9/2021** (single-state)
- Applications **must build on results from eligible Pathfinder, H2020 FET** (including Flagships and their ERA-NET Cofund calls) **or ERC Proof of Concept projects**
 - Applicant does not need to be the Principal Investigator/ partner of the original project, but an entity owning the IP of results in question (agreement to be provided)
 - **Single legal entity** as 'mono-beneficiary' (SMEs, spin-offs, start-ups, research organisations, universities) **or**
 - **Small consortium** with 2-5 beneficiaries (universities, research organisations, SMEs or larger companies, user/customer organisations or potential end-users)
 - Ongoing projects 12 months from start or finished projects within 24 months of the completion to the call deadline

Transition Challenge themes 2021

1. Medical Technology and Devices: from Lab to Patient

Any technology addressing important health needs in the direct clinical treatment and care of patients. Special conditions:

- a) To perform the necessary R&D to advance from an existing proof-of-principle technology to a mature version ready to initiate clinical evaluation.
- b) To develop an exploitation strategy, qualitatively and quantitatively outlining the proposed path to patient and describing an investable proposition.

2. Energy harvesting and storage technologies

- Technologies for efficient, low cost, sustainable, compact and flexible energy harvesting, conversion and storage
- Special conditions: sustainability and Green Deal targets
- To address at least one of the given three aims

Evaluation process, Transition

Evaluation & Time to grant (indicative):

1. First phase evaluation by EIC expert evaluators (cf. Pathfinder)
 - Feedback (ESR) 9 weeks after the call deadline
 2. If successful, invitation* (of max 5 persons mentioned in the proposal) for a face-to-face **interview** in front of EIC jury (max 6 persons)
 - Cf. Accelerator, but experts from both academia & industry
 - Result of the interview 17 weeks after the call deadline
- grant agreement will be signed within 6 months from the call deadline
- individual SMEs not funded but meeting all evaluation criteria may be awarded a Seal of Excellence quality label (to help gain funding from other sources)

*) Starting with the highest scoring proposal and in descending order, and if within a maximum number of applications ranked by overall score

Evaluation Criteria, Transition

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

- Technological breakthrough ; Technology feasibility; Objectives

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

- Business and market fit; Economic and/or societal benefits; Entrepreneurship; Partnerships and investment-readiness

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

- Quality of the team ; Milestones and Work plan; Allocation of resources

Possibilities for funded Transition Open and Challenge projects

Funded Transition projects are eligible to:

- Apply for **up to 50 000 € additional grant** possible to undertake portfolio activities (Annex 6) – see above slide 20 for Pathfinder
- Submit an **Accelerator proposal via the Fast-Track** scheme (Annex 4)
- IPR issues are explained in **Annex 7**
 - IP generated by the Transition project is expected to be formally protected: IP rights allow also their owners to shape the way they wish to share the results with other entities.

EIC call calendar 2021 – F&T portal 6.4.

- **U Prize for Women Innovators** (Open, DL 30/6/2021)
- **The European Capital of Innovation Awards** (Open, DL 15/7/2021)
- **EIC Pathfinder Open 2021** (HORIZON-EIC-2021-PATHFINDEROPEN-01-01)
 - **Deadline model** single-stage
 - **Opening date** 8/4/2021
 - **Deadline date** 9/5/2021 (17:00 Brussels time)
- **EIC Accelerator Open 2021** (HORIZON-EIC-2021-ACCELERATOROPEN-01)
- **Strategic Digital and Health Technologies** (HORIZON-EIC-2021-ACCELERATOR-CHALLENGES-01-01)
 - **Deadline model** multiple cut-off
 - **Opening date** 8/4/2021 (full proposals)
 - **Deadline date** 9/6/2021 (17:00 Brussels time)

Useful links:

[EIC web page](#)

[EIC Pilot \(2018-2020\) Impact Report](#)

[EU Funding & Tender portal](#)

www.horisonttieurooppa.fi -> [EIC-page](#)

[HEU esitysaineistoja](#) -> EIC Accelerator -hakuinfo
30.3. 2021, Pathfinder/Transition info 7.4.2021

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Please, contact / Ota yhteyttä!

At your service/ Opastusta rahoitusmahdollisuuksista ja hauista:

National Contact Points for EIC Pathfinder ja Transition

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EIC committee expert

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Thank you – Kiitos!