

European Innovation Council

EIC Pathfinder & Transition Info

Webinaari 7.4.2021

Klo 14-16

[Linkki EUTIn Tapahtuma sivulle](#)

HORISONTTI EUROOPPA

— 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

EIC Pathfinder & Transition Info 7.4.2021

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

HORIS^{NTTI} EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

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

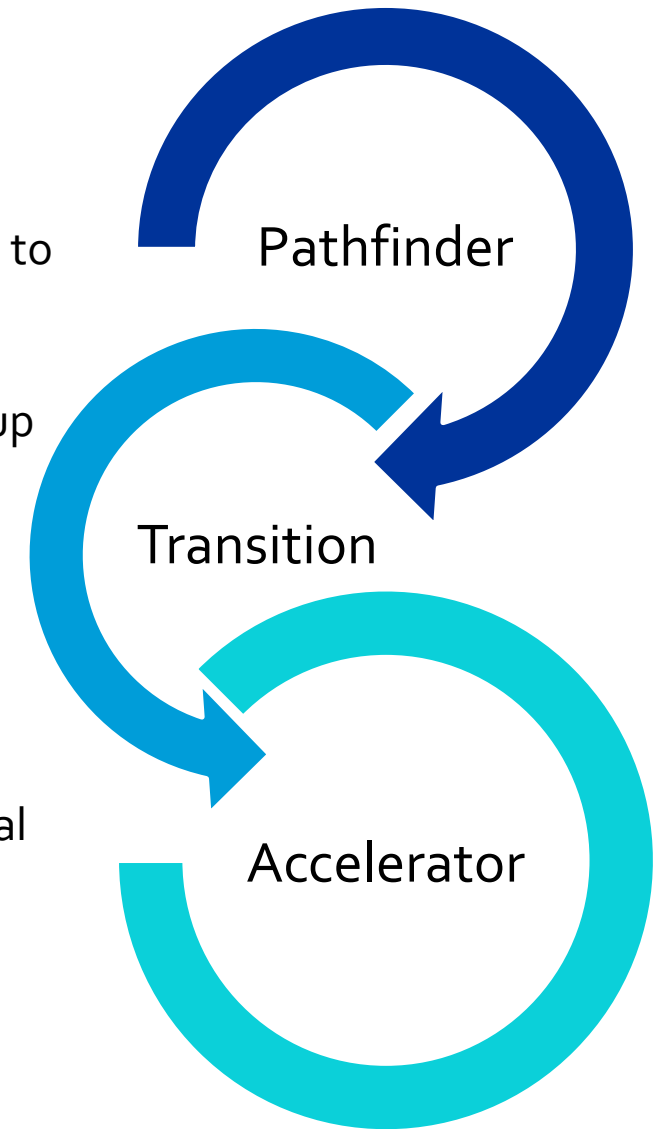
European Innovation Council EIC

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

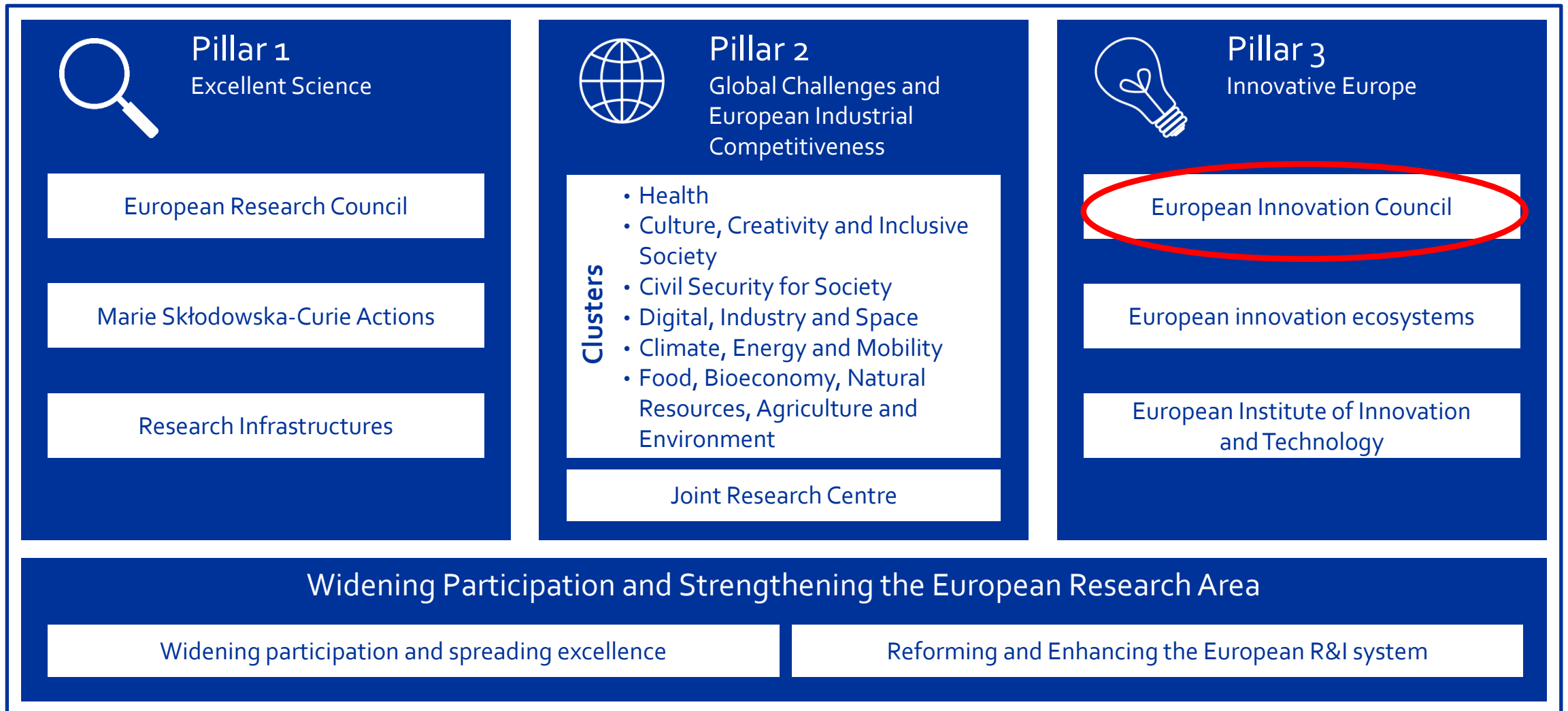
Funding mainly through **Bottom-up Open Calls**
Some **Thematic Calls** (e.g. **Green Deal challenges**)



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



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 EIT 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!



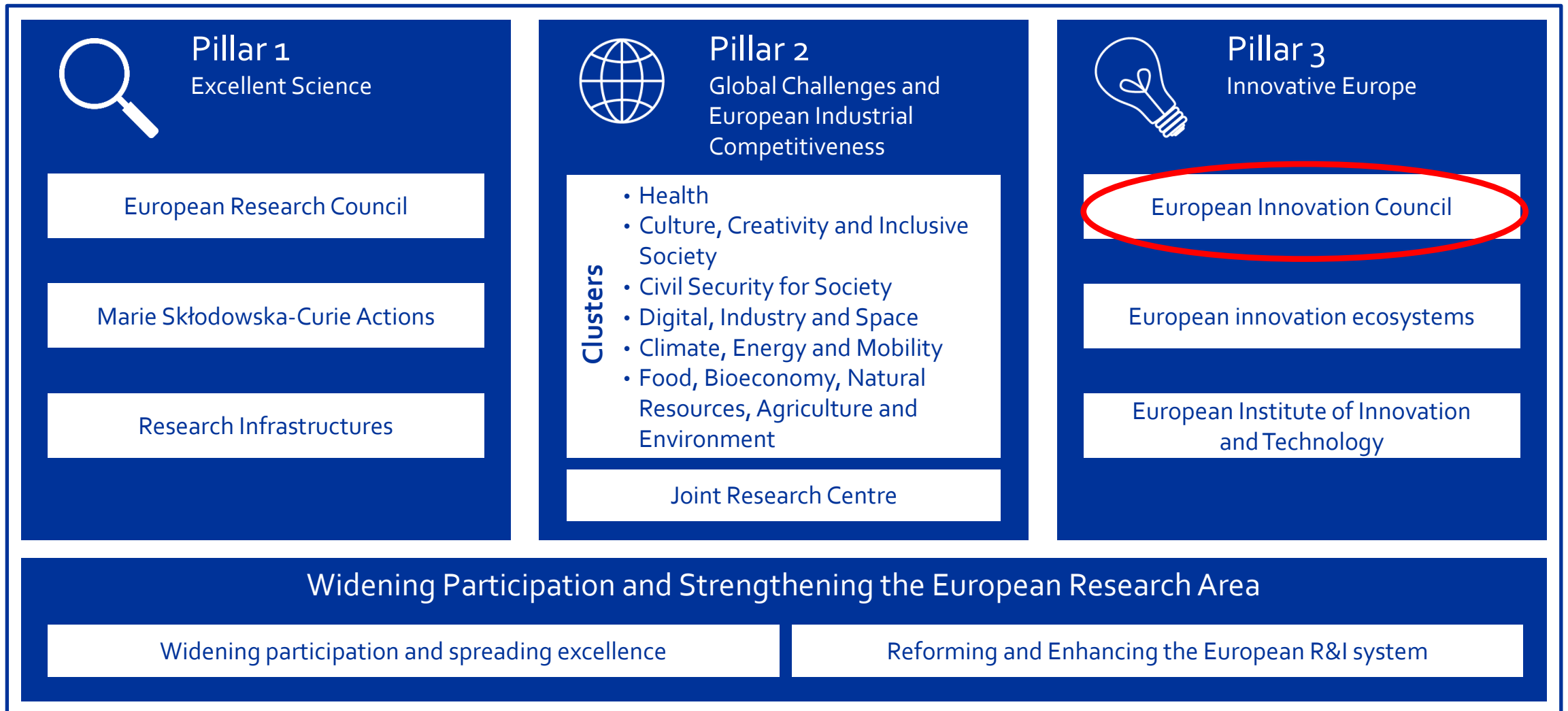
EIC Pathfinder

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

HORIS^{NTTI} EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

Horizon Europe 2021 – 2027: Structure



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'

HORIS^{*****}NTTI EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

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

HORISONTTI EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

Please, contact / Ota yhteyttä!

At your service/ Opastusta rahoitusmahdollisuuksista ja hauista:

National Contact Points for EIC Pathfinder ja Transition

- Tuomas Katajarinne, tuomas.katajarinne@aka.fi
- Timo Lehtinen, timo.lehtinen@aka.fi

EIC committee expert

- Hannele Lahtinen, hannele.lahtine@aka.fi

Thank you – Kiitos!