Tuomas Katajarinne Tiedeasiantuntija Suomen Akatemia

### **EIC PATHFINDER**

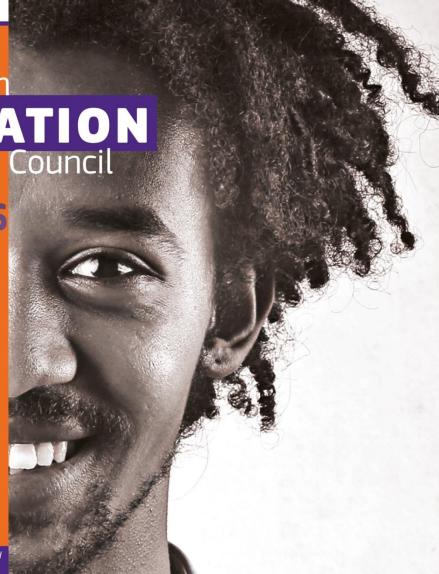
#### **Esittely**

- Tiedeasiantuntija, Strateginen tutkimus
- Kansallinen yhteyshenkilö (NCP)
- FET (Future and Emerging Technologies)
- Tiedonvälittäjä
- Tutkimuksen tukena



# European INNOVATION Council

**EMPOWERING EUROPEAN INNOVATORS** 



Research and Innovation

#### €2 billion-pilot package to support bottom-up ideas

#### **PATHFINDER Pilot ACCELERATOR PIlot** € 845 million € 2.100 million Approx.250 projects 2,900 projects SME Instrument Phase 2 / Fast Track to Innovation (FTI) **FET OPEN + FET Proactive** (grant-only) **Future and Emerging Technologies** (grant-only) **Blandad finance** (grant + equity) Visionary idea for developing radical and Radically new, highly risky ideas commercially viable and with a innovative technologies potential to scale up

Coaching, mentoring and business acceleration services for all SMEs

EIC Horizon Prizes + Support actions €50 million

#### The Pathfinder Pilot

#### **Pathfinder**



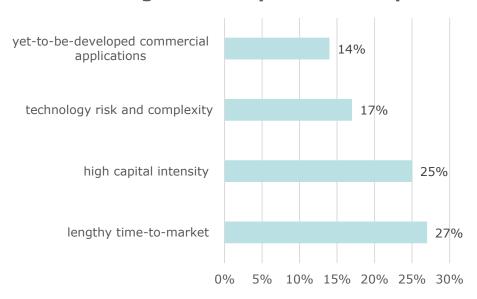


- > supports researchers, innovators and innovative companies with ideas relating to future and emerging breakthrough technologies with a grant
- > Researcher, innovator or innovative company can apply for Accelerator funding as it matures

### EIC Pathfinder Pilot Deep-tech 'made in Europe'

- Needs a strong research base.
- Deep-tech companies are constantly pushing the technological frontier.
- Collaborations are especially important since it lies at the crossroads of disciplines, fundamental research and industrial application.

#### **Challenges for deep-tech startups**



**Source:** BCG and Hello Tomorrow Report: "From tech to deep tech"

# **EIC Pathfinder - FET Novelties**

- From early stage proof-of-concept research,
   up to demonstration of commercial viability
- FET Proactive integrated in the Pathfinder Pilot
- Programme managers
- Business Acceleration Services
- FET Transition to Innovation Activities



# **Major novelties EIC Programme managers**

- For more flexible and pro-active management and steering of tech or challenge-based portfolios
- 3 to 5 programme managers to follow projects in EIC Pathfinder Pilot
- Professionals with visionary thinking
- Hired as a temporary Commission staff

### Major novelties EIC Advisory Board

- To advise the Commission on the design of European Innovation Council (EIC) support for innovation
- Group of 15 to 20 entrepreneurs, investors, individuals building start-up communities, innovative researchers and academics working on innovation policy
- Will support the Commission:
  - Developing the pilot in 2019 and 2020
  - Enhancing innovation eco-systems and impact
  - With the overall strategy under Horizon Europe

### **EIC Pathfinder – FET Open**

**2019-2020** (new WP adopted on 2 July 2019)

- Deep-tech made in Europe: from early stage proof-of-concept research up to demonstration of commercial viability (<u>bridging research-innovation</u> gap)
  - high-risk/high-gain breakthrough research/market creating innovation
- Call stays the same H2020-FETOPEN-2018-2020
- **2 topics** (Research and Innovation Actions, and Coordination and Support Actions Innovation Launchpad)
  - for both topics **4 cut-off dates** (2 per topic): in 2019 and 2020
  - Budget: **362,55 M€** (**356,85 M€** for RIA and **5,7 M€** for CSA)
- Grant based: individual and/or collaborative actions

### **EIC Pathfinder – FET Open**

**2019-2020** (new WP adopted on 2 July 2019)

- FET-Open Research and Innovation Actions
  - Supporting high-risk interdisciplinary collaborative research on the technologies of the future
  - Ideas from any area of technology or business sector including novel combinations of technologies and business models
  - Always very attractive, but still competitive: success rate above 10%
- FET Innovation Launchpad
  - Turning results from FET funded projects into genuine societal/economic innovations
  - Cut-off in 2020 included in <u>Lump Sum pilot</u> (great simplification for the beneficiaries)



# **EIC Pathfinder - FET Open Research and Innovation Actions**

- Foundations for radically new future technologies, highrisk & high-impact interdisciplinary research:
  - Radical vision
  - Breakthrough technological target
  - Ambitious highly interdisciplinary research
- Bottom-up and continuously open
- 15-page proposal, up to €3 million (indicative), consortium of minimum 3 partners from 3 EU / associated countries

# FET Open (RIA): FETOPEN-01-2018-2019-2020 Scope

Proposals are sought for **cutting-edge high-risk/high-impact interdisciplinary research** with ALL of the following essential characteristics so-called **"FET gatekeepers"** (in-scope/out-of-scope)

- Radical vision
- Breakthrough technological target
- Ambitious interdisciplinary research

https://www.youtube.com/watch?v=t8dAJvoiguM

### FET Open (RIA): FETOPEN-01-2018-2019-2020 Evaluation

- Three award criteria stay the same
  - Excellence: weight of 60%, threshold of 4
  - **Impact**: weight of 20%, threshold of 3,5
  - **Implementation**: weight of 20%, threshold of 3
- Evaluation process stays the same
- Out-of-scope (FET gatekeepers) proposals become ineligible
- Possible <u>advice not to resubmit the proposal</u>

# FET Open (CSA): FETOPEN-03-2018-2019-2020 FET Innovation Launchpad



- Strengthening exploitation of FET results: turning results from FETfunded projects into innovations and increase their value creation
- Examples of activities:
  - Market or competitiveness analysis, commercialisation process, business case development, technology assessment, consolidation of IPRs
- EU contribution of up to 100 k€ (eligibility) and up to 18 months
- Sole applicant or as part of a consortium from MS/AC
- 7-pages (A4) proposal
- Cut-off in 2020: introduction of lump sums



# **EIC Pathfinder - FET Proactive Emerging paradigms and communities**

- Stimulate the emergence of a **new technological paradigm**
- Selected emerging paradigms
- 2019 €52M 2020 €50M
- Human-Centric AI
- Implantable autonomous devices and materials
- Breakthrough zero-emissions energy generation for full decarbonisation
- Future technologies for social experience
- Measuring the unmeasurable -- Sub-nanoscale science for Nanometrology
- Digital twins for the life-sciences
- Up to €4-5 million, across up to 4 years
- 30-page proposal, Minimum 3 partners from 3 EU / AC

# **EIC Pathfinder - FET Open Research and Innovation projects**

#### A typical Research and Innovation Action project







# **EIC Pathfinder - FET Open Innovation Launchpad**

- Turning results from FET-funded projects into genuine societal or economic innovations
- Up to **€0.1** million over 18 months
- Sole applicant or as part of a consortium
- Market analysis, business case, technology assessment, IPRs...

# **EIC Pathfinder - FET Proactive Transition to Innovation Activities**

- Turn promising results into breakthrough and disruptive innovations
- At the end of a typical FET-Open or FET Proactive project (i.e., starting from early-stage technologies)
- Targeted technologies: <u>Micro- and Nano-technologies</u>, <u>Artificial Intelligence and advanced robotics</u>, <u>Technologies for the</u> <u>life sciences</u>, <u>health and treatment</u>, <u>Energy technologies</u>, <u>Interaction technologies</u>
- 24 months, €1-2 million

#### Pathfinder Next cut-offs

- FET Open
  - 18 September 2019
  - 13 May 2020
- FET Proactive Emerging paradigms and communities
  - 3 Sep 2019
  - 22 Apr 2020
- FET Proactive Environmental Intelligence
  - 22 Apr 2020
- FET Innovation Launchpad
  - 8 October 2019
  - 14 October 2020
- FET Proactive Transition to Innovation Activities
  - 3 Sep 2019

# **EIC Pathfinder - FET Open and Proactive Evaluation Criteria**

- For FET Open and Proactive RIAs:
  - Three award criteria:
    - 60% 'excellence'
    - 20% 'impact'
    - 20% 'quality and efficiency of implementation'
- For Transition to innovation & ILP
  - Three award criteria:
    - 40% 'excellence'
    - 40% 'impact'
    - 20% 'quality and efficiency of implementation'
    - Time-to-inform: 5 months
    - Time-to-grant 8 months

#### Let's try even if it fails!



The **spirit** of FET Open remains <u>the same!</u>

### **EIC Pilot** Need help?

- EIC Wizard via EIC website
- EIC Pilot Guide for Applicants
- EIC Questions and Answers
- National Contact Points (NCPs)
- European Enterprise Network (EEN)

#### For further information

**EIC** website

**European Funding and Tender portal** 

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### linkkejä

- FET työohjelma
- EIC Pilot työohjelma