TECHNOLOGY CENTRE PRAGUE

EIC PATHFINDER CHALLENGES CALL 2024

EIC Pathfinder Challenge on EU Space infrastructure, 17.5. 2024

EIC UNDER HORIZON EUROPE

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications

Pillar I
EXCELLENT SCIENCE

Pillar II
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Pillar III
INNOVATIVE EUROPE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures

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

Joint Research Centre

European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

EIC MAIN INSTRUMENTS

PATHFINDER – from early stages of a technology to a proof of concept (TRL 1 – 3/4)
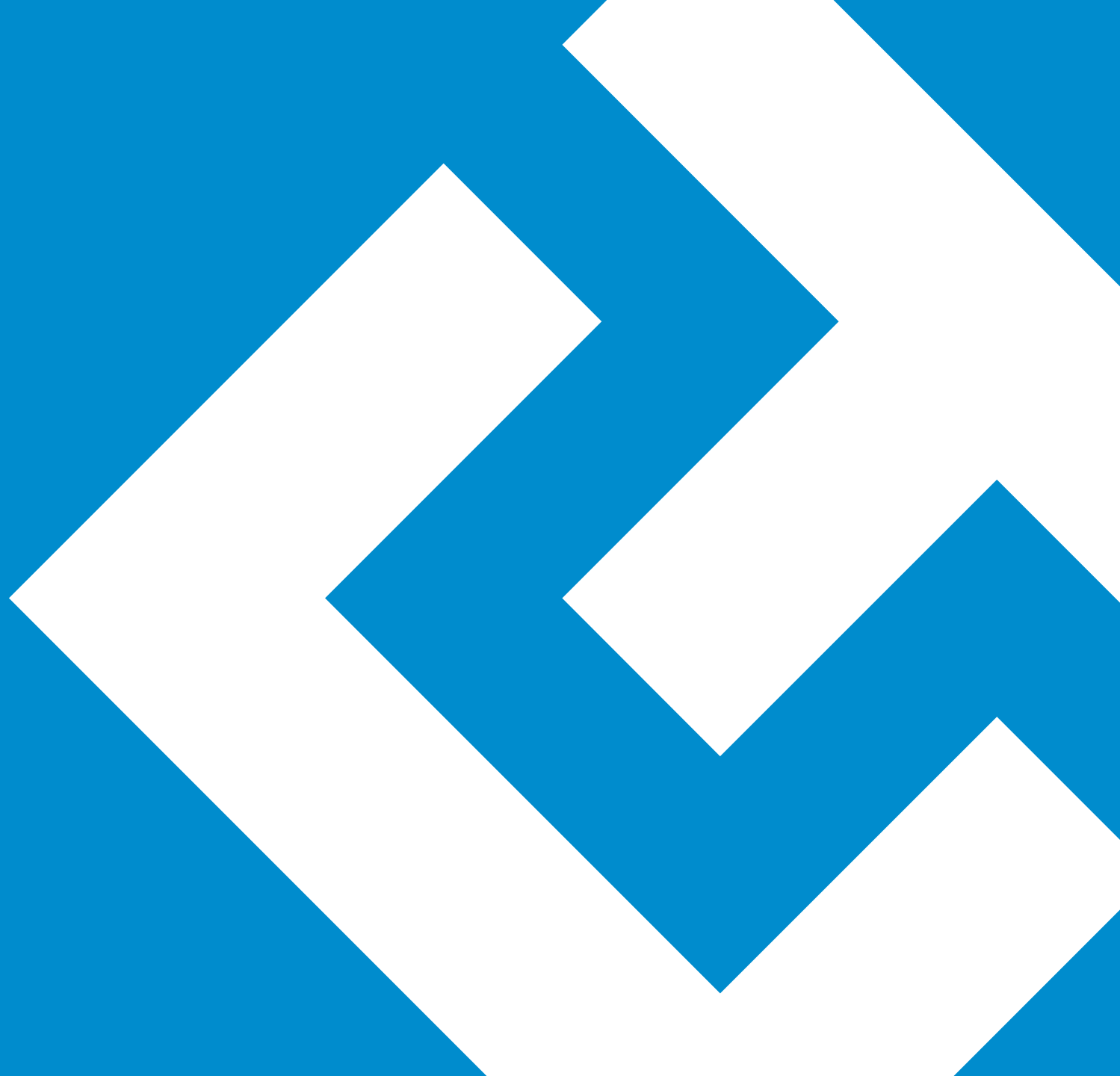
TRANSITION – from a proof of concept to a pre-commercial stage (TRL 3/4 – 5/6)

ACCELERATOR – from a pre-commercial stage to the market uptake and scale-up (TRL 5 – 9)

➢ EIC calls are mostly **Open** („bottom-up")
➢ Specific thematic calls are called **Challenges**

EIC PATHFINDER

WHAT DOES EIC PATHFINDER SUPPORT

- Research of **new directions** in science and technology

- **High-risk approach** with the aim to bring **breakthrough technological solutions** and create **market opportunities**

- **Interdisciplinary projects** combining different perspectives in order to open up new technological pathways

- Projects with a high potential to have a **positive effect on the society and economy**
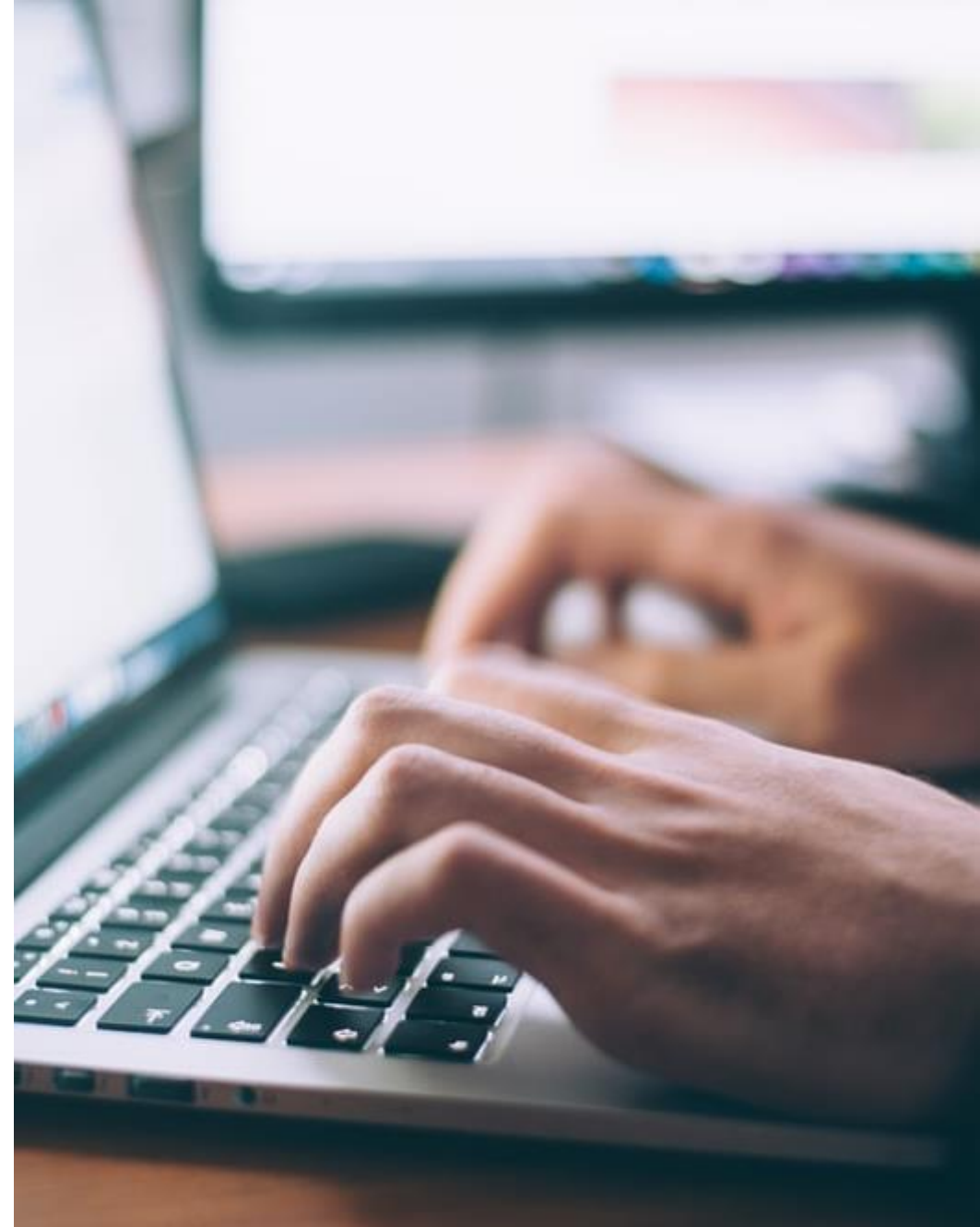
WHAT PROJECTS ARE NOT SUPPORTED

➢ Projects focused purely on pushing boundaries of a scientific field with no potential/ambition to develop a new technology/innovation

➢ Projects focused on an incremental development or development of already known methods/principles

WHAT IS EXPECTED?

- **Expected output**

  - ➤ **Proof of principle** that the main ideas of the envisioned future technology are feasible

- **Important aspect of project proposals**

  - ➤ Top-level **scientific publications**
  - ➤ Adequate formal protection of the generated **Intellectual Property**
  - ➤ Assessment of relevant aspects related to **regulation, certification, and standardization**
  - ➤ Empowerment of excellent **early career researchers** or promising **high-tech SMEs**
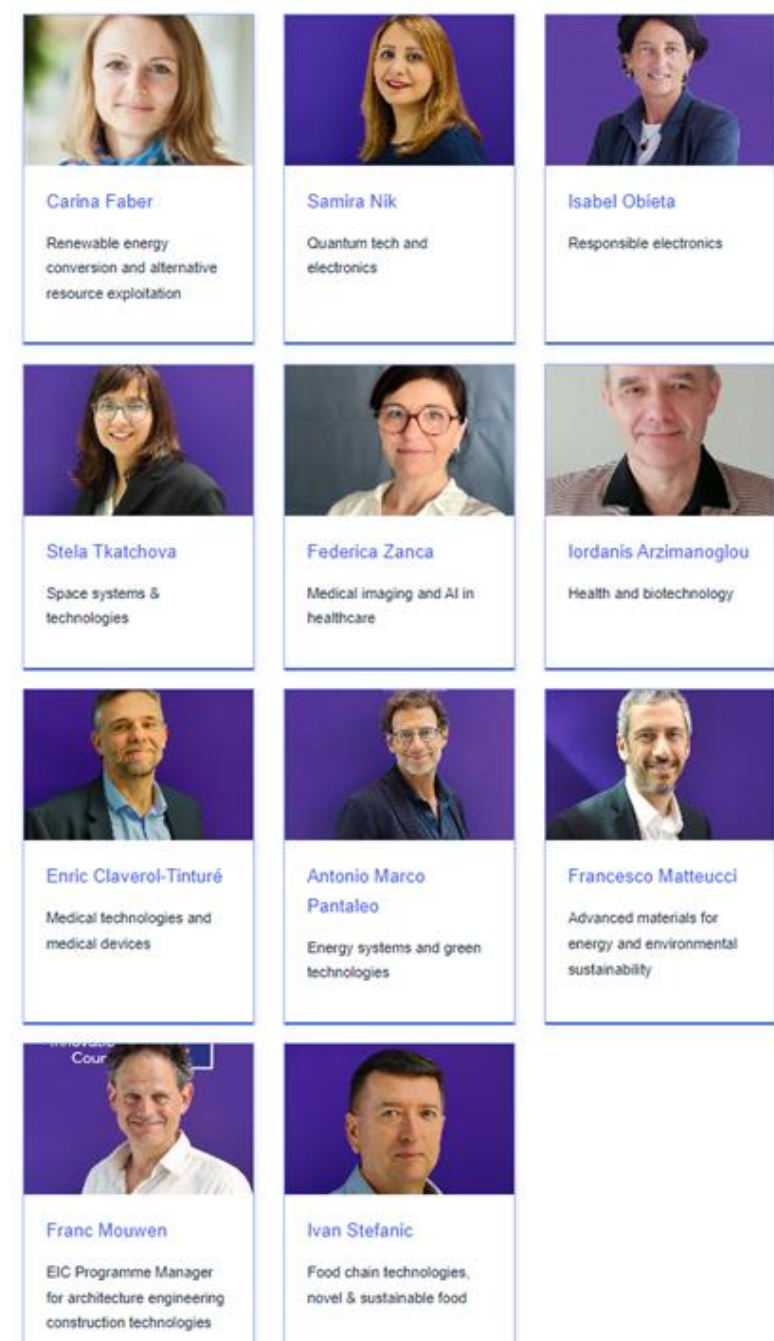 - ➤ **Gender balance** among the WP leaders

WHY CHALLENGES?

- The objective of EIC Pathfinder is to speed up development of new technologies that will reinforce the **EU strategic autonomy and global competitiveness**

- Challenges help to **direct efforts** into selected strategic areas

- The areas are defined based on **industry needs**, the **EU strategies** and an analysis of **funded Horizon projects**

- **EIC Programme Managers** play an important role in Challenges design and execution

EIC PROGRAMME MANAGERS

- Experts in strategic areas with **academic as well as business** backgrounds

- **Identify potential challenges** for emerging technologies and disruptive innovations

- They take part in the project selection process and **steer selected projects portfolios** towards the Challenge objectives

- https://eic.ec.europa.eu/eic-communities/eic-programme-managers_en

Carina Faber
Renewable energy conversion and alternative resource exploitation

Samira Nik
Quantum tech and electronics

Isabel Obieta
Responsible electronics

Stela Tkatchova
Space systems & technologies

Federica Zanca
Medical imaging and AI in healthcare

Iordanis Arzimanoglou
Health and biotechnology

Enric Claverol-Tinturé
Medical technologies and medical devices

Antonio Marco Pantaleo
Energy systems and green technologies

Francesco Matteucci
Advanced materials for energy and environmental sustainability

Franc Mouwen
EIC Programme Manager for architecture engineering construction technologies

Ivan Stefanic
Food chain technologies, novel & sustainable food

EIC PATHFINDER CHALLENGES 2024

- Solar-to-X devices for the decentralized prosumption of renewable fuels, chemicals and materials as climate change mitigation pathway

- Towards cement and concrete as a carbon sink

- Nature inspired alternatives for food packaging and films for agriculture

- Nanoelectronics for energy-efficient smart edge devices

- **Strengthening the sustainability and resilience of EU space infrastructure**

EIC PATHFINDER CHALLENGES CALL 2024

- Planned opening: **June 20, 2024**

- **Deadline:** <u>October 16, 2024</u>

- EU contribution up to **EUR 4 million** (lump sum)
  - ➤ The overal call budget is EUR 120 mio

- **RIA** (100 % eligible costs)

- **Individual** or **Collaborative research**:

  - ➤ Single legal entity (companies larger than SMEs are not allowed to apply as a single entity)
  - ➤ A consortium of 2 partners from 2 different MS/AC
  - ➤ A consortium of at least 3 partners from 3 different MS/AC (standard HE rules)

EVALUATION CRITERIA

EXCELLENCE	IMPACT	IMPLEMENTATION
Treshold 4/5, weight 60 %	**Treshold 3,5/5, weight 20 %**	**3/5, weight 20 %**
Objectives and relevance to the Challenge	Potential Impact	Work plan
Novelty	Innovation potential	Allocation of resources
Plausibility of the methodology	Communication and Dissemination	Quality of the applicant/consortium

PORTFOLIO CONSIDERATIONS

- Projects in a portfolio are supposed to be complementary

- Interaction among projects is expected

Enhanced impact

- Challenge Guide = key document for the applicants

  ➢ It specifies the aspects to be taken into account when establishing a project portfolio

WHAT ARE PATHFINDER BENEFICIARIES ELIGIBLE FOR

- **EIC Booster grant**
  - ➢ Additional grant of up to EUR 150K to undertake complementary activities to explore potential pathways to commercialisation or for portfolio activities

- **EIC Transition** scheme

- **Fast Track** to the EIC Accelerator

- **Next Generation Innovation Talents scheme**

- **Business Acceleration Services**

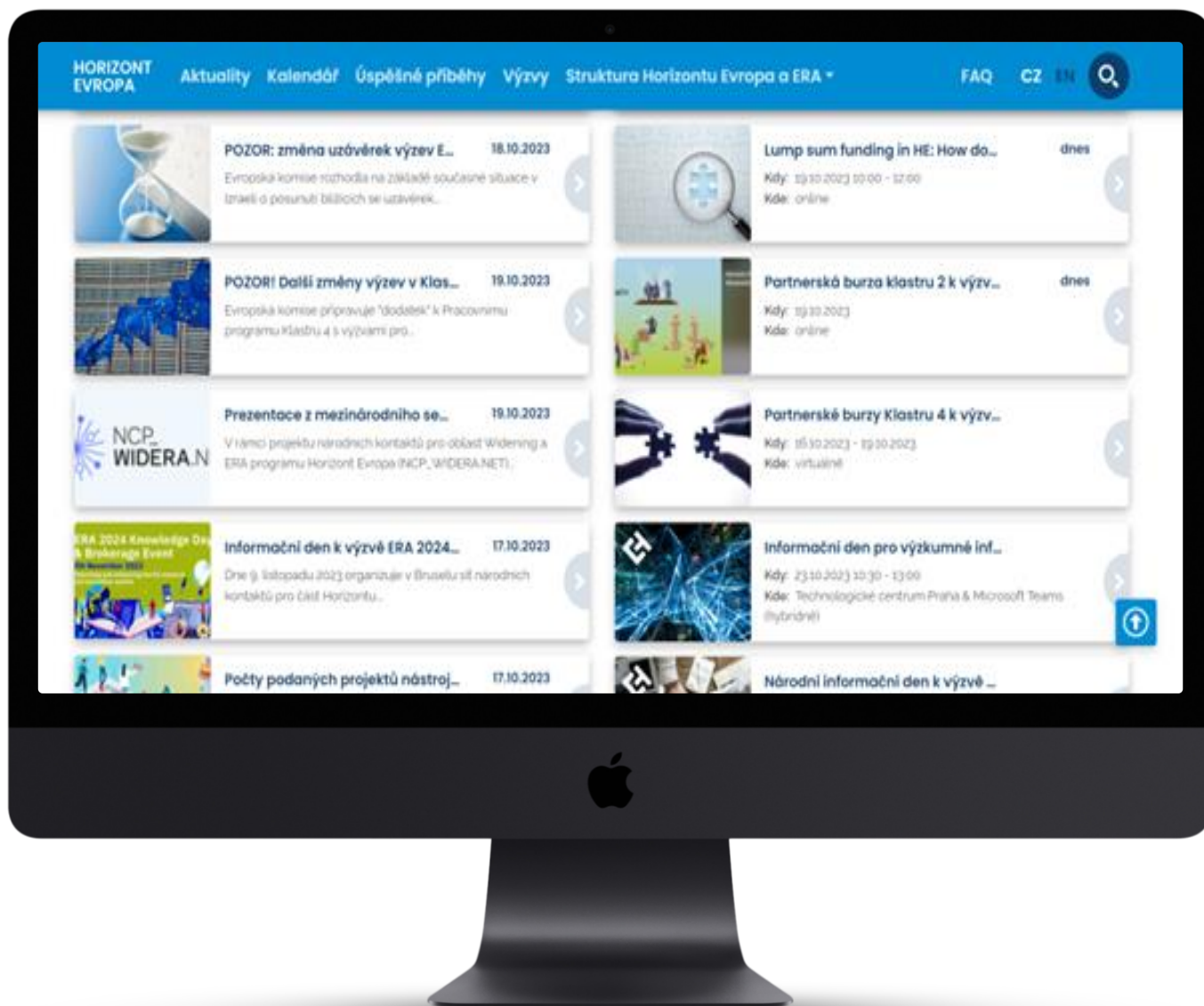# SUPPORT TO APPLICANTS FROM THE WIDERA INTERNATIONAL NETWORK

- Free expert pre-check of the proposal

- For proposals with a coordinator or a WP leader from a widening country

- https://www.ncpwideranet.eu/wideraexperts/

SOME FAQS

- **What is the expected duration of a Pathfinder project?**
  - ➢ There is no pre-defined duration, the projects typically last between 36 and 60 months

- **Is there any expected/recommended size of a consortium, does the size correlate with chances to succeed?**
  - ➢ No, the success depends on the quality of the proposal and ability of the applicant to implement the project

- **Is it obligatory to include industry partners into the consortium?**
  - ➢ No, it is not obligatory. It may however be beneficial for the future commercialization activities or be taken into account during the evaluation

- **Note: read the Challenge Guide for Challenge specific details**

EIC TEMPLATES AND GUIDANCE

- **Proposal forms and evaluation forms:**
  - ➢ Funding & Tenders Opportunities portal: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents

- **EIC Work programme 2024** (general rules and evaluation criteria):
  - ➢ https://eic.ec.europa.eu/system/files/2023-12/EIC-workprogramme-2024.pdf

- **Challenge guides**: guidance and background for the common understanding, participation rules and obligations for the EIC beneficiaries that are involved in the Challenge Portfolio
  - ➢ Funding & Tenders Opportunities portal (for each Challenge separately)

- EIC FAQ: https://eic.ec.europa.eu/eic-frequently-asked-questions_en

MORE INFORMATION

- https://www.horizontevropa.cz/cs

- https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home

- https://eic.ec.europa.eu/

THANK YOU!

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