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Backing visionary entrepreneurs

Francesco Matteucci

EIC Programme Manager on Advanced Materials for energy and Environmental Sustainability

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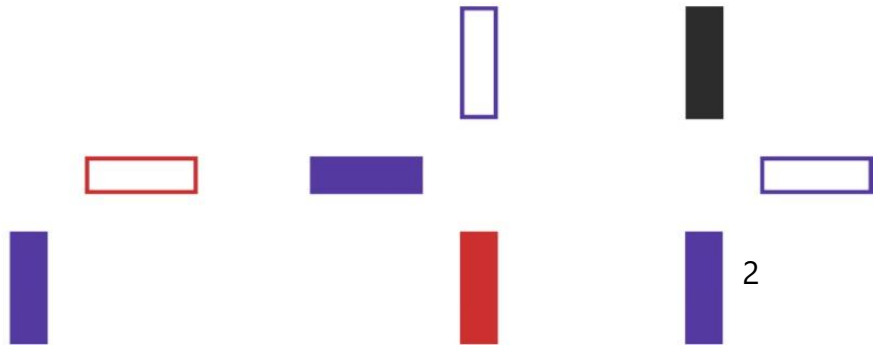
Agenda

- Overview of the EIC funding programmes
- The rationale of Transition call
- The rationale for environmental intelligence
- The EIC transition challenge: scope of the call
- Evaluation process
- Some lessons learnt
- Proactive management



Horizon Europe Structure

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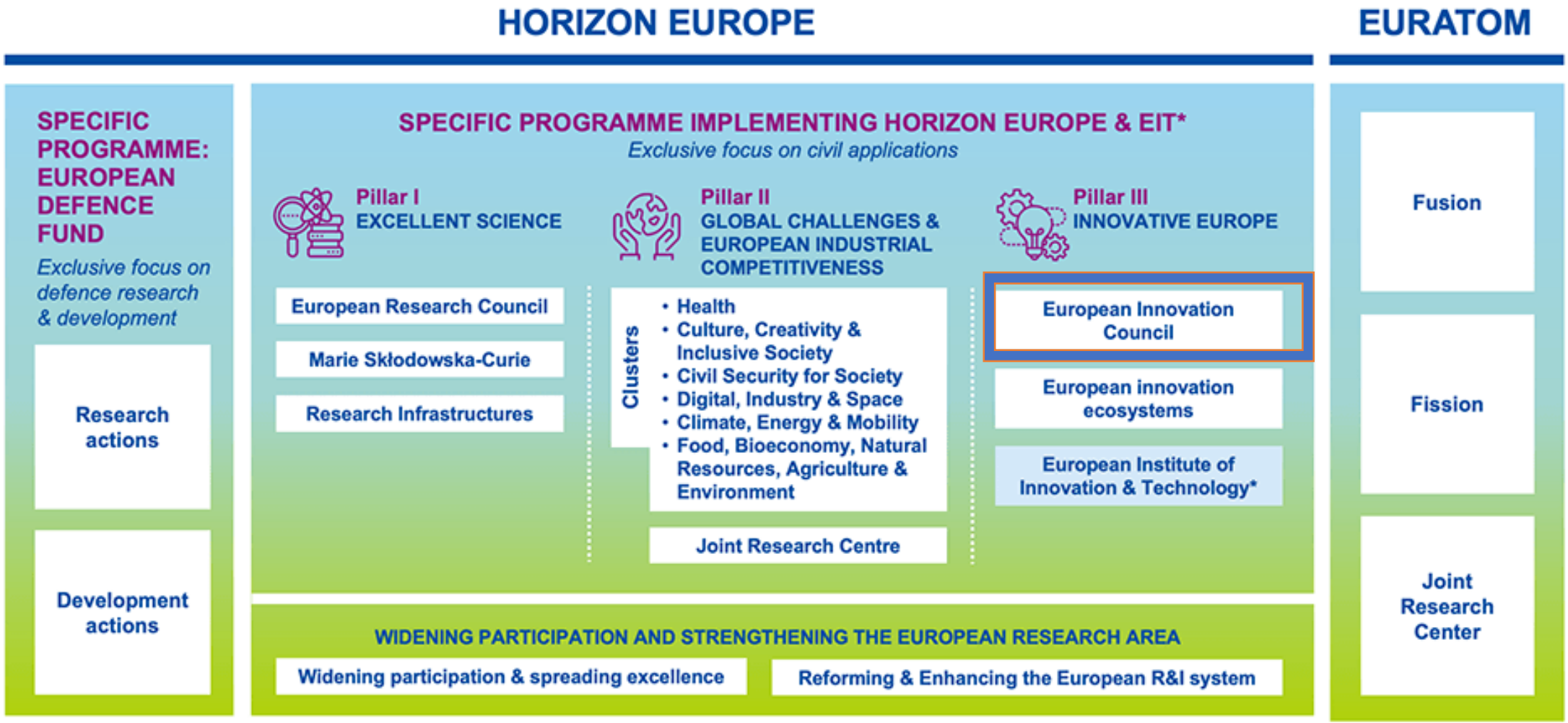

* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

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EIC Programs

Pathfinder (TRL1-4)

- **For consortia (open and challenge calls) and single entities (challenge call)**
- Early stage research on breakthrough technologies
- **Grants up to €3/4 million**

Transition (TRL 4-6)

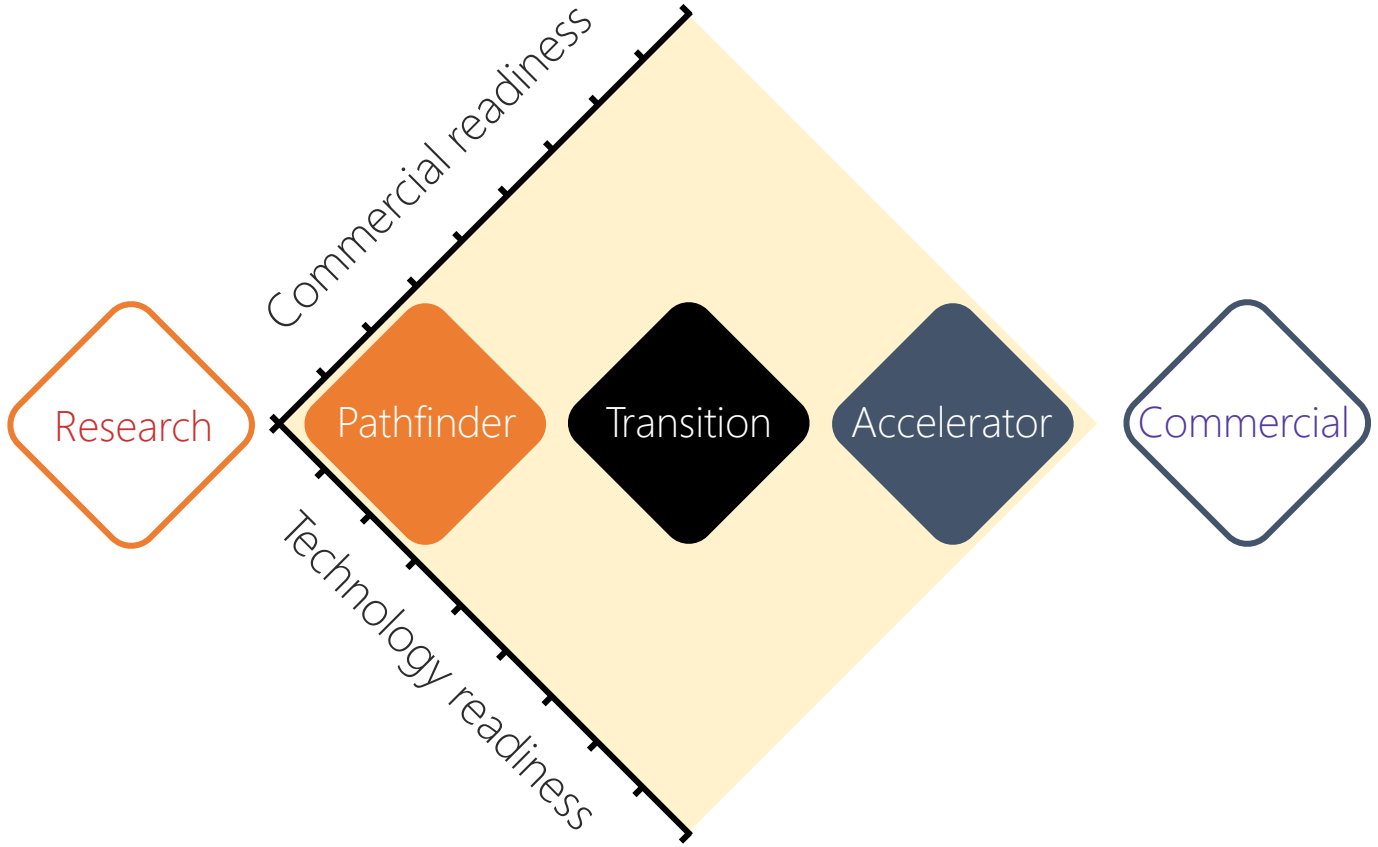
- **For consortia and single entities**
- Technology maturation from proof of concept to validation
- Business & market readiness
- **Grants up to €2.5 million**

Accelerator (TRL 6-9)

- **For individual SMEs**
- Development & scale up of deep-tech/ disruptive innovations by startups/ SMEs
- Blended finance (**grants up to €2.5 million; equity investment up to €15 million or above**)

EIC stages the entrepreneurial journey as pathfinder, transition, accelerator with increasing readiness levels

WHAT?



WHY?

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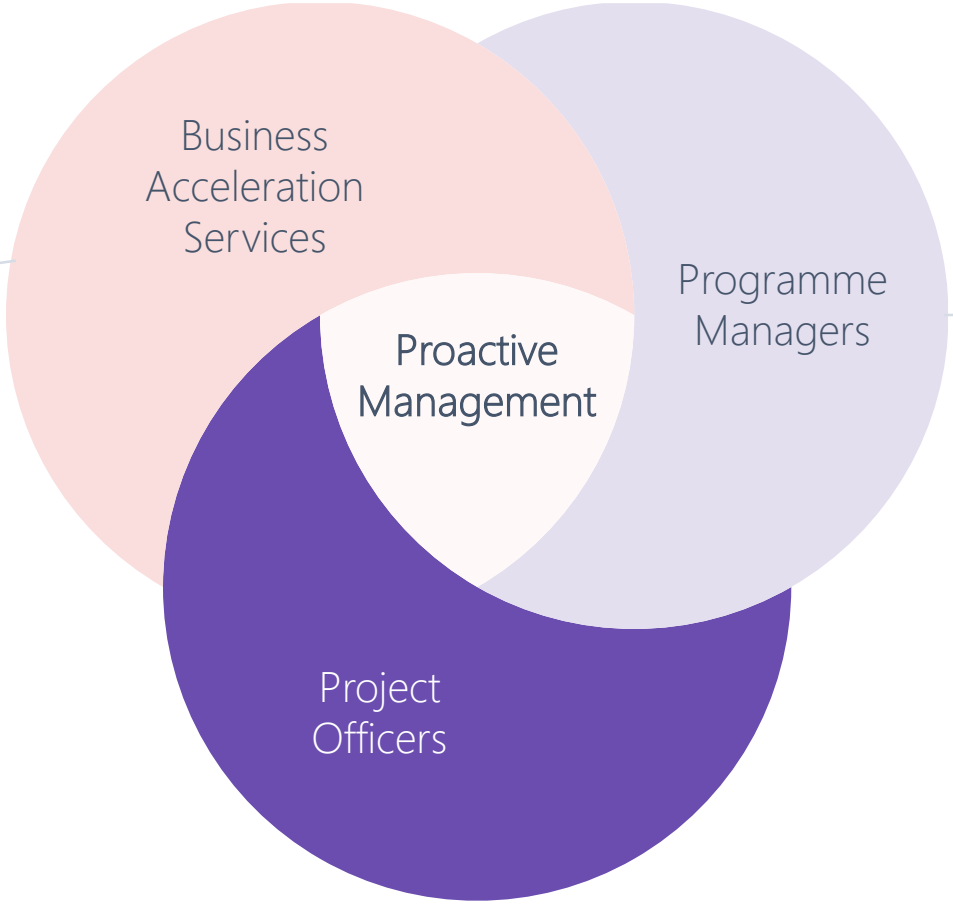
With proactive management the EIC aims to maximize its support to success of the entrepreneurial journey

- Access to entrepreneurs
- Access to mentoring
- Access to ecosystems
- Access to partners, peers
- Access to trainings
- Access to workshops
- Access to expert advice
- Access to recruitment
- Access to industry



- Health, Biotech
- MedTech
- SpaceTech
- Quantum, electronics
- Greentech materials
- Greentech
- AEC
- Agri-food
- Responsible electronics
- Bio-fuels, E-fuels

Challenges
Portfolios
Outreach

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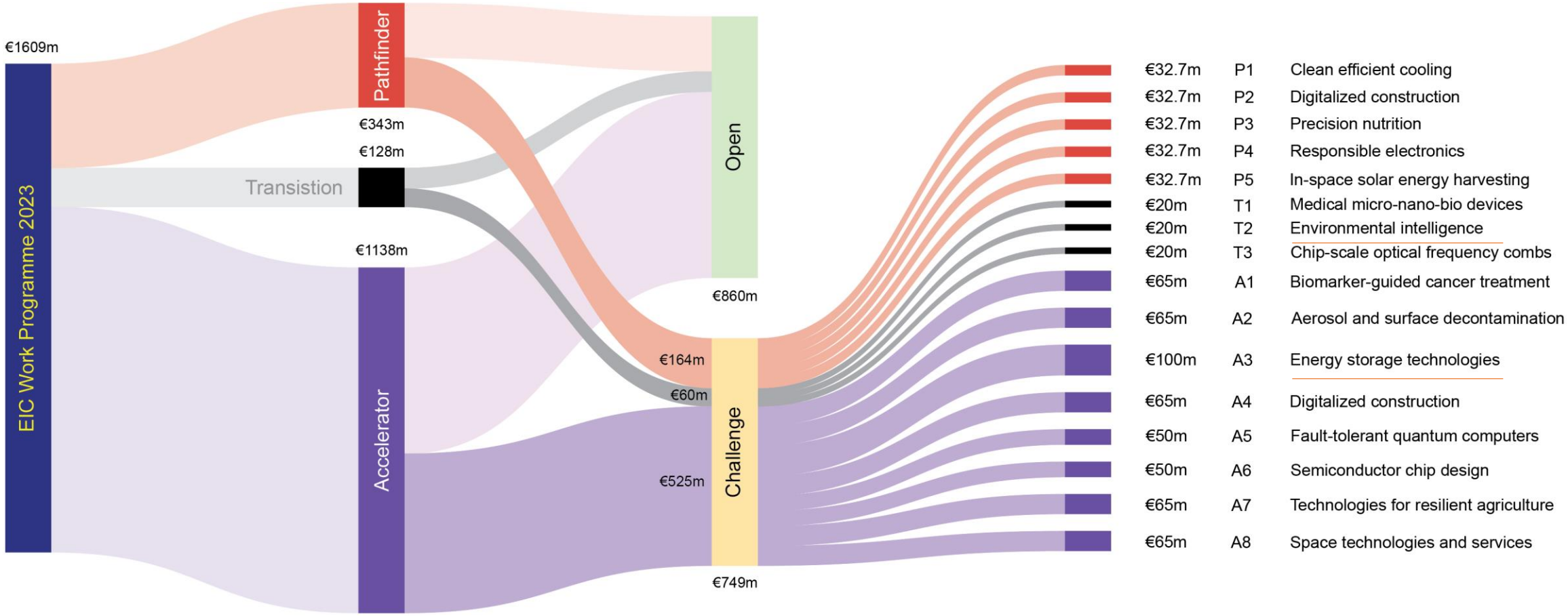
In 2023 EIC allocates ~€1.6bn to Open and Challenge calls by its Pathfinder, Transition, Accelerator programs



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Cut-off dates of the various calls

Cut-off dates:	Pathfinder	Transition	Accelerator
Open	7 March 2023	12 April 2023 27 September 2023	11 January 2023 22 March 2023 7 June 2023 4 October 2023
Challenge	18 October 2023	12 April 2023 27 September 2023	22 March 2023 7 June 2023 4 October 2023

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EIC Transition

Environmental Intelligence

EIC Transition Open and Challenges 2023

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Why EIC Transition?

- Suppport of novel technologies
- Commercialisation support
- The Open funding support
- Challenges: predefined thematic priorities (project portoflios)

Who can apply?

- Pathfinder* & H2020 FET*
- **H2020* or HEU* if on topic**
- FET ERA NETs*
- Eu Defence Fund (Preparatory Action on Defence Resarch)
- ERC PoC*

Financial contribution

€0.5 - 2.5 mil

**Started 12 months before or ended less than 24 months after the call deadline*

EIC Transition 2023

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Budget €128.36 million

- Open: €67.86 million
- Challenges: €60.5 million
  - Full scale Micro-Nano-Bio devices for medical and medical research applications;
  - Environmental intelligences;
  - Chip-scale optical frequency combs

Grants up to €2.5 million

(or more if well justified)

Applications

- Apply anytime
- 2 cut-offs
  - 12 April 2023
  - 27 September 2023

Who can apply?
Monobeneficiary or small consortia

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2 beneficiaries	**2** different countries
3 beneficiaries	**3** different countries (min 1 Member State)
4 or 5 beneficiaries	**min 3** different countries (min 1 Member State)

Beneficiaries
independent legal entities

Countries
Member States or Associated countries

Consortia
may include universities (TTOs), RTOs, SMEs, corporates, customer organisations, end users
(e.g. hospitals, utilities, industry, regulatory bodies, public authorities)

Can you apply if you are not part of the initial consortium?

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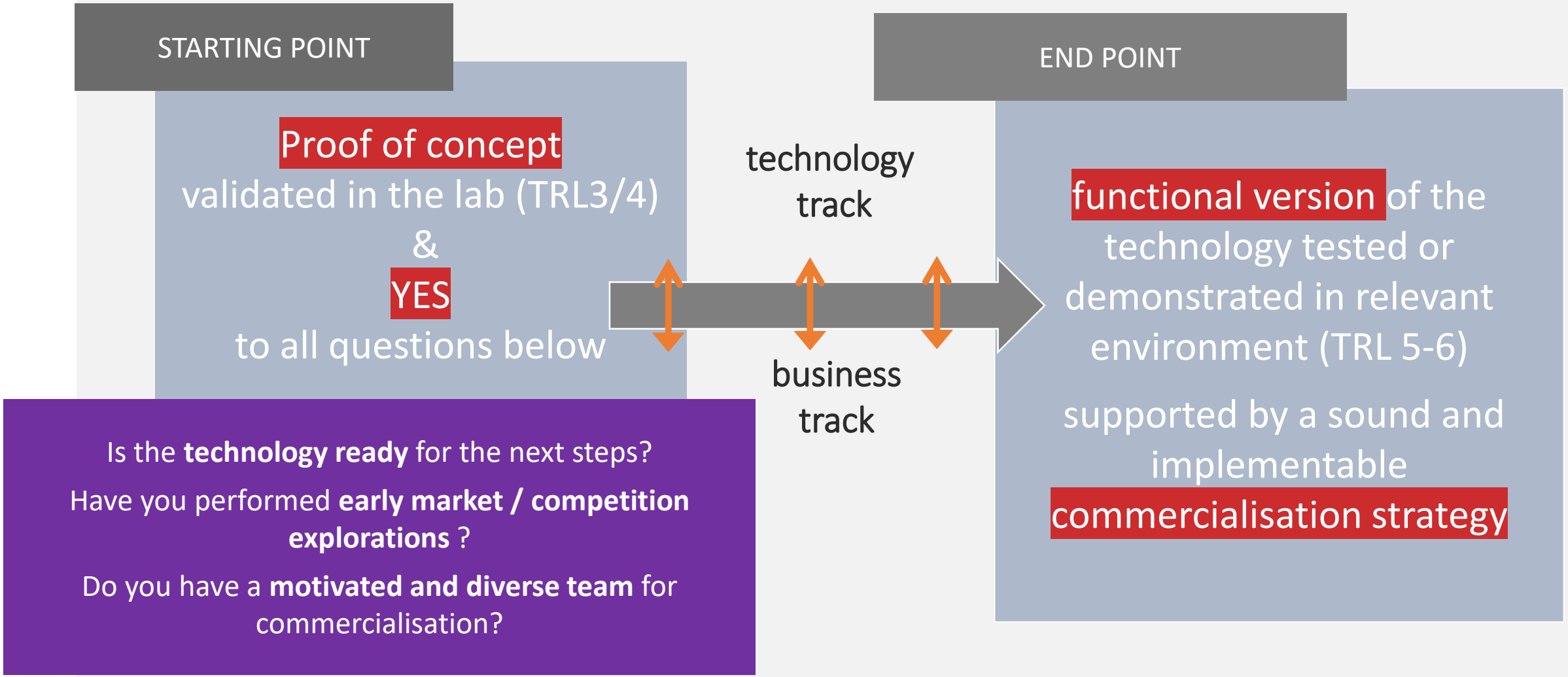
- Absolutely YES! WP2023 clearly mention this:

- If you **were not part of the eligible project** whose results are further developed in the EIC Transition proposal, **you need to include in your proposal a commitment letter** from the relevant owner(s) of the result(s),
- which confirms the **commitment of the owner of the eligible project result to negotiate** with you fair, reasonable and non-discriminatory **access to such results**, including IPR, for the purpose of future commercial exploitation.

Core elements of a good proposal



How to find partners?

Problem statement

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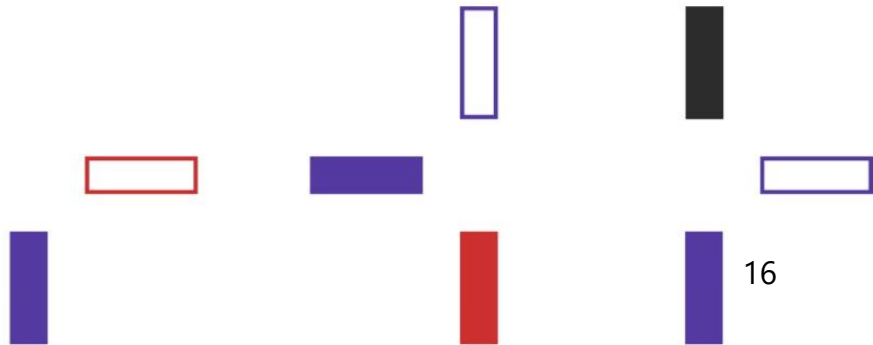
- There are researchers who have developed proof of concept as part of their H2020, HEU or ERC or FET project, but they are not so confident to go to market.

- While there are SMEs, startups or entrepreneurs that want to find, connect with or benefit from project results ...



Get Informed

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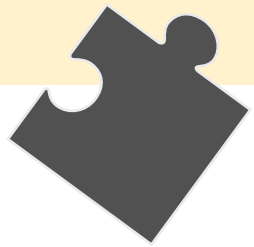
SME/Startup/Entrepreneur

- **Read** about EIC and Transition, its goal, Work programme
- Check if this fits with **your strategic needs**
- **Conditions** in which you can participate
- What innovation or project results fit best with my needs & added value:
  - List of eligible projects on EIC Transition
  - Cordis Innovation Radar List of innovations from FET and Pathfinder projects
  - ERC Research Information System

Researcher/ project results IPR holder

What is the **Transition scheme** and what are its main features, eval criteria

What are the **conditions** in which this collaboration can happen?



Getting involved if not part of an eligible project

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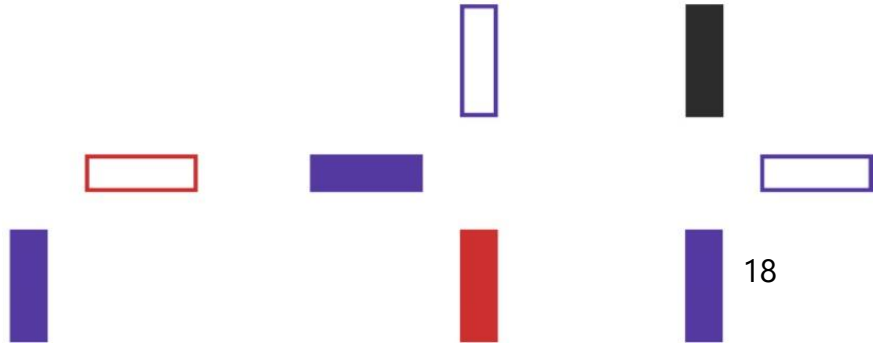
- Use the list of eligible projects in EIC Transition webpage
- Use the Innovation radar to identify projects results
- Use the ERC Research Info System & search PoC
- Contact owner of results and coordinator of eligible project
- Explore if there is an alignment of interest and potential for collaboration
- Start writing (together) your proposal



You found an interesting innovation?! What's next?

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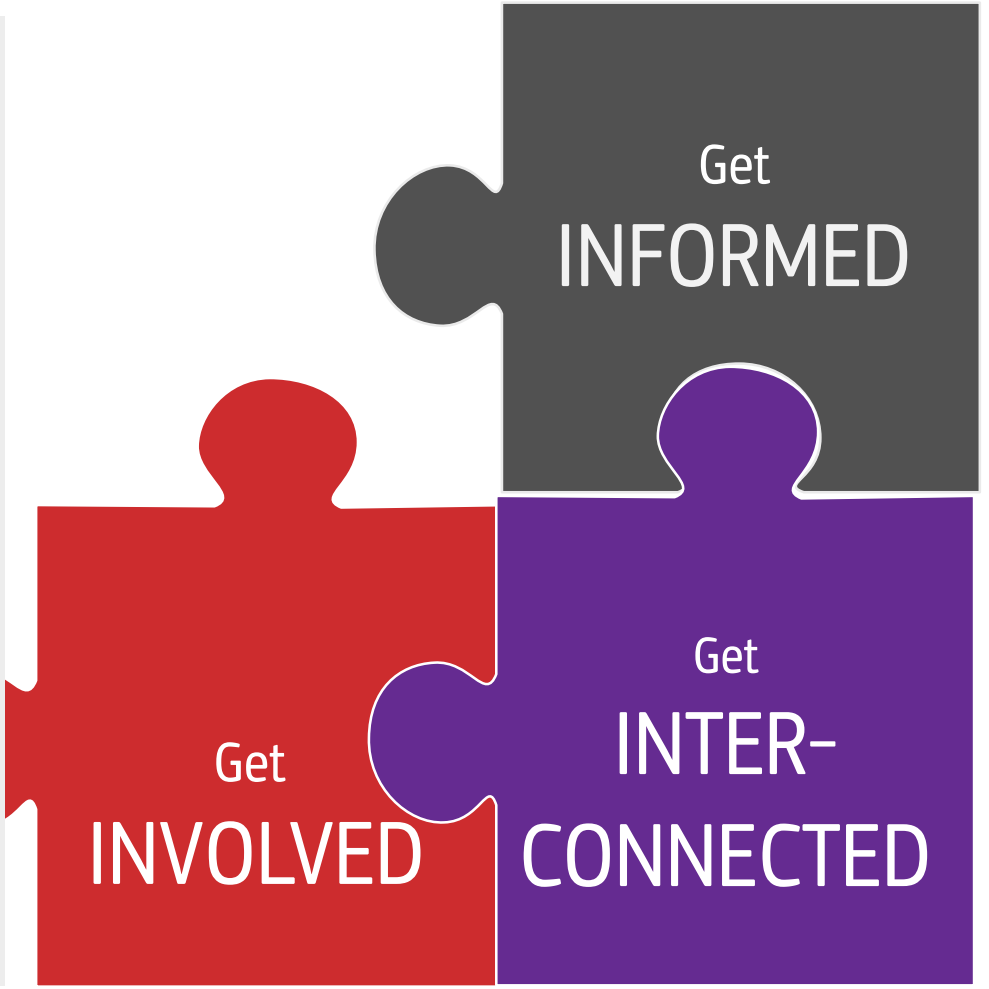
- **Get (inter) connected**
  - Talk to your NCP(s) (National Contact Point):
  - There are NCPs specialised on ERC or FET/Pathfinder, Accelerator…
  - Contact the owner(s) of the technology and/or members of the consortia.
  - Explore if there is an alignment of interest and potential for collaboration
- **Get involved**
  - Try to reach an agreement for a possible consortia
  - Start writing (together) your proposal.



The rationale for Environmental intelligence

- Increasing human-based pollution compromises the health of ecosystems and poses risks for the health of soil, water and air
- The integration of data from multiple, inter-related, sources provides a step-change in our understanding of the complex interactions between the environment, climate, natural ecosystems, human social and economic systems, and health.
- Need to ensure environmental modelling and remediation actions.
- Support shaping policies/guidelines driven by environmental intelligence for environmental sustainability, biodiversity loss prevention, economic growth and human health.
- The ability to integrate data and information from multiple, inter-related sources provides a step-change in our understanding of the complex interactions between the environment, climate, natural ecosystems, socio-economic systems and health.
- Environmental intelligence will support the shaping of better policies and guidelines to improve environmental sustainability, biodiversity loss prevention, economic growth and human health.

Examples of Environmental intelligence

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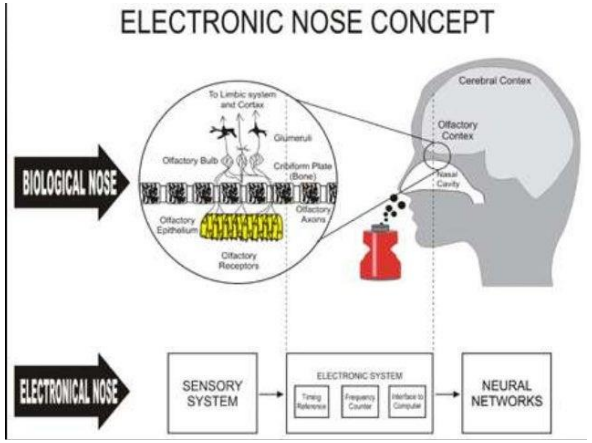
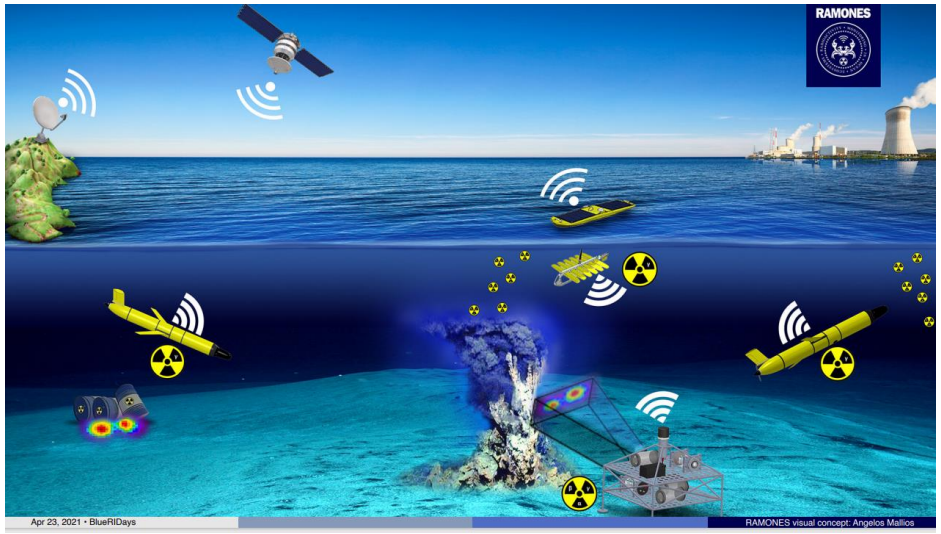
AIR



Source A. Murali

HYDROSPHERE



SOIL/PLANTS

EU Innovation gaps in environmental intelligence

- Lack of low cost-"green" technologies for environmental monitoring and treatments/solutions to remediate contaminated areas because existing remediation technologies are complex, energy consuming or expensive.
- Combination of technologies to detect key environmental parameters through biological, chemical and physical sensors able to ensure environmental modelling and remediation actions.
- Lack of an EU "environmental monitoring and/or remediation-based" economy based on the integration of sensors, data elaboration and remediation technologies.

Scope/specific objectives

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- Proposals should focus on materials, processes and systems – including bio-inspired, nature-based, chemical, biological and physical technologies-solutions – aimed at detecting/monitoring, preventing, reducing or eliminating environmental recalcitrant and/or emerging contaminants present in air, soil or hydrosphere.

- Proposals should focus on technologies that, without using critical raw materials or ensuring their full recycle/reuse, will enable the onset of synergies between sensors and artificial intelligence, at the interface of environment/sustainability and data science, so allowing the implementation of environmental monitoring and/or remediation actions.

- Solutions are encouraged to combine, analyze and interpret data (environmental intelligence), also coming from different sources – in situ (e.g. biological, chemical or physical sensors) or remotely (e.g. satellite) – eventually enabling the making of decision-ready information-based policies.

- Technologies should minimize their carbon footprint, measured through a full life-cycle analysis, in order to ultimately protect the environment from contaminations and to avoid the exposure of people to contaminants as well as to mitigate or reverse the effects of climate change.

Expected Impacts

- To reduce environmental pollution through technologies demonstrated by means of safe and sustainable pilot-scale prototypes able to perform environmental monitoring and/or remediation actions.

- To raise the awareness of the critical balance between humanity and Natural systems.

- To ease and improve environmental policy making through environmental intelligence.

- To promote the development of an EU “environmental monitoring/remediation-based” economy.

Alignment with EU Policies and synergies

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Relevance to EU policies and initiatives

- HEU SET Plan; Green Deal; Next generation EU, EU Biodiversity policy

Synergy/ complementarity with other EU programmes

Leadership in enabling and industrial technologies:

- ICT-37-2020
- H2020 NMBP-TR-IND-2018-2020
- New biotechnologies to remediate harmful contaminants (RIA)
- CE-BIOTEC-04-2018
- CE-BIOTEC-05-2019
- CE-BIOTEC-08-2020

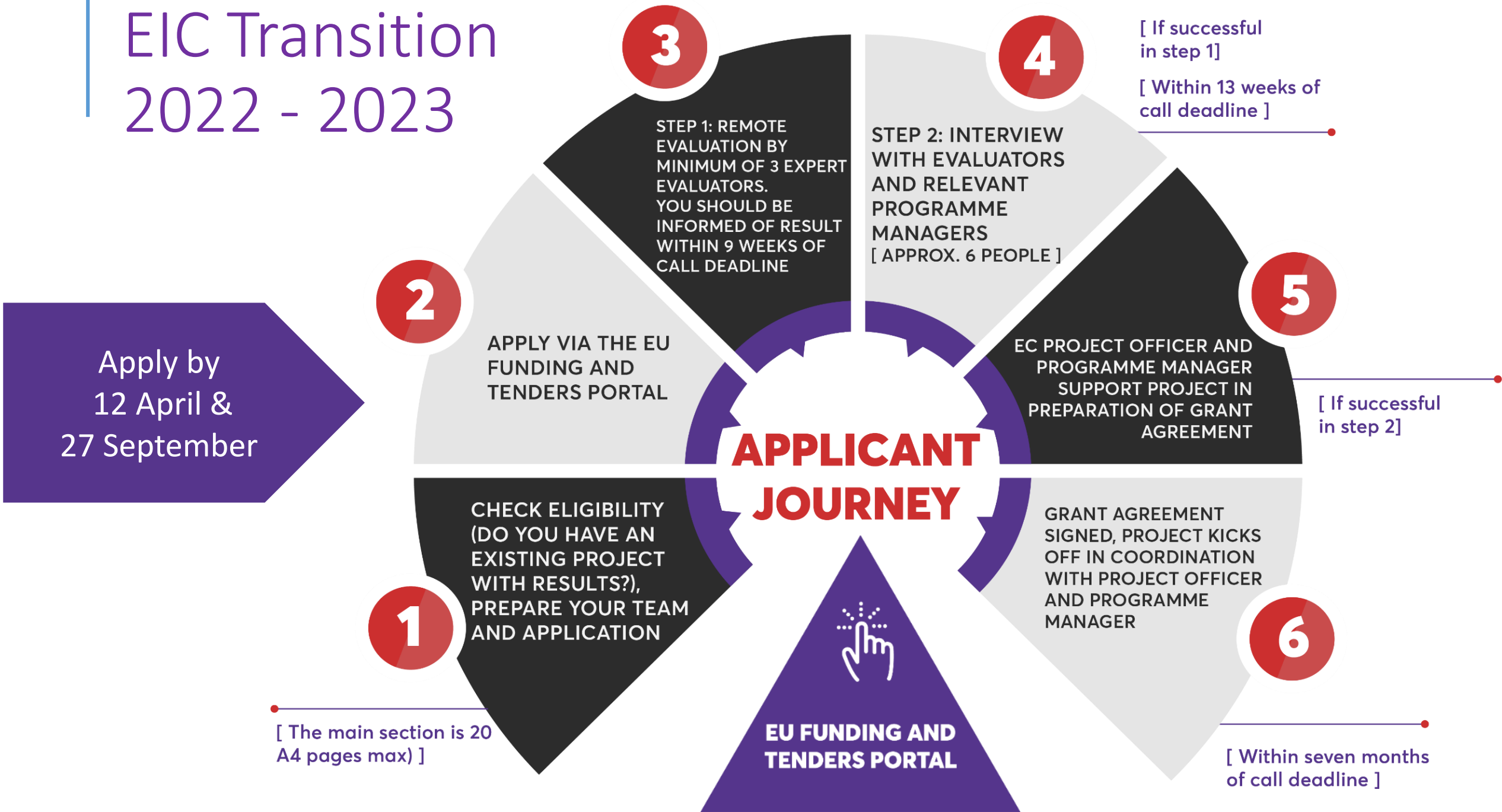
Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy

- LC-FNR-13-2020
- CE-FNR-17-2020

Underpinning evidence

- https://www.eea.europa.eu/data-and-maps/indicators/progress-in-management-of-contaminated-sites-3
- UNEP/MAP–EEA Joint Work Plan 2022-2030 (https://www.eea.europa.eu/about-us/documents/unep-map2013eea-joint-work-plan)
- Evaluation of the Urban Waste Treatment Directive SWD(2019) 700 final
- Decision 2018/5 Long-term strategy for the Convention on Long-range Transboundary Air Pollution for 2020–2030 and beyond - United Nations Economic Commission for Europe (ECE)

EIC Transition 2022 - 2023



Pro-active management after selection of proposals

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- Projects implementation
- Matchmaking EIC funded project with VCs, (private) equity investors, corporates, trade-fair, EU Research infrastructure, OITBs…
- Stakeholder mapping and engagement strategy, business plans, promoting partnerships & fundraising opportunities
- Synergies with other funding instruments
- Policy, standards, regulatory bottlenecks to innovation

Experience & lessons learned

Lessons learned / proposal content

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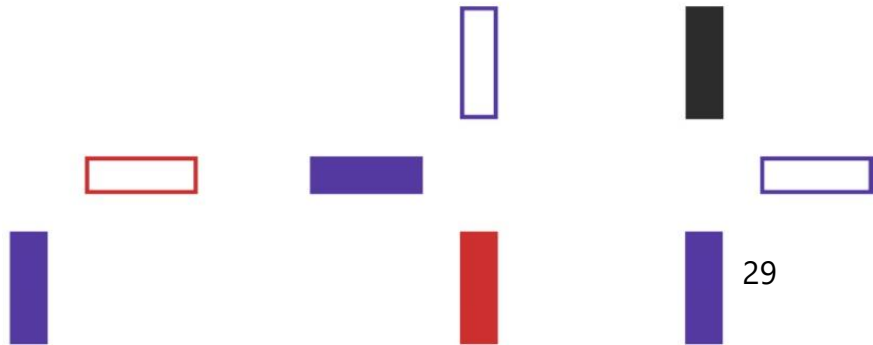
- **Need for focus on impact and higher business potential**
  - Some projects did not identify a promising market potential
- **Business Model and Market Analysis**
  - Preliminary Business and Market analysis part of proposal
  - Business Model validation and refinement of Market analysis alongside technology development
- **Technology Readiness Level**
  - Level 3 is the starting point in the proposal, cannot be less
  - Level 4 is preferred especially when high technological risks
  - Level 5 is too high. They can apply directly to Accelerator

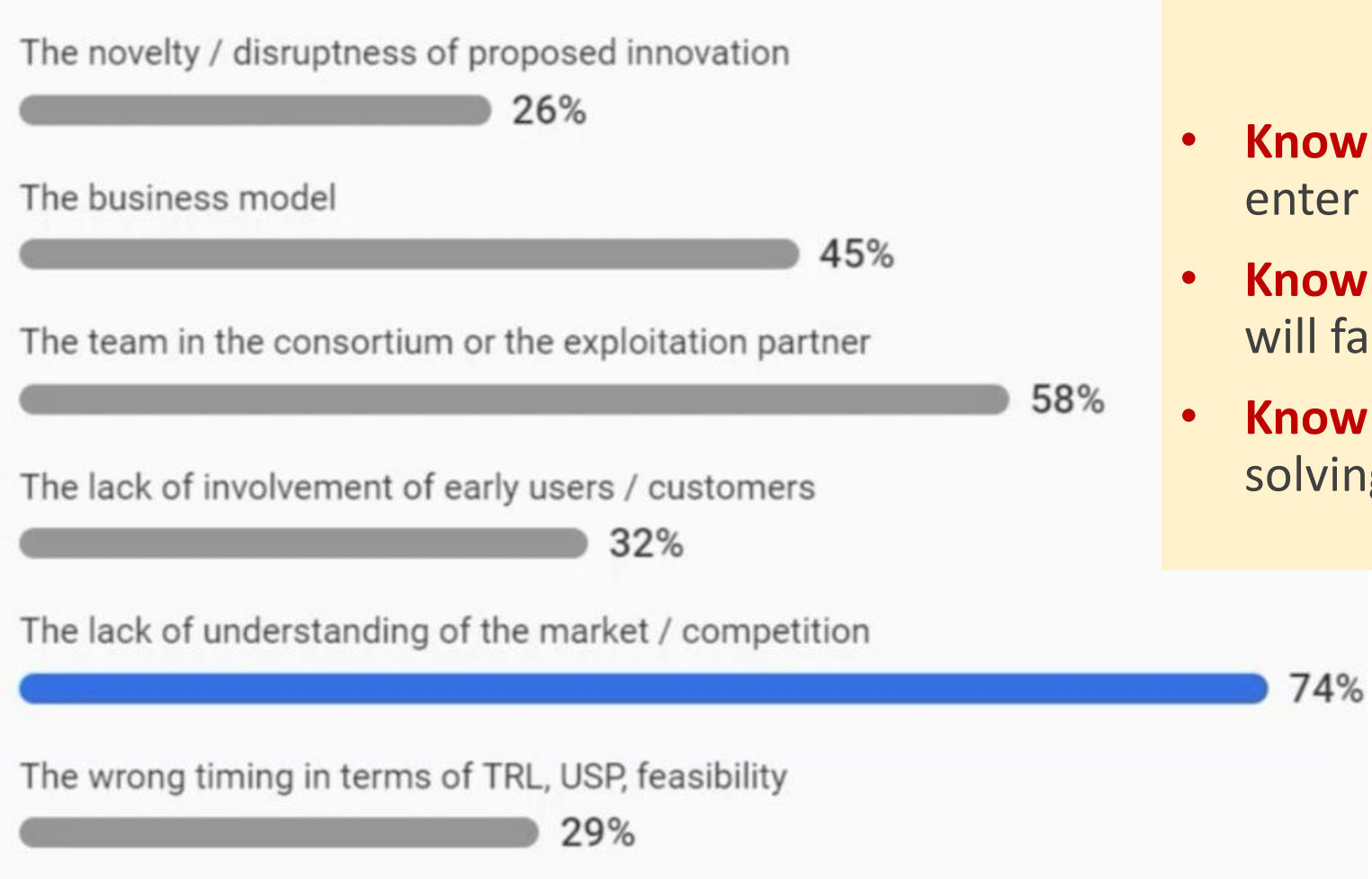


Feedback from the Jury Members

Applicants must provide clarity on aspects related to

- Technical **milestones**,
- **IPR** ownership,
- budget and allocation of resources,
- **technical** and **business** risks,
- current and expected **TRLs** at the end of the project,
- **interdependence** of work packages and tasks,
- the **future exploiting team**, and
- the **credibility of the business objectives**.

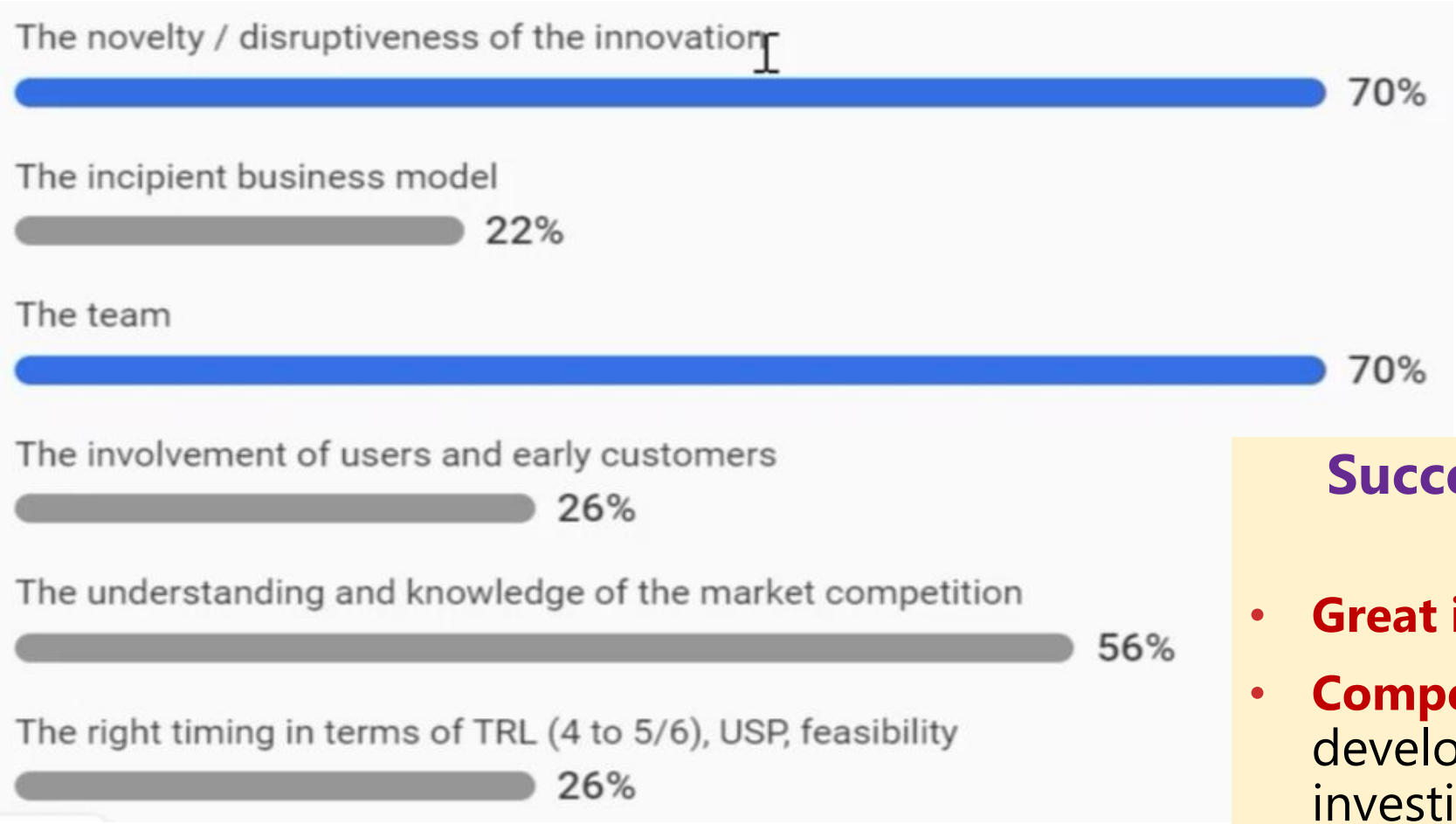
Major weaknesses of the NoGO proposals



Lessons

- **Know the market** you plan to enter
- **Know the competition** you will face
- **Know the problem** you are solving

Major strengths of the GO proposals



Succesful proposals have

- **Great innovation**
- **Competent team** to develop technology and investigate market and business

EIC Transition Overall results 2022

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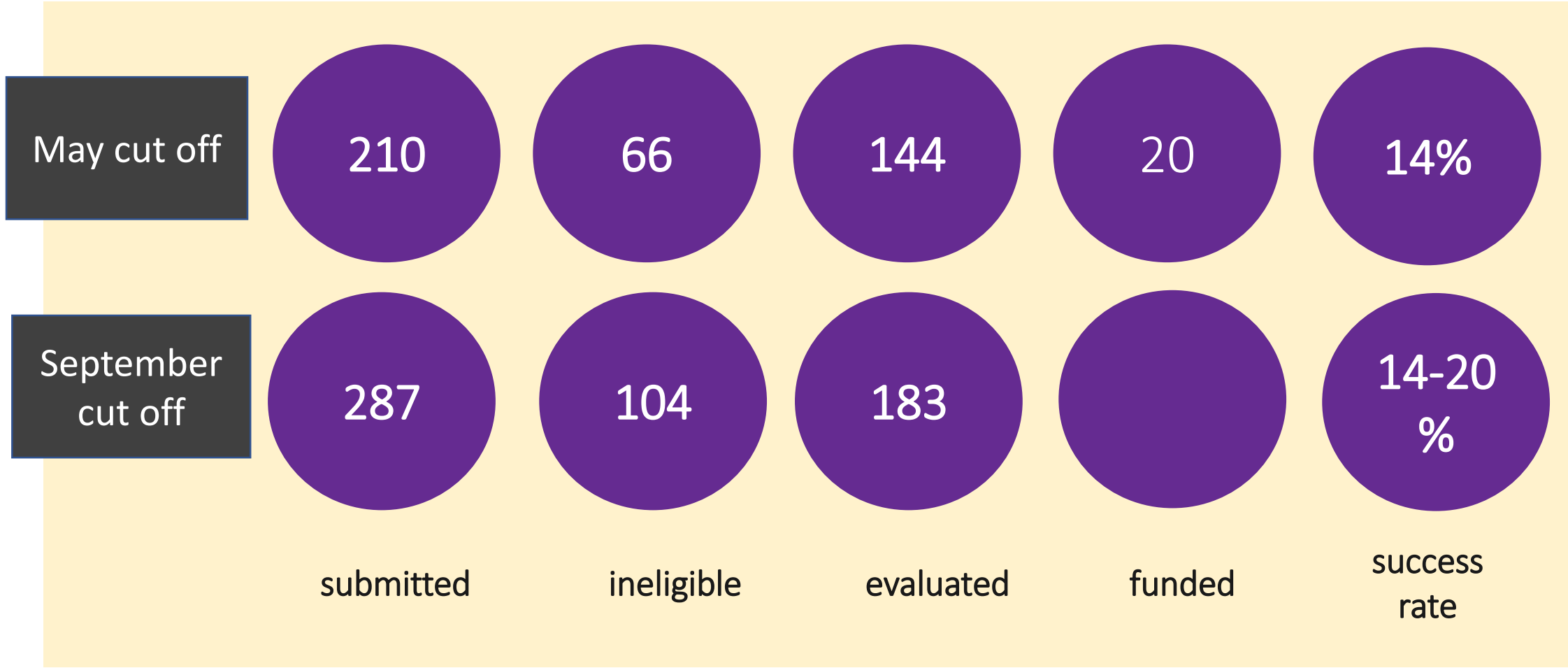

Further information and questions

- **EIC 2023 WP**: EIC 2023 work programme (europa.eu)
- **Recording general info day**: European Innovation Council online Info Day - Work Programme 2023 - 13 December 2022 (europa.eu)
- **Your National Contact Point**
- **Marco Pantaleo**: https://www.linkedin.com/in/antonio-marco-pantaleo-1602622/
- **Francesco Matteucci**: https://www.linkedin.com/in/francesco-matteucci-9351076/

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Thank you!

Q&A