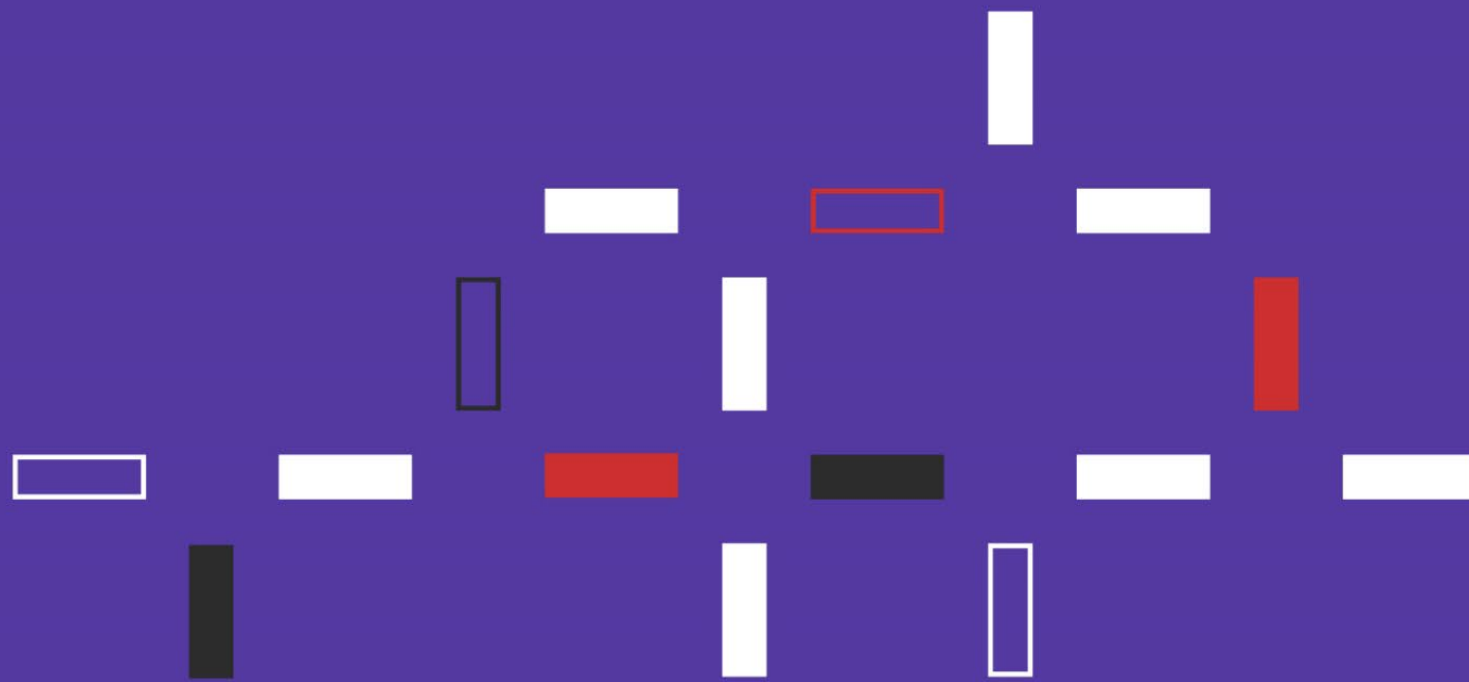




Backing visionary entrepreneurs

**Aerosol decontamination
Accelerator Challenge**

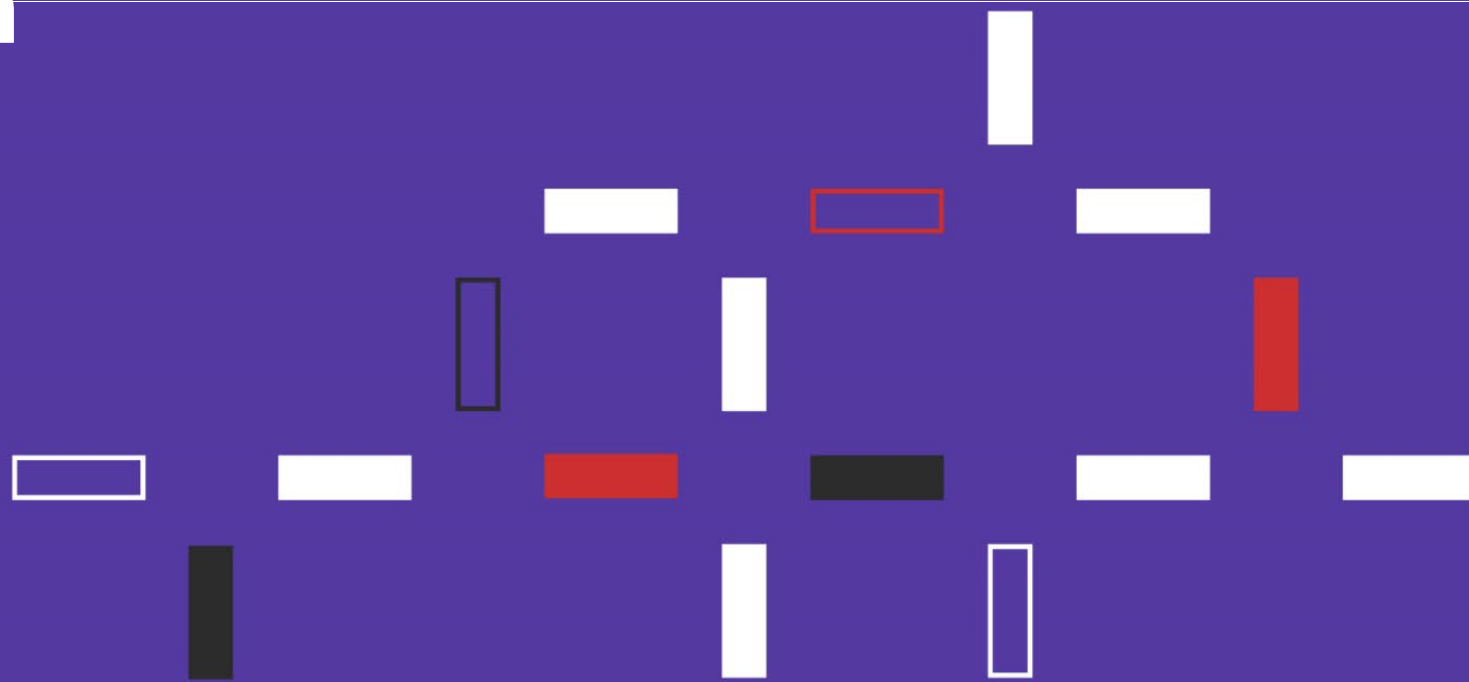
European Innovation Council and SME
Agency





Introduction

Anne-Marie Sassen





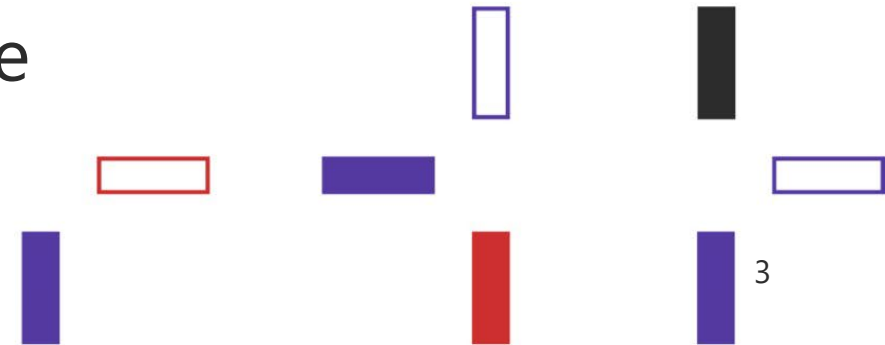
WELCOME!

- Be aware that **this meeting is recorded**
- **Recording and slides** of the event will be available very soon **on the event page**
- Please submit **your question as Anonymous** in Sli.do if you do not want your name to appear in the recording.



Join at **Sli.do**

With the event code
#Challenges





AGENDA | Accelerator Challenge

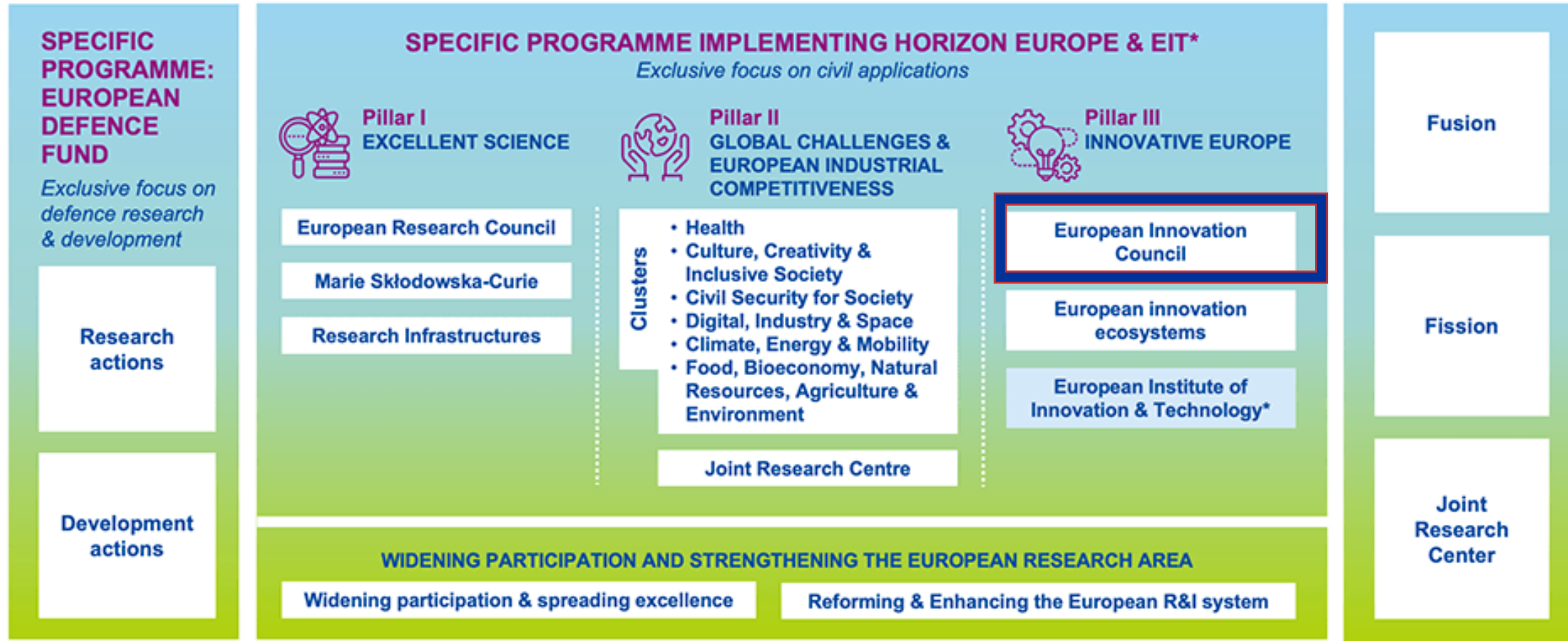
Time	Topic	Presenter	
14:30	15 min	Opening, Introduction to EIC proactive management	Anne-Marie Sassen (EIC/EISMEA)
14:45	30 min	Aerosol and surface decontamination for pandemic management	Eric Claverol (EIC/EISMEA)
15:15	10 min	Q & A session about the challenge and technical details of the challenge	Eric Claverol, Giovanni La Placa, Justyna Tisserand, Neil Griffin (EIC/EISMEA); all participants via Sli.do
15:25	5 min	Closing remarks	Anne-Marie Sassen & Eric Claverol
15:30		End of the session	



Horizon Europe Structure

HORIZON EUROPE

EURATOM



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



EIC Programs

Pathfinder (TRL1-4)

- **For consortia**
- Early stage research on breakthrough technologies
- **Grants up to €3/4 million**

Transition (TRL 4-6)

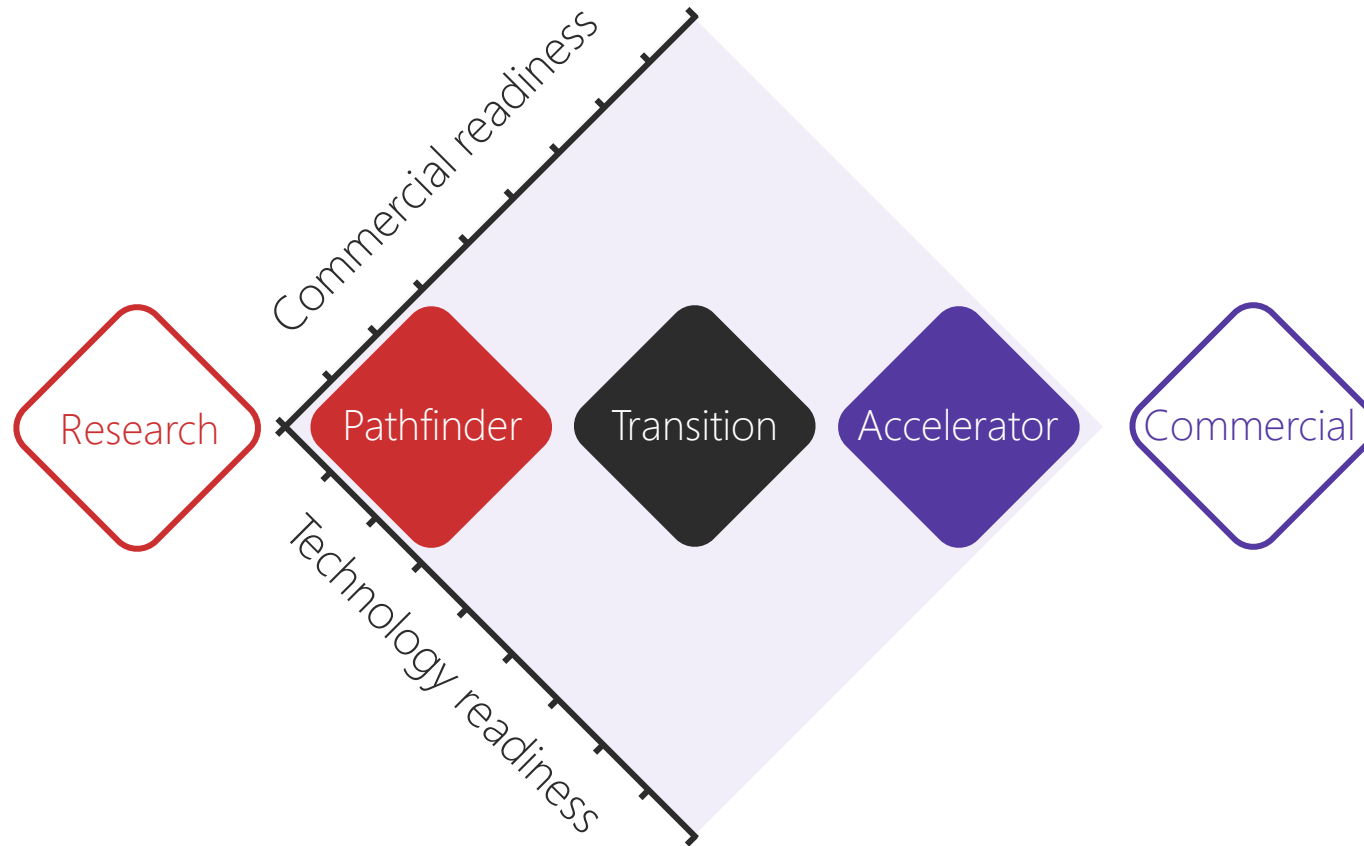
- **For consortia and single entities**
- Technology maturation from proof of concept to validation
- Business & market readiness
- **Grants up to €2.5 million**

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**)

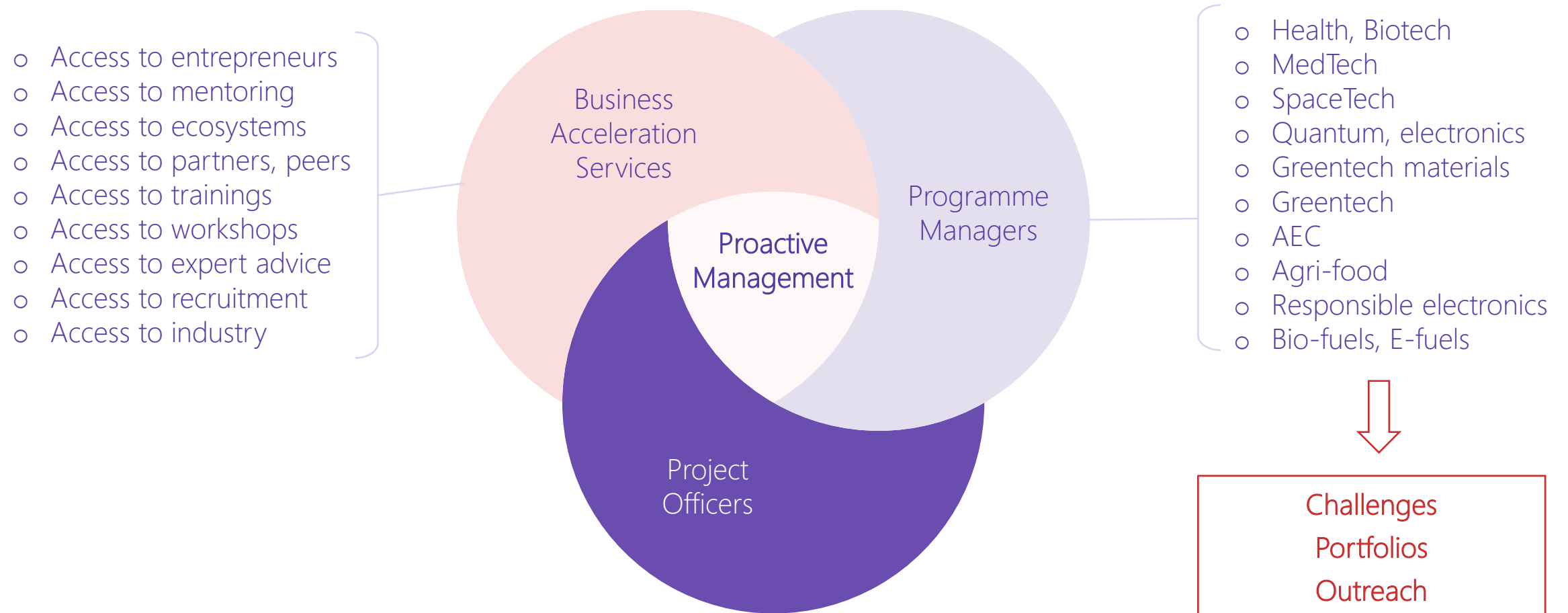
EIC stages the entrepreneurial journey as pathfinder, transition, accelerator with increasing readiness levels

WHAT?

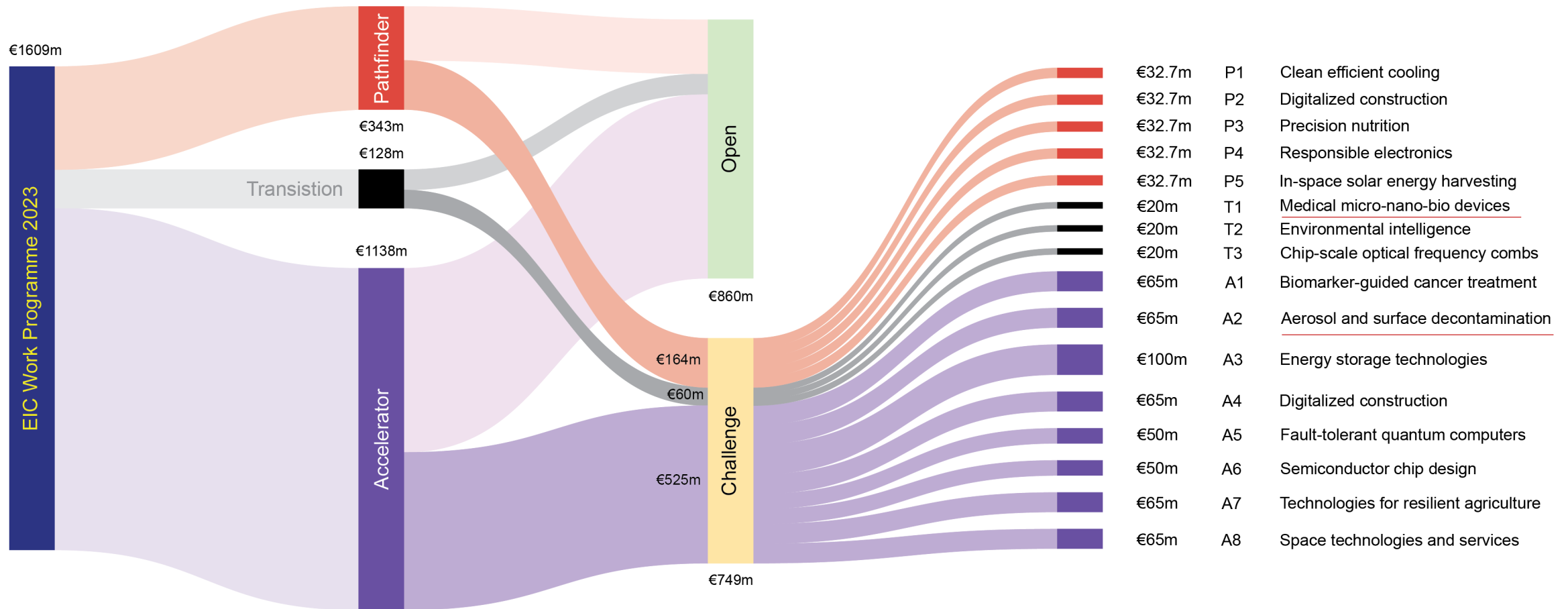


WHY?

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



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



Credits: Franc Mouwen (PM Construction technologies)

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

Useful links to the EIC Work Programme 2023:

EIC Work Programme 2023:

(the legal basis)



Recording of EIC Info-day 13 December:

(not repeated today)





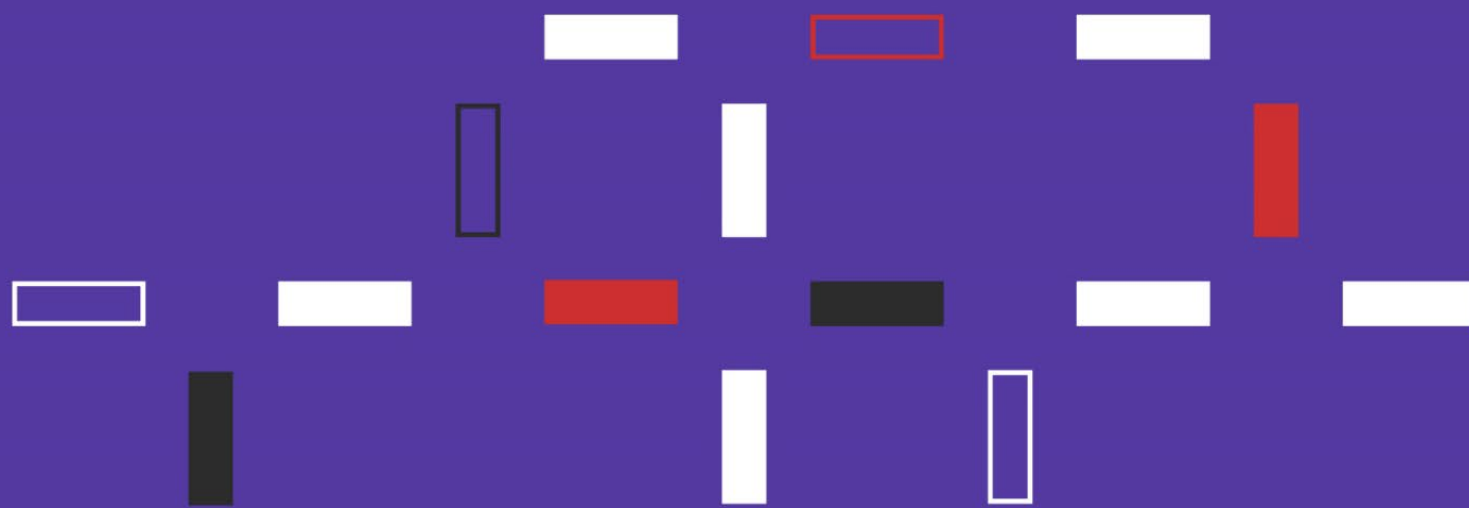
Aerosol decontamination Accelerator Challenge

Enric Claverol

Giovanni La Placa

Neil Griffin

Justyna Tisserand





Medical Technologies and Medical Devices

Enric Claverol-Tinturé

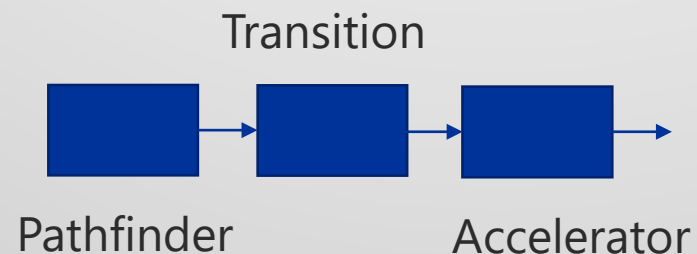
Disclaimer

The views expressed in this presentation is the sole responsibility of the Programme Manager and does not necessarily reflect the views of the European Commission



Brief reminder on Agency goals

- EIC was created to bring EU science to the user (market)
- We seek to create a pipeline of technology projects and companies with high probability of reaching their markets
- EIC supports deep tech projects





Pathfinder vs Accelerator topics

Pathfinder

Topic = area where an important problem needs a new tech solution.

Realizing this solution will bring societal change and market advantage.

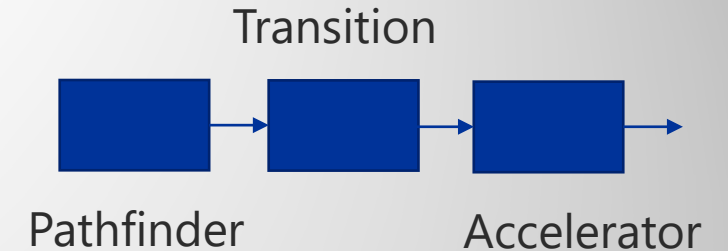
We allow and encourage high-risk high-return technology developments.

But target a real user need (future product or service).

Creativity by technology inventors is welcome.

But fundamental research is more appropriate for ERC and other programmes.

Focus on an end tech product.



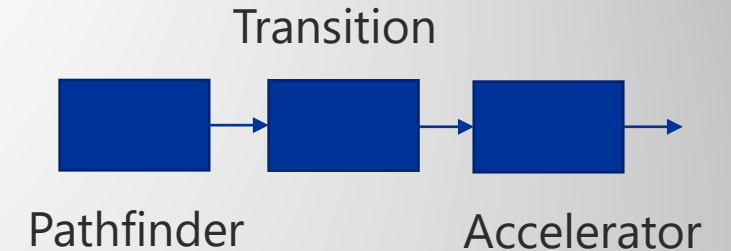


Transition

Capture the most “transitionable” results from PF

Bridge funding to increase readiness for investment

Topics = broad scope, cast a wide net to avoid missing opportunities





Pathfinder vs Accelerator topics

Accelerator (create and grow global medtech companies)

Topic = area where new tech solutions are ready to reach the market.

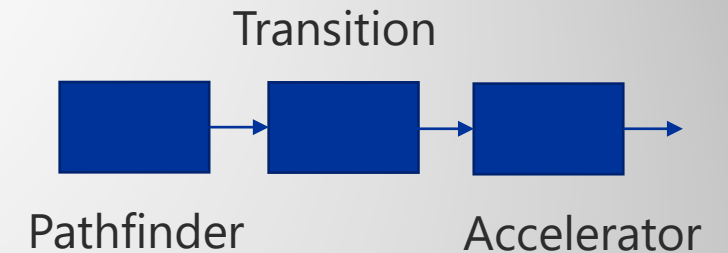
Focus on reaching the persons in need of the solution (market entry).

Focus on growing a Europe-based Global Leader.

We allow and encourage entrepreneurial risk taking.

Target a real user need ("short-term" product or service).

Limited research appropriate for Accelerator (given limited time-frame to enter market).





To know if an idea matches what the EIC is looking for:

- Check successful Accelerator projects funded in the past (these are the end goal)
 - see e.g. EIC 2022 Impact Report, Cordis website or EIC lists of beneficiaries
- High tech content + product focused + market/product fit
- Work with national NCPs
- Successful creation of European market leaders. Save lives.



Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management

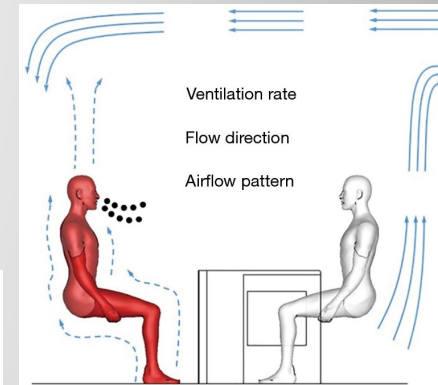
IV.2.2 EIC Accelerator Challenge: Aerosol and surface decontamination for pandemic management

Background and scope

The management of infectious diseases propagated by aerosol suspensions of pathogens or by direct physical contact with surfaces populated by pathogens often requires social distancing.

Yet, social distancing can have a dramatic effect on economies, e.g. precluding air-travel, retail activities, office teamwork, etc. Moreover, insufficient social interaction is a major cause of depression and anxiety and underpins the observed peaks in mental disorder incidence linked to pandemic events.

The creation and commercialisation of technologies enabling pandemic-resilient behavioural patterns, particularly in poorly ventilated spaces and at close inter-personal distances, is of critical importance.



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023



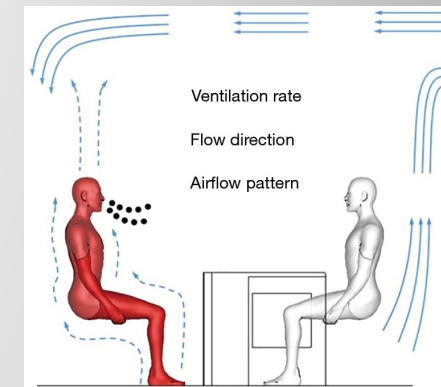
Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management

Substantial progress has recently been achieved on innovative barrier technologies for aerosol capture, e.g., nanostructured and functionalised membranes with tuneable properties, membrane-embedded microbial deactivation, e.g., by enzymatic or metal-enabled deactivation of the viral load and deep-tech enabled modelling of airflow and pathogen circulation in closed spaces. Further, rapid detection of pathogens has become a reality using PCR/LAMP, CRISPR/Cas12a, immunoassays, novel nanomaterials with electrical, luminescent, or catalytic properties, MEMS pathogen sensors and others.

These achievements can be brought together to realise systems and devices capable of continuous air filtering, pathogen capture and deactivation for air purification, with sampling and real-time pathogen detection and profiling, in addition to advanced next generation face mask technologies and solid surface decontamination.



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023



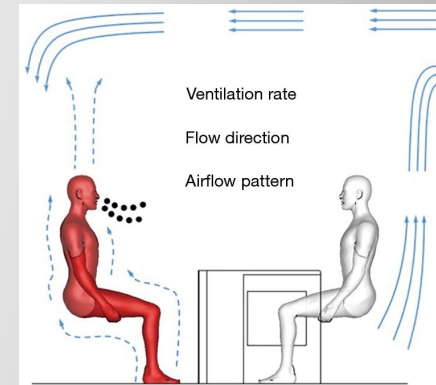
Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management

This Challenge calls for proposals by SMEs with technologies, backed by scientific evidence, supporting normal social interaction, devoid of social distancing, in the presence of air- or surface-borne pathogens. In doing so, this Challenge aims to strengthen EU's industry preparedness and competitiveness in the area of pandemic safety technologies.

This Challenge contributes to the mission of the European Health Emergency Preparedness and Response Authority (HERA)⁷⁷.



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023



Accelerator topic:

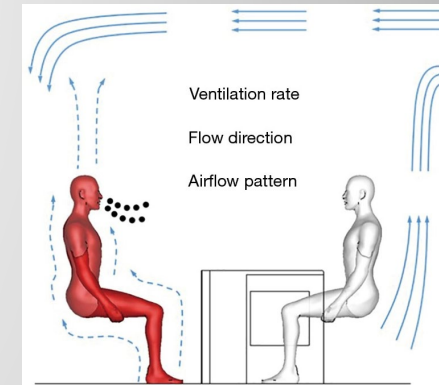
WP2023

Challenge: Decontamination for pandemic management

Specific objectives

The proposals should target the development and commercialisation of technological solutions facilitating social interaction in the context of pandemic emergencies, by means of one or more of the three following approaches:

- ✦ Full systems for high-efficiency aerosol capture, pathogen deactivation and air circulation management in closed-environments (e.g., office space, in-flight, retail stores, etc.), including advanced air-filtering architectures and dynamic air circulation optimisation.
- ✦ Next-generation face mask technologies with smart filtration materials to exceed N95 performance at low airflow resistance, with improved retention/rejection of sub-micron particles.
- ✦ Rapid surface decontamination devices beyond state-of-the-art UV-C irradiation systems and biocidal agent dispersion.



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

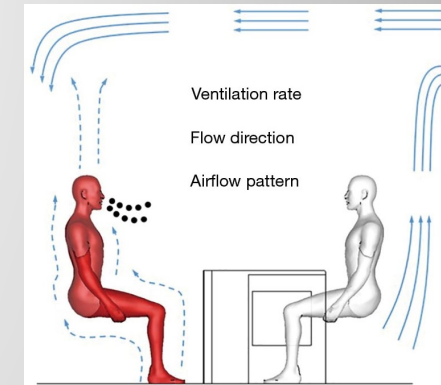
4 October 2023



Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023

Where advantageous, pathogen profiling sensors and sub-systems could be integrated with air renewal systems, face masks or surface decontamination devices to provide quasi- real-time information on pathogen presence for rapid decision making and/or autonomous optimisation of air circulation.

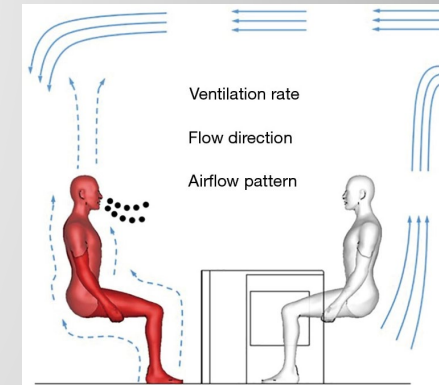
The proposals should provide preliminary evidence demonstrating that social distancing can be avoided or substantially reduced, under realistic pathogen infectivity assumptions, with the targeted technologies.



Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023

Expected outcomes and impacts

By reducing the need for social distancing in the event of infectious pandemics, this Challenge will empower society at large to sustain unaltered economic and social dynamics in the event of pandemic outbreaks.



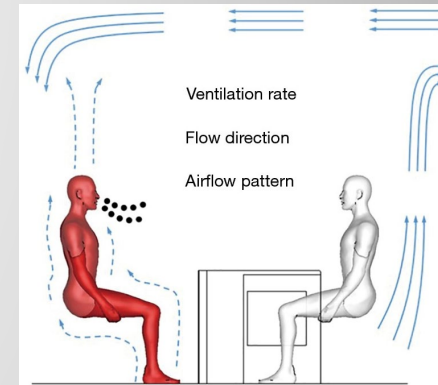
Accelerator topic:

WP2023

Challenge: Decontamination for pandemic management

The EIC Accelerator provides *blended finance* (Innovation and Market Deployment Action) which is composed of:

- + An *investment component* usually in the form of direct equity or quasi-equity such as convertible loans.⁵⁵
- + A *grant component* to reimburse eligible costs incurred for innovation activities, including demonstration of the technology in the relevant environment, prototyping and system level demonstration, R&D and testing required to meet regulatory and standardisation requirements, intellectual property management, and marketing approval (e.g. at least TRL 5⁵⁶ to 8).



Total funding: 65M

Deadlines:

22 March 2023

7 June 2023

4 October 2023

The minimum investment component is EUR 0.5 million and the maximum is EUR 15 million. a. A request **above EUR 15 million investment**⁵⁸ is allowed in duly justified cases for:

The grant component should normally be less than EUR 2.5 million but may be for a higher amount in exceptional and well justified cases.⁶⁰ The innovation activities to be supported should normally be completed within 24 months but may be longer in well justified cases.

Useful links to the EIC Work Programme 2023:

EIC Work Programme 2023:

(the legal basis)



Recording of EIC Info-day 13 December:

(not repeated today)



Questions: contact your National Contact Point

National Contact Points for Horizon Europe:
(NCP Portal)

