

PERIN Portugal in Europe
Research and Innovation Network

Other opportunities for aviation in Horizon Europe

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Other opportunities for aviation in Horizon Europe



**Cluster 5: Climate,
Energy and
Mobility**



SESAR

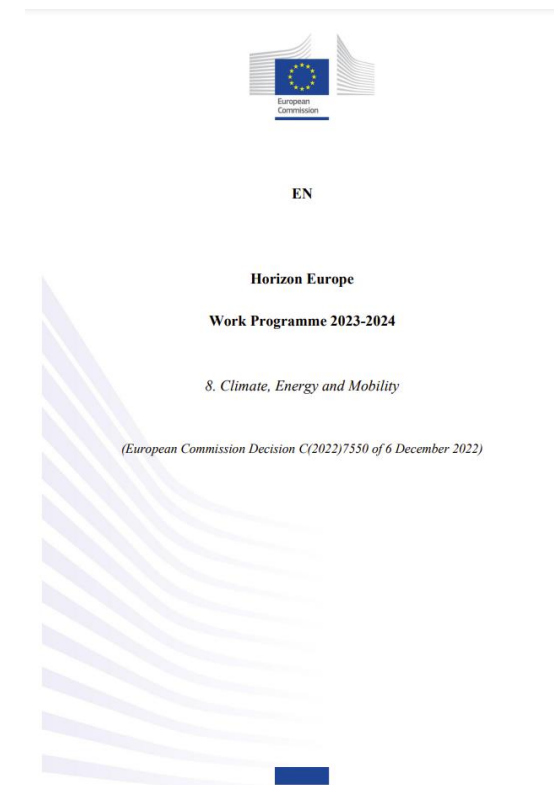


**Opportunities in
other areas of
Horizon Europe**

Cluster 5: Climate, Energy and Mobility - Work Programme 2023-2024

Cluster 5 Work Programme is divided in 6 destinations:

- Destination 1 – Climate sciences and responses for the transformation towards climate neutrality
- Destination 2 – Cross-sectoral solutions for the climate transition
- Destination 3 – Sustainable, secure and competitive energy supply
- Destination 4 – Efficient, sustainable and inclusive energy use
- **Destination 5 – Clean and competitive solutions for all transport modes**
- Destination 6 – Safe, Resilient Transport and Smart Mobility services for passengers and goods



Cluster 5: Climate, Energy and Mobility - Work Programme 2023-2024

Destination 5 – Clean and competitive solutions for all transport modes

Topics in the area of Aviation in 2023 - Deadline 20/04/2023



<i>Topic code</i>	<i>Topic title</i>	<i>ToA</i>	<i>Budget per project (M€)</i>	<i>Number of projects expected</i>	<i>TRL at the end of project</i>
HORIZON-CL5-2023-D5-01-07	Hydrogen-powered aviation	IA	8-10	2	6
HORIZON-CL5-2023-D5-01-08	Accelerating climate neutral hydrogen-powered/electrified aviation	RIA	3-4	4	2-3
HORIZON-CL5-2023-D5-01-09	Competitiveness and digital transformation in aviation – advancing further capabilities, digital approach to design	RIA	3-5	4	2-4
HORIZON-CL5-2023-D5-01-10	Aviation research synergies between Horizon Europe, AZEA and National programs	CSA	2	1	-

Cluster 5: Climate, Energy and Mobility - Work Programme 2023-2024

Destination 5 – Clean and competitive solutions for all transport modes



Topics in the area of Aviation in 2024 - Deadline 18/04/2024

<i>Topic code</i>	<i>Topic title</i>	<i>ToA</i>	<i>Budget per project (M€)</i>	<i>Number of projects expected</i>	<i>TRL at the end of project</i>
HORIZON-CL5-2024-D5-01-07	Accelerating climate neutral aviation, minimising non-CO2 emissions	RIA	4-5	4	2-4
HORIZON-CL5-2024-D5-01-08	Competitiveness and digital transformation in aviation – advancing further composite aerostructures	RIA	3-5	4	2-4
HORIZON-CL5-2024-D5-01-09	Impact monitoring of EU Aviation R&I	RIA	8	1	-
HORIZON-CL5-2024-D5-01-10	Towards a flying testbed for European leadership in aviation	RIA	16	1	4-5

Institutionalized Partnerships in Cluster 5

Institutionalised Partnerships (Art 187.)

- [Clean Aviation](#) - successor of *Clean Sky 2*
- [SESAR JU](#) - successor of *SESAR 2020*
- [Clean Hydrogen](#) - successor of *FCH-JU*
- [Europe's rail](#) - successor of *Shift2Rail*

- Public Private Partnerships between the EU and the European industry
- The rules applicable to these partnerships are defined in the [Single Basic Act](#)
- They **have their own image and website**, but the Calls will be published on the [Funding and Tenders Portal](#)
- Institutionalised partnerships can have **Calls for Associate Members** alongside regular **Open Calls**

SESAR 3 Joint Undertaking

- SESAR is the technological pillar of the **EU's Single European Sky policy** and a key enabler of the European Commission's Sustainable and Smart Mobility Strategy
- **SESAR defines, develops and deploys technologies to transform air traffic management in Europe**
- Building on the work of the first SESAR Joint Undertaking, the SESAR 3 JU has 10-year mandate (2021-2031), corresponding to the duration of the Horizon Europe programme (2021-2027), followed by 4 years to complete the work outlined in the Multiannual Work Programme.



SESAR 3 Joint Undertaking

SESAR funds
3 types of
projects:



EXPLORATORY RESEARCH

Through its Exploratory Research, the SESAR 3 JU looks beyond the current R&D and what is already identified in the European ATM Master Plan.

The aim is to investigate new ideas, concepts, and technologies, but also to challenge pre-conceived notions about air traffic management and the aviation value chain.



INDUSTRIAL RESEARCH

Within the context of SESAR 2020, the SESAR JU and its members have been working on two waves of industrial research projects, aiming to deliver more digital solutions to transform Europe's ATM system.

In 2019, the first wave of SESAR 2020 industrial research projects came to a close, delivering a number of solutions (as part of Release 9) to the necessary level of maturity to make them available for pre-industrialisation (Technology readiness level 6 or V3).



VERY LARGE SCALE DEMONSTRATIONS

As with many things, ATM stakeholders need to try before investing in new technologies, which is why SESAR members and partners carry out flight trials and other demonstrations in real-life environments involving a wide range of operational experts, from airports, air traffic control centres, airlines, business aviation and general aviation.

SESAR 3 Joint Undertaking

In 2022, SESAR launched 2 Calls:

HORIZON-SESAR-2022-DES-ER-01 – Call for **Exploratory Research**

- Overall budget: **23,75 M€**
- 17 topics
- Deadline 13/10/2022

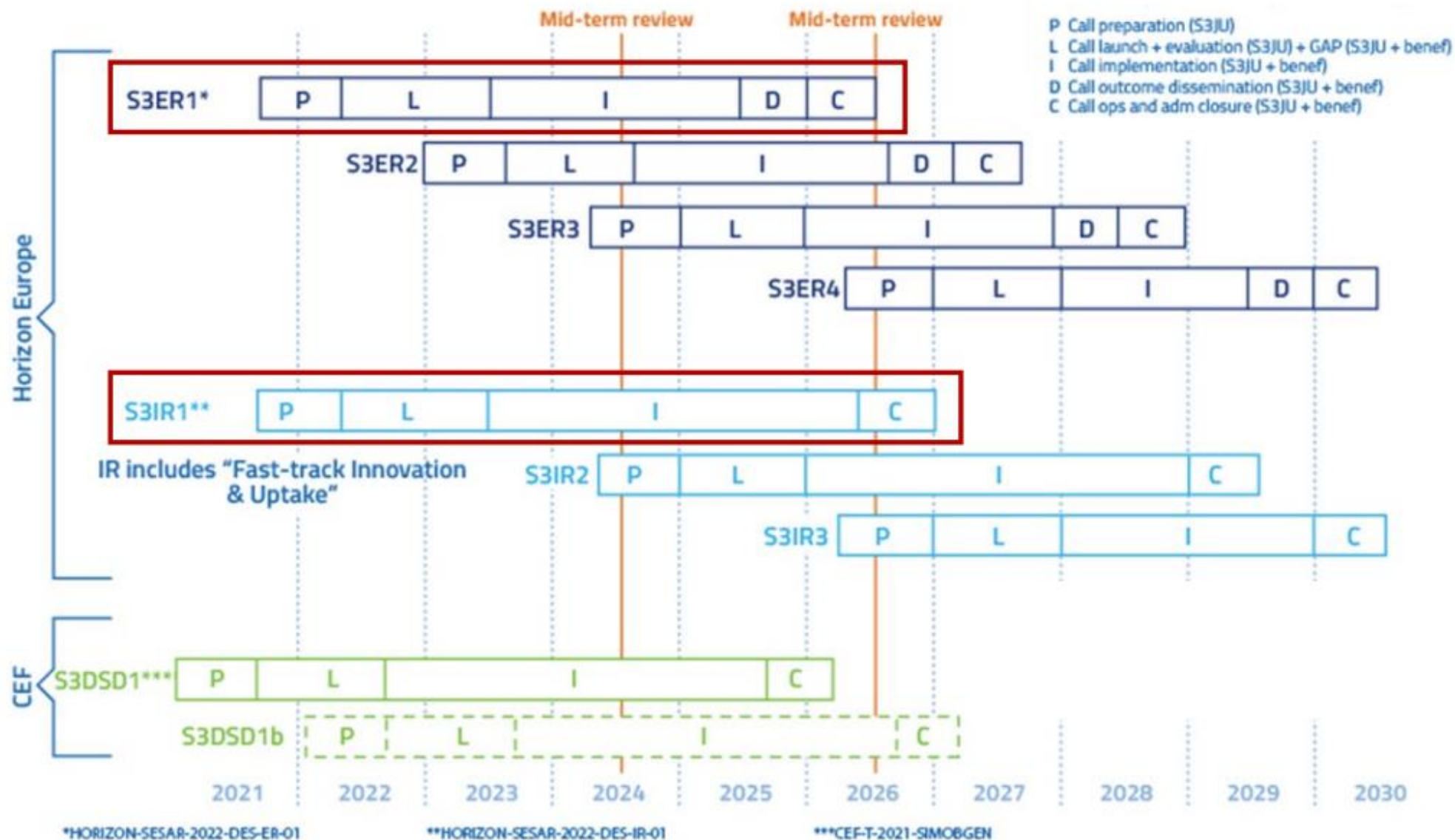
HORIZON-SESAR-2022-DES-IR-01 – Call for **Industrial Research**

- Overall budget: **171 M€**
- 17 topics
- Deadline 13/10/2022

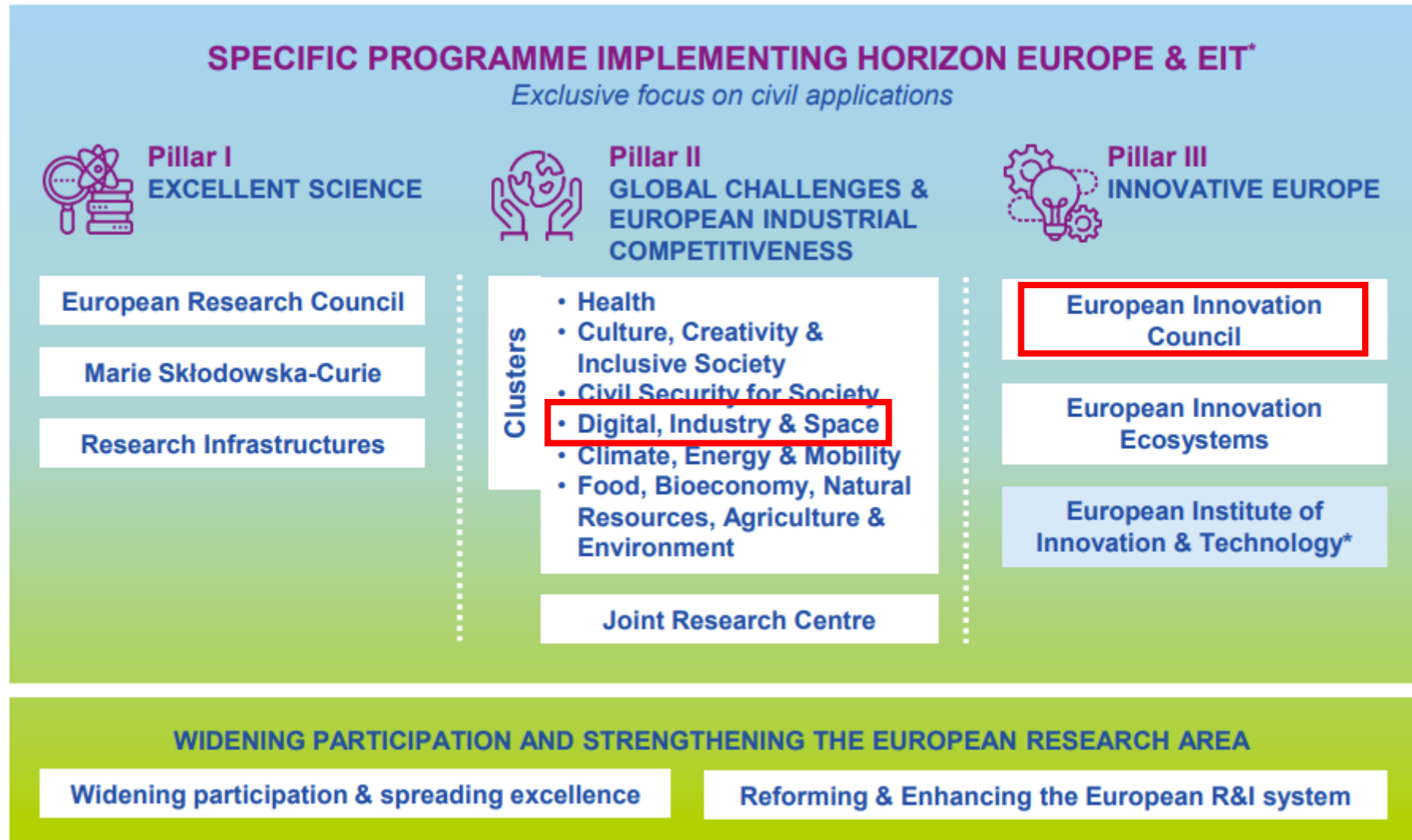


SESAR 3 Joint Undertaking

SESAR Calls
planned for
the next
years:



Opportunities in other areas of Horizon Europe



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FCT Fundação
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e a Tecnologia



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