



EREA executive summary

A dedicated FP10 for aviation research and technology addressing societal challenges

As the voice of European aviation research and technology (R&T), our 15 national R&T centres create, and develop, clean technologies that address today's biggest societal challenges. These include decarbonisation and climate neutral mobility, clean energy (as addressed in the Clean industrial Deal) and safety.

Aviation R&T is truly European in nature, having led the way for member states and the entire European aviation research and technology community cooperating for over 30 years. Collaborating across borders and sectors delivers cutting-edge impact that no single country or stakeholder can achieve alone.

We recommend to:

Create a standalone Framework Programme (FP) 10

- A separate FP10 is needed as the key instrument for enhancing innovation through supporting cross-border cooperation. The FP should be the key European instrument to implement European R&T visions and strategies and to support cross-border cooperation and thus create impact.

Increase funding for the entire aviation R&T value chain to address societal challenges

- Much like a blossoming tree has its roots underground, R&T is the not-so-visible lifeblood of future innovation in aviation, and beyond. These roots need to be safeguarded from drying out, so Europe can benefit from its fruits.
- FP10 needs to support the entire R&T chain: from basic research, application-oriented research, technology demonstration and validation up to innovation. This requires appropriate and dedicated instruments so that the innovation pipeline is continuously filled with new ideas and technologies.
- Investing more in R&T is crucial to improve Europe's innovative power and thus competitive edge. Our success increasingly depends on how we convert knowledge into innovation.

Fund sustainable climate neutral aviation now, for a competitive and clean EU later

- Aviation technology has long development times, often taking 10 to 15 years from the basic idea to the final product we can fly. This is due to the advanced technology that aviation requires and to guarantee the unprecedented levels of safety we enjoy today.
- To truly innovate, Europe's industry relies on a constantly full pipeline of research, technological development, demonstration, testing and certification.
- A coherent overall strategy is needed, involving all aviation sector stakeholders in preparing a Strategic Research and Innovation Agenda (SRIA), as previously done by the Advisory Council for Aeronautics Research and Innovation in Europe (ACARE).

Full members

AIT Austrian Institute of Technology (AT)
 CEIIA Centro para a Excelência e Inovação na Indústria Automóvel (PT)
 CIRA Centro Italiano Ricerche Aerospaziali (IT)
 DLR Deutsches Zentrum für Luft- und Raumfahrt (DE)
 FOI Totalförsvarets Forskningsinstitut (SE)
 ILOT Institute of Aviation (PL)
 AFIT Air Force Institute of Technology (PL)
 CSEM Centre suisse d'électronique et de microtechnique (CH)

INCAS
 INTA
 NLR
 ONERA
 VKI
 VZLU

NCC

National Institute for Aerospace Research "Elie Carafoli" (RO)
 Instituto Nacional de Técnica Aeroespacial (ES)
 Nationaal Lucht- en Ruimtevaartlaboratorium (NL)
 Office National d'Études et de Recherches Aéronautiques (FR)
 The von Karman Institute for Fluid Dynamics (BE)
 VZLU AEROSPACE, a.s. (CZ)

National Composites Centre (UK)

Affiliate member Strategic partners

Empower collaborative research

- A strong collaborative research component in FP10 would provide industry with new ideas and solutions to remain globally relevant in the next decades. Ideas and solutions coming from aviation are often applied in various other sectors (e.g. light weight structures developed in aerospace are applied in cars and other vehicles, but also in wind turbines).
- Involve all R&T stakeholders (industry, research centers, universities, operators and SMEs) in FP10 for a strong and well-balanced system. We need to balance bottom-up and top-down approaches, with a level playing field for all instruments.
- European collaborative research provides the crucial link between research and industrial stakeholders to address Europe's geopolitical, environmental and industrial challenges.

Keep the public-private partnerships (PPPs)

- Public-private partnerships ensure a rapid transfer of knowledge to applications and thus innovation and have been the real added-value of Horizon Europe and the previous Horizon 2020 and FP7 so far, ensuring continuity over the years.
- Require a balanced governance for PPPs, allowing strong contributions and cooperation between all R&T stakeholders.

Ensure a dedicated funding stream for aviation

- FP10 needs a dedicated independent funding stream for aviation. This would ensure a continuous pipeline of new technologies that boost competitiveness amidst fast rising global competition that challenges our prosperity and security. Therefore, we recommend complementing the aviation partnerships with an increased budget share for collaborative aviation research in FP10.

Support technology infrastructures in FP10

- High-level European support for aviation technology infrastructures (TIs) in FP10 is essential to translate research into certified products and safe and secure services. Highly innovative aerospace R&T also spills over to other sectors including defence technologies and systems
- For any technological breakthrough, TIs prove an idea and test it, validating the technology and demonstrating its effectiveness and impact, which is decisive for scaling up.

Europe needs to balance a focus on accelerated impact and concrete results, with the need to plant the seeds now to remain at the forefront of innovation. Please read more in our full [position on impactful aviation research in FP10](#). We remain available to help find solutions for Europe's key challenges.

About us

The Association of European Research Establishments in Aeronautics (EREA) unites 15 aviation research centres. We are key players in the innovation chain, contributing to state-of-the-art aviation applications. We are closely linked to our national governments and industries, with a profound knowledge of the aviation industry's needs. Our goals include developing the European Research Area and contributing to a flourishing European aviation R&T ecosystem. <https://erea.org/>

EU Transparency Register: 010397411668-54

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