



AirTN – Air Transport Net

CSA AirTN NextGen

Aviation Research Funding in European Countries/Regions & Associated Countries

November 2016





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Vienna, November 2016

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To reduce redundancies, "aviation" always includes "aviation and aeronautics" in this report.

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Content

1	Overview on Aviation Research Funding in Europe9			
	1.1	Aviation	ı policy	9
	1.2	Aviation	programmes	11
	1.3	National	I competencies and programme priorities	15
2	Detaile	ed Informa	ation on Aviation Research in Europe	16
	2.1	2.1.1 // 2.1.2 E 2.1.3 F 2.1.4 (2.1.5 F 2.1.6 F 2.1.7 S	es with aviation-specific programmes Austria Belgium France Germany Poland Romania Sweden Switzerland	19 21 23 25 27 29 31
	2.2	2.2.1 (2.2.2 [2.2.3 (2.2.4] 2.2.5] 2.2.6 §	es with general programmes Croatia Denmark Greece Malta Netherlands Spain United Kingdom	37 39 41 43 45 47
	2.3	Countrie	es with no aviation programme	51
	2.4	2.4.1 (al aviation research funding in Europe Germany - Bremen Spain - Andalucía	53
3	Overview on Calls 2010-2016			58
4	List of	Contacts.		59
5	Annex			61

Figures

Figure 1: Number of countries with national aviation strategy board (n=19)	9
Figure 2: Number of countries with national funding programmes or programme-like activities (n=19))10
Figure 3: Number of countries where partners from other countries can apply (n=15)	12
Figure 4: Most frequent types of supporting measures (n=15)	13
Figure 5: Technology Readiness Level cluster (TRL 1-9) of the programmes (n=14)	14
Figure 6: Call scheme of the programme (n=14)	14
Figure 7: National competences and programme priorities overview	15
Figure 8: Overview on calls	58

Introduction

A survey on the research and innovation activities in aviation (aeronautics and air transport) in the Member States and their regions has been performed by the Aeronautics ERA-Net AirTN Nextgen in the past years on a yearly basis. About every five years, the Member States Group (MSG) of the Advisory Council of Aviation Research & Innovation in Europe (ACARE) takes the initiative to analyse the received answers and data and by this monitors the development on aviation research and innovation in the EU Member States and their regions.

19 countries and 2 regions participated to the survey. It places a particular focus on national and/or regional support activities (programmes, calls for proposals...) as well as on national/regional strategies on aviation research. An effort is needed on European, national and even regional level in order to ensure the future competitiveness, environmental friendliness and safety of European aviation.

This year's survey was conducted primarily online and goes along with the update of the Strategic Research & Innovation Agenda of ACARE (SRIA), the common strategic technology basis of Europe's aviation stakeholders. The survey is also part of the agreed tasks of the Aeronautics ERA-Net AirTN Nextgen, which is a support action of numerous Members States co-funded by the European Commission. The survey was performed by the Austrian consultancy company BRIMATECH Services and supported by the Austrian Research Promotion Agency FFG, which is a partner of AirTN.

This questionnaire aims to build a picture of the relevant aspects of aviation (aeronautics and air transport) strategies, funding programmes (PGM) and/or programme-like activities (PLA) and calls that could support the objectives of ACARE Member States Groups (MSG) and AirTN (funded under FP7, <u>www.airtn.eu</u>), which are the increased collaboration between the main actors and programmes.

ACARE is the Advisory Council for Aviation Research and Innovation in Europe and provides a network for strategic research in aeronautics and air transport so that aviation satisfies the needs of society and secures global leadership for Europe in this important sector. ACARE is essential in bringing together the right stakeholders to turn the air transport vision in Europe into reality. ACARE has been in existence since 2001 and comprises European public and private stakeholders who collaborate on a common purpose to develop challenging improvements for aeronautics and air transport in Europe. The ACARE Member States Group is according to the ACARE structure a Board of States Representatives in charge of or with an interest in shaping aviation research and innovation frameworks in the Member States.

The Aeronautics ERA-Net AirTN is a network of EU Member States, which came together to enhance Europe's aviation industry to prepare for future expansion and competitive success. The initiative first received support under the Sixth Framework Programme (FP6) and many work package objectives were completed during this phase. Continued support under the Seventh Framework Programme (FP7) has allowed further development and more involvement and collaborations between Member States. One of AirTN's foremost goals was to create a better awareness of the research development mechanism that already exist in Europe.

www.airtn.eu

The following countries and organisations participated in the survey:

Country	Responsible person	Organisation
Austria	Ingrid Kernstock	Federal Ministry for Transport, Innovation and Technology
Belgium	Georges Jamart	Belgian Science Policy
Croatia	Ivica Smojver	University of Zagreb
Denmark	Jakob Just Madsen	Danish Ministry of Higher Education and Science
Estonia	Allan Nõmmik	Estonian Aviation Academy
Finland	Erkki Soinne	Finnish Transport Safety Agency
France	Thilo Schoenfeld	Aerospace Valley
Germany	Nicole Ewinger	Federal Ministry for Economic Affairs and Energy (BMWi)
Greece	Vassilis Kostopoulos	Mech Upatras
Hungary	Roland Guraly	National Reeach, Development and Innovation Office
Luxembourg	Claude Luja	Direction de l'Aviation Civile
Malta	Nadine Castillo	Malta Council for Science and Technology
Netherlands	Ruben Prins	Netherlands Enterprise Agency
Poland	Jacek Rokicki	Warsaw University of Technology
Romania	Catalin Nae	National Institute for Aerospace Research "Elie Carafoli"
Spain	Juan Francisco Reyes Sánchez	Centre for the Development of Industrial Technology
Sweden	Björn Jonsson	Innovair
Switzerland	Juerg Wildi	RUAG Aviation / State Secretary for Education, Research and Innovation
United Kingdom	lan Turner	Aerospace Hub, Department for Business, Energy & Industrial Strategy

The following regions and organisations participated in the survey:

Country/Region	Responsible person	Organisation
Spain/Andalusia	Juan Callejon	Agencia de Innovación y desarollo de Andalucía
Germany/Bremen	Bastian Müller	Ministry of Economic Affairs, Labour and Ports

1 Overview on Aviation Research Funding in Europe

In this survey, 19 EU Member States and two of their regions participated and gave detailed insights about their strategies, programmes and calls.

Whereas this chapter gives an overview on aviation research funding in general, the country specifics are outlined in chapter 2 "Detailed Information on Aviation Research in Europe".

1.1 Aviation policy

Aviation policies aim to ensure the future competitiveness, environmental friendliness and safety of European aviation. This chapter delivers insight into aviation policies of the participating Member States and their regions. Besides national/regional strategies on aviation research, it highlights national and/or regional research promotion activities (programmes, calls for proposals, etc.).

Aviation strategy board and aviation strategy

Austria, Belgium, France, Germany, Netherlands, Romania, Sweden, and the United Kingdom have a national aviation strategy board, the majority of the countries do not. These boards usually are held at regular intervals and are formed by representors of the industry, research, universities, institutes and the Air Force. Urgent issues as well as long-term strategies are discussed, the strategic information base is formulated and in some countries also the government is supported.

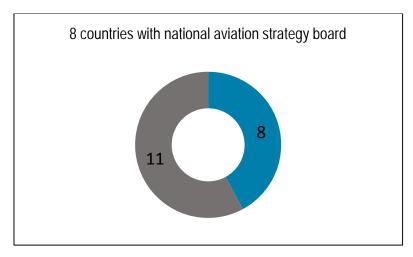


Figure 1: Number of countries with national aviation strategy board (n=19)

Also in eight countries (Austria, Malta, Netherlands, Poland, Romania, Sweden, Switzerland, United Kingdom) an aviation research strategy is stated. Thus, the presence of an aviation strategy board and an aviation strategy often goes hand in hand. The main areas covered in the strategy range from generic technology topics over challenges in aeronautical aviation up to recommendations of new programmes.

Most common topics are R&D in aeronautics and infrastructure as well as the challenges in aeronautical innovation. In all countries, this strategy is a published document and can be reached online.

Interaction with regions

On a national level, the interactions with its regions differ in every country. In some countries like Austria and Switzerland, there is no specific regional RTI-strategy available. In Belgium, federal and regional administrations are represented within the Airbus Programme Board, where decisions to support projects are taken at that level. In France, there is a close interaction with aerospace clusters (Aerospace Valley, SAFE and PEGASE) and the regional council that implements their strategy. In Greece, the interaction arises from the fact that aviation is a research priority within the RIS3 program of many regional research and innovation activities. In the Netherlands, regions are independent in this respect. Relevant examples for aviation are MoUs (Memorandum of Understanding) between the joint undertaking Clean Sky 2 and the regions Dutch regions Flevoland and Zuid-Holland. Similarities to this can be found in Sweden, where the aeronautical regions in Sweden have signed a MoU with Clean Sky to support aeronautical research on EU-level. The aeronautical regions take part in strategic discussions on national level.

National funding programmes

About 70% of the participating countries have a national funding programme or a programme-like activity. These countries are Austria, Belgium, Croatia, Denmark, France, Germany, Greece, Malta, Netherlands, Poland, Romania, Spain, Sweden, Switzerland and the United Kingdom. It is obvious that not only the bigger countries have national funding programmes.

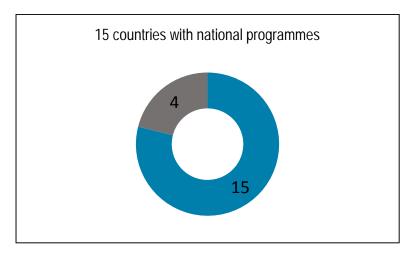


Figure 2: Number of countries with national funding programmes or programme-like activities (n=19)

For two of the four countries that do not have national programmes, the reason for not having a programme is unknown. In Estonia, there is simply no aviation industry and therefore no programme or a programme-like activity.

1.2 Aviation programmes

This chapter gives an overview on the different types of programmes offered, the target groups addressed, supporting measures, the Technology Readiness Level covered, and call schemes followed.

Programme types

Funding schemes vary across the participating countries. Some programmes have a thematic focus on aviation; others are kept general as they encourage research across sectoral boundaries. Therefore, the programmes can be divided into the following three categories:

- Aviation-specific programme: countries offering programmes specifically dedicated to aviation.
- General programme: countries not having a specific programme dedicated to aviation, but having programmes or programme-like activities that include aviation-related topics.
- No programme: countries offering no aviation related programmes or programme-like activities.

The following table relates the countries to their programme category.

Aviation-specific programme	General programme	No programme
Austria	Croatia	Estonia
Belgium	Denmark	Finland
France	Greece	Hungary
Germany	Malta	Luxembourg
Poland	Netherlands	
Romania	Spain	
Sweden	United Kingdom	
Switzerland		

Target groups

In general, target groups for the programmes offered are the following:

- Industry: SMEs
- Industry: Large enterprises
- Universities
- Research establishments (public and private)

Foreign participation

In most programmes or programme-like activities, partners from other countries can participate. Only in Belgium, Denmark, Poland, Romania, Spain and Switzerland partners from other countries cannot participate in programmes or programme-like activities.

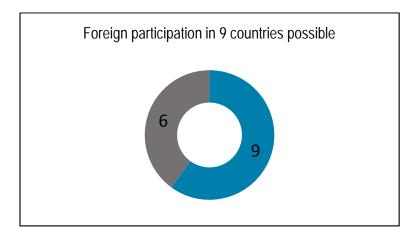


Figure 3: Number of countries where partners from other countries can apply (n=15)

All countries stated that partners from other countries are not entitled to receive funding. Although in all countries foreign partners are entitled to participate, they are not allowed to receive funding.

Types of supporting measures

Through specific activities and supporting initiatives, programmes foster the implementation of strategies. Asked for the supporting measures existing within their programmes, 15 countries stated that there are eligible R&D activities. These are followed by studies and networking activities, eight countries indicated these measures. It is remarkable that in 6 out of these 8 countries (Austria, Croatia, Greece, Romania, Sweden and the United Kingdom) studies and network activities go hand in hand. Compared to the last study, it can be stated that studies and staff exchange gained more importance in the last couple of years. There are also R&D Services, Living Labs, Research Infrastructure, Innovation activities, which have been categorised under "Others" in the diagram.

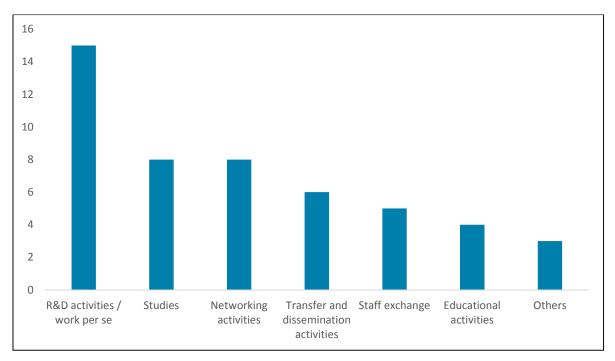


Figure 4: Most frequent types of supporting measures (n=15)

Technology readiness level

TRL (technology readiness level) is a method of estimating technology maturity of Critical Technology Elements (CTE) of a programme during the acquisition process. The NASA definitions for the TRL are as follows:

- TRL1: Basic principles observed and reported
- TRL 2: Technology concept and/or application formulated
- TRL 3: Analytical and experimental critical function and/or characteristic proof of concept
- TRL 4: Component and/or breadboard validation in laboratory environment
- TRL 5: Component and/or breadboard validation in relevant environment
- TRL 6: System/subsystem model or prototype demonstration in a relevant environment (ground or space)
- TRL 7: System prototype demonstration in a space environment
- TRL 8: Actual system completed and 'flight qualified' through test and demonstration (ground or space)
- TRL 9: Actual system 'flight proven' through successful mission operations

It is obvious in the diagram below that TRL 3 to TRL 6 are most common. So most countries focus on the development of experimental critical functions up to a prototype demonstration.

Only Austria, Belgium, Greece, Malta and Switzerland are represented from TRL 7 to TRL 9, therefore it can be stated that in these countries market-near developments are supported.

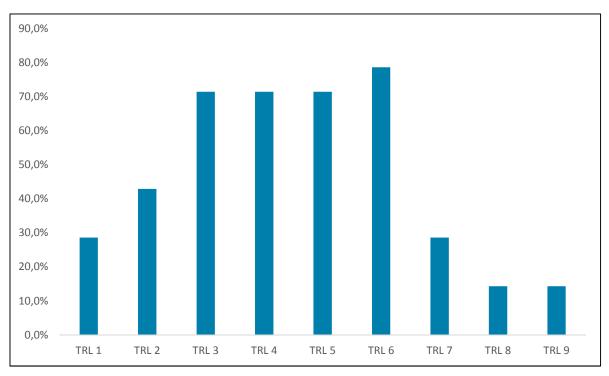


Figure 5: Technology Readiness Level cluster (TRL 1-9) of the programmes (n=14)

Call scheme

As can be seen in the diagram below, the great majority of the programme calls are public with fixed deadlines and subsequent evaluation. However, Belgium, Croatia Spain and the United Kingdom use the open call system. In the Netherlands (Other) the scheme is set accordance with TKI (Top consortia for Knowledge and Innovation) programme regulation.

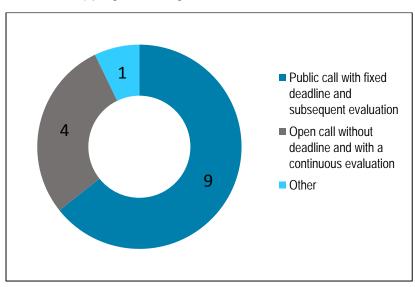


Figure 6: Call scheme of the programme (n=14)

Usually there are no restrictions concerning the topics to be announced in the call.

The call budgets range from 1,6 MEUR to 46 MEUR. The biggest budgets can be found in Romania (26 MEUR), Poland (30 MEUR) and Sweden (46 MEUR). Unfortunately, large countries like France, Germany or United Kingdom provided no figures on their call budget.

1.3 National competencies and programme priorities

To get an overview of national competencies, respondents marked the research and technology areas for both the national competencies and programme priorities. In accordance to the ACARE taxonomy, they are divided into the following groups:



Figure 7: National competences and programme priorities overview

Considering programme priorities, it seems likely that ticking all areas can be seen equivalent as ticking none, namely having no specific research topic addressed.

2 Detailed Information on Aviation Research in Europe

As mentioned in chapter 1.2, the countries can be divided into three programme categories:

- Aviation-specific programme
- General programme
- No programme

For aviation-specific programmes and for general programmes the following tables highlight the programme name, and the responsible funding and management organisation for each country.

Country	Ministry/Agency	Aviation-specific programme
Austria	Federal Ministry for Transport, Innovation and Technology / FFG	Take Off
Belgium	BELSPO/FPS Economy/IDEM	Airbus programme
France	Finance ministry DGE	FUI - Fond unique interministeriel
Germany	Federal Ministry for Economic Affairs and Energy	Aeronautics Research Programme
Poland	National Centre for Research and Development	INNOLOT
Romania	Ministry of Education/ANCSI/UEFISCDI	SN CDI 2020 - National Strategy for RDI 2014-2020
Sweden	Vinnova/Armed Forces/Innovair	NFFP - National Aeronautical Research Program
Switzerland	Federal Department of the Environment, Transport, Energy and Communications / Federal Office of Civil Aviation	BV86
Country	Ministry/Agency	General programme
Croatia	Ministry of Science and Education (MZO)/Croatian Science Foundation (HRZZ)	IP – Research projects
Denmark	Styrelsen for Forskning og Innovation/ Innovationsfonden	Innobooster
Greece	General Secretariat for Research and Technology	Research-Create-Innovate
Malta	Malta Council for Science and Technology	FUSION - The R&I Programme
Netherlands	Ministry of Economic Affairs/RVO.nl	ТКІ
Spain	CDTI	PID - Research Development Projects
United Kingdom	Department for Business, Energy & Industrial Strategy	ATI Research and Technology programme

Estonia, Finland, Hungary and Luxembourg do not have any aviation specific programme or programme-like activity for aviation topics.

2.1 Countries with aviation-specific programmes

The countries listed in this chapter have a specific aeronautics programme. These are:

- Austria
- Belgium
- Germany
- France
- Poland
- Romania
- Sweden
- Switzerland

These countries, their aviation policy and aviation-specific programmes are described in detail hereafter.

2.1.1 Austria

Policy

Responsible organisation

Federal Ministry for Transport, Innovation and Technology

Aviation research strategy

Date of publishing: 11.01.2015 Date of update: Dec 2020

Issuing organisation: bmvit

the international markets

Contact

Ingrid Kernstock, ingrid.kernstock@bmvit.gv.at

Strategy

Aviation strategy board

Name: Strategic advisory board (RTI-aviation)

Description: Dialogues for the future held at regular intervals between manufactures, researchers, developers & universities as support in formulating the strategic information base.

Contact: Ingrid Kernstock, ingrid.kernstock@bmvit.gv.at

Availability: http://www.bmvit.gv.at/innovation/luftfahrt/strategie.htm

Name: Research and Innovation in the aviation sector: leverage in

Main areas covered: Research, Technology and Innovation in the field of air transportation and aeronautics

Programme/programme-like activity

Name	Take Off – Research & Innovation Funding Program for Aviation
Fundina bv	Austrian Federal Ministrv for Transport. Innovation and Technoloav (BMVIT)
Manaded bv	Austrian Research Promotion Agency (FFG)
Contact	Inarid Kernstock
Duration	Jan 2015 – Jan 2020
Extension likelv	Yes
Programme priorities	System Integration (Humans. Organisations. Technologies), Partnerships (National. Transnational. International), Resource Creation (Traffic. Production. Staff), Knowledge Development & Sharing (Topic. Process. Application).

Programme objectives

In line with ACARE Flightpath 2050 goals, the new strategy promotes four measures to be deployed within the framework of a five-year action plan. These are:

- 1. Build strategic partnerships;
- 2. Strengthen Austria's competencies and skills in R&I;
- 3. Foster visibility and market uptake;
- 4. Facilitate excellent qualification.

Each of these four measures contains a bundle of subordinated tasks to be carried out via public funding programmes and accompanying activities. In 2020, a comprehensive strategy evaluation will be conducted.

Take Off 2015 – 2020, with focus on (a) System Integration (Humans. Organisations. Technologies), (b) Strategic Partnerships (National. Transnational. International), (c) Capacity and Resource Creation (Traffic. Production. Staff), and (d) Knowledge Development & Sharing (Topic. Process. Application).

Target groups

The economic significance of Austria's aviation sector is a given. Considering both the air transportation sector (Airlines, ANSP's and Airports) and the aeronautics industry, Austria has about 280 R&I intensive companies. In addition, there are about 40 academic and non-academic research institutes. All these stakeholders constitute the R&I intensive aviation sector in Austria.

 SME Large enterprises Universities Universities of applied sciences Competence centres Research facilities Start-ups NPOs

Types of supporting measures



Technology readiness level covered within the programme



	Take Off call 2016	Take Off Call 2017
Start date	17/10/2016	10/2017
End date	20/02/2017	02/2018
Typical period to funding decision	4 months	4 months
Topics to be announced in the call	Innovative products & services New fields of research & spill overs Solutions for societal challenges Knowledge creation and sharing	Innovative products & services New fields of research & spill overs Solutions for societal challenges Knowledge creation and sharing
Overall call budget	7,7 MEUR	6 - 9 MEUR
Typical project funding	600 KEUR	600 KEUR
Restrictions from programme information	at least two cooperating entities	at least two cooperating entities
Web link / contact	daniel.jokovic@ffg.at	daniel.jokovic@ffg.at

2.1.2 Belgium

Policy			
Responsible organisation	Belspo		
Contact	Frank Monteny, <u>frank.monteny@belspo.be</u>		
Strategy			
Aviation strategy board	Aviation research strategy		
Name: Federal aeronautics platform	N.a.		
Description: N.a.			
Contact: Frank Monteny (<u>frank.monteny@belspo.be</u>),			
Luc Ballet (<u>luc.ballet@economie.fgov.be</u>)			

Programme/programme-like activity	
Name	Airbus programme
Funding by	BELSPO and FPS Economy
Managed by	idem
Contact	contact.aeronautics@economie.fgov.be; contact.aeronautics@belspo.be
Duration	N.a.
Extension likely	Probably yes
Programme priorities	N.a.

Programme objectives

The Belgian industrial sector receives federal support for its participation in various AIRBUS aircraft manufacturing programmes (such as the A380 and A350 XWB) through a system of repayable advances for the financing of NRCs (Non-Recurring Costs).

Target groups

Belgian Industries active in Airbus programmes.

Allowed to apply	Partners from other countries	
Industries	Cannot applyNo funding	

Types of supporting measures



Technology readiness level covered within the programme



	Open call
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	Not yet available
Overall call budget	0 (an increase in the financial envelope is intended)
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

2.1.3 France

Policy		
Responsible organisation	GIFAS	
Contact	Anne Bondiou-Clergerie, Anne.BONDIOU-CLERGERIE@gifas.fr	
Strategy		
Aviation strategy board	Aviation research strategy	
Name: CORAC	N.a.	

Description/contact: http://aerorecherchecorac.com

Programme/programme-like activity	
Name	FUI - Fond unique interministeriel
Funding by	Research - Transport - Defence
Managed by	Finance ministry DGE
Contact	vernieres@aerospace-valley.com
Duration	Jan 2006 – open
Extension likely	Probably yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipment, Air Traffic Management

Programme objectives

Funding of aerospace R&D

Target groups

Large firms - SME - universities and labs

Allo	wed to apply	Partne	rs from other countries	
۰	R&D stakeholders that are member of a pôle de compétitivité	•	Can apply No funding	

Types of supporting measures



Technology readiness level covered within the programme



	N.a.
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	N.a.
Overall call budget	N.a.
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

2.1.4 Germany

Policy	
Responsible organisation	Federal Ministry for Economic Affairs and Energy (BMWi)
Contact	Jan Bode, jan.bode@bmwi.bund.de
Strategy	
Aviation strategy board	Aviation research strategy
Name: Aviation Strategy of the F Government Description: The Federal Government's objective is Germany as a worldwide tec for an environmentally friendly, safe, effic and last but not least friendly passen system. The economic and technological streng Group leader system is as important a innovation and global competitiveness of in Germany.	 Center (DLR) The financial research funding through the National Aeronautics Research Programme (LuFo) and EU research programmes within the context of Horizon 2020 and the national loan programme for the financing of development costs in industry. Date of publishing: March 2014 Date of update: February 2016
Programme/programme-like activity	
Name	LuFo - Aeronautics Research Programme
Funding by	Federal Minister for Economic Affairs and Energy (BMWi)

Managed by	Program Management Agency / Aeronautics Research (DLR, PT-LF)
Contact	Jan Bode, jan.bode@bmwi.bund.de
Duration	Jan 1995 – Mar 2023
Extension likely	Yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipment, Flight Mechanics, Integrated Design & Validation, Air Traffic Management, Human Factors, Innovative Concepts & Scenarios

Programme objectives

Support Programme for enhancing Innovation through collaboration between industry, supply chain and academia; efficient use of national resources.

Target groups

Industry, Research establishments, Universities.

Allowed to apply	Partners from other countries
IndustryResearch establishmentsUniversities	Can applyNo funding

Types of supporting measures



Technology readiness level covered within the programme



	LuFo V-3
Start date	Sep 2016
End date	Dec 2016
Typical duration	Approx. 4 years
Topics to be announced in the call	N.a.
Overall call budget	300 MEUR
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	http://www.dlr.de/pt- lf/desktopdefault.aspx/tabid-8323/

2.1.5 Poland

Policy	
Responsible organisation	Ad hoc group of personalities
Contact	Jacek Rokicki, jack@meil.pw.edu.pl
Strategy	
Aviation strategy board	Aviation research strategy
N.a.	Name: Research Strategy of the Aeronautic Industry 2012-2035 (in
	Date of publishing: 2014
	Issuing organisation: Polish Aeronautical Technology Platform

Availability: http://www.pptl.pl/pl/strategia

Programme/programme-like activity	
Name	INNOLOT
Funding by	NCBR - National Centre for Research and Development
Managed by	NCBR - National Centre for Research and Development
Contact	NCBR, Izabela Budniak, <u>izabela.budniak@ncbr.gov.pl</u> http://www.ncbir.pl/programy-krajowe/programy-sektorowe/innolot/aktualnosci/
Duration	Oct 2012 – Dec 2020
Extension likely	Yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipment, Integrated Design & Validation (methods & tools)

Programme objectives

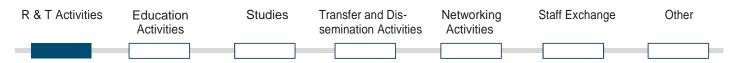
- Increasing the competitiveness of the Polish Aeronautic Industry
- Increasing cooperation between the Industry and the Research organisations (Universities, Institutes).

Target groups

- Group A (Large projects up to 10 MEUR) All Industrial companies
- Group B (Small projects up to 2 MEUR) SMEs

Allowe	ed to apply	Partners from other countries	
•	Polish Industry (large companies as well as SME's) with research organisations as subcontractors.	Cannot applyNo funding	

Types of supporting measures



Technology readiness level covered within the programme



	INNOLOT 3rd call
Start date	31/03/2017
End date	01/04/2017
Typical period to funding decision	
Topics to be announced in the call	All
Overall call budget	30 MEUR
Typical project funding	3-10 MEUR (group A), 1-2 MEUR (group B)
Restrictions from programme information	Industry only
Web link / contact	izabela.budniak@ncbr.gov.pl

2.1.6 Romania

Policy

Responsible organisation

INCAS - National Institute for Aerospace Research "Elie Carafoli"

Contact

Catalin NAae, Nae.Catalin@incas.ro

Strategy

Aviation strategy boardAviation research strategyName: OPIARName: National Strategy for Aviation ResearchDescription: Association of Romanian Aeronautical
CompaniesDate of publishing: 2008
Date of update: 2012
Issuing organisation: OPIAR
Availability: www.opiar.ro

Contact: <u>www.opiar.ro</u>, Nicolae TONCEA, <u>opiar.org@gmail.com</u> Main areas covered: R&D in aeronautics, infrastructures, civil and military products, RPAS

Programme/programme-like activity	
Name	National Strategy for RDI 2014-2020
Funding by	Min. of Education/ANCSI
Managed by	ANCSI & UEFISCDI
Contact	www.ancs.ro; www.uefiscdi.ro
Duration	2014 - 2020
Extension likely	Yes
Programme priorities	Flight physics, Propulsion, Aircraft Avionics, Systems & Equipment, Innovative Concepts & Scenarios

Programme objectives

- Innovative technologies and products in aviation and space sector
- Basic and applied research in high-tech areas relevant for aviation sector
- Critical R&D infrastructure development in space and security areas
- Human resources development in aviation and space sectors.

Target groups

- Consortia based on R&D
- Academia and industrial entities in aviation sector
- SMEs with RDI activities in aviation and high-tech areas
- Start-ups and spin-off entities

Allowed to apply **Partners from other countries** Consortia based on RE Cannot apply • • Universities No funding • • Industrial companies legally established under Romanian law • Dedicated calls for SMEs - legal entities according to Romanian legislation • Legal framework with respect to state-aid is applicable to commercial • entities. **Types of supporting measures R & T** Activities Education Studies Transfer and Dis-Networking Staff Exchange Other: Activities semination Activities Activities

Technology readiness level covered within the programme



	2.11	A 1.1.3 ²
Start date	art date 09/04/2016	
End date	2016	continuous, 30/06/2023
Typical period to funding decision	6 months	6 months
Topics to be announced in the callSmart specialisation areas: Bioeconomy, IT Space and Security, Eco-nano-technologies		COMPLEMENT - JTI CleanSky2
Overall call budget	26 MEUR	2 MEUR
Typical project funding	150 KEUR	2 MEUR
Restrictions from programme at least two cooperating entities		synergy with JTI CleanSky2
Web link / contact	http://uefiscdi.gov.ro/, andreea.dimitriu@uefiscdi.ro	http://www.poc.research.ro/actiuni-1-1-3, daniela.gheorghian@ancs.ro

¹ Competitivitate prin cercetare, dezvoltare și inovare

² Crearea de sinergii cu acțiunile de CDI ale Programului-cadru ORIZONT 2020 și alte programe CDI internaționale

2.1.7 Sweden

Policy		
Responsible organisation	Innovair	
Contact	Dr. Anders Blom, anders.blom@foi.se	
Strategy		
Aviation strategy board		Aviation research strategy
Name: Innovair		Name: NRIA Flyg 2016
Description : Participants from Government agencies including the Air Force, Universities, Institutes, Industry including SME meets regularly to discuss practical issues and long-term strategies.		Date of publishing: 05.01.2016 Date of update: N.a Issuing organisation: Innovair Availability: <u>http://www.nriaflyg.se/laddaned.php</u>
Contact: <u>http://innovair.org/</u> Dr. Anders Blom, <u>anders.blom@foi.se</u>		Main areas covered : Challenges in aeronautical innovation, International cooperation, Recommendation of new programs.
Programme/programme-like activity		
Name	National Aeronautical Research Program	

- Tomo	Halonal Aorona allo anno anno anno anno anno anno a
Funding by	Vinnova and Armed Forces
Managed by	Innovair/ VINNOVA
Contact	FMV, Mr. Mats-Olof Olsson, mats-olof.olsson@fmv.se, http://innovair.org
Duration	2013 – 2017
Extension likely	Yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Flight Mechanics, Integrated Design & Validatio (methods & tools), Innovative Concepts & Scenarios

Programme objectives

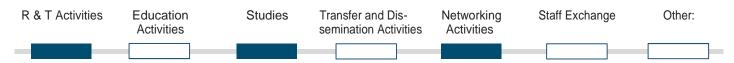
To develop Technologies on TRL 2-4 at universities with the support of aeronautical industry in Sweden. Projects are defined by industry, institutes and universities and they are managed by industry.

Target groups

Doctor candidates, universities and industry.

Allowed to apply	Partners from other countries		
Industry based in Sweden	Can applyNo funding		

Types of supporting measures



Technology readiness level covered within the programme



	NFFP 7	IFFP, International Aeronautical Reserach Program	
Start date	February 2017	TBD in the Governmental research bill november 2016	
End date	Mid 2021	N.a.	
Typical period to funding decision	2 months	N.a.	
Topics to be announced in the call	N.a.	N.a.	
Overall call budget	46 MEUR	N.a.	
Typical project funding	1 MEUR	N.a.	
Restrictions from programme information	N.a.	N.a.	
Web link / contact	<u>http://innovair.org,</u> bjorn.jonsson@fmv.se	N.a.	

2.1.8 Switzerland

Policy Responsible organisation 1 State Secretary for Education, Research and Innovation Contact Claude Vaucher / Juerg Wildi, claude.vaucher@sbfi.admin.ch / juerg.wildi@ ruag.com Responsible organisation 2 Federal Office of Civil Aviation Contact https://www.bazl.admin.ch/bazl/en/home.html

Strategy	
Aviation strategy board	Aviation research strategy
N.a.	Name: Luftfahrtpolitischer Bericht (German name)
	Date of publishing: 25.02.2016 Issuing organisation: Federal Office of Civil Aviation Availability: https://www.bazl.admin.ch/bazl/de/home/politik/luftfahrtpolitik/luftfahrtpolitischer- bericht.html

Main areas covered: Civil Aviation in Switzerland (in generall and all aspects)

Programme/programme-like activity	
Name	BV86 - Spezialfinanzierung Luftfahrt (German name)
Funding by	Federal Offive of Civil Aviation
Managed by	Federal Offive of Civil Aviation
Contact	Jan Bittel; https://www.bazl.admin.ch/bazl/de/home/fachleute/regulation-und- grundlagen/spezialfinanzierung-luftverkehrwofuer-es-gelder-gibt.html
Duration	Yearly
Extension likely	Probably yes
Programme priorities	Safety, Security, Environment. Aviation without specific focus on R&D and Innovation.

Programme objectives

Aviation related topics with focus environment, safety, security.

Target groups

All stakeholders in aviation.

Allowe	ed to apply	Partners from other countries	
•	All stakeholders in Aviation		Cannot apply No funding

Types of supporting measures



Technology readiness level covered within the programme



	Spezialfinanzierung Luftfahrt (German name)
Start date	Yearly
End date	
Typical period to funding decision	6 months
Topics to be announced in the call	No specific focus
Overall call budget	Tbc 8 MEUR
Typical project funding	5 - 1000 KEUR
Restrictions from programme information	None
Web link / contact	https://www.bazl.admin.ch/bazl/de/home/fachleute/regulation-und- grundlagen/spezialfinanzierung-luftverkehrwofuer-es-gelder- gibt/gesuch-um-finanzhilfehtml

2.2 Countries with general programmes

The countries listed in this chapter have no specific programme dedicated to aviation, but offer programmes or programme-like activities that include aviation-related topics. These are:

- Croatia
- Denmark
- Greece
- Malta
- Netherlands
- Spain
- United Kingdom

These countries, their aviation policy and general programmes are described in detail hereafter.

2.2.1 Croatia

Policy	
Responsible organisation 1	Ministry of Science and Education (MZO)
Contact	Prof. dr. sc. Krešo Zadro (kreso.zadro@mzos.hr), http://public.mzos.hr/Default.aspx?sec=
Responsible organisation 2	Ministry of the Sea, Transport and Infrastructure (MSTI)
Contact	Jure Šarić, (jure.saric@caacro.hr), http://www.mppi.hr/default.aspx?id=7397

Strategy	
Aviation strategy board	Aviation research strategy
N.a.	N.a.

Programme/programme-like activity	
Name	IP – Research projects
Funding by	Croatian Science Foundation (HRZZ)
Managed by	Croatian Science Foundation (HRZZ)
Contact	Croatian Scienc Foundation (HRZZ) <u>http://www.hrzz.hr/default.aspx?id=1166</u>
Duration	Permanent, at announced dates
Extension likely	Yes
Programme priorities	N.a.

Programme objectives

The Research Projects programme is developed to support research groups that are working on internationally / nationally competitive issues, and whose leaders have been recognized for their scientific achievements and mentoring skills.

Target groups

Academia, public institutes, private institutes.

Allowed to apply	Partners from other countries
 Researchers from Croatia registered in the register of researchers in Croatia 	Can applyNo funding

Types of supporting measures



Technology readiness level covered within the programme



	IP-06-2016
Start date	Once a year – (last year: May 3, 2016)
End date	06.02.2016
Typical period to funding	4 months
Topics to be announced in the call	No restrictions on topics
Overall call budget	5.3 MEUR
Typical project funding	Up to 132 KEUR
Restrictions from programme information	Open for researchers registered in the register of researchers in Croatia
Web link / contact	http://www.hrzz.hr/default.aspx?id=2313; Croatian Science Foundation through its services, Executive Director Hrvoje Mataković, hmatakovic@hrzz.hr

2.2.2 Denmark

Policy	
Responsible organisation 1	Styrelsen for Forskning og Innovation
Contact	www.ufm.dk
Responsible organisation 2	Trafik- og Byggestyrelsen
Contact	www.trafikstyrelsen.dk

Strategy	
Aviation strategy board	Aviation research strategy
N.a.	N.a.

Programme/programme-like activity	
Name	Innobooster
Funding by	Innovationsfonden
Managed by	Innovationsfonden
Contact	www.innovationsfonden.dk
Duration	N.a.
Extension likely	Probably yes
Programme priorities	N.a.

Programme objectives

Bottom-up funding of innovative SME's - not specifically targeted at aviation.

Target groups

SMEs.

SMEs Cannot apply No funding

Types of supporting measures



Technology readiness level covered within the programme

N.a.

	N.a.
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	N.a.
Overall call budget	N.a.
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

2.2.3 Greece

Policy	
Responsible organisation	General Secretariat for Research and Technology
Contact	Agni Spilioti, <u>sisi@gsrt.gr</u>

Strategy	
Aviation strategy board	Aviation research strategy
N.a.	N.a.

Programme/programme-like activity	
Name	Research-Create-Innovate
Funding by	The Research and Innovation (R&I) sector was first founded in the Ministry of Education, Research and Religious Affairs by establishing the Alternate Minister of the R&I portfolio
Managed by	General Secretariat for Research and Technology
Contact	Agni Spilioti, <u>sisi@gsrt.gr</u>
Duration	Jan 2015 – Jan 2020
Extension likely	Probably yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipment, Flight Mechanics, Integrated Design & Validation, Air Traffic Management, Airports, Human Factors, Innovative Concepts & Scenarios

Programme objectives

In the R&I sector, policies were developed based on three crucial objectives:

- 1. The support of education and culture via the production of new knowledge arising from research. To this end, various initiatives were developed that advocate the osmosis of research, education and culture, with emphasis given on the humanitarian and social sciences.
- 2. The pursuit of excellence and high-quality scientific research, so that it can become a proxy for promoting the country on an international level, especially in today's times of crisis.
- 3. The development of innovation that arises from scientific research so that it can be a driver for national growth and take part in confronting the social and economic crisis, as well as to create prospects for the near future. It should be noted that Greece possesses exemplary scientific resources, with a high degree of specialisation, that are competitive on an international level. These resources constitute the significant foundation on which the means for achieving the aforementioned goals will be built. The development of actions supporting human resources, with an emphasis on young scientists, has always been and always will be a priority for the R&I sector.

Target groups

The research and innovation community (Academia & Research Centers) as well as the industry, mainly SMEs. Emphasis on young scientists, has always been and always will be a priority for the R&I sector.

Allowed to apply	Partners from other countries
All the players involved in RTD activities. Within the frame of bilateral cooperation research activities, partners coming from other EU and non-EU countries have to participate (without funding from Greek resources but using their own budget). The calls are generic and aviation/aeronautics research is eligible.	Can applyNo funding
Types of supporting measures	

R & T Activities Education Activities Studies Transfer and Dissemination Activities Networking Activities Staff Exchange Other

Technology readiness level covered within the programme



	Research-Create-Innovate
Start date	Within 2017
End date	Jan 2018
Typical period to funding decision	6 months
Topics to be announced in the call	It will be a general call
Overall call budget	More than 10 MEUR
Typical project funding	300-500 KEUR
Restrictions from programme information	None
Web link / contact	General Secretariat for Research and Technology

2.2.4 Malta

Policy	
Responsible organisation	Malta Council for Science and Technology
Contact	James Foden, james.foden@gov.mt
Strategy	
Aviation strategy board	Aviation research strategy

N.a.

Name: Science and Innovation Strategy - TEMARA

Comment: The NAC has an advisory board which is tasked to assist the Chief Executive Officer in the discharge of her duties which ensures that the Agency's strategy is properly implemented. The NAC will provide advice to the government on the local aviation industry, thus the advisory board may in turn be involved in the strategic direction in relation to the aviation policy guidance provided by the NAC.

Main areas covered: the NAC will have four domains of activity: The primary domain of activity will be research and innovation. The NAC will engage primarily in the areas of avionics, flight operations and air traffic management, Maintenance Repair and Overhaul (MRO) and Unmanned Aircraft Systems (UAS). The NAC will engage in the design and development of hardware and software systems. The NAC will extend the national capabilities and activity in the flight operations and air traffic management by filling in the operational gap between Malta Air Traffic Services and the University of Malta. The industrial nature of the NAC will exploit the two said organisations' strengths to elevate national capacities in the sector to complete solutions spanning the complete range of technology readiness levels. There is a national need for the NAC to provide scientific and technical support in maintenance, repair and overhaul to ensure it remains operating competitively in the country in the longer term. The sector of unmanned aircraft systems (UAS) is an emerging sector that will grow significantly in the coming decades and Malta is targeting the attraction of industrial investment in this sector. Exploiting the skills the NAC will have to operate in the MRO (composites), avionics (hardware and software) and flight operations and ATM sectors, the organisation will be well placed to develop strong knowledge in design, development and operation of UASs.

Programme/programme-like activity	
Name	FUSION - The R&I Programme
Funding by	Malta Council for Science and Technology
Managed by	Malta Council for Science and Technology
Contact	Malta Council for Science and Technology www.mcst.gov.mt
Duration	Jan 2014 – Jan 2020
Extension likely	Yes
Programme priorities	Flight physics

Programme objectives

The programme is divided into two: The Commercialisation Voucher Programme (CVP) guides and mentors researchers through a variety of feasibility study activities. The Technology Development Programme (TDP) provides R&I funding for research over 1-3 years through a consortium.

Target groups

Public, academic and private sectors.

Allowed to apply	Partners from other countries
 For the CVP, any legal entity can a their own When getting to TDP stage, if successful through the second application, a consortium (public/academic-private) is required. 	Can applyNo funding

Types of supporting measures



Technology readiness level covered within the programme



National calls for funding

	FUSION - The R&I Programme
Start date	01/10/2016
End date	15/11/2016
Typical period to funding decision	1 month
Topics to be announced in the call	All Smart Specialisation areas
Overall call budget	1.6 MEUR across all areas across both programmes
Typical project funding	18 KEUR for CVP and 200 KEUR for TDP
Restrictions from programme information	Legal entities
Web link / contact	james.foden@gov.mt

t

2.2.5 Netherlands

Policy	
Responsible organisation 1	Ministry of Economic Affairs
Contact	https://www.government.nl/ministries/ministry-of-economic-affairs
Responsible organisation 2	Ministry of Infrastructure and the Environment
Contact	https://www.government.nl/ministries/ministry-of-infrastructure-and-the-environment

Strategy	
Aviation strategy board	Aviation research strategy
Name Lucht- en Ruimtevaart Nederland	Name: Roadmap Aeronautics in the top sector High Tech Systems and Materials
Web: http://www.luchtenruimtevaart.nl	Date of publishing: 09.01.2014
Contact: info@luchtenruimtevaart.nl; + 31 (0)88 1976 120	Issuing organisation: Lucht- en Ruimtevaart Nederland
	Availability: http://www.hollandhightech.nl/nationaal/innovatie/roadmaps/aeronautics/roadmap- aeronautics-september-2014

Programme/programme-like activity	
Name	ТКІ
Funding by	Ministry of Economic Affairs
Managed by	RVO.nl
Contact	http://www.rvo.nl/subsidies-regelingen/tki-toeslag
Duration	Oct 2012 – Nov 2017
Extension likely	Yes
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipment, Flight Mechanics, Integrated Design & Validation, Air Traffic Management, Airports, Human Factors, Innovative Concepts & Scenarios

Programme objectives

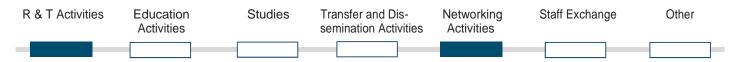
Stimulate private-public cooperation in top sectors of Dutch economy.

Target groups

Top consortia for Knowledge and Innovation (TKI), consisting of research organisations and companies, that work on private-publicly financed multi-annual TKI programmes for research and development.

Allowed to apply	Partners from other countries	
 Companies Research organisations through TKIs. 	Can applyNo funding	

Types of supporting measures



Technology readiness level covered within the programme



National calls for funding

Comment:

TKI is fully operational, but does not use the instrument of calls. The Netherlands has a set of subsidies and grants to stimulate research and innovation. These do not have a specific focus on a certain domain (such as aviation). Research in the field of aeronautics can also benefit from these programs. The most important programmes are:

- The R&D tax credit: <u>http://english.rvo.nl/subsidies-programmes/wbso</u>
- The innovation credit: <u>http://english.rvo.nl/subsidies-programmes/innovation-credit</u>
- Academic research funding: <u>http://www.nwo.nl/en/funding/research+funding</u>

An example of an aviation project partly funded with the generic instruments is TAPAS2. A 24,3 M euro project on thermoplastics in aviation: <u>http://www.tapasproject.nl/en/</u>.

2.2.6 Spain

N.a.

Policy	
Responsible organisation	CDTI
Contact	Juan Francisco Reyes, juanfrancisco.reyes@cdti.es
Strategy	
Aviation strategy board	Aviation research strategy

ition strategy board	Aviation research strategy
	N.a.

Programme/programme-like activity	
Name	PID - Research and Development Projects
Funding by	CDTI
Managed by	CDTI
Contact	juanfrancisco.reyes@cdti.es
Duration	open
Extension likely	Yes
Programme priorities	N.a.

Programme objectives

Research and Development projects are business projects of an applied nature for the creation and significant improvement of a production process, product or service submitted by one single company or by a group of businesses. These projects may comprise both industrial research activities as well as experimental development, in accordance with the definitions of the General Block Exemption Regulation (EC Regulation nº651/2014)

Target groups

Companies.

Allowed to apply				Partne	rs from other countrie	S
consortiu at least, t	nomic Interest Grou Im governed by a p	private collaborat	: be formalised or a tion agreement comprise maximum number of	• • ed of,	Cannot apply No funding	
Types of suppo	rting measure	S				
R & T Activities	Education Activities	Studies	Transfer and Dis- semination Activities	Networking Activities	Staff Exchange	Other

Technology readiness level covered within the programme



	Individual R&D projects
Start date	Open
End date	Open
Typical period to funding decision	Open
Topics to be announced in the call	All
Overall call budget	Not defined
Typical project funding	250 - 500 KEUR
Restrictions from programme information	N.a.
Web link / contact	http://www.cdti.es/index.asp?MP=15& MS=642&MN=3

2.2.7 United Kingdom

Policy

Responsible organisations	Aerospace Hub, Department for Business, Energy & Industrial Strategy	
	Aerospace Tech	nnology Institute
Contact	lan Turner,	ian.turner@beis.gov.uk

Strategy	
Aviation strategy board	Aviation research strategy
Name: Aerospace Growth Partnership	Name : Investing in UK Aerospace (July 2015) Raising Ambition - Technology Strategy and Portfolio Update (July 2016)
Description : A strategic partnership between Government and industry which has been established to secure the future of the UK aerospace industry	Date of publishing: 01.07.2015 Date of update: 07.01.2016 Issuing organisation: Aerospace Technology Institute
Website: www.theagp.aero	Availability: http://www.ati.org.uk/strategy/publications/
	Main areas covered: Strategic Technology Themes

Programme/programme-like activity		
Name	ATI Research and Technology programme	
Funding by	Department for Business, Energy & Industrial Strategy	
Managed by	Aerospace Technology Institute	
Contact	info@ati.org.uk	
Duration	2013 - 2026	
Extension likely	Probably yes	
Programme priorities	Flight physics, Aerostructures, Propulsion, Aircraft Avionics, Systems & Equipmen	
	Integrated Design & Validation (methods & tools)	

Programme objectives

Strategic investment to support the development of relevant technologies from TRL3 to TRL6.

Target groups

UK based civil aerospace manufacturers and supply chain.



Allowe	ed to apply	Partners from other countries
•	UK based businesses Research organisations	Can applyNo funding

Types of supporting measures



Technology readiness level covered within the programme



	Open call (continuous)
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	N.a.
Overall call budget	N.a.
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

2.3 Countries with no aviation programme

Countries not having a programme for aviation topics are:

- Estonia
- Finland
- Hungary
- Luxembourg

In Estonia the reason for not having a programme is simply that there is no aviation industry in Estonia. Minor developments are implemented by dedicated SME's (mainly ICT sector). Applied research is carried out on project bases or contracted by ministries or companies. Regarding research strategy the development of Estonian aviation sector including R&D is reflected in National Transport Development Plan 2014-2020. The Ministry of Economic Affairs and Communications has convened expert group on aviation. The objective is to contribute to better network of flight connections which might influence local competencies in the field and relevant R&D activities.

Country	Responsible organisation	Contact
Estonia	Ministry of Economic Affairs and Communications	Priit Rifk, priit.rifk@mkm.ee
Finland	Ministry of Transport and Communications	Ari-Pekka.Manninen@lvm.fi
Hungary	Slot Consulting	N.a.
Luxembourg	Direction de l'Aviation Civile	N.a.

2.4 Regional aviation research funding in Europe

Only two regions contributed to the survey, namely:

- Germany Bremen
- Spain Andalucía

These regions, their aviation policy and funding schemes are described in detail hereafter.

2.4.1 Germany - Bremen

Policy	
Responsible organisation 1	Ministry of Economic Affairs, Labour and Ports
Contact	Bastian Mueller, bastian.mueller@wah.bremen.de
Responsible organisation 2	Bremeninvest
Contact	Dr. Barbara Cembella, barbara.cembella@wfb-bremen.de

Strategy	
Aviation strategy board	Aviation research strategy
Name: AVIABELT Bremen e.V.	Name:Strategische Planung für die Luft- und Raumfahrtindustrie Bremen 2016–2020
Description : Network Organisation for Aerospace in Bremen	Date of publishing: Draft version 10.12.2015 Date of update: Coming soon Issuing organisation: Ministry of Economic Affairs, Labour and Ports Availability:file:///C:/Users/fl/Downloads/Bremer+Luft-+und+Raumfahrt Forschungsprogramm+2020.pdf
Contact: Dr. Barbara Cembella, <u>barbara.cembella@wfb-bremen.de</u>	Main areas covered : launcher, satellite application, lightweight production, RPAS, moveables

Programme/programme-like activity						
Name	LuRaFo HB 2020 - Aerospace Research programme for Bremen					
Funding by	Ministry of Economic Affairs, Labour and Ports					
Managed by	Economic Development Agency					
Contact	https://www.wfb-bremen.de/de/page/beratung-und-foerderung/foerderprogramme-fuer- bremen					
Duration	Sep 2016 – Jun 2021					
Extension likely	Probably yes					
Programme priorities	Flight physics, Aerostructures, Integrated Design & Validation (methods & tools), Innovative Concepts & Scenarios					

Programme objectives

Along the lines of the aerospace strategy of Bremen: launcher, satellite application, lightweight production, RPAS, moveables. Also topics like smart industries, cross-sectoral transfer, additive manufacturing.

Target groups

Companies in Bremen (especially SME) together with partners from science.



Allowe	d to apply	Partners from other countries
۰	It should be consortia of OEM, SME and Academics	Can applyNo funding

Types of supporting measures



Technology readiness level covered within the programme



	N.a.
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	N.a.
Overall call budget	N.a.
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

2.4.2 Spain - Andalucía

Policy	
Responsible organisation 1	Consejería De Empleo, Empresa Y Comercio
Contact	Maria José Asensio, sgiie.ceec@juntadeandalucia.es
Responsible organisation 2	Fundación Hélice
Contact	Joaquin Rodríguez Grau, jrodriguez@catec.aero

Strategy	
Aviation strategy board	Aviation research strategy
Name: Fundación Hélice	Name: Ris 3 Andalusia
Description: Comité De Dirección De La Fundacion Hélice	Date of publishing: 10.12.2013 Date of update: 10.12.2013 Issuing organisation: Agencia De Innovación Y Desarrollo De Andalucia, IDEA Availability: <u>http://ris3andalucia.es/</u>
Contact: http://helicecluster.com/,	Main areas covered: Research, Innovation And Industry

Joaquin Rodríguez Grau, jrodriguez@catec.aero

Main areas covered: Research, Innovation And Industry Specialisation

Programme/programme-like activity	
Name	Pay Incentive Programme For Indutrial Development, The Productivity Improveness, The Digital Society and The Employment. / Pay Incentive Law For Research, Experiemental Development And Inn ovation
Funding by	Consejeria De Empleo, Empresa Y Comercio
Managed by	Agencia De Innovacion Y Desarrollo De Andalucia, IDEA
Contact	
Duration	Probably Sep 2016 – 12.31.2018
Extension likely	Probably yes
Programme priorities	Aerostructures, Aircraft Avionics, Systems & Equipment, Flight Mechanics, Integrated Design & Validation, Airports, Human Factors.

Programme objectives

There will be two programmes; the first one is focussed on industrial investments and employment, and the second one in research and innovation activities.

Target groups

Companies, mainly SME.

Allow	red to apply	Partners from other countries
4	Research organisations	 Can apply Research organisations, University research groups receive funding
T	of our outling more stress	

Types of supporting measures



Technology readiness level covered within the programme



	N.a.
Start date	N.a.
End date	N.a.
Typical period to funding decision	N.a.
Topics to be announced in the call	N.a.
Overall call budget	N.a.
Typical project funding	N.a.
Restrictions from programme information	N.a.
Web link / contact	N.a.

3 Overview on Calls 2016-2021

The following figure shows the currently open and upcoming calls per country.

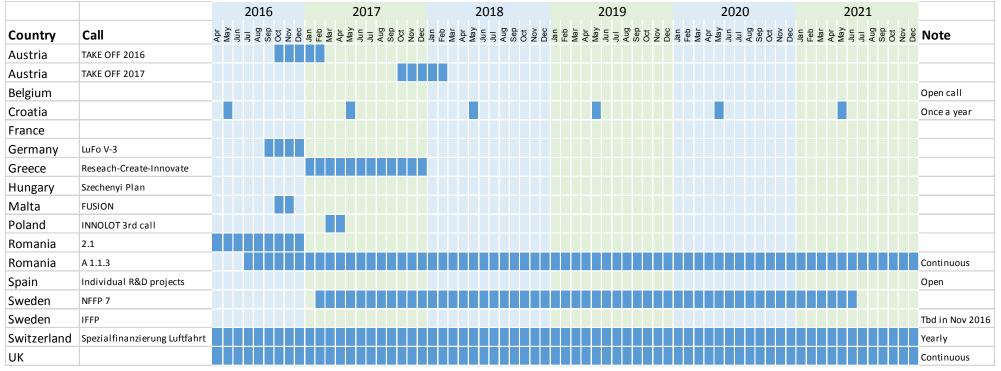


Figure 8: Overview on calls

The Netherlands' TKI programme is fully operational, but does not use the instrument of calls.

4 List of Contacts

Country	Name	Organisation	Function	Mail	Phone	Address
Austria	Ingrid Kernstock	bmvit	R&I Strategy Design and Programme Owner	ingrid.kernstock@bmvit.gv.at	+43 1 7116265 2119	Radetzkystrasse 2 1030 Vienna
Belgium	Georges Jamart	Belspo	Programme manager	georges.jamart@belspo.be	+32 2 238 36 90	
Croatia	lvica Smojver	University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture	Head of Chair of Aircraft Structures	ismojver@fsb.hr	+385 (1) 6168 267	I. Lučića 5 10000 Zagreb
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5 Annex

Detailed information on national competencies and programme priorities

The following figures give a more detailed view on the national technological competencies and programme priorities as stated by the participating countries. Each figure depicts one research and technology area subdivided into subareas.

