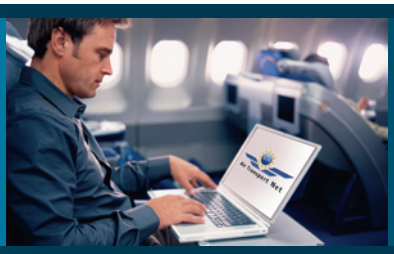
AirTN – Air Transport Net

Air Transport Net

ERA-NET AirTN
Aeronautics Research Funding in the Partner Countries
June 2009

This report is an output of the ERA-NET AirTN
> a project funded through the ERA-NET scheme of the 6th EU Framework Programme
> AirTN will be continued under FP7

SIXTH FRAMEWORK PROGRAMME

LEGAL NOTICE

This report was compiled as part of ERA-NET AirTN by the leaders of Work Package 3:

Austrian Federal Ministry for Transport,
Innovation and Technology (BMVIT)
Renngasse 5, 1010 Vienna

Contact:
Elisabeth Huchler
www.bmvit.gv.at

Austrian Research Promotion Agency (FFG)
Sensengasse 1, 1090 Vienna

Contact:
Vera Ellegast
www.ffg.at

Checked by:
All AirTN Partners

Coordinator of the ERA-NET AirTN is:

DLR e.V.
Programme Management Agency / Aeronautics Research
for the Federal Ministry of Economics and Technology
Königswinterer Str. 522-524, 53227 Bonn

Contact:
Nicole Ewinger
www.dlr.de/pt-lf

Layout:
Projektfabrik Waldhör KG
Nedergasse 23, 1190 Vienna, www.projektfabrik.at

Vienna, June 2009

Contents

1 Preface

As part of the Lisbon Process on strengthening the European competitiveness in a globalised world, the 6th Research Framework Programme (2002 - 2006) aimed to enhance the research collaboration in highly qualified technology areas of Europe by overcoming the fragmented landscape of European research activities. As a result the European Commission launched the European Research Area Networks (ERA-NET) initiative, which aims to coordinate the cooperation of national and regional research activities of EU Member States. The ERA-NET initiative encourages ministries and national agencies, that fund and manage research programmes, to exchange best practise and information to improve the coordination of research and have the shared aim of implementing trans-national calls.

AirTN was set up as a Special Support Action for ERA-NETS within the Sixth Framework Programme and has been built upon the knowledge and experience of the *Group for Aeronautical Research and Technology in Europe (GARTEUR)*, which was founded in 1973 by a government agreement and involves France, Germany, Italy, the Netherlands, Spain, Sweden and the United Kingdom. AirTN was launched in January 2006 to address research and technology developments (RTD) in Aeronautics and Air Traffic Management. The network integrates ministries and agencies from additional eleven countries: Austria, Belgium, the Czech Republic, Greece, Hungary, Ireland, Poland, Portugal, Romania, Slovakia and Switzerland as well as EUROCONTROL. As the aeronautics sector operates in a global competitive environment, the coordination and cooperation between the Member States needs to be strengthened. With its 27 partners having a wide range of activities and experience in research funding schemes, AirTN represents one of the largest ERA-NETS within the Sixth Framework Programme. It has made good progress towards tackling the big challenge of launching joint call activities in future.

AirTN conducted a survey covering the period 2006 – 2008 on the status of RTD programmes of the participating countries. The results were used to implement the first initiatives for bilateral pilot projects in 2007 and 2008. This guide offers a comprehensive summary of the survey and will hopefully contribute to identifying further collaborative opportunities that will lead to transnational calls. The European Commission supports AirTN as a very promising measure to further widen the European Research Area in aeronautics and air traffic management to pool its research capabilities and deepen cooperation among European countries.

András Siegler
Director Transport Research
European Commission, DG Research

2 Introduction

This guide provides a clear overview of the organisation of the key aeronautics research funding mechanisms in the AirTN member states and includes a brief explanation of how these mechanisms operate in consistent format. It has been produced for industry, government officials, universities and research establishments to deepen the co-operation for research projects across national borders. National contacts are listed in chapter 10, if you want futher information or wish to discuss potential projects.

The information collected in this guide is based on the survey results conducted by the Austrian partners, BMVIT and FFG.

The guide is another step towards closer co-ordination of national authorities to work towards common goals. Therefore the authors wish to thank all AirTN partners for their constructive contributions.

AirTN Board

3 The ERA-NET AirTN

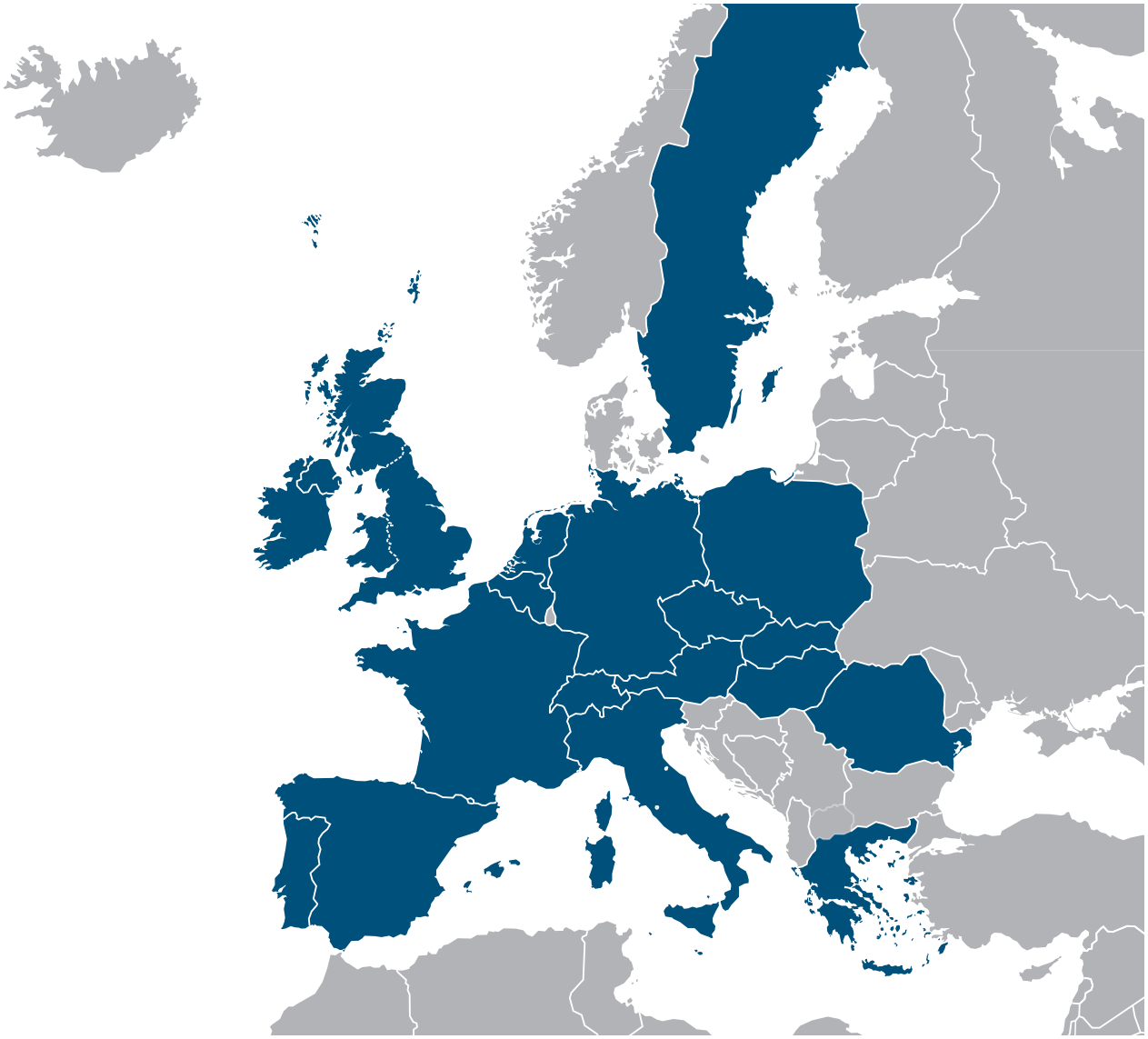
3.1 The Partners

The ERA-NET AirTN project started in January 2006. The objective of the ERA-NET scheme is to step up the cooperation and coordination of research activities carried out at a national or regional level in the AirTN Member States and Associated States through

1. the networking of research activities conducted at national or regional level and
2. the mutual opening of national and regional research programmes.

The ERA-NET scheme will contribute to realising the European Research Area by improving the coherence and coordination of national research programmes in Europe. The scheme also enables national systems to take on tasks collectively that would not have been tackled independently.

The ERA-NET Project Air Transport Net (AirTN) (www.airtn.eu) covers Aeronautical Research and Air Traffic Management issues and thus the whole Air Transport System. All partners have a common strategic interest in these fields. They are public bodies, i.e. ministries and programme agencies, who manage nationally funded aeronautical research programmes.



18 AirTN member states plus EUROCONTROL

The AirTN consortium consists of 27 partners from 18 countries plus the associated partner EUROCONTROL. The consortium includes ministries and agencies that manage civil aeronautics programmes or technology innovation programmes.

Countries in this guide are:

Austria
Belgium
Czech Republic
France
Germany
Greece
Hungary
Ireland
Italy
Poland
Portugal
Romania
Slovakia
Spain
Sweden
Switzerland
The Netherlands
The United Kingdom

Coordinator: Germany, DLR

The respective partners of the AirTN member states are listed in the following table:

Country	Public body	Agency	Research Facility
Austria	BMVIT – Austrian Federal Ministry for Transport, Innovation and Technology	FFG – Austrian Research Promotion Agency	
Belgium	BELSPO – Belgian Federal Science Policy Office Aeronautics		
Czech Republic	MSMT – Ministry of Education, Youth and Sports		VZLU – Aeronautical Research and Test Institute
France	MEEDDAT/DGAC/DTA – Ministry for Ecology, Energy, Sustainable Development and Land Use		ONERA – The French Aerospace Lab
Germany	BMWI – Federal Ministry of Economics and Technology	DLR/PT-LF Programme Management Office Aeronautics Research & Technology	
Greece	GSR – Ministry of Development/ General Secretariat for Research and Technology		
Hungary	NORT – National Office for Research and Technology		
Ireland		EI – Enterprise Ireland	
Italy	MIUR – Ministry of Education, University and Research		CIRA – The Italian Aerospace Research Centre
Poland			NCBiR – National Centre for Research and Development
Portugal		FCT – Foundation for Science and Technology	
Romania		ROSA – Romanian Space Agency	
Slovakia	MDPaT – Ministry of Transport and Communications of Slovak Republic	UNI ZILINA – University of Zilina	
Spain		CDTI – Centre for the Development of Industrial Technology	
Sweden		VINNOVA – Swedish Agency for Innovation Systems	
Switzerland	SER – Secretariat for Education and Research	CTI – Innovation Promotion Agency	
The Netherlands	EZ – Ministry of Economic Affairs	NIVR – Netherlands Agency for Aerospace Programmes*	NLR – National Aerospace Laboratory
UK	BERR – Department for Business, Enterprise & Regulatory Reform	TSB – Technology Strategy Board	

*NIVR will be integrated in the Netherlands agency for R&T called SenterNovem in the 2nd half of 2009

3.2 The Objectives

The AirTN overall objectives are:

1. to step up the cooperation and coordination of research activities in aeronautics carried out at a national level through the networking of research activities at EU level;
2. to provide an effective platform to support the ACARE initiative and the development and implementation of the Strategic Research Agenda;
3. to support EU and EUROCONTROL activities for implementation of a Single European Sky for a seamless Air Traffic Management all over Europe;
4. to initiate joint actions.

3.3 The Added Value

The added value of AirTN is on the one hand, ensuring that the European stakeholders work together by exchanging information, sharing best practice and facilitating the networking of different industries/research establishment/universities by means of transnational cooperative projects/activities and the communication with other institutions/organisations/public bodies (EC, ACARE, GARTEUR, etc.).

On the other hand AirTN is a unique opportunity for the new and smaller member states to contribute to the European aeronautics agenda. It has provided an invaluable platform for them to raise awareness and set out their requirements. Through AirTN, these smaller partner countries have gained access to information about national programmes of the larger partner countries, providing valuable leads for cooperation. The joint activities of AirTN can help industries of the smaller European countries to qualify as valuable partners in the main supply chains. AirTN can also facilitate the technology transfer from research for large aircraft into research for smaller aircraft.

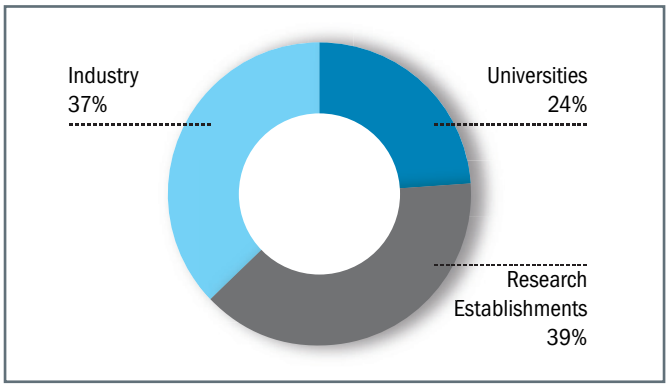
4 Key Figures on Aeronautics Research in AirTN Partner Countries

Statistics about funding modalities and principles within the AirTN partner countries are given in the following graphs. The country specifics are outlined in chapter 6 “Detailed Information on Aeronautics Research Funding in the AirTN Partner Countries”.

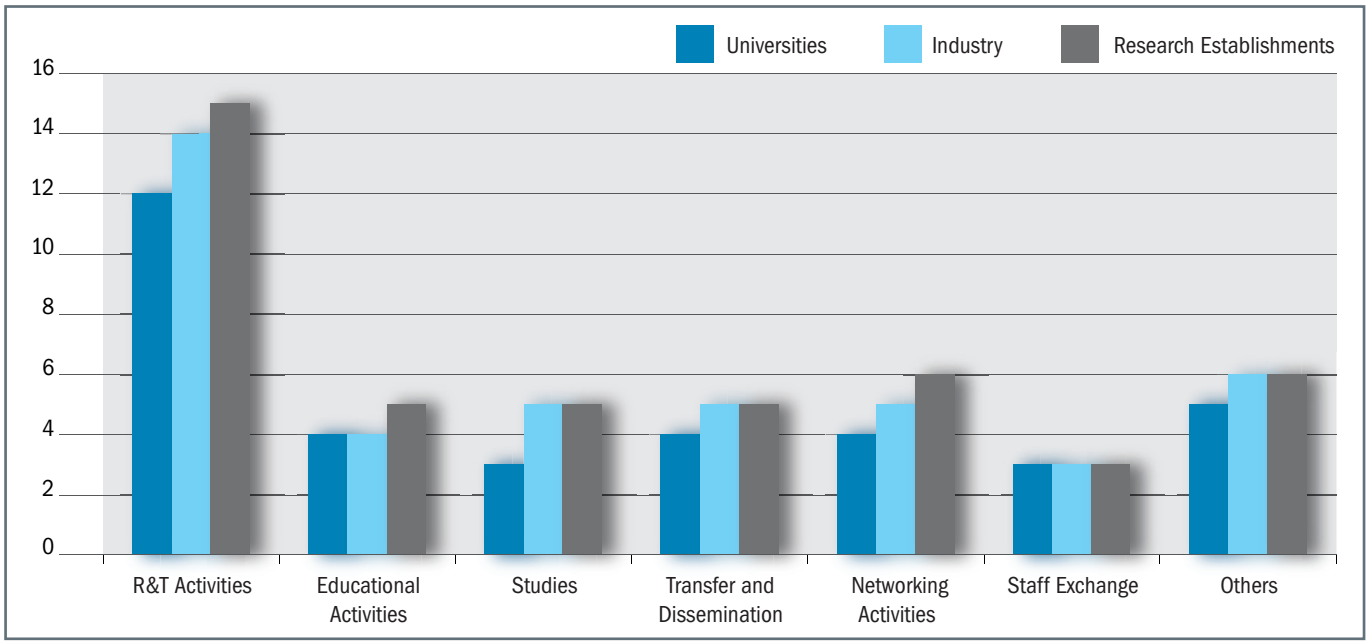
4.1 Funded Target Groups

Organisations being funded within the AirTN partner countries are not primarily industry. Research establishments are the biggest target group, followed closely by the industry. But also universities are being addressed in a substantial number of AirTN member states.

Mapping the number of AirTN partner countries funding specific project types for respective target groups (see Graph 2) makes it clear, that funding R&T activities composes – as anticipated – the biggest part of project types. But nevertheless other project types, such as networking, transfer and dissemination activities, etc., are also being funded in some of the partner countries.



Graph 1: Funded target groups within R&T programmes in AirTN partner countries

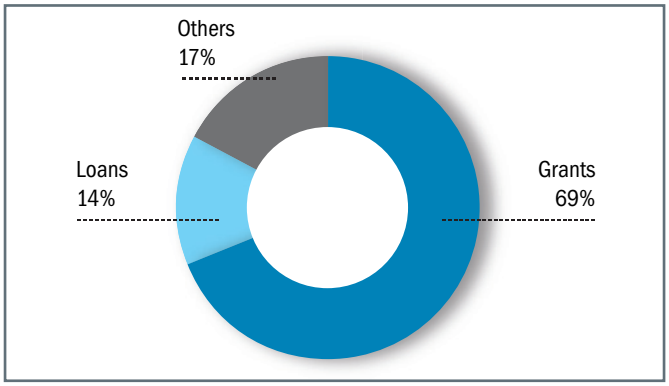


Graph 2: Number of AirTN partners funding specific project types for the respective target group

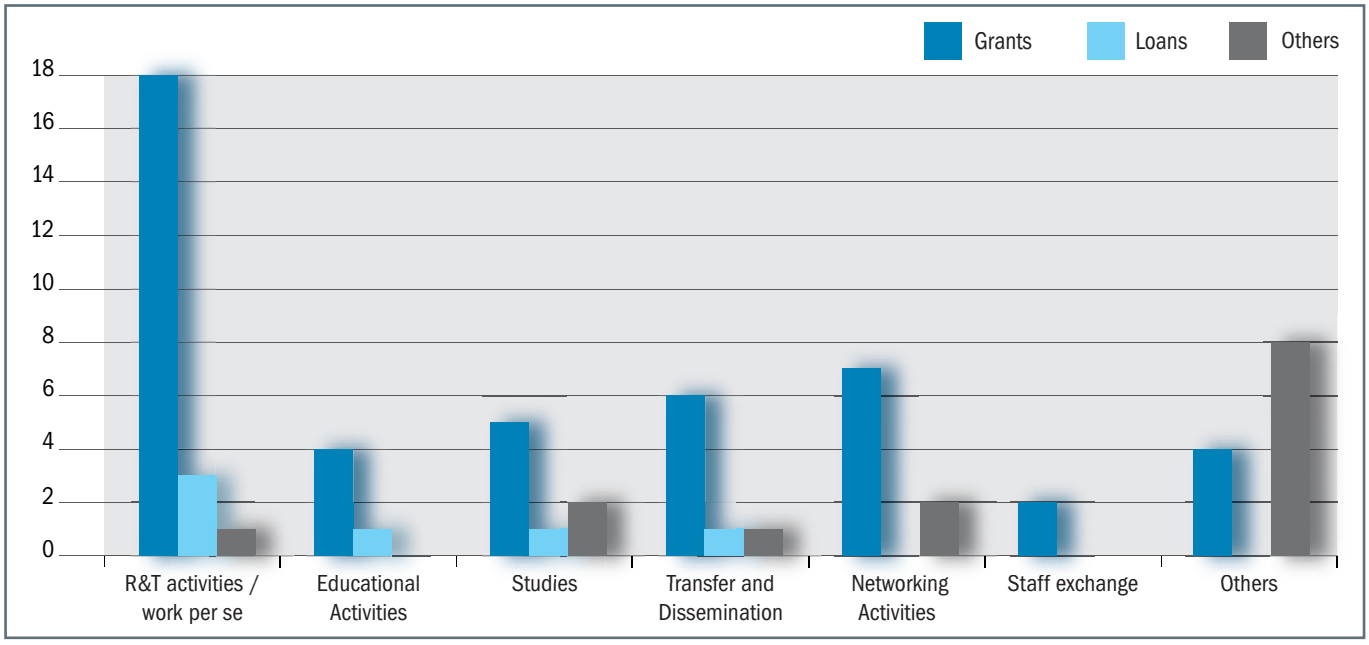
4.2 Type of Supporting Measures

Grants are the most common form of support, although some countries also provide loans or loans as supplementary funds. Other support mechanisms include fiscal incentives, venture capital funds, repayable launch investment, etc.

The diagram below illustrates, that all of the AirTN partner countries offer grants for eligible R&T activities, although as already mentioned a substantial number of countries offer support for studies, networking activities, transfer and dissemination activities. There are also stimulation projects, management or VAT (value added tax) exemption, the international participation of a foreign partner, etc., which have been categorised under "others" in the diagram.



Graph 3: Type of supporting measures

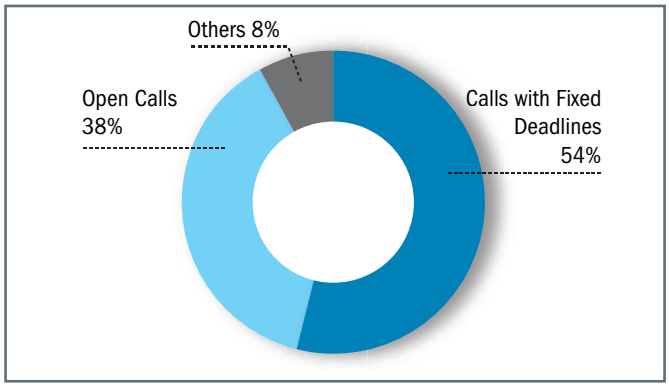


Graph 4: Number of AirTN partners funding specific project types with respective supporting measures

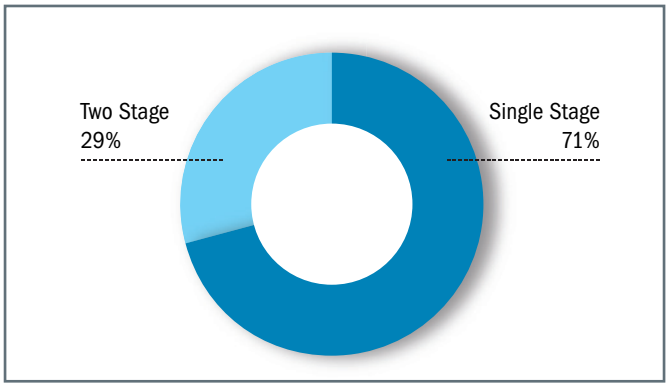
4.3 Types of Calls

The majority of programmes have public calls with fixed deadlines; however some countries use the open call system. Other systems include invitation to tender, individual requests, etc..

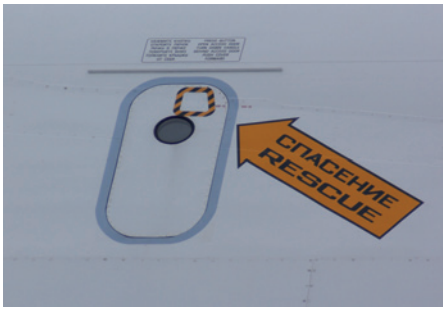
The selection procedure for proposals is predominantly organised in a single stage process based on a full proposal. In some programmes applicants are offered the option to present/discuss their proposal. A few programmes have a two stage selection procedure, i.e. the applicant first submits the project idea in form of a short/draft proposal, then – if the proposal is positively evaluated – a full proposal has to be submitted.



Graph 5: Types of calls used



Graph 6: Steps of selection procedure




F-WWEA

5 Overview on Aeronautics Research Funding in AirTN Partner Countries

All AirTN partner countries fund aeronautics research projects, but the characteristics of the funding mechanisms do vary. Some are targeted on a sectoral basis and have a thematic focus. These programmes are defined as vertical programmes. Others encourage research across sectoral boundaries, these are called horizontal programmes.
Although some funding mechanisms are well established, the position is never static as some are currently under development and others are being redefined. Programmes can be bottom-up, which means they are industry driven or top-down, meaning governmental driven, for example challenge led.

The funding schemes within the AirTN partner countries can generally be divided into three categories.

Type A are ministries/agencies having a coordinated programme specifically dedicated to aeronautics.

	Type A **Specific Aeronautics Programmes**
Country: Ministry/Agency	**Programme**
Austria: BMVIT/FFG	TAKE OFF
France: MEEDDAT/DGAC	Programme 190
Germany: BMWi/DLR	LuFo
Spain: CDTI	PNA - Aeronautic National Plan
Sweden: VINNOVA	NFFP, NFFP-SME, FLUD
The Netherlands: NIVR	Strategic Research Programme Aeronautical Cluster (SRP)

Type B are ministries/agencies not having a specific programme dedicated to aeronautics, but having programmes that include aeronautic related themes.

	Type B Programmes including Topic Aeronautics
Country: Ministry/Agency	**Programme**
Greece: GSRT	Included in horizontal activities (previous situation); National programme for transport will include aeronautics as a topic. (Under preparation – Might evolve into a Type A activity)
Italy: MIUR	Large Strategic Programmes within the National Research Programme 2005-2007
Ireland: Enterprise Ireland	Commercialisation Fund
Poland: Ministry of Science and Higher Education/NCBiR	National Programme for Scientific Research and Development Activities
Portugal: FCT	General R&T Programme for Engineering
Romania: ROSA	PNCDI-2
UK: TSB	Collaborative Research and Development

Type C are ministries/agencies not having a specific funding research programme, but have aeronautic related projects funded by various means.

	Type C Programme like Activities
Country: Ministry/Agency	**Comment**
Belgium: BELSPO	The regions have handed over the responsibility to the federal government in respect of the Belgian involvement in large aeronautic related projects
Czech Republic: VZLU	The Aeronautical Research and Test Institute (VZLU) does not have a specific aeronautics programme, but has a lot of aeronautics projects/programme-like-activities
Slovakia: APVV	Agency with yearly call announcements
Switzerland: CTI	There is no coordinated programme in aeronautics in Switzerland, but aeronautics projects can be funded on a case by case basis

The information above provides details of the programme most relevant to transnational cooperation. Most of the countries have several other funding programmes; some of which are led by the same organisations. The funding mechanisms above are briefly explained in chapter 6 “Detailed Information on Aeronautics Research Funding in the AirTN Partner Countries”. But this guide is not a complete inventory of all the funding mechanisms relevant to aeronautics.

6 Detailed Information on Aeronautics Research Funding in AirTN Partner Countries

6.1 AirTN Partner Countries with Specific Aeronautics Programmes

The AirTN partner countries listed in this chapter have a specific Aeronautics Programme. These are Austria, France, Germany, Spain, Sweden and the Netherlands.

Only the programmes dedicated to aeronautics – according to transnational cooperation – of each AirTN country are explained in detail, some national vertical programmes open to aeronautics research are therefore not covered in this guide.

For example, in Italy the Aerospace Research Programme (PRORA) was defined following the National Research Plan (PNR) and National Space Plan (NSP). It ensured that the industrial and research needs were consistent, whilst taking into account long term global perspectives in the fields of aviation and space. CIRA is committed to the management and development of PRORA.

In Greece, the National Research Programmes are currently being prepared. It is likely that the Transport programme will include Aeronautics as a specific priority.

6.1.1 Austria

Programme Name
Austrian Aeronautics Research and Technology Programme

Acronym
TAKE OFF

Programme Owner
Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT)

Programme Manager
Austrian Research Promotion Agency (FFG)

Programme Duration	Programme Budget	Type of Calls
2002 – 2012	2002 – 2008: 36 M €, 2009 – 2012: expected to be another 30 M €	Calls with fixed deadlines

Brief Description of the Programme

TAKE OFF is a top-down funding programme for civil aeronautics research and technology. TAKE OFF supports the development of strategic national, European and international partnerships for opening up new markets. By implementing the first national RTI-Aeronautics-Strategy (Research, Technology and Innovation) in the year 2007, the TAKE OFF objectives were being adjusted and already incorporated into the subsequent calls.

Programme Objectives

- Support of the international competitiveness of the Austrian aeronautics industry and research institutions
- Promotion of an efficient, environment-friendly, safe, comfortable and user-friendly aeronautics transportation system
- Education of qualified personnel and promotion of ambitious research projects
- Improvement of visibility on a European and international scale and intensified networking of the Austrian RTD community

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Industry • Universities • Research establishments • Natural persons	• Completeness • Project duration • In line with the goals of the programme • Financial security • Relevant signatures available	• Eligibility • Technical/scientific quality • Quality of planning • Relevance with regard to programme goals • Participants' capabilities/resources • Economic potential and exploitation

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other: Stimulation Activities
■	■	■	■	■	■	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• formulation of strategy (BMVIT) • definition of objectives (BMVIT) • dedication of money (BMVIT) • design of programme (BMVIT)	• design of programme (FFG)	
Announcement	• approve proposer forms and information (BMVIT) • design of events (BMVIT)	• design proposer forms and information (FFG) • organization of events (FFG) • contact and hotline for information requirements (FFG) • newspapers, mailings (FFG)	
Advisory Service/ Helpdesk Single stage application procedure		• consultation for proposers (FFG) • optional preproposal check via FFG • full proposal submission to FFG	
Proposal Selection Procedure ~2 months	• approval of list of jury-experts (BMVIT) • observation of jury-meeting (BMVIT) • final decision on project funding (BMVIT)	• invitation of jury-experts (FFG) • jury record and documentation (FFG)	• assessment individually at distance • on site jurymeeting • common funding recommendation
Contract 2 months (dependent on submission of consortium)	• definition of timelines (BMVIT)	• contract negotations (FFG) • announcement and explanation of jury results (FFG) • consignment of contract offer, including additional requirements of jury (FFG) • signing of contracts (FFG)	
Project Monitoring 2,5 years project duration	• approval of modifications (BMVIT)	• financial audit (FFG) • technical verification (FFG) • monitoring (FFG)	
Dissemination	• definition of programme marketing (BMVIT) • design of brochures, events, website (BMVIT)	• organization events, workshops, website • distribution of reports, brochures	

Links

www.bmvit.gv.at/innovation/luftfahrt/takeoff.html
www.ffg.at/content.php?cid=97
www.takeoff.or.at

National Strategy

www.bmvit.gv.at/innovation/downloads/luftfahrtstrategie.pdf

6.1.2 France

Programme Name
Recherche dans le domaine des transports de l'équipement et de l'habitat, Action 02: R&T dans le domaine de l'aéronautique civil (R&T in civil aeronautics)

Acronym
Programme 190

Programme Owner
Ministry in charge of Environment &Transport

Programme Manager
MEEDDAT/DGAC

Programme Duration	Programme Budget	Type of Calls
Yearly cycle which runs from January till December	> 50 M € per year	Open calls, yearly application process

Brief Description of the Programme

The DGAC (General Directorate of Civil Aviation) is part of the Ministry of Environment, Energy Sustainable Development and Land Use (MEEDDAT), which also is in charge of transportation. DGAC participates to a national strategic council, which includes all air transport stakeholders, and defines and implements the R&T strategy and -roadmaps in the domains of civil aeronautics, air transport environmental research. It grants funding in the domains of R&T.

Programme Objectives

- To develop and reinforce the French Aeronautics Sector's global competitiveness and prepare the answers to the challenge of the future and to support the ACARE goals
- To develop and maintain the industrial base of high added value activities and the associated highly-skilled employment
- To promote the French Aeronautics "Know-How" and develop fruitful international cooperation in line with the above objectives

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Industry (incl. SMEs) • ONERA • Other research organisations, labs and universities	• Civil aeronautics R&T projects	• Eligibility • Scientific quality • Socio-economic aspects • Management • Initiative • Structuring and federating leverage effects

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	□	□	□	□	□

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• definition of programme objectives (DTA together with the sector's stakeholders) • design of programme (DTA within DGAC, others to negotiate and supervise each contract) • dedication of money (MEEDDAT) – Ministry for Ecology, Energy, Sustainable Development and Land Use		• CORAC council – strategy • other ministries involved in the strategy
Announcement	• constant strategic dialogue		
Advisory Service/ Helpdesk	• pre-proposal check (DTA) • comments on early drafts (DTA) • check of full proposal (DTA)		• check of proposal by external services
Proposal Selection Procedure ~4 months	• final choice (DTA)		• selection of full proposal • scientific assessment • recommendations and final assessment • evaluation on site and at distance • technical and final evaluations (by external bodies)
Contract ~4 months			• contract negotiations (Ministry of Defence) • signing of contracts (Ministry of Defence)
Project Monitoring ~2,5 to 3 years project duration	• monitoring (DTA)		• technical verification (independent experts)
Dissemination	• dissemination of research results: depending on the kind of project (fundamental R&T, etc)		

Links

www.dgac.fr

National Strategy

published but not for the general public

6.1.3 Germany

Programme Name
Luftfahrtforschungsprogramm IV

Acronym
LuFo IV

Programme Owner
Federal Ministry of Economics and Technology (BMWi)

Programme Manager
German Aerospace Center (DLR PT-LF)

Programme Duration	Programme Budget	Type of Calls
2007 – 2013	2007 – 2013: 600 M €	Calls with fixed deadlines

Brief Description of the Programme

The Federal Research Programme LuFo (Luftfahrtforschungsprogramm) is a civil programme for aeronautical research and technology.

Programme Objectives

- A more efficient air transport system
- A more efficient environment friendly air traffic system
- More passenger safety and passenger comfort
- More efficiency in aircraft design/development and production
- More efficiency in maintenance and repair

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Industry • Academia • Research institutes	• Industry, academia and research establishments located in Germany	• Eligibility • Scientific quality • Socio-economic aspect • Management • Relevance for Germany • Reliability of a company

Activities covered within the Programme

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

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• definition of objectives (dialogue between BMWi, industry, research establishment and academia) • design of procedures and final decision on work programme • dedication of money (BMWi)	• definition of objectives (dialogue between BMWi, industry, research establishment and academia) • design of procedures and final decision on work programme	• definition of objectives (dialogue between BMWi, industry, research establishment and academia) • design of procedures and final decision on work programme
Announcement	• internet, regular governmental newsletter (Bundesanzeiger)	• internet, regular governmental newsletter (Bundesanzeiger)	• internet, regular governmental newsletter (Bundesanzeiger)
Advisory Service/ Helpdesk tow stage application process	• proposal check on eligibility criteria	• proposal check on eligibility criteria	• proposal check on eligibility criteria
Proposal Selection Procedure possibility to present/discuss the proposal	• evaluation of eligible projects selection by independent evaluator vote	• evaluation of eligible projects selection by independent evaluator vote	• evaluation of eligible projects selection by independent evaluator vote
Contract 2 months	• contract negotiations, sign of contract	• contract negotiations, sign of contract	• contract negotiations, sign of contract
Project Monitoring 3 years project duration	• regular project monitoring over the whole duration	• regular project monitoring over the whole duration	• regular project monitoring over the whole duration
Dissemination			

Links

www.dlr.de/pt-lf

National Strategy

www.bmwi.de/BMWi/Navigation/Wirtschaft/branchenfokus,did=196214.html

6.1.4 Spain

Programme Name
Plan Estratégico para el Sector Aeronáutico Español
Strategic Plan for the Spanish Aeronautical Sector

Acronym
PNA

Programme Owner
Ministry of Science and Innovation (MSI) and
Ministry of Industry Tourism and Trade (MITD)

Programme Manager
CDTI

Programme Duration	Programme Budget	Type of Calls
2008 – 2016	2008: 52 M €	Open calls Calls with fixed deadlines regarding applied research projects in aeronautics, those calls are approved yearly under budget provision

Brief Description of the Programme

The Strategic Plan for the Spanish Aeronautical Sector implements several policies in R&T in order to support financial instruments aimed at increasing the Spanish aeronautics turnover by 2016. The Plan includes a set of actions and strategies, a new set of R&T instruments and a map of technological areas of interest to receive preferential support. The Ministry of Industry Tourism and Trade is in charge of promoting and developing new opportunities within the aeronautics sector. The Ministry of Science and Innovation is in charge of developing and implementing the Government policies in academia, scientific research, technological development and innovation in all sectors including public research centres.

Programme Objectives

- Support integration capabilities in both, aircraft and systems, adding high-value industrial niches
- Strengthen the auxiliary and sub-systems industrial base
- Strengthen the Spanish traditional technological capabilities and diversify towards new promising areas
- Encourage the different Spanish regions to participate in aeronautics R&T funding

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Aeronautics industry in Spain • Auxiliary industry • Services companies	• Quality of project • Financial analyse • Weight of the company within the aeronautics industry • The leading technology • etc.	• Eligibility • Scientific quality • Socio-economic aspects • Management • Cooperation with small and medium enterprises and public centres of research

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	■	■	■	□	□

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• dedication of money (MSI and MITD)	• programme design (CDTI) • definition of the objectives (CDTI)	
Announcement		• internet, personal distribution of information/calls, mailing, industrial workshops	
Advisory Service/ Helpdesk single stage application process		• pre-proposal check (CDTI) • comments on early drafts (CDTI) • check of full proposal (CDTI)	
Proposal Selection Procedure ~6 months; possibility to present/discuss the proposal		• election of short proposal (CDTI) • selection of full proposal (CDTI) • scientific assessments (CDTI) • evaluation (CDTI) • final choice (CDTI)	
Contract at max. 6 months		• contract negotiations (financial department of the CDTI) • signing of contracts (CDTI)	
Project Monitoring 2 years project duration, duration of an average contract is 8 years (time of the contract until return of the money)		• on-going supervision of financial and technical milestones (CDTI) • financial audit (CDTI) • technical verification (separate monitoring department within CDTI)	
Dissemination		• CDTI organises events, workshops, information days	

Information Source

www.cdti.es

National Strategy

www.cdti.es/index.asp?MP=35&MS=0&MN=1&TR=A&IDR=120&iddocumento=174&xtmc=&xtcr=3

6.1.5 Sweden

Programme Name
A) Swedish National Aeronautic Programme
B) Swedish National Aeronautic Programme for SME
C) Aeronautical Development and Demonstration Programme

Acronym
A) NFFP
B) NFFP–SMF
C) FLUD

Programme Owner
A) Ministry of Defence (M.D) and Ministry of Enterprise, Energy and Communications (M.EEC)
B) and C) Ministry of Enterprise, Energy and Communications (M.EEC)

Programme Manager
VINNOVA

Programme Duration	Programme Budget	Type of Calls
A) 2005 – 2008, 2009 – 2012	A) 2009 – 2012: ~40.0 M €	Open calls
B) 2007 – 2010	B) 2007 – 2010: ~ 3.3 M €	Calls with fixed deadlines
C) 2007 – 2010	C) 2007 – 2010: ~ 23.6 M €	

Brief Description of the Programme

The Swedish National Aeronautic Programme is a recurrent four year programme initiated by the Swedish government in 1994, the fifth round is starting 2009 (NFFP 5). The programme is a cooperation between the Swedish aeronautic industry and the Swedish government and is regulated by a contract between these partners. NFFP is a civil and military programme focusing on dual use. NFFP 5 will have an increased focus on environment and will also include a small part focusing on SME.
The Swedish National Aeronautic Programme for SME and Aeronautical Development and Demonstration Programme are two civil programmes initiated by the Swedish government as part of an extraordinary drive to strengthen research in a number of nationally important industry sectors.

Programme Objectives

A) The purpose of NFFP is to strengthen the Swedish aeronautics industry's competitiveness to strengthen and coordinate the Swedish research resources at industry, institutes and universities. Another objective is to facilitate Swedish participation in international research programmes
B) Strengthen SMEs' (within the aeronautics area) knowledge and growth by supporting research and advanced development
C) Strengthen the international competitiveness of major Swedish aeronautic industry by supporting advanced development and demonstration activities within international demonstrator projects

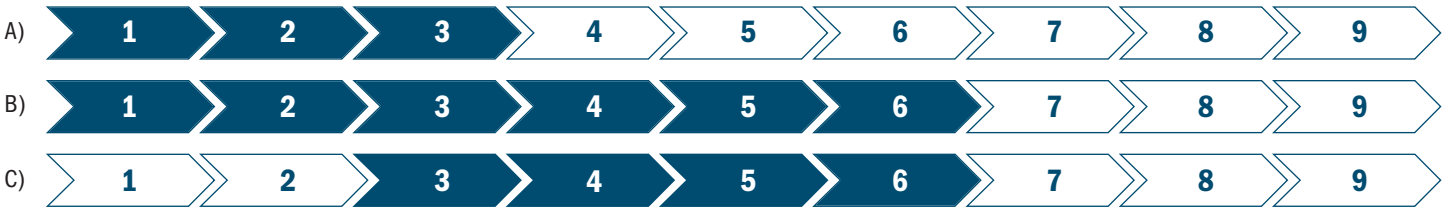
Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• A) Cooperation between industry and research establishments (90% of governmental funding is going to Universities and Institutes) • B) SMEs and cooperation between SME and research establishments • C) Major Swedish industry in aeronautics that should include subcontractors/SME and research establishments	• Fulfil the goals of the programme • Quality, i.e. how advanced, new value, contribution, etc. • Feasibility, i.e. participants' capacity to accomplish the project • Exploitation, how the result will be disseminated and how the project is in line with company's strategy	• Eligibility • Scientific quality • Socio-economic aspects • Management

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	□	□	□	□	□

Technology Readiness Level covered within the Programme



Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• definition of the objectives (M.EEC and M.D together with aeronautics industry) • B) and C) programme design (respective ministry) • dedication of money (A) M.D an M.EEC 20 M € (all through VINNOVA) plus same amount from industry B) an C) M.EEC – through VINNOVA Rest is coming from industry, i.e., 50 %	• objectives refined (VINNOVA) • A) B) and C) programme design (VINNOVA together with industry)	
Announcement		• A) and B) internet, personal distribution of information/calls C) mailing	
Advisory Service/ Helpdesk single stage application process		• pre-proposal check (VINNOVA) • check of full proposal (VINNOVA)	
Proposal Evaluation/ Selection Procedure A) approx. 3 months; B) 6 weeks; C) approx 3 months, possibility to present/ discuss the proposal	• A) selection of jury members (respective Ministry)	• selection of full proposal (VINNOVA) • B) and C) selection of jury members (VINNOVA) • final choice ((A) The executive board of NFFP. B) VINNOVA, C) VINNOVA and Swedish National Space Board)	• selection of full proposal
Contract 3 months		• contract negotations (VINNOVA) • signing of contracts (VINNOVA)	
Project Monitoring 3-4 years project duration		• financial audit (VINNOVA) • A) technical verification (executive board of NFFP) • monitoring (A) executive board of NFFP B) and C) VINNOVA)	
Dissemination			

Information Source

www.vinnova.se

National Strategy

not available

6.1.6 The Netherlands

Programme Name
Strategisch Research Programma Luchtvaartcluster
Strategic Research Programme Aeronautical Cluster

Acronym
SRP

Programme Owner
Ministry of Economic Affairs

Programme Manager
NIVR

Programme Duration	Programme Budget	Type of Calls
2006 – 2011	2006 – 2010: 25 M € excluding a required 25% contribution by industry	Open calls Calls with fixed deadlines

Brief Description of the Programme

The Strategic Research Programme is focused on stimulating civil aeronautical (aircraft) knowledge. This incorporates mid-term technology developments in those niches, that are coupled to the thematic areas which are part of the Memorandum of Understanding (MoU) with Airbus or that are otherwise important to the Netherlands (e.g. engine components). The Strategic Research Programme comprises (multi-year) research projects carried out by established research institutes and universities in the Netherlands and which has been focused on acquiring new technological knowledge with the aim of applying this knowledge in the mid-term to civil aircraft development and production. Financing the costs of this research requires a participation of 25% of industrial parties as (potential) users of the results.

Programme Objectives

- To research and develop technologies based on fundamental knowledge in the field of aeronautics
- To prove the feasibility of application of these technologies in the mid term

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Research institutes • Universities • Target to stimulate research cooperation between research groups and industry; cash contribution by industry (about 25%)	• National research establishment or university • Each proposal shall be supported by industrial partner(s)	• Relevance for the SRP programme • Scientific quality • SME participation • Relations with EU research • Spin-off/Spill-over • Performance of co-financing industry

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	□	□	□	□	□

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• definition of objectives (Ministry of Economic Affairs) • programme design – approval of programme arrangements/yearly allocation of total budget (Ministry of Economic Affairs) • dedication of money (Ministry of Economic Affairs)	• definition of objectives (NIVR) • programme design – selection of projects, contracting & monitoring (NIVR) • SRP programme management (NIVR)	
Announcement		• internet, personal distribution of information/calls, mailing	
Advisory Service/ Helpdesk single stage (full porposal), with discussion before		• pre-proposal check (NIVR) • comments on early drafts (NIVR) • check of full proposal (NIVR)	
Proposal Selection Procedure 2 – 3 months		• NIVR proposal for the different technical areas called for • scientific assessments (internal experts of NIVR) • ranking the proposal (internal experts of NIVR) • consensus meeting (NIVR) • (overall) evaluation report for internal use and reporting to the board (NIVR) • final decision (Director of NIVR)	• selection of full proposal • scientific assessments • ranking the proposal • participation in consensus meeting
Contract 3 months from the deadline of the call until receiving the contract		• contract negotations (NIVR) • signing of the contract (NIVR)	
Project Monitoring 24 months average project duration, max 30 months		• financial and technical verification (NIVR experts). • monitoring: NIVR	• financial audit (external auditor report)
Dissemination		• restricted events with Airbus under the MoU NL-Airbus	

Information Source

www.nivr.nl
www.senternovem.nl

National Strategy

www.nivr.nl/srp-746.html

6.2 AirTN Partner Countries with Programmes that include themes relevant to Aeronautics

The AirTN partner countries listed below have horizontal programmes, which include – amongst others – topics relevant to aeronautics. These are Greece, Hungary, Ireland, Italy, Poland, Portugal, Romania and the UK.

Only the most relevant programme – according to transnational cooperation – is explained in detail. So other programmes do exist, for example:

1) Austria supports other funding activities within commercially viable research projects carried out by companies, research institutes, individual researchers and inventors, and supports the networking of industry, research establishments and academia.

2) In the Netherlands there are several generic innovation programmes with opportunities for aeronautical projects. Those programmes include M2i (Materials) and Point One (nano electronics and embedded systems).

3) Sweden also has other programmes for specific research areas, e. g. materials and manufacturing. In these programmes the aeronautic industries are involved, too.

6.2.1 Greece

Programme Name
Not yet specified

Acronym
–

Programme Owner
General Secretariat for Research & Technology (GSRT), Ministry of Development

Programme Manager

Programme Duration	Programme Budget	Type of Calls
2009 – 2013	Not finalised yet (Estimation: 3 M € for the duration of the programme)	Calls with fixed deadlines

Brief Description of the Programme

In January 2007, the National Strategic Reference Frame for Research, Technology and Innovation was announced, which contains the general principles that guide the research programmes for the period (2007 - 2013). The planning of national research activities, although not finalised, has reached the final stages. According to the proposals of the scientific committee, research in the field of aeronautics has been incorporated as a distinct section of TRANSPORT as a thematic priority. So for the first time there is a clear intention for a dedicated programme in aeronautics.

Programme Objectives

The primary objectives of the research activities in the general field of transport are:

- Increase in productivity in terms of goods and services
- Strengthening of competitiveness and increase of employment for the transport sector
- Improvement of transport safety
- Environmental protection – greening of transport,
- Improvement of public mobility

The axis of priority for the Aeronautics theme follows the principal objectives of ACARE:

- Quality & Affordability
- Environmental friendly transport – Greening
- Flight Safety
- Security
- Enhancement of the effectiveness of the air-transport system (ATM, airport management)

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
According to the specific programmes, but generally: • Private companies • SMEs • Research institutions • Universities • Priority will be given to consortia of the above organisations	They vary according to the specific programme but emphasis will be given on: • Technological competence • Research capabilities • Export potential	• Eligibility • Scientific quality • Socio-economic aspects • Management

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Others: Fiscal incentives, venture capital funding
■	□	■	■	■	■	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• design of the programme/programme-like-activities (GSRT) • funding allocation (GSRT) • programme management (GSRT)		• support of design of the programme/ programme-like-activities
Announcement	• newspaper, internet		
Advisory Service/ Helpdesk single stage application procedure	• check of full proposal (GSRT)		
Proposal Selection Procedure on average 3-6 months	• final choice (Ministry of Development, other ministries in the case of co-funded programmes)		• selection of full proposal • scientific assessment • preliminary evaluation (if necessary) • final evaluation
Contract about 1 month, at maximum 2 months	• formal communication between the project coordinator and GSRT • contract negotations (GSRT) • signing of contracts (GSRT)		
Project Monitoring on average 2 years, maximum of 4 years	• technical verification (committee of GSRT) • monitoring (GSRT)		• financial audit (comittee of auditors)
Dissemination	• events, internet sites (GSRT)		

Information Source

www.gsrt.gr

National Strategy

Official Documents not yet published

6.2.2 Hungary

Programme Name
Nemezeti Technológiai Program – National Technology Programme

Acronym
TECH

Programme Owner
NORT (Founded by the Innovation Fund)

Programme Manager
NORT

Programme Duration	Programme Budget	Type of Calls
2008 – 2010	150 M € for the two calls of 2008	Calls with fixed deadlines

Brief Description of the Programme

The National Technology Programme supports mid-term R&T-activities, which have a potential for bringing about scientific and technology break-through in the given field. The programme promotes innovation in several technology areas, which are the sub-programmes or dedicated thematic areas of this call (Biotechnologies, Nano- and Micro-Technologies, Material- and Production-Technologies, Information and Communication Technologies, Agriculture and Food Industry, Safety and Security and Environmental Technologies), whilst taking Hungarian R&T-strategy into consideration. The programme strategy is set for three years. The calls for proposals consist of two parts, a set of general rules on the one hand, which remains effectively unchanged for three years, and the annually changing work programmes containing the specific calls on the other hand.

Programme Objectives

- Enhancing the competitiveness of the economy
- Improving the sustainability of development by promoting application-oriented, strategic research and development in the field of state-of-the-art technologies

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Maximum six partners per consortium • Economic entities located in Hungary • Foreign enterprises having Hungarian subsidiary • Non-profit organisations • Public bodies	• First level: formal eligibility (if obligatory sections are missing, the proposal is not eligible) • Second level: compliance with the call	• Eligibility • Scientific quality • Socio-economic aspects • Management • Budget/financial background

Activities covered within the Programme

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design		• design of the programme (NORT) • funding allocation (NORT, founded by the Innovation Fund)	• support of the design of the programme
Announcement		• internet, newspaper, information day	
Advisory Service/ Helpdesk single stage application procedure		• check of full proposal (NORT)	• check of full proposal
Proposal Selection Procedure possibility to present/discuss the proposal		• selection of full proposal (NORT) • coordination of assesment (NORT) • coordination of expert meetings (NORT) • evaluation record and documentation (NORT) • final decision (NORT)	• selection of full proposal • scientific assesment • expert meeting • evaluation record and documentation
Contract The contract negotiation offer is valid for 60 days		• contract negotiations (NORT) • signing of the contracts (NORT)	
Project Monitoring 2-3 years project duration		• financial and technical report (NORT) • monitoring (NORT)	• project monitoring of bigger projects
Dissemination			

Information Source

www.nkth.gov.hu/palyazatok-eredmenyek/felhivasok

National Strategy

www.nkth.gov.hu

6.2.3 Ireland

Programme Name
Commercialisation Fund
Technology Development (TD) and Proof of Concept (POC)

Acronym
CFTD, POC

Programme Owner
Enterprise Ireland

Programme Manager
Enterprise Ireland

Programme Duration	Programme Budget	Type of Calls
Continuous	2005 – 2008: 99 M € 2009: indicative budget 32 M €	Continuous calls with 3 deadlines per year

Brief Description of the Programme

Enterprise Ireland is the Irish State Development Agency focused on transforming the Irish industry. The programme, in which aeronautics is part of, is called the Commercialisation Fund. This includes Technology Development (CFTD) and Proof of Concept (POC). The programme is funded by the Department of Enterprise Trade and Employment; Office for Science and Technology through Enterprise Ireland.

Programme Objectives

- Accelerate the development of world class Irish industries to achieve strong positions in global markets through the commercialisation of innovative technologies

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Non profit research organisations (universities, institutes of Technology, research and development centres)	• All publicly funded research organisations	• Eligibility • Scientific quality • Socio-economic aspects • Management

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dis-semination Activities	Networking Activities	Staff Exchange	Other: Fiscal Incentives
■	□	□	■	■	□	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design		• design of the programme/programme-like-activities (EI) • funding and administration (EI)	
Announcement		• newspaper, internet, personal distribution of information/calls, road shows, mailing	
Advisory Service/ Helpdesk single stage application procedure		• pre-proposal check (EI) • comments on early drafts (EI) • check of full proposals (EI)	
Proposal Selection Procedure 2 – 3 months depending on what category the project falls under (two programmes: for one 2 months, for the other 3 months)		• in case of POC: evaluations (EI) • in case of POC: final decision (EI)	• in case of TD: evaluations (external evaluators) • in case of TD: final decision (external/ EI evaluators)
Contract 2 weeks		• contract negotiations (EI) • signing of contracts (EI)	
Project Monitoring on average 1 – 3 years project duration		• technical verification (EI) • project monitoring (EI)	• financial audit (external auditor)
Dissemination		• http://www.indtech.ie/ indtechresearch.aspx	

Information Source

www.indtech.ie/indtechresearch.aspx.

National Strategy

www.enterprise-ireland.com/ResearchInnovate/Research+Commercialisation/Commercialisation_Fund.htm

6.2.4 Italy

Programme Name
Grandi Programmi Strategici –
Large Strategic Programmes within the
National Research Programme 2005-2007

Acronym
PNR

Programme Owner
Ministry of Education, University and Research (MIUR)

Programme Manager
MIUR

Programme Duration	Programme Budget	Type of Calls
2005 – 2007 (A possible extension depends on the approval of the next PNR)	In total for 2005 – 2007: 1.100 M €	Calls with fixed deadlines

Brief Description of the Programmes

The Ministry of University and Research (MIUR) has the major role in fulfilling activities according to the Italian National Research System reform beginning by laws laid in the year 1999. The main target setting instrument for RDT investments in Italy is the National Research Plan, which will be renewed every third year. The main targets of the present National Research Plan (PNR) have been reached by eleven strategic programmes. One of these is related to the thematic area “Ships, Aeronautics, Helicopters”. Further to the National Research Plan (PNR) and of the National Space Plan (NSP), the Aerospace Research Programme PRORA was defined, consistently with the needs expressed by the industrial and research arena and taking in account the perspectives in the fields of aviation and space on a world-wide scale. CIRA is committed to the management and development of PRORA.

Programme Objectives

- To improve life science, industry competitiveness and sustainable development

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Partnership of: undertakings – public research bodies - universities – pre-existing formal consortia • Universities can participate together with industrial companies	• To meet the requirements requested for the application	• Eligibility • Scientific quality • Socio-economic aspects • Management • Coherence of the chain of applied R&T and basic research and training activities

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dis-semination Activities	Networking Activities	Staff Exchange	Other
■	■	□	□	■	■	□

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• design of the programme, overall procedure (MIUR). • design of the programme, procedure of the funding allocation and notification (MIUR) • funding allocation (MIUR) • overall supervision (MIUR) • definition of objectives (Ministry Decree Law)		
Announcement	• MIUR website and the Italian Official Journal		
Advisory Service/ Helpdesk two stage submission and evaluation procedure			
Proposal Selection Procedure ~ 3 months for the short proposal evaluation. ≈ 8 months for a provisional notification of funding	• selection of project ideas (ad hoc commission MIUR) • applicants of selected project ideas are invited to present full proposal • appointing evaluators (MIUR) • selection of full proposal (MIUR) • final decision (MIUR assisted by the Technical and Scientific Committee)		• scientific assessment • pre-selection of the full proposals and submission to T&S Committee • final evaluation of each project and submission to T&S Committee • assessment on the financial items (appointed bank)
Contract 2 months	• contract negotiations (MIUR)		• contract negotiation (bank assisted by the external evaluator that endorses the technical research programme of activities) • signing of contracts (bank)
Project Monitoring at max 36 months project duration			• financial evaluation (bank) • technical verification (technical expert) • monitoring (expert and bank)
Dissemination			

Links

www.miur.it
www.cira.it
http://roma.cilea.it/Sirio
http://firb.cineca.it

National Strategy

www.miur.it

6.2.5 Poland

Programme Name
Krajowy Program Badán Naukowych i Prac Rozwojowych –
National Programme for Scientific Research and Development Activities

Acronym

Programme Owner
Ministry of Science and Higher Education

Programme Manager
National Centre for Research and Development

Programme Duration	Programme Budget	Type of Calls
2008 – 2013	Depends on specific strategic programmes	Calls with fixed deadlines

Brief Description of the Programme

The Minister of Science and Higher Education established the National Programme for Scientific Research and Development Activities which defines the strategic research areas. Within this programme strategic scientific research and experimental development programmes in particular areas will be established. They will be financed by the national funds for research.

Programme Objectives

- Outcome of the strategic programmes – new technologies or products shall be implemented and used in economy, health service, administration or other areas crucial for Polish society
- Encouraging collaboration between researchers and business community

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Depends on strategic programme: universities, scientific institutes, SMEs	• Scientific organisations located in Poland	• Depends on scientific area covering strategic programmes • Input for science and industry

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other: programmes or undertakings specified by the Minister
■	□	□	■	■	□	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• management and design of the programme (Ministry of Science and Higher Education) • funding allocation (Ministry of Science and Higher Education)		• consultations with scientists and industry
Announcement at least once a year	• announcement of the call (Ministry of Science and Higher Education)		
Advisory Service/ Helpdesk depending on the call: single stage or two stage	• pre-proposal check (Ministry of Science and Higher Education) • comments on early drafts (Ministry of Science and Higher Education) • check of full proposal (Ministry of Science and Higher Education)		• scientific assessment (Ministry of Science and Higher Education)
Proposal Selection Procedure	• short proposal (Ministry of Science and Higher Education) • full proposal (Ministry of Science and Higher Education) • final choice (Ministry of Science and Higher Education)		• scientific assessment (Ministry of Science and Higher Education)
Contract		• contract negotations (NCBiR) • signing of contracts (NCBiR)	
Project Monitoring 3 years project duration, duration of an average contract 6 months – 3 years		• monitoring and coordination (NCBiR) • financing of projects (NCBiR) • approval of modifications (NCBiR)	• evaluations of modifications (external evaluators) • evaluation of completed projects (external evaluators)
Dissemination	• website, brochure etc (MSHE)	• website, brochure etc (NCBiR)	

Information Source

www.ncbir.gov.pl
www.nauka.gov.pl

National Strategy

www.nauka.gov.pl/mn/_gAllery/45/80/45808/Krajowy_Program_Badan_Naukowych_i_Prac_Rozwojowych.pdf

6.2.6 Portugal

Programme Name
National Programmes for Scientific Research and Development Activities

Acronym

Programme Owner
Ministry of Science, Technology and Higher Education (MCTES)

Programme Manager
Foundation for Science and Technology (FCT)

Programme Duration	Programme Budget	Type of Calls
2009 – 2011	In 2005, the total research funding of FCT was above 256 M €. In the same year, FCT accounted for more than 25 % of the total public S&T budget (around 30 % of the total R&T). 2009 – 2011: 50 M €	• Open calls for industry • Calls with fixed deadlines for universities and research institutions

Brief Description of the Programme

The Foundation for Science and Technology does not have a national programme for civil aeronautics. There are two main programmes, where the Foundation for Science and Technology is involved: The first programme is on fundamental research and is dedicated to universities and research institutions, which are encouraged to include industry. The second programme is a special programme, which is dedicated more to development projects that have to be declared by industry. They are encouraged to include universities as subcontracts and get extra funding if universities are included. The programmes are owned by two ministries and operated by the agency.

Programme Objectives

- Growth, enforcement and consolidation of the Science and Technology National System

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
Depending on the programme: • Universities • Research institutes • Industry	• Type of institution • Dedicated time of the principal investigator • No social security or tax debts • Administration procedures	• Eligibility • Scientific quality • Management • Feasibility of the research plan • Scientific method • Competence of applicant

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	■	□	□	□	□	□

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• dedication of money (ministry)	• design of the programme (FCT)	
Announcement		• newspaper, internet, mailing, newsletter (FCT)	
Advisory Service/ Helpdesk single stage application process		• check of full proposal (FCT)	
Proposal Selection Procedure on average 6 – 8 months	• approval of list of external experts (Ministry)	• evaluation form for the evaluation report (FTC) • documentation (FCT) • evaluation guidelines (FCT) • final choice (FCT board)	• selection of full proposal • scientific assessment • panel of external experts
Contract 4 – 6 months		• contract negotiations (FCT) • signing of contracts (FCT)	
Project Monitoring 3 years project duration		• technical verification (Technical staff and Scientific Advisory Council of FCT) • monitoring (Scientific Advisory Council of FCT)	• financial audit (contracted auditors)
Dissemination		• annual reports	

Information Source

www.fct.mctes.pt

National Strategy

www.fct.mctes.pt

6.2.7 Romania

Programme Name
Planul National de Cercertare – Dezvoltare si Inovare
National Plan for RTD and Innovation – thematic areas SPACE and SECURITY

Acronym
PNCDI-2

Programme Owner
Ministry of Education and Research (MER)

Programme Manager
Ministry of Education and Research –
National Centre for Programme Management (NCPM)

Programme Duration	Programme Budget	Type of Calls
2007 – 2013	2002 – 2006: overall budget of the programmes 31,25 M €	Bottom-up activities: calls with fixed deadlines Top-down activities: open calls

Brief Description of the Programme

The National Plan for Research, Development and Innovation for the period 2007-2013 is the main instrument for the implementation of the National Strategy for Research, Development and Innovation.
Orienting the National Plan in accordance with the general purpose and the strategic objectives of the Research, Development and Innovation (RTI) System the National Research, Development and Innovation Plan for the period 2007-2013, herein referred to as the National Plan II – PNCDI II, is the main instrument, by which the National Authority for Scientific Research (NASR) is implementing the National Strategy for RTI. In order to conceive the NP II, the role of the National Research, Development and Innovation System has taken the following factors into consideration: to develop science and technology to increase the economic competitiveness; improve social quality and enhance the knowledge base; and provide the platform to sustain further expansion.

Programme Objectives

- Contribute to the national and global scientific development by participation in international space missions and development of new projects
- Improve the national and regional security by means of peaceful space applications (2001)
- Contribute to the infrastructure of the information society
- Develop new space technologies, space spin-offs and commercial space applications
- Human resources building to meet the space science and technology development for the 21st century
- Give a model of capacity building and support the national effort to continental and international integration
- Component sub-programmes: Policy and infrastructure, space exploration, space applications, aerospace science and technology, industrial development and spin-off

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• R&T-establishments • They are also encouraged to introduce universities and industries	• Relevance to the objectives • Scientific merit • Socio-economic impact • Financial • Dissemination	• Eligibility • Scientific quality • Socio-economic aspects • Management

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dis-semination Activities	Networking Activities	Staff Exchange	Other: Management, VAT exemption
■	■	■	■	■	□	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• launch of the process (MER) • major responsibility in all phases (MER) • dedication of money (MER)	• design of the programme, consultancy on strategy elaboration	• evaluation and monitoring process
Announcement	• newspaper, internet, personnel distribution of information/ calls, mailing (E-mail or paper) (MER – NCPM*)		
Advisory Service/ Helpdesk single stage and two stage application process	• pre-proposal check (MER – NCPM*) • check of full proposals (MER – NCPM*)		• check of full proposals
Proposal Selection Procedure usually more than 90 days, about a 120 days due mainly to the difficulties in the proposal evaluation and ranking process	• selection of full proposal (MER – NCPM*) • approval of selection of experts (MER – NCPM*) • MER – NCPM* is appointing an officer – "monitor" – for each programme – which acts as liaison between contractors and MER – NCPM* • final decision (MER – NCPM*)	• final selection of the experts (programme management committee of ROSA)	• selection of full proposal • scientific assessment
Contract 1 – 2 months	• signing of the contracts (MER – NCPM*)	• contract negotiations (ROSA)	
Project Monitoring 3 years project duration (duration of an average contract: 18 – 24 months)	• financial audit (financial expert of MER-NCPM*) • technical verification (project monitor of MER-NCPM*) • approval with both, the technical and financial report (subprogramme director of MER-NCPM*) • monitoring of specific projects (MER-NCPM*)		
Dissemination	• web page for each financed project • yearly research exhibition (CONRO)		

* NCPM – National Centre for Programme Management

Information Source

www.mct.ro/img/files_up/1188313586PN2%20eng.pdf

National Strategy

www.mct.ro/img/files_up/1188316504strategia%20eng.pdf

6.2.8 UK

Programme Name
Collaborative Research and Development

Acronym
CR&D

Programme Owner
Technology Strategy Board (TSB)

Programme Manager
Technology Strategy Board (TSB)

Programme Duration	Programme Budget	Type of Calls
The duration of the programme is not defined; starting date was in April 2003	The overall budget for the programme is 1.4 B € for 3 years (2008 - 2010) (aerospace related projects secure on average about 60 M € per year)	Calls with fixed deadlines

Brief Description of the Programme

The Technology Strategy Board (TSB) manages the Collaborative Research and Development (CR&D) in support of UK industries and complements this through the delivery of knowledge transfer networks.

Programme Objectives

- Invest and develop technologies for UK business benefit

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Consortium leads must be registered UK businesses	• Registered UK business with recognised research or manufacturing base • Academia	• Technology Readiness Level • UK strength and ability to exploit • Market potential • Added value of public sector investment

Activities covered within the Programme

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other: Knowledge Transfer Networks
■	□	□	□	□	□	■

Technology Readiness Level covered within the Programme

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• budget and shape of competition (DIUS)	• identification of new and emerging technologies critical for the growth of the UK (TSB, in support of the overarching technology strategy) • setting project guidelines and criteria for projects to attract top quality proposals (TSB) • design of the competitions (TSB) • consultation of the Department for Innovation, Universities and Skills on its strategy and the shape of its competitions (TSB)	• prioritisation process by external assessors • design of the competition themes is through external consultation
Announcement		• internet, road shows, mailing	
Advisory Service/ Helpdesk ~ 3 months; two stage application process		• feedback on draft expression of interest, if submitted before competition deadline (TSB) • expression of interest is considered by the Technology Strategy and those successful proceed to next stage • full proposal considered for support (TSB)	• ranking of expression of interest against competition criteria • ranking of full proposal against competition criteria
Proposal Selection Procedure	• DIUS may be consulted on final funding decisions on large projects and size of calls	• technical assessment (TSB) • where support from regional agencies or research councils form part of project, their views are taken into account • final funding decision (TSB)	• technical assessment • assessment (research council and regional evaluators)
Contract 1 – 2 months		• large projects (>£5M public support) require more detailed assessment and panel interviews • contract negotiation (when required) (TSB) • signing of contracts (TSB)	
Project Monitoring 3 years project duration		• technical verification (monitors of TSB) • project monitoring (TSB with the assistance of a contractor)	
Dissemination		• dissemination of research results are dependent on the type of project	

Information Source

www.innovateuk.org

National Strategy

see Aerospace and Defence Knowledge Transfer Network at www.ktnetworks.co.uk/epicentric_portal/site/defaero/?mode=0

6.3 AirTN Partner Countries with Support-Activities relevant to Aeronautics

The AirTN partner countries listed below do not have a programme, but support activities relevant to aeronautics. These are Belgium, Czech Republic, Slovakia and Switzerland.

Only the most relevant support-activity – according to transnational cooperation – is included. Others do exist, for example in Slovakia there are several other agencies funding projects related to aeronautics. These are the Cultural and Educational Grant agency (KEGA), the International Scientific and Scientific Technical Participation (MVTS) and the Scientific Grant Agency (VEGA). KEGA is focused on the support of scientific and technological projects and funds projects concerning educational and creative arts. MVTS supports Framework Programmes (FP6, FP7) and bilateral and multilateral projects. VEGA is an advisory body of the Ministry of Education of the Slovak republic and the SAV (Academy of Sciences). Projects are aimed on solving particular problems through research. They must concern scientific and/or be of a basic research character.

6.3.1 Belgium

Programme Name
Same name as the corresponding Airbus programme to which the programme is intended to contribute

Acronym
e.g "A380", "A350XWB"

Programme Owner
Belgian Science Policy Office (BELSPO)
Federal Public Service Economy, SME, Self-Employed and Energy

Programme Manager
–

Duration	Budget	Type of Calls
The government may launch new sub-programmes at any time it considers an opportunity (e.g. launch of A350 programme by Airbus). If there is an opportunity the programme is/ the programmes are prolonged	• Depending on the subprogramme e.g. "A380" programme: 195 M € • Depending on the estimated scale of the subprogramme and the estimated Belgian participation and requirements of each sub-programme	Open calls

Brief Description of the Activity

The Belgian Science Policy Office does not have a specific programme dedicated to aeronautics; it simply gives each subprogramme a name, e.g. the "A380" programme, the "A350" programme, etc. The regions hand over the responsibility for aeronautics (due to its national economic importance) to the federal government (to which the Belgian Science Policy Office belongs). The funds are given by the Belgian Science Policy Office and the Federal Public Service Economy, SMEs, Self-Employed and Energy.

Objectives

- Support the Belgian aeronautics industry and institutes to develop state of the art aeronautics technology in order to extend their participation in major international programmes (e.g. Airbus A380, Airbus A350, NH90, A400M...)

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Belgian aeronautics industry • Belgian research centres	• Financial viability of the company/ institute • Credibility of the proposed project • Interest of potential customers in the outcome of the project • Credible business plan for the outcome of the project • Compatibility with European, national and regional legislation	• To meet the requirements for the eligible organization • To meet the financial requirements and the scope of the call

Activities covered within the Programme-like Activities

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	■	□	■	□	□

Technology Readiness Level covered within the Programme-like Activities

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• dedication of money (Belgian Science Policy Office and the Federal Public Service Economy, SMEs, Self-Employed and Energy) • definition of objectives (Belgian Science Policy Office and the Federal Public Service Economy, SMEs, Self-Employed and Energy) • approval and adoption of objectives (Belgian Federal Government) • programme design (Ministry and Belgian Regions)		
Announcement	• personal distribution of information/calls; national legislation (which is published) and provision of information to Belgian aeronautics corporations		
Advisory Service/ Helpdesk single stage	• pre-proposal check (ministry) • comments on early drafts (ministry) • check of full proposal (ministry)		
Proposal Selection Procedure possibility to present/discuss the proposal	• full proposal submission to ministry • scientific assessments (ministry) • evaluation on site (ministry) • final decision on project funding (Belgian Federal Government)		
Contract 5 months	• contract negotiations (ministry) • signing of contracts (ministry)		
Project Monitoring	• financial audit (specialized employees of the Federal Public Service Economy, SMEs, Self-Employed and Energy) • technical verification (specialized employees of the Belgian Science Policy Office) • monitoring (The Belgian Science Policy Office and the Federal Public Service Economy, SMEs, Self-Employed and Energy)		
Dissemination			

Information Source

www.belspo.be

National Strategy

www.belspo.be

6.3.2 Czech Republic

Programme Name
–

Acronym
–

Programme Owner
Czech Ministries

Programme Manager
Aeronautic Research and Test Institute (VZLU)

Duration	Budget	Type of Calls
VZLU gained the institutional support for 2004 – 2010	21.65 M €	Open calls and calls with fixed deadlines

Brief Description of the Activity

The Aeronautical Research and Test Institute (further referred to as VZLU) does not have a specific aeronautics programme but has a lot of aeronautics projects or programme-like-activities. The programme-like-activities are organised generally by several ministries and their bodies (Ministry of Industry and Trade (MPO), Ministry of Education, Youth and Sports, Ministry of Transport, Grant Agency, etc.). According to the character of R&T there are three major groups of programme-like-activities: 1) targeted support of R&T, 2) institutional support of R&T and 3) grant support.

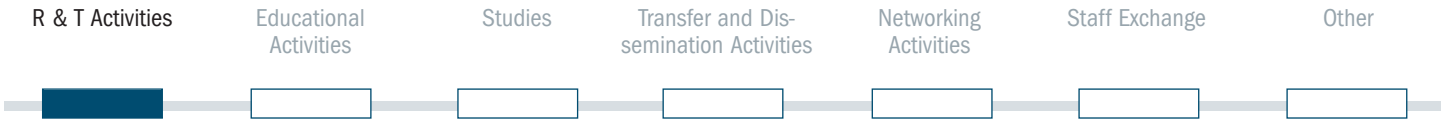
Objectives

- Support research and development activities (further referred to as R&T) of industry, research and educational organisations
- Support cooperation on the national and international level

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Research institutes • Commercial companies • Both, consortia and single participant projects, are supported by the Czech Ministries	• Quality • Fulfilment of the goals of the programme • Feasibility • Exploitation/Dissemination	• Scientific quality • Socio-economic aspects • Gender issue • Cooperation with SME

Activities covered within the Programme-like Activities



Technology Readiness Level covered within the Programme-like Activities

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• design of programm-like-activities	• assigning of grants (Grant Agency (state body) and the Academy of Sciences (state organization)) • design of programm-like-activities	
Announcement	• national distribution of information/calls		
Advisory Service/ Helpdesk single stage application procedure	• pre-proposal check • comments on early drafts • check of full proposal	• check of full proposal	
Proposal Selection Procedure some months	• selection of full proposal • scientific assessments • final decision		• scientific assessments • independent evaluators so called "opponents" sign a NDA
Contract some months	• contract negotations • signing of contracts		
Project Monitoring	• project monitoring		• financial audit (external auditor) • technical verification (opponency comprising review statement of independent experts)
Dissemination	• website MSMT, MTO • grant agency, brochures • events	• web site, workshops • events	

Information Source

www.vzlu.cz

National Strategy

The Czech national strategy is being prepared by the Czech Technological Platform for aeronautics and space

6.3.3 Slovakia

Programme Name	Acronym

Programme Owner
Ministry of Education of the Slovak Republic

Programme Manager
Slovak Research and Development Agency (APVV)

Duration	Budget	Type of Calls
–	2009: total budget 35 M €, of which 7 M € are dedicated for research in SMEs	Calls with fixed deadlines Open calls

Brief Description of the Activity

APVV does not have a specific aeronautics programme, but does have programme-like-activities. The agency supports all projects of research and development, in applied and/or basic research in the areas of science and technology. No restrictions are given in the focus of activity. The agency supports international cooperation and participation in EU programmes in the area of Science and Technology.
APVV has a new call to support Framework Programmes (FP7) and bilateral and multilateral projects, instead of MVTS.
The University of Zilina acts as an agent between the different institutions in Slovakia. The main activities and responsibility of the University are to inform and coordinate activities and link them to EU programmes. In Slovakia projects with international cooperation are funded by MVTS and APVV. National projects, which are not aimed towards international cooperation are funded by the agencies KEGA and VEGA.

Objectives

–

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Any company focused on research and development • Universities • Research institutions • Individuals	• Fulfilling of scheduled goals • Particular results of the research • Proposals for goals for the next year and project changes • Effectiveness of used financial resources	• Eligibility • Scientific quality • Management

Activities covered within the Programme-like Activities

R & T Activities	Educational Activities	Studies	Transfer and Dis-semination Activities	Networking Activities	Staff Exchange	Other: International participation of the foreign partner
■	□	□	□	□	□	■

Technology Readiness Level covered within the Programme-like Activities

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• design of the programme-like activities and policy making (Ministry of Education) • funding allocation (Ministry of Education)	• design of the programme-like activities (APVV)	• design of the programme-like activities
Announcement	• internet, announcements through the official Ministry information channels, section of Science & Technology, annual challenges for submitting the proposals on the agency web side: www.apvv.sk		
Advisory Service/ Helpdesk	• check of full proposal (Minsitry of Education)	• check of full proposal (APVV)	• check of full proposal
Proposal Selection Procedure approx. 4 months, 6 months for cooperation projects	• selection of full proposals (Ministry of Education) • scientific assessment (Ministry of Education) • selection of jury members (Ministry of Education) • committee of experts from Ministry makes the final choice	• selection of full porposals (APVV) • scientific assessment (APVV)	• selection of full proposals • scientific assessment • evaluation at distance
Contract national 3 months, international 5 – 6 months		• contract negotiation (APVV) • signing of contracts (APVV)	
Project Monitoring 3 years (at max. 4) project duration		• technical verification (Committee APVV Agency) • monitoring (Committee APVV Agency)	• financial control (financial department of the university)
Dissemination	www.minedu.sk	• www.apvv.sk	

Information Source

www.apvv.sk

National Strategy

none existing

6.3.4 Switzerland

Programme Name	Acronym
Programme Owner	**Programme Manager** Swiss Aeronautical Industries Group for CTI

Duration	Budget	Type of Calls
–	No coordinated budget	Individual request

Brief Description of the Activity

Switzerland does not have a specific, coordinated aeronautics programme, so there is no coordination of funding or aeronautics supporting measures. However, academia and industry are actively involved in research projects. The government funds participation in the framework programmes and academia is part of joint R&T with industry (KTI/CTI funding) dealt with on a case by case basis.

CTI promotes the creation of R&T consortia meant to offer ambitious solutions to the economic partners with their competencies and resources in clearly defined industrial and trade sectors. Hence more high quality CTI projects shall be generated. This work is renumerated by the CTI with a bonus.

Principal Eligibility Condition

Eligible Organisations	Eligibility Criteria	Evaluation Criteria
• Universities • In some cases individuals	In case of KTI/CTI: • At least one company and one academic institution • As a general rule, the industry partner covers at least 50% of the project costs • CTI funding goes exclusively to academic partners and not to industry • Quantified, measurable goals and a coherent and structured schedule with verifiable milestones • Based on a thorough appraisal of the current state of the relevant technology and on an evaluation of the corresponding data base and patent rights	• Economic, technical and scientific importance • Commercial potential • Contribution to sustainable development • Clear work programme • Transparent budget

Activities covered within the Programme-like Activities

R & T Activities	Educational Activities	Studies	Transfer and Dissemination Activities	Networking Activities	Staff Exchange	Other
■	□	□	□	□	□	□

Technology Readiness Level covered within the Programme-like Activities

Workflow

	Ministry	Agency	External Jury Experts
Strategy/Design	• design of the programme/ programme-like-activities (ministry)	• implementation (KTI/CTI)	
Announcement		• occasional workshops; no deadline for submission (KTI/CTI)	
Advisory Service/ Helpdesk single stage application process		• pre-proposal check (KTI/CTI) • comments on early drafts (KTI/CTI)	
Proposal Selection Procedure		• selection of experts to act as referees/ co-referees (KTI/CTI) • discussion by the relevant team of KTI/CTI and final decision	• assessment of proposal (referees) • written recommendation sent by the referees to the team of the relevant KTI/CTI section
Contract		• standard contract between KTI/CTI and partners	
Project Monitoring		• regular reviews (KTI/CTI experts)	
Dissemination		• IP rights settled inside agreements between parties • Dissemination is not requested	

Information Source

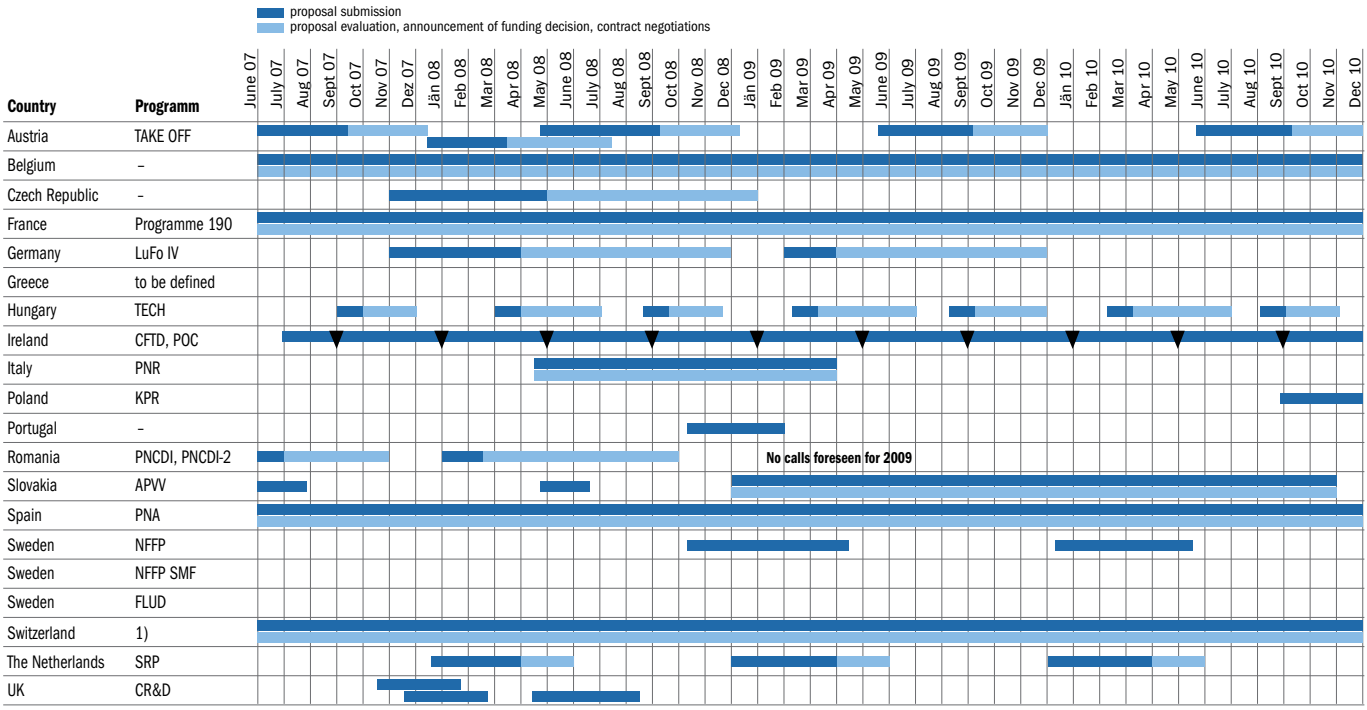
www.bbt.admin.ch/kti/index.html?lang=en

National Strategy

none existing

7 Overview on Calls 2007 – 2010

The following graph gives an overview on calls within the AirTN member states for the period 2007 – 2010. An updated version will be available at http://www.airtn.eu/eCache/AIR/1/488.html .



1) No specifc calls planned but aero projects can be submitted any time

The first tangible results of AirTN to improve cooperation and coordination of the national programmes were achieved in 2008. The German Aerospace Programme LuFo and the Austrian Aerospace Programme TAKE OFF mutually opened their latest calls for proposals to consortia with partners of both countries. A joint information event for interested applicants was held in Vienna in January 2008. Briefings were presented by representatives of the Austrian Ministry for Transport, Innovation and Technology (BMVIT), the German Ministry for Economics and Technology (BMWi) and the European Commission. First transnational projects started on January 2009. Funding will be provided for a period of 3 – 4 years with a combined funding for the selected projects of approx. 20 M €, shared between LuFo and TAKE OFF. This marks an important step towards European cooperation of national programmes.

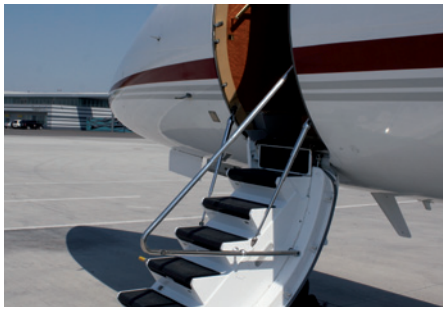
Following this approach, the UK has canvassed ideas for joint projects with the Austrian Aerospace Programme TAKE OFF, who opened their latest calls for proposals to consortia with partners of both countries in June 2008. The calls were being closed in October 2008. To date the industry from both countries have shown much interest, but so far no proposals have been submitted. New windows of opportunities will be given in the future (see graph above).

8 Future of AirTN

AirTN´s role in the second period will be to continue strengthening the foundation of European Research in Aeronautics and Air Transport. This will be achieved through further cooperation and coordination of national and regional research programmes, and the development of policies in support of strategic planning. It will enhance and centralise European aeronautics focus by increasing alignment of national programmes, leading to more innovation and hence greater probability of finding solutions to policy-driven challenges.

The European Technology Platform for aeronautics, ACARE, has produced a Strategic Research Agenda, (SRA), which sets challenges for industry through High Level Target Concepts. This strategy is widely accepted and is reviewed at intervals to make sure it remains applicable in a rapidly changing world. The level of aeronautical Research and Technological Development (RTD) identified by ACARE to meet these challenges requires, that industry works together at a European level. There is a strong interface between ACARE and AirTN, and so this Member State Network promotes the aims of the ACARE SRA, encouraging alignment of national agendas to meet the overall European objectives. National and regional programmes potentially cover areas of central importance and the broader issues of the SRA.

There is therefore a great opportunity within AirTN-FP7 to align national and regional programmes with other partner countries or international programmes, which will move industry towards achieving the targets of the European strategy and policy. It will also provide an increased amount of funding for greater coordination.



9 European Aeronautical Landscape

The aerospace industry is global and highly competitive, so national funding is critical for the industrial base to develop new technologies to position themselves for work shares on future aircraft platforms. Research, Technology and Development cooperation in aeronautics is essential for Europe to grasp the opportunities created by the predicted exponential growth of the air transport system. This can only be achieved through the development of new technologies that enable our companies to manufacture and/or to secure contracts on state-of-the-art aircraft platforms. This holds true for all levels of the industry, supply chain, research establishments and infrastructure.

One central goal of AirTN is therefore to create opportunities for transnational cooperation. In doing so, it is necessary to be aware of the already existing research, technology and development cooperation mechanisms within Europe.

Aircraft manufacturing, system integrators and 1st and 2nd tier suppliers in particular, already demonstrate a high degree of consolidation amongst each other. Common interests of aerospace companies are discussed and promoted in the **Aerospace and Defence Industry Association of Europe** with national member organisations. Together, RTD roadmaps, international programmes of the EC (China/India/Asia), AeroSME, REACH initiatives and support for ACARE are discussed (http://www.asd-europe.org).

Together with the Member States, these stakeholders nominate representatives to the **ACARE** Advisory Council for Aeronautics Research in Europe (ACARE) and have committed themselves to achieve the goals and the contents of the Strategic Research Agenda. The **Strategic Research Agenda** is the holistic vision for RDTI in the Aeronautics and Air Transport in Europe (http://www.acare4europe.org/).

The **EU Framework Programmes** for research, technology and development bundle all research-related EU initiatives together and play a crucial role in reaching the goals of growth, competitiveness and employment. It is the main financial and legal instrument of the European Commission to implement the European Research Area, alongside national efforts and other European co-operative research activities. The Framework Programme supports collaboration in research, promotes mobility and coordination and invests in mobilising research in support of other EU policies. The EU framework programmes are by far the most prominent instruments in supporting transnational aeronautics R&T in Europe (http://ec.europa.eu/research/fp7/index_en.cfm).

A Joint Technology Initiative (JTI) is a Seventh Framework Programme instrument to allow for large scale demonstration and long term public private research partnerships to implement the ambitious priorities of the Strategic Research Agenda (SRA) which are of such scale that they require the mobilisation and management of substantial public and private investment. The aeronautics specific **JTI Clean Sky** is an industry driven 7-year research programme plan for greener European Air Transport systems, while strengthening and securing the European aeronautics industry's competitiveness. Its purpose is to demonstrate and validate the technological breakthroughs necessary to reach the environmental goals set by the Advisory Council for Aeronautics Research in Europe (ACARE: the European Technology Platform for Aeronautics & Air Transport) (http://www.cleansky.eu).

Research activities require substantial public support to lower the risk in this long term investment and to encourage innovation in areas which there is public interest. Therefore public **research programmes** have already been set up to address a range of aeronautical and air transport issues.
The **national aeronautics programmes** are under the responsibility of the respective ministries in the different countries and to a great part managed by the corresponding agencies. The majority follow a top down, although some have a bottom up approach. From a study in the AirTN FP6 – WP3 it was found that at least 10 of all European programmes are directly and solely dedicated to aeronautics. At least 15 have programmes relevant to aeronautics. (http://www.airtn.eu/eCache/AIR/1/490.html).

The European Organisation for the Safety of Air Navigation, **EUROCONTROL**, initiates, develops and coordinates pan-European air traffic management operational and technological improvements aiming to provide a uniform European ATM system for civil and military users. This is done through a collective effort involving civil and military aviation stakeholders, the European institutions, and international aviation bodies (http://www.eurocontrol.int).

EUROCONTROL coordinates and undertakes a substantial part of ATM RTD efforts in Europe, a task which will be conducted from the end of 2008 by the **SESAR Joint Undertaking**. This private-public-partnership represents the legal organisation with EUROCONTROL and the European Commission as founding members plus 15 candidate members (essentially ATM industry and air navigation service providers), which will manage over the next 7 to 8 years the Single European Sky ATM Research Programme, **SESAR** (http://www.sesarju.eu/).

EUREKA is an initiative for near-to-market research and development in Europe and offers a framework for transnational cooperation for companies and research organisations. It offers a "bottom-up" approach. There are no restrictions on the topics for cooperation and is always open for submission. It enables participants of 38 countries and the European Union (as such) to work closely on the development and utilisation of innovative technologies (http://www.eurekanetwork.org).

The **Group for Aeronautical Research and Technology in Europe (GARTEUR)** is an important organisation for research collaboration in Europe in the field of aeronautics. It is based on a Memorandum of Understanding between governments of seven European nations with major research and test capabilities in aeronautics. GARTEUR is a unique forum of aeronautical experts from academia, research establishments and industry. It focuses on collaborative research topics mainly aimed at longer-term R&T that is essential to assure sustained European Aeronautics Industry competitiveness and interacts with other fora, such as EU, EREA, ASD and EDA (European Defence Agency). GARTEUR is also the root for the establishment of the ERANET AirTN (http://www.garteur.eu/).

The **major aeronautical research institutes** have organised themselves in **EREA** (Board of the Association of European Research Establishments in Aeronautics), and are continuously updating research and educational roadmaps. Infrastructure pooling already exists, such as the Dutch Netherlands Wind Tunnel Association, as well as test aircraft and tower simulators (http://www.erea.org/).

Central European Aeronautical Research Initiative (CEARES) is a Seventh Framework Programme project started in April 2008. CEARES has established a network of the aeronautics and air transport research organisations and university departments of the Central - European States. The aim of the project is to share the know-how, the latest research results and to develop strong contacts with the European aeronautics industry and research centres. So far more than thirty organisations and approximately sixty experts have joined the network. (http://www.ceares.eu)

Universities with specialisation in aeronautics have set up different networks, such as **EASN** (European Aeronautics Science Network, http://www.easn.net/) and **PEGASUS** (Partnership of a European Group of Aeronautics and Space Universities, http://www.pegasus-europe.org/) being the most prominent.

On an individual basis, aeronautics RTD stakeholders (among others) are members of **national aerospace societies**, (e.g. www.aaafasso.fr, www.dglr.de, www.aerosociety.com, http://www.aiad.it). These societies regularly organise national aeronautics congresses, symposia and workshops and also concentrate on educational issues. The aerospace societies have combined their efforts under **CEAS** (Council of European Aerospace Societies, http://www.ceas.org/).

From the regulatory side the **European Aviation Safety Agency (EASA)** develops common safety and environmental rules at the European level and sets the standards to be implemented. It monitors the implementation of standards through inspections in the Member States and provides the necessary technical expertise, training and research. The agency works hand in hand with the national authorities, which continue to carry out many operational tasks, such as certification of individual aircraft and licensing of pilots (http://www.easa.eu.int).

10 List of Contacts

Austria

Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT)

Elisabeth Huchler

Function: Aeronautics Research Manager for Austria
T: +43 (1) 711 62-653102
E: elisabeth.huchler@bmvit.gv.at
W: www.bmvit.gv.at

Austrian Research Promotion Agency (FFG)

Vera Ellegast

Function: Programme Manager TAKE OFF
T: + 43 5 77 55 - 5062
E: vera.ellegast@ffg.at
W: www.ffg.at

Belgium

Belgian Federal Science Policy Office (BELSPO)

Peter Van Geloven

Function: Advisor
T: +32 2 23 83 587
E: peter.vangeloven@belspo.be
W: www.belspo.be

Czech Republic

Ministry of Education, Youth and Sports

Jan Marek

Function: General Manager Department for International Cooperation
T: +420 257193718
E: jan.marek@msmt.cz
W: www.msmt.cz

Aeronautical Research and Test Institute (VZLU)

Pavlina Makovská

Function: RTD Administrative Project Manager
T: + 420 225 115 367
E: makovska@vzlu.cz
W: www.vzlu.cz

France

Direction of Aeronautical Programmes and Cooperation (DPAC)

Jean-Luc Tinland

Function: Deputy Director Aeronautics Manufacturing
T: + 33 1 58 09 37 21
E: jean-luc.tinland@aviation-civile.gouv.fr
W: www.dgac.fr

ONERA

Dominique Nouailhas

Function: Director for International Affairs
T: + 33 1 46 73 46 56
E: dominique.nouailhas@onera.fr
W: www.onera.fr

Germany

BMWi

Franz-Josef Mathy

Function: Head of Division
T: +49 30 2014 7471
E: Bueroviib1@bmwi.bund.de
W: www.BMWi.de

DLR-PT LF

Friedrich König

Function: Head of Division
T: + 49 228 447 661
E: friedrich.koenig@dlr.de
W: www.DLR.de

Greece

General Secretariat for Research & Technology (GSRT), Ministry of Development

Chrysoula Diamanti

Function: Responsible for ERA-NET projects
T: + 30 210 74 58 094
E: cdiama@gsrt.gr
W: www.gsrt.gr

Hungary

NORT

Katalin Gyöngy Járay

Function: EU FP7 - SECURITY and TRANSPORT NCP for HUNGARY
T: +36 1 484 2535
E: katalin.jaray@nkth.gov.hu
W: www.nkth.gov.hu

Ireland

Enterprise Ireland

Paul Butler

Function: Senior Commercialisation Specialist
T: +353 61 777 049
E: paul.butler@enterprise-ireland.com
W: www.indtech.ie/indtechresearch.aspx.

Italy

Ministry of Education, University and Research (MIUR)

Aldo Covello

Function: Senior Advisor for European Cooperation on Research
T: + 39 06 9772 6465
E: aldo.covello@miur.it
W: www.miur.it

Centro Italiano Ricerce Aerospaziali (CIRA)

Marcello Amato

Function: Fluid Physics Department, Head
T: + 39 0823 623310
E: m.amato@cira.it
W: www.cira.it

The Netherlands

Ministry of Economic Affairs

Johan Lindeman

Function: Team Manager Aeronautic and Space
T: +31 70 379 7002
E: J.B.Lindeman@minez.nl
W: www.minez.nl

Netherlands Agency for Aerospace Programmes

Dik Verduijn

Function: Programme Coordinator R&D Aeronautics
T: +31 70 373 45 56
E: d.verduijn@nivr.nl
W: www.nivr.nl

National Aerospace Laboratory NLR

Bas Oskam

Function: Division Manager Aerospace Vehicles
T: +31 20 511 3357
E: oskam@nlr.nl
W: www.nlr.nl

Poland

National Centre for Research and Development

Maciej Malski-Brodzicki

Function: Project Coordinator
T: + 48 22 515 061 543
E: m.brodzicki@ncbir.gov.pl
W: www.ncbir.gov.pl

Portugal

Fundação para a Ciência e a Tecnologia (FCT)

Joaquim Silva Gomes

Function: Professor Mech. Eng. (University of Porto)
T: + 351 2250 81 771
E: sg@fe.up.pt
W: www.fct.mctes.pt

Romania

Romanian Space Agency (ROSA)

Marius-Ioan Piso

Function: President and CEO
T: + 40 21 316 8722
E: marius.piso@rosa.ro
W: www.rosa.ro

National Authority for Scientific Research (MER)

Andrei Ionel

Function: General Director, DG Programmes
T: +40 21 318 3067
E: aionel@mct.ro
W: www.mct.ro

Slovakia

Ministry of Education of Slovak Republic

Ludmila Gregorova

Function: Assistant Director of Science and Technology Division
T: +421 2 591 02 611
E: ludmila.gregorova@minedu.sk
W: www.minedu.sk

University of Zilina

Prof. Antonin Kazda

Function: Head of the Air Transport Department
T: + 421 41 513 3451
E: kazda@fpedas.utc.sk
W: www.uniza.sk

Spain

Centre for Development of Industrial Technology (CDTI)

Raul Garcia

Function: Programme Manager
T: + 34 91 581 55 41, +34 91 581 07 07
E: garcia_raul@cdti.es
W: www.cdti.es

Sweden

Swedish Governmental Agency for Innovation Systems (VINNOVA)

Vilgot Claesson

Function: Programme Manager
T: + 46 8 473 30 56
E: vilgot.claesson@vinnova.se
W: www.vinnova.se

Switzerland

Federal Department of Economic Affairs FDEA, Federal Office for Professional Education and Technology OPET, Innovation Promotion Agency CTI

Alain Dietrich

Function: R&D Consortia
T: + 41 31 324 92 87
E: alain.dietrich@bbt.admin.ch
W: www.bbt.admin.ch/kti/index.html?lang=en

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs FDEA
Federal Office for Professional Education and Technology OPET
Innovation Promotion Agency CTI

Swiss Aeronautical Industries Group for CTI

Albert Gaide

Function: CEO
T: + 41 21 802 32 62
E: gaide@swissonline.ch
W: www.swissmem.ch/en/members/divisions/swiss-aeronautical-industries-group.html

SAIG

UK

Department for Business, Enterprise & Regulatory Reform (BERR)

Peter Joyce

Function: Assistant Director: Aerospace, Marine & Defence
T: + 44 20 7215 1165
E: peter.joyce@berr.gsi.gov.uk
W: www.technologyprogramme.org.uk; www.berr.gov.uk

BERR | Department for Business Enterprise & Regulatory Reform

Air Transport Net