

*First successes of the European Parliament Resolution on an  
“Agenda Sustainable Future of General and Business Aviation”*

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- European Parliament Resolution
  - History and facts
  - Resolution extracts
- First successes of the Resolution
  - General Aviation vs. FP7
    - 3rd Call topics
    - Topics for future Calls
  - General Aviation Community in Europe
    - EGAC
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- International Cooperation
  - AirT-Net
  - Joint Programming
  - Don Q Air



## Short history

1.01.2007 – Start of EPATS (European Personal Air Transport System) Project

1.02.2007 – DG TREN discussion paper on General Aviation and Business Aviation

8.03.2007 – 1st European discussion forum on General Aviation and Business Aviation

- ✓ Dassault Aviation
- ✓ EASA (European Aviation Safety Agency)
- ✓ EBAA (European Business Aviation Association)
- ✓ ECOGAS (European Council of General Aviation Support)
- ✓ IAOPA (International Council of Aircraft Owner and Pilot Associations)
- ✓ IAOPA Europe
- ✓ General Aviation in France
- ✓ General Aviation in Germany
- ✓ The UK General Aviation Strategic Review

21.05.2007 – EC report on GA consultations

**22.05.2007 – Creation of EGAMA**

11.01.2008 – An Agenda for Sustainable Future in General Aviation and Business Aviation

07.04.2008 – Council Conclusions on the Commission „Agenda for Sustainable Future in General and Business Aviation”

18.09.2008 – Hearing on General and Business Aviation in the European Community

**03.02.2009 – European Parliament resolution of 3 February 2009 on an Agenda for Sustainable Future in General and Business Aviation**



## ***General Aviation – facts***

- General and business aviation is the fastest growing segment of civil aviation in Europe
- Complements regular air transport performed by commercial airlines
- G&BA
  - ✓Transport
  - ✓Aerial works
    - aerial cartography
    - agricultural flights
    - firefighting
    - traffic surveillance
    - aerial training
    - recreational flying
- EP Believes that helicopters can be an important short-haul means of connecting between airports and urges the Commission and Member States to include them in capacity-enhancing strategies;



## ***Four axis of dialogue on G&BA***

[http://ec.europa.eu/transport/air/internal\\_market/general\\_aviation\\_en.htm](http://ec.europa.eu/transport/air/internal_market/general_aviation_en.htm)

- ✓ Proportionate regulation and subsidiarity
- ✓ Airport and airspace capacity
- ✓ Environmental sustainability
- ✓ Other issues



## ***Proportionate regulation and subsidiarity***

- Commission when adopting implementing rules on aviation safety, **needs** to ensure that they are proportionate and commensurate to the complexity of the respective category of aircraft and operation;
- EC **is invited** to examine the possibility of laying down simplified security procedures and screening processes for business aviation passengers without in any way compromising their security and safety;
- Commission **is suggested** to facilitate the exchange of best practice on security measures at small to medium-sized airports;
- **Need** to take into account the interests and specificities of general and business aviation in the development of future air transport policy initiatives, with a view to strengthening its competitiveness;



## ***Airport and airspace capacity***

- EP Believes that helicopters can be an important short-haul means of connecting between airports and **urges** the Commission and Member States to include them in capacity-enhancing strategies;
- **Encourages** Member States and regional and local authorities to invest in the modernisation and establishment of small and medium-sized airports, which are of major importance for general and business aviation
- "Single European Sky" legislation and SESAR can not lead to disproportionate and excessively costly technological requirements for small aircraft operated under VFR;



## ***Airport and airspace capacity?***

- Business aviation **should be given**, where possible, adequate access to major airports in order to enable it to connect Europe's regions to its economic centres
  
- SESAR programme **must** fully take into account the specificities of general and business aviation and deliver real benefits to the sector without placing unnecessary burdens on it
  - Common airspace not only for MS but for all types of aircraft





## ***Environmental sustainability***

- General and business aviation has a reduced environmental impact in terms of CO<sub>2</sub> emissions and noise, when compared with that of commercial air transport;
- It is necessary **to reduce** emissions through further enhancing the environmental performance of smaller aircraft by using cleaner fuels and by promoting research, technological development and innovation; in this respect **stresses** the importance of initiatives such as "Clean Sky" and CESAR;
- Noise issues **should** be dealt with at national and local levels;



## *Other issues*

- Commission **has to** take appropriate measures to facilitate access of the EU's general and business aviation manufacturing industry to world markets;
- Commission **is requested** to reinforce support for aeronautical research, development and innovation, in particular by SMEs that develop and build aircraft for general and business aviation;
- Promotion of recreational and sport aviation, as well as of European aeroclubs, which constitute an important source of professional skills for the entire aviation sector is considered as essential;
- **Commission is requested to report back to the European Parliament by the end of 2009 on progress achieved in relation to the issues identified in the resolution**



## *Conclusion*

**European Air Transportation System  
will have to be based on General Aviation**



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# General Aviation topics in 3rd call of FP7

Area \ Topic	GREENING AIR TRANSPORT			CREASING TIME EFFICIEN		CUSTOMER SATISFACTION AND SAFETY				COST EFFICIENCY			PROTECTION OF AC&PA		PIONEERING THE FUTURE A	
	Green Aircraft	Ecological Production & Maintenance	Green AT Operations	Improved Aircraft Throughput	Time-efficient AT Operations	Pax-friendly Cabin	Pax-friendly AT Operation	Aircraft Safety	Operational Safety	Aircraft Development Cost	Aircraft Operational Cost	AT Operational Cost	Aircraft Security	Operational Security	Breakthrough In Technologies	Step Changes in AT
Flight Physics																
Aerostructures													X			
Propulsion Systems & Equipment				X		X		Substantially reduced					X			
Avionics Design Systems & Tools						X		Open for small aircraft					X			
Production Noise & Vibration									Substantially reduced							
Human Factors								X	X					X		
Maintenance, Repair & Disposal				X			X	X	X		X					
Airports Flight Management							X	X				X		X		
Novel Concepts																



Open in the 2010 Workprogramme



Closed in the 2010 Workprogramme (open in the first two Calls)



Non existing topic in the Area

## **AAT.2010.3.3-3. Avionics**

Advanced concepts and technologies to counteract hazards specific to the flight operation of small-size aircraft operating in non-scheduled flights, improving automation, smart responsiveness to unforeseen situations in piloting the vehicle, including those adapted to less-skilled pilot operations.

**Funding scheme:** Collaborative Projects small or medium-scale focused research, Coordination and Support Actions aiming at coordinating research activities

**Note:** Limits on the EC financial contribution apply. These are implemented strictly as formal eligibility criteria. You must refer to the call fiche for details of these limits

**Open in call:** FP7-AERONAUTICS and AIR TRANSPORT (AAT)-2010-RTD-1



## **AAT.2010.7-12. Assessing and further developing the role of small aircraft in the air transport system**

**Expected impact:** Proposals should demonstrate contributing to an improved understanding of the role that small-size aircraft operating on scheduled or non-scheduled flights can play as a component of the **air transport system to satisfy the needs of transportation in regions where transport networks are underdeveloped.**

**Scope:** Study to develop a road map and supporting business case to address the benefits of the use of small aircraft as a component of the air transport systems. The task will identify the technologies necessary to meet the safety, environmental, operational and economic requirements, including integration into the European ATM environment, ensuring complementarity with SESAR. The implications of the safety regulation process as it applies to small aircraft will also be considered.

The existing capabilities in the **Member States and Associated Countries** regarding this sector should be assessed.

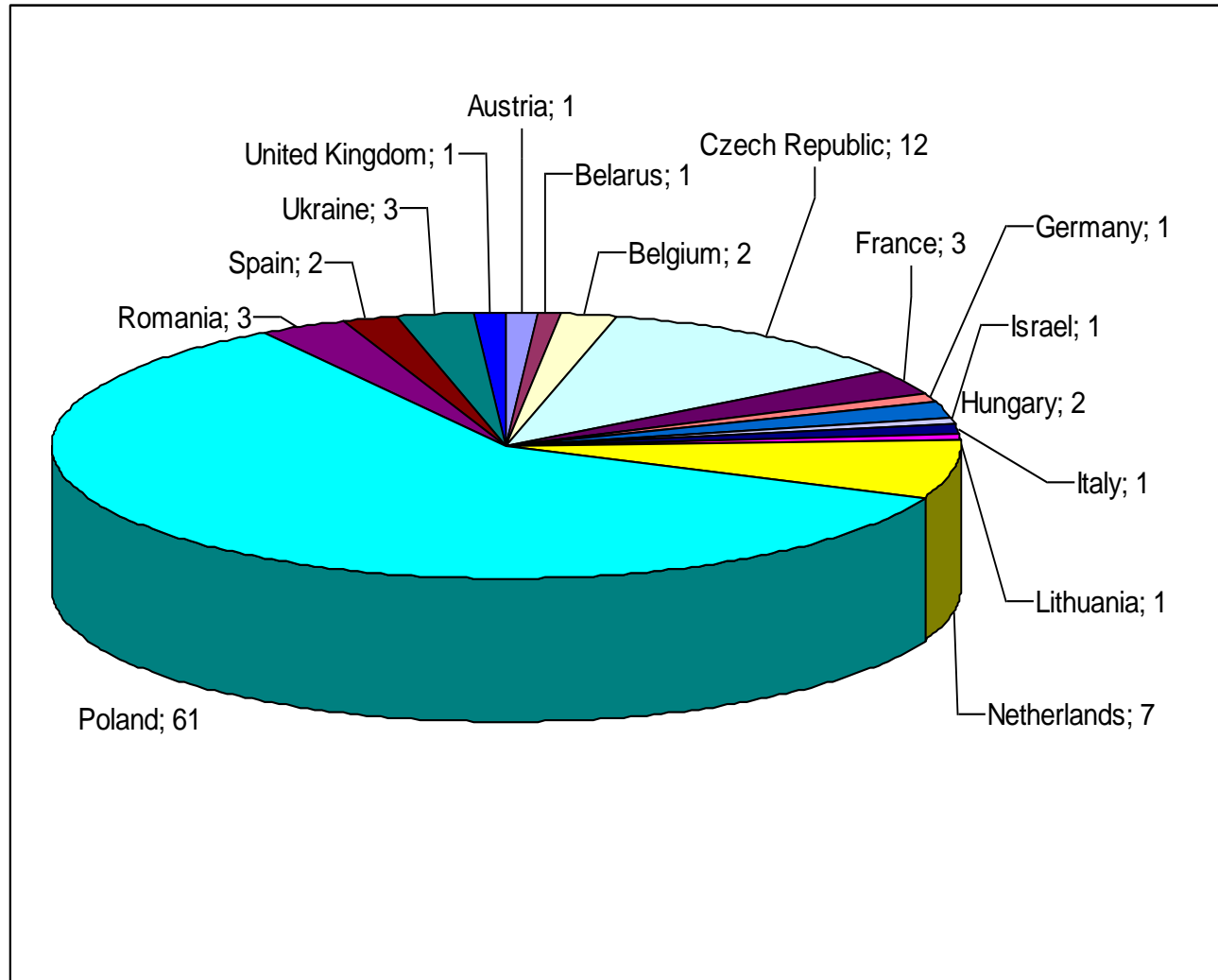
**Funding scheme:** Coordination and Support Actions aiming at supporting research activities

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# General Aviation in Poland European-scale activities

- ✓ More than 100 participants attended.
- ✓ Some „names”: DG RTD, EqIMG, TU Delft, BAE Systems, EASN, EASA, EGAMA, VZLU, Onera, Piaggio, PZL Mielec, Evektor, Honeywell, ISDEFE, Institute of Aviation, INCAS, Wroclaw University of Technology, WSK Rzeszów, General Electric Polska.





**Date and place:** 7-8.07.2009, Warsaw, Poland (110 attendees from 15 countries)

## **Goals of the Workshop:**

1. to discuss research priorities from General Aviation – Air Transport System (GA\_ATS) and General Aviation perspective, which could also provide a feedback for the future Work Programme documents of FP7
2. to present project ideas for the 3rd Call in Aeronautics in order to elaborate proposals of CSA-SA and L1 type which would incorporate both ideas and potential beneficiaries from all countries interested in GA related research.
3. to contribute to a general overview of current situation of GA and overview of research related to GA (SESAR, collaborative research projects such as EPATS, CESAR, SOFIA, PPlane, etc.)
4. to discuss potential future developments based on e.g. feedback from EASA and European Civil Aviation Conference (the study requested by the EC).

## **Workshop results:**

32 Proposal Ideas – presented and discussed

7 pre-proposals – suggested to take part in submission 3rd Call





# ***General Aviation and European Transport System – Third Call FP7; Workshop no. 2***

**Date and place:** 23.11.2009, Brussels, Belgium

## **Goals of the Workshop:**

to present GA ATS results after 4 months since 1st Workshop

to present L1 proposals for GA being prepared for 3rd Call (8 presentations)

To discuss future L2 proposals for 4th Call (3 presentations)

To discuss cooperation between GA community and EC and its supporting institutions

## **Workshop results:**

11 proposals presented (8 L1, 3 L2) and discussed

**More information about the proposals can be found at:**

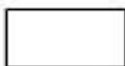
<http://ilot.edu.pl/GeneralAviation/index.php>





# General Aviation topics in future Calls

Area \ Topic	GREENING AIR TRANSPORT			CREASING TIME EFFICIENT		CUSTOMER SATISFACTION AND SAFETY				COST EFFICIENCY			PROTECTION OF AC&PA		PIONEERING THE FUTURE A	
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Human Factors								X	X					X		
Maintenance, Repair & Disposal				X			X	X	X		X					
Airports Flight Management							X	X				X		X		
Novel Concepts																



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- European Parliament Resolution on G&BA
- EC agenda for G&BA – **to appear soon**
- EU research projects
  - EPATS
  - SESAR
  - CESAR

EU Community expects from the EC and **the others** implementation of the Agenda and is ready to contribute to it.



Existing pan-European GA and BA associations in Europe

- IAOPA Europe
- European Business Aviation Association (1977)
- European Council of General Aviation Support (?)
- European General Aviation Manufacturing Association (2007)

**There is no organization** dealing exclusively with G&BA  
and whole spectrum of stakeholders interested in that sector



## ***EGAC - Why new Association ?***

### **Possible answers:**

- Need for a roadmap for the implementation of the „*Agenda for a Sustainable Future of General and Business Aviation*”
- Need for Safe and Efficient European Air Transportation System (incorporating GA)
- Endorsing the Lisbon Strategy by creation of SMEs and giving an opportunity to „small aero countries” for an acces to High Tech



1. A dialogue with the EC as regards implementation of the “Agenda for sustainable development of G&B Aviation”
2. A forum for a dialogue with the EU institutions and MS and local and regional authorities
3. Pursue a dialogue on the future of G&BA sector in Europe.
4. Establishing and maintaining contacts with all relevant national and international authorities and bodies that might influence on the growth possibilities for G&BA
5. Co-operating with manufacturers, suppliers, service providers, R&D units and Academia
6. Establishing and maintaining contacts with all relevant national and international associations e.g. (EBAA, EGAMA, ECOGAS etc.)





- To enhance the competitive development of the G&BA Industry in Europe in partnership with European Institutions and Member associations.

Strategic objective:

- Implementation of the “Agenda for a Sustainable Development of G&BA” according to the roadmap by the Commission





## EGAC – activities in business domain

### European Civil Aviation Conference

- Safety
- Security
- Environment
- Facilitation
- Economic Matters
- Passenger Health
- Integration

### European Council of General Aviation Support

- Representation of common interests to national and European authorities
- Cooperation with and support other European national and professional operator associations in General Aviation

### European Business Aviation Association

- Airport Access and Transatlantic Issues
- Security
- Environment
- Safety / Flight Time Limitations

### International Council of Aircraft Owner and Pilot Associations

- facilitate the movement of general aviation aircraft internationally
- coordinate with international and national organizations to promote better understanding of general aviation's requirements
- integrate the views and requirements of member organizations
- advance the interests of general aviation internationally and to represent the membership
- encourage the implementation of planned systems, facilities, services and procedures

What is missing?

Support in R&D&I; Maintenance standards; Airport security, access, infrastructure, network development – new small-medium airports; Helicopters; Access to major airports; ATM application, VFR included; Env. Impact – noise, CO2





# EGAC – activities in R&D domain

**EREA**

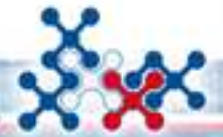
- Aerodynamics
- Materials & Structures
- Propulsion
- Flight mechanics
- Acoustics
- Avionics
- Security
- Ground testing
- Flight testing, Simulation
- Human factors
- Environment measuring
- Safety
- Air & airport traffic management
- Aircraft operation

**EASN**

- Flight Physics
- Aerostructures
- Propulsion
- Aircraft Avionics, Systems and Equipment
- Flight Mechanics
- Integrated Design and Validation
- Air Traffic Management
- Airports
- Human Factors
- Innovative Concepts and Scenarios

**European General Aviation Manufacturing Association**

- Fuselage
- Avionics
- Suppliers
- Manufacturers



## Current subjects of interest of the Group:

- ✓ Investment in technology for globally competitive excellence
- ✓ Air Transport and the Environment
- ✓ Aircraft manufacture
- ✓ Global competition and trade in air transport markets
- ✓ Air Traffic Management in Europe's Single Sky
- ✓ Aviation Safety and EASA
- ✓ New concepts of sustainable mobility and inter-city connections
- ✓ Highly skilled jobs in the Knowledge economy
- ✓ Aeronautics as a capability tool for common policies such as internal security and ESDP
- ✓ Cooperation with third countries (Japan, Russia, etc.)
- ✓ Air transport as a means to integrate Europe
- ✓ The EU's present and future role in space infrastructures
- ✓ The EU's role in international space exploration programmes
- ✓ The role of space in Europe security and defence policies
- ✓ Benefits of space assets for energy policy, environmental policy and climate change.



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Possible ERA-NET involvement:

- **AirTN and AirTN+**
- MATERA+ (material science and engineering)
- HY-CO ERA-NET (hydrogen and fuel cells)
- MNT ERA-NET (micro and nanotechnologies):
  - Sensors,
  - Energy (fuel cells, batteries, etc.),
  - Manufacturing (machining, structuring),
  - Materials (surface structuring, composite),
  - Simulation modeling
  - System integration



## ***Joint Programming Initiative***

“ **Joint Programming involves Member States engaging voluntarily and on a variable-geometry basis in the definition, development and implementation of common strategic research agendas based on a common vision of how to address major societal challenges** ..... It aims to increase and improve the cross-border collaboration, coordination and integration of Member States' publicly funded research programmes **in a limited number of strategic areas**, and thus to help Europe boost the efficiency of its public research funding so as to better address major societal challenges...”

by ACARE



## ***Support for SMEs collaboration within Don Q Air project***

***Don Q Air*** – SSA project financed by European Commission aiming at supporting Polish, Romanian and Turkish SMEs' participation in EC funded aeronautical projects.

Currently, preparation of six project's is supported. More information about proposals can be found at:

[http://www.kpk.gov.pl/donqair/3rd\\_call.html](http://www.kpk.gov.pl/donqair/3rd_call.html)

In case of interest, please contact Mr. Mikolaj Pyczak ([mikolaj.pyczak@kpk.gov.pl](mailto:mikolaj.pyczak@kpk.gov.pl)) and Mr. Antonio Collado ([acollado@carsa.es](mailto:acollado@carsa.es))

Profiles of over 60 Polish and Turkish aero-SMEs are available at: [http://www.kpk.gov.pl/donqair/sme\\_profiles.html](http://www.kpk.gov.pl/donqair/sme_profiles.html)



Don Q Air





**ESVIA** - Methodology to design, verify and validate aeronautical embedded systems based on individual models

### Objective

Develop a methodology involved in the aeronautical embedded system lifecycle, able to share and reuse information between the models used to design, verify and validate aeronautical embedded systems.

**DAFICS** - All Electrical Aerial Transport Vehicle Composite Structure

The primary scientific and technical objectives of the proposed AEATVCP project would be:

- Development of a light composite structure,
- Innovative application of composite materials,
- Development of innovative profile cross sections,
- Weight reduction,
- Increase in strength and rigidity of structures



**AEROPTIMUM** – Aeronautics Knowledge-based Production Optimisation. High Density and Multi-Dimensional Digital Representation and Simulation of Composite Parts, Processes and Activities in Aeronautics

### Objective

The challenge of this proposal is to design a new knowledge-based method for activities design and process control to improve the manufacturing of composite materials in terms of: accuracy, surface finish, productivity and cost performance.



**reBLADE** - Advanced Support System for Aircraft Turbine Blades Design

### Objective

Development of high accuracy, high precision, fast, reliable and adaptable inspection systems that are designed for the shop floor environment, to be fully integrated in the production line to perform advanced in-line inspection of every manufactured part.



## ***Projects prepared by Don Q Air for 3rd Call***

**VIRTUALMET** - Virtual metrology environment in the aeronautic production:  
Elimination of time, cost and space constraints

### Objective

Project idea aims at improving the competitiveness of the European aeronautic industry by implementing flexible production processes. Project address the needs of the manufacturers by developing high accuracy, high precision, fast, reliable, flexible, adaptable and user oriented inspection systems that are designed for the shop floor environment, to be fully integrated in the aeronautic production line and perform advanced in-line inspection of every manufactured part.

**ZERO** - Exploitation of tooling knowledge in the aeronautic production: Zero production errors due to tool under-performance

Aim of the proposal is to lower the production costs in the aeronautic industry and offer higher mass production combined with high quality through exploitation of tooling knowledge beyond the tool and to develop a holistic method for tool design that integrates information from the whole manufacturing process lifecycle.



## *Projects prepared by Don Q Air for 3rd Call*

**More information about projects (including large descriptions) can be found at:**

[http://kpk.gov.pl/donqair/3rd\\_call.html](http://kpk.gov.pl/donqair/3rd_call.html)

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# Thank you for your attention!

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