



EC Funded

## Final Publishable Activity Report



Contract no. 044666



# Promoting RTD in aeronautic SMEs of Poland, Romania and Turkey

Contract number : 044666

## *Final Publishable Activity Report*

Start Date	1.01.2007
End Date	30.06.2010



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## Introduction

Don Q Air project aimed at encouraging R&D activities in the aeronautic-related SMEs in Poland, Romania and Turkey, by means of a well targeted methodology, the Don Q Air Method, developed to enable R&D in adverse environments.

By means of Don Q Air Methodology, aeronautic-related SMEs in targeted countries got aware of the advantages of taking part in RTD actions, especially at a European level, through dissemination events and training on how to participate, promote and/or propose RTD projects in the 7<sup>th</sup> Framework Programme.

Don Q Air sought also to provide SMEs with both information and resources to participate in R&D activities in a European context. Don Q Air has significantly increased the awareness of Polish, Romanian, and Turkish SMEs about EU activities in the aeronautics sector and will strive to encourage their participation in RTD and co-operative research actions even after the project has finished.

Promoting candidate countries' participation in EU research projects was one of the objectives of Don Q Air, therefore Romania (now a NMS country) and Turkey have been included in this project.

Turkish, Romanian and Polish SMEs received support services on how to prepare RTD proposals and how to participate in EU research projects in the field of aeronautics in order to give them a chance to benefit from the EU cooperation and also from EU funding for the participation in its projects.

More specifically, Don Q Air had the following objectives:

- Contact at least 250 aeronautic-related SMEs
- Analyse the **technological situation** of at least **170 SMEs related to the aeronautical sector** (including suppliers) – 60 in Poland, 40 in Romania, and 70 in Turkey).



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- Inform about RTD actions and European RTD Programmes to 170 SMEs through the celebration of 3 training seminars in each targeted country (**9 seminars throughout the project**).
- Support and tutor directly **90 SMEs**, through the creation of a Direct Support Information Area. Mail, phone and technical visits were the common means to carry out these tutoring activities. Integration of these 90 in a **First Excellence Club**, for further collaboration.
- Perform **50 detailed technological diagnoses**, with assessment on possible improvements. The top 50 SMEs were included in the Permanent Exchange Ideas Network, to facilitate future contacts and project cooperation.
- Develop, from **30 Project Ideas**, at least **15-20 project dossiers** involving various SMEs from targeted countries, training SMEs in developing good ideas, finding partners, planning resources, and fitting the proposal to the proper instruments and calls.
- **10-12 SMEs** involved in European RTD projects/proposals.
- **5 Full Proposals**, ready to be submitted, if the proper call appears.

Project consortium consisted of four partners, IPPT PAN (coordinator), CARSA, TUBITAK and ROSA. All partners had extensive experience in international cooperation, including participation in European projects, financed under the umbrella of EC Framework Programmes. Also, IPPT PAN, TUBITAK and ROSA, being National Contact Points responsible for Aeronautics issues had large contacts with many European partners, ensuring the quality of actions undertaken in the project.

The below report highlights the most important facts from the activities that the consortium has performed in 42 months of work done.



## ***WP 1 From Don Q Method to Don Q Air Methodology: Polish, Romanian and Turkish Cases***

### **Task 1.1 Gathering information**

Main goal of the first task of this Workpackage was to prepare the “as-is” report on the situation of the aeronautical sectors in Poland, Romania and Turkey. The report overviewed R&D and industrial sectors in all countries giving extra emphasis, on the role and importance of Small and Medium Sized enterprises. The analysis was to tackle also the participation of the countries in research projects of European Framework Programmes as well as information on relevant national tools and priorities for supporting the development of aviation industry.

At the beginning of this task, consortium has defined guidelines for the analysis report and started working on gathering the information.

The final outcome of this analysis was to show the complete situation of aeronautical sector in Poland, Romania and Turkey, taking into consideration its constant changes, creation of new companies, R&D institutes, industrial clusters and new tools and financial support mechanisms for the development of aviation sector in mentioned countries.

Each partner has contacted many institutions in its country, working in the field of aeronautics. Also, official government documents were revised in order find national supporting schemes, aiming at financing activities targeted or related to aeronautics.

In parallel, another task was to prepare a special questionnaire, which would compile information on the technological situation of aeronautical-related SMEs. Partners began with revising the already existing forms and came to the conclusion, that preparation of a new form would be unnecessary. Therefore, DonQ Air coordinator contacted coordinator of AeroSME project, and during the discussion, an agreement was made, that DonQ Air will use the AeroSME profile form in order to avoid duplicities and to enhance the existing database with new companies, identified by the project partners. The on-line AeroSME registration form was slightly updated, putting a new field to identify, by which Aeronautics SSA project, a given SME was invited to AeroSME database. Word format version of this registration form is enclosed to this report as an Annex.



This questionnaire was also intended to support CARSA in the customization and adaptation of DonQ Methodology for Polish, Romanian and Turkish companies.

Project partners worked also on identifying aeronautical-related SMEs. This work was conducted by using existing databases, contacting various organizations (universities, R&D units, large companies), clusters, chamber and other institutions working in the field of aeronautics. In the first pre-selection 140 companies were identified (60 from Turkey, 48 from Poland, 32 from Romania), comprising of various fields of aeronautical activity. Complete list of those companies is available as an Annex to this report.

### **Task 1.2 Analysis and Report**

All the information gathered by partners was compiled by the Coordinator, supported by CARSA. Appropriate analysis and conclusions were drawn, putting special emphasis on the common potentials and barriers for developing technological innovation of contacted SMEs. The final version of the report was prepared and submitted as Deliverable 1 “Sector Analysis in Poland, Romania and Turkey: Potentials and Constraints. Questionnaires”. It is also available for public download at the project website ([www.kpk.gov.pl/dongair/index.html](http://www.kpk.gov.pl/dongair/index.html)).

### **Task 1.3 Elaboration of Don Q Air Method**

Basing on the information compiled by IPPT PAN, TUBITAK and ROSA in the **Sector Report** as well as feedback received from companies that were contacted by partners, CARSA has customized the Don-Q Method for the aeronautical sector and has refined the DIATEC tool. All criteria, tools and procedures can be found in the Deliverable 2: “Don Q Air Methodology: Polish, Romanian and Turkish cases”. Given the fact of applying confidential CARSA methodology to the above mentioned report, it could not be provided for public information.

### **Task 1.4 Customization to Polish, Romanian, and Turkish Cases**

CARSA, with the support of all the consortium partners has refined the Don-Q-Air Methodology tools and procedures to the particular requirements for Poland, Romania and Turkey in order to apply it for the Technical Audits procedure that was conducted at the later stage of the project.



## ***WP 2 Selection and Clustering of SMEs***

### **Task 2.1 Creation of DISA**

The aim of the creation of a Direct Support Information Area (DISA) was to support and tutor directly SMEs. Mail, phone and technical visits were the common means to carry out these tutoring activities.

In the first year of the project, main role of DISA was to organise dissemination events and to maintain a fluid and constant information flow with SMEs. This communication channel would enable preliminary tutoring activities, as well as the identification of potential end-users fulfilling minimal requirements. The DISA was conceived as a supra-regional structure, formed by members of each NCP and supported by CARSA.

DISA originated the Excellence Club of SMEs where all aeronautics RTD-advanced SMEs were assisted with additional support, such as introduction in specific networks, support in customisation of their business plans based on opportunities given with the appearance of technologies, etc. This Club grew up in number in accordance to the technological improvement of other interested SMEs.

During the first call of AAT call, Don Q Air partners could not fully use the benefits of the project to create new proposals and to form new consortiums. Consortium focused on to the 2<sup>nd</sup> and 3<sup>rd</sup> Calls. Therefore by the help of DISA (mail, phone and technical visits) an effort was made to reach the SMEs in aeronautics sector.

### **Task 2.2 Promoting RTD activities**

Main goal of this task was raising awareness on RTD activities at international level, among broad scope of the aeronautical communities in Poland, Romania and Turkey. With the support of DISA, each project partner (CARSA excluded) organized a number of training seminar in each country. Seminars were open for any entity, especially SMEs, being interested in:

- receiving up-to-date information on current fields of aeronautical research,
- collaboration opportunities (including information on FP7 proposals being prepared, which were looking for additional partners)
- legal and financial issues for FP7 projects participation
- and others





Each partner organized three or more seminars, in which a special attention was put to invite for active participation as much SMEs as it was possible. Also, other stakeholders were invited to those events, such as: various associations, universities, R&D units, large companies, representatives of local and public administration offices.

IPPT PAN has organized and co-organized four events aiming at developing new collaboration opportunities at European and international level. Below, a list of those events with short description is provided:

11-12.03.2008 "Info Days – FP7 2nd Call":

- presentations aeronautical activities undertaken at national level, as well as on the involvement of various Polish institutions in European aeronautics research
- FP7 2<sup>nd</sup> Aeronautics Call info-day with L. Breslin and A. Podadowski (EC), D. Ollinger and P. Chiarini (ASD)
- Presentations of research potential from companies and institutions from NMS, AC

21-22.10.2008 General meeting of CAT AERONET + ASD EqIMG

First day was devoted to discussions on: current activities of the members of the Council, discussing on cooperation between industry and science, new national and European projects, engagement of national stakeholders in AirTN and JTI Clean Sky.

Second day of the event was conducted at European level with the presence of the representatives of EqIMG, ASD on the possibilities of transnational cooperation.

Very important activity undertaken by IPPT PAN in 2008 was participation in creation of a network of Polish organizations interested in General Aviation sector. GA was recognized by European Parliament and EC as an important sector, and EC informed in the beginning of 2009 that some activities with regards to GA will be covered in future FP7 Aeronautics calls. In the first half of 2008, IPPT PAN together with Institute of Aviation (coordinator of FP6 EPATS project) and a number of Polish R&D, university and small and large industry partners formed an initiative group on General Aviation. Goal of this group was to define potential engagement of Polish aviation sector in possible GA thematic areas in FP's as well as to discuss possible project proposals that could be submitted for the 3rd and consecutive Calls.

During 2008 there were four meetings of the initiative group, along with a number of meetings at European level. Purpose of those meetings was to

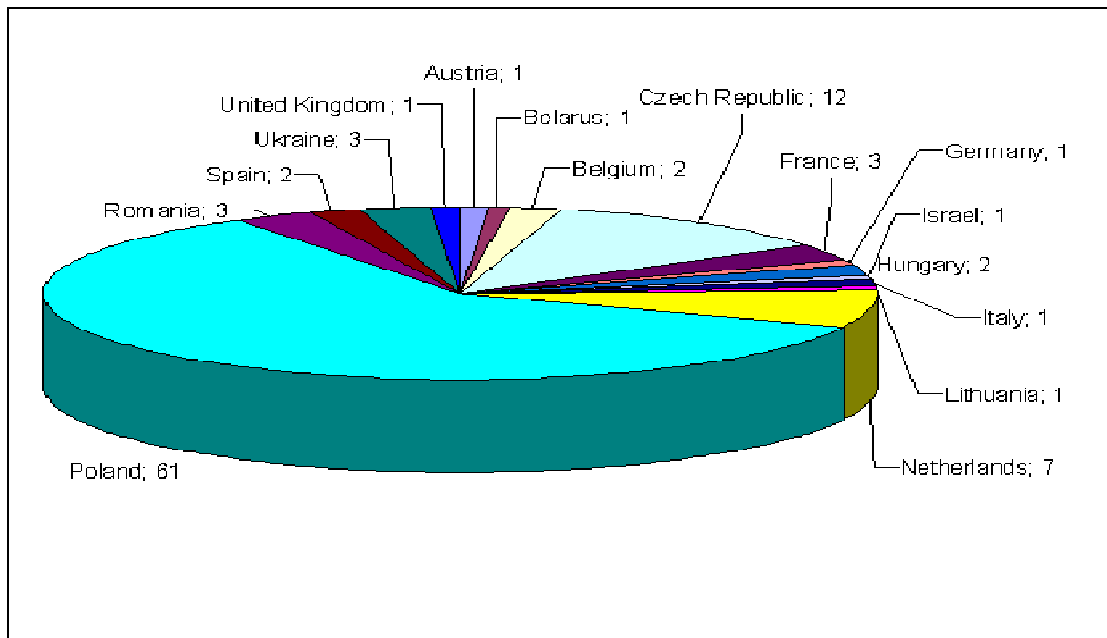


inform about work done in GA sector in Poland, as well as to invite European partners to mutual cooperation.

The general consensus in the initiative group was met, it was planned and agreed that several projects with Polish coordination (L1 as well as coordination and support actions) will be prepared for the 3rd Aeronautics call. Some of those projects will be lead by SMEs and supported in all possible ways by the DonQ Air consortium. Also, a need to organize a large European event in the eve of the 3<sup>rd</sup> AAT call was brought up, and was successfully realized just before the official publication.

7-8 July 2009, General Aviation and European Transport System – Third Call FP7 Workshop, Warsaw, Poland

This workshop was co-organized by IPPT PAN and Institute of Aviation. 110 people from 15 European Countries attended this very important for General Aviation community event. Among others the following organizations attended the workshop: DG RTD, EqIMG, TU Delft, BAE Systems, EASN, EASA, EGAMA, VZLU, Onera, Piaggio, PZL Mielec, Evektor, Honeywell, ISDEFE, Institute of Aviation, INCAS, Wrocław University of Technology, WSK Rzeszów, General Electric Poland.



Whole event was divided into **General sessions**; where issues related to GA Air Transport System, EU collaborative research and work planning with



regards to 3<sup>rd</sup> Call vs. GA were presented and discussed and four **Thematic Sessions**, where ideas for General Aviation projects were presented and discussed

Minutes: <http://www.ilot.edu.pl/GeneralAviation/dokumenty/Minutes.pdf>

Presentations: <http://www.ilot.edu.pl/GeneralAviation/presentations2.php>

Second General Aviation meeting was organized on 23.11.2009 in Polish Science Contact Agency (Pol SCA) in Brussels, Belgium.

Main goal of this meeting was to review the status of GA proposals being prepared for 3<sup>rd</sup> Call and to discuss L2 projects for next FP7 calls. Amongst the participants, representatives of EC DG RTD, JTI CLEAN SKY, IMG4 were present.

Meeting agenda: <http://www.ilot.edu.pl/GeneralAviation/agenda3.php>

Presentations: <http://www.ilot.edu.pl/GeneralAviation/presentations3.php>

### ROSA:

**The first DonQ Air seminar** took place on **17<sup>th</sup> of December 2007**, in Bucharest, within an information day on GALILEO first call of proposals and on Aeronautics second call for proposals. Information about the event can be found on [www.rosa.ro](http://www.rosa.ro)

Giving the date of the launching of second call for proposals on aeronautics, the first seminar for DonQ air was more appropriate to be organized in this period, even if later than the date envisaged in the project. There were 80 participants that attended the event. Presentation of DonQ air project, its objectives, activities and support that can be offered was presented. As collaboration with other similar support actions financed by the commission was decided within the consortium, the activities of these support actions were also presented during the event.

The remaining two seminars were organized on:

- **21 February 2008 - 'European Research in Aeronautics and the New Member States'**, followed by a brokerage event, **Bucharest, Romania.**
- **3 February 2010 – 'Romanian Aerospace Industry – implementing the European strategies regarding defence and security'**, **Bucharest, Romania**

### TUBITAK:



### **Information Day for the 2nd Aeronautics Call on the 23rd of November in Ankara**

This information day was designed to give information about 2nd Call and activities related with the 2nd Call. Audited companies attended this and received more information on FP activities. Some experiences from Turkish SMEs participating in proposals submitted to first Call were presented.

### **Seminar II**

- **23 October 2009**, info day in Istanbul Technical University Faculty of Aeronautics and Astronautics, **Istanbul, Turkey**
- **27 October 2009** - meeting was to give the latest information about the 3<sup>rd</sup> Call of Aeronautics, **Ankara, Turkey**

### **Seminar III**

- **3 March 2010** - event is to inform about the procedure to involve Level 2 projects, Clean Sky JTI's calls, **Ankara, Turkey**

This event was organized to give preliminary information to companies and researchers. The target was to prepare them to the following training:

- **17-18 March 2010**, Training about "how to write a successful project proposal and EU RTD system", **Ankara, Turkey**

This training were given by Mr Jean-Louis Bonafe and Mr. Jan Depauw. TUBITAK also organized one-to-one meetings and on-site visits to active organizations with the trainers.

### **Task 2.3 Selection and clustering of SMEs**

In the later stage of the project partners evaluated all SMEs, and chose 101 potential project end-users out of the 140 SMEs pre - selected in the first phase of the project, that fulfilled the minimal requirements. There were two main criteria, upon which companies were selected to the potential end-users group:

- area of interest ; only companies working directly or related to aeronautics sector were selected. SMEs not fulfilling any of these criteria were rejected
- internationalisation potential ; for this criteria, only companies clearly stating their interest for cooperating at international level were chosen, other ones, not willing to cooperate at such level were rejected, as not fulfilling this criteria.



This preliminary list of companies served as a basis for identification of a group of 50 SMEs that would form the Top Excellence Group. This Group consisted of companies with highest RTD potential and skills allowing them to fully benefit from the extended project support. This Group was to take part in Technological Audits at the later stage of the project. It has consisted of 20 SMEs from Turkey and 15 from Poland and Romania.

### **Task 2.4 Selection of Top Excellence Group**

Having already selected 101 potential end-users, partners with support of CARSA once again revised all companies, and chose 50 SMEs which were scheduled to perform the Technological Audits. After careful selection an appropriate number of companies from each country was chosen (20 from Turkey, 15 from Romania and Poland).

The consortium decided, that the audits will be performed in two stages. First one was conducted in October – December 2007. Second one was planned to be done in February – March 2008 in order to conduct all audits before closure of the second FP7 Aeronautics call. During the consortium meeting on 17-18 of January 2008 in Bucharest it was decided that the project will be prolonged by one year to cover also third Aeronautics call, and therefore consortium decided to postpone second audit phase to beginning of 2009. Given the fact, the list of SMEs previously chosen for the second audits has slightly changed, as the consortium has put efforts on identifying new, interesting companies.



## **WP 3 Tutoring of SMEs**

### **Task 3.1 Technological Diagnosis**

Main goal of the Technological Diagnosis was to perform a diagnosis of each of the SMEs gathered in Top Excellence Group. Main points of the diagnosis included:

1. SWOT Analysis
2. Predicted technological situation of the SME in the next few years with respect to the market/competitors
3. First assessment on most favourable practices

In this study CARSA was implementing a DIATEC tool, specially customized for the purposes of the project within the activities performed in Workpackage 1.

DIATEC is the computer-based methodology that CARSA has applied to analyse the technological standing point and potentiality of the diagnosed SMEs

With the support of this tool, several key aspects of each company were assessed:

STA: Technological Standing Point

CDI: Innovation Potential

RTE: Technological Resources

AYC: Openness and Co-operation

First phase of audits was done in 2007 for 28 SMEs: 12 SMEs in Turkey, 8 SMEs in Poland and Romania:

#### **Romania**

- AEROFINA SA;
- SC. STRAERO SA;
- INCAS;
- CSA – INCAS;
- INAV SA;
- IAROM SA;
- COMOTI;
- GECI ENGINEERING SA.



### Turkey

- C2TECH
- AYDIN YAZILIM ve ELEKTRONIK SANAYI;
- GATE Elektronik;
- KAREL ARGE;
- Savronik Elektronik;
- COSKUNOZ SAVUNMA VE HAVACILIK SAN. TIC;
- MAVİ TEKNİK;
- KUZGUN HTD;
- SDT Space and Defence Technologies;
- EDA Engineering Design & Analysis;
- Neo Group Engineering.

### Poland

- Polish Intelligent Logic Controllers;
- Eurotech;
- Ultratech;
- VIGO System;
- Amepox;
- Aerotec;
- Autocomp;
- QWED.

During 2008 and 2009 IPPT PAN, TUBITAK and ROSA, supported by CARSA, continued to develop the database of companies, that could be included in the project's Top Excellence Group. Partners revised the existing databases created in the first year of project lifetime and consulting them with CARSA,

Within the scope of the project, CARSA has diagnosed 21 enterprises in the second part of the Don Q Air technical procedure, in order to detect and analyse the research competences of each company and beyond that, also the potential impact of Collaborative EU research at each company.

The primary objective of this task was to perform total of 50 technological diagnosis, with an assessment on possible improvements. The top 50 SMEs



were to be included in the Permanent Exchange Ideas Network, in order to facilitate contacts and project cooperation.

The second phase of the technological diagnosis was accomplished with 21 companies audited: 6 Romanian, 8 Turkish and 7 Polish. Due to some confidential-related reasons, one Romanian company decided in the last minute not to participate in the second phase of such analysis, once the first contact, the logistics and organisation of the process and also the first interview were already performed. This is the reason why 49 SMEs were audited instead of 50 planned within the project.

A list of companies from each country, diagnosed in the second auditing phase (2009) is provided below.

### **Poland**

- Microtech International
- Franklin Aircraft Engines
- Materials Engineers Group
- EC Systems
- ATM Awionika
- Aero-Kros
- VAC Aero Polska

### **Romania**

- SIMULTEC SA
- Aerostar BACAU,
- Advance Studies and Research Centre- ASRC,
- IAR BRASOV,
- METAV CD,
- OPTOELECTRONICA SA

### **Turkey**

- Global Teknik Inc.
- LNL Technology Ltd.
- KaTron Inc.
- Barış Elektrik Inc.





- BAYKAR Makina Inc.
- ATARD Inc.
- myTECHNIC Aircraft MRO Services
- Tekno Tasarım Inc.

### **Task 3.2 Identifying opportunities: Dossier for Top 20 Project Ideas**

During both auditing phases of the project, a total of 39 project ideas were identified and this number has exceeded the 30 ideas planned within the project's DoW.

Out of the 39 ideas, CARSA has elaborated a number of project dossiers out of some of the identified ideas.

The main aim of this task therefore was to develop, from 39 Project Ideas, at least 15 project dossiers involving various SMEs from targeted countries, training SMEs in developing good ideas, finding partners, planning resources, and fitting the proposal to the proper instruments and calls.

The process for the selection of the ideas that could become Project Dossiers was based on the next terms:

1. Potential new markets to be found for SMEs willing to expand their activities;
2. Possible new products and/or processes to be developed raising the competitiveness of companies and in general the competitiveness of the EU and allowing them to switch to other activities;
3. Real orientation from traditional to value added services and products;
4. Competitive high quality research on international level;

The more a Project Idea is reflecting or verifying the compliance with those terms the better is it to become a Project Dossier.

Every idea was revised and evaluated, taking into account viability of the project, quality of consortium partners, and most importantly – the relevance of the project to the respective FP7 priorities. After the first revision, the best project ideas were identified for further support and development. For each of the selected ideas, CARSA supported by all partners and DISA, prepared a project dossier, describing the project objectives, consortium, management plan and work plan.



Every SME willing to prepare full project proposal was fully supported by the DonQ air consortium.

Finally, 16 Project Dossiers were prepared .

### **Task 3.3 Creation of a permanent Exchange Ideas Network**

PEIN was launched as soon as the Top Excellence Group was formed. TEG companies were serviced by DonQ Air consortium in various ways. First of all, information on any project ideas that were developed were distributed among the network with an aim of identifying SMEs potentially interested in collaboration. Such companies were included in the process of project elaboration and participated in the consortia of such projects.

On the other hand, during 2<sup>nd</sup> and 3<sup>rd</sup> AAT Calls, they were contacted with partner search offers that DonQ Air consortium received from external consortia. Each such offer was at first checked to identify potential company that could take part in the proposal. Afterwards, chosen company was contacted by respective DQA partner and the project was presented to it. After the SME expressed its interest in proposal, DQA partner assisted the company in facilitating contact with the project coordinator and assisted in any issues relevant to successful final incorporation into the consortium.

Project website and DISA were also used to exchange ideas. Both identified and supported with the DonQ Air activities, as well as those arriving from external parties. All partners took active part in creation and continuous work of the network.



## ***WP 4 Gathering best practices***

### **Task 4.1 Proposal Elaboration**

#### *Elaboration of DonQ Air proposals*

CARSA has led the task of elaborating proposals starting from the Project Dossiers created in previous Work Package. In this respect, CARSA, with the active support of the local partners, prepared 9 proposals (3 under the scope of a sister project, AeroPortal – acronyms marked in italic). This number of 9 projects has exceeded the amount of proposals that were planned within the Don Q Air DoW (5).

List of proposals supported by the Don Q Air consortium is provided below:

**DIMENSIONS** – High Density and Multi-Dimensional Digital Representation and Simulation of Physically Manufactured Tools, Parts and Processes for Knowledge-based Design Optimisation in Aeronautics (2009 NMP SME Call)

**CMM-NEXT** – Future Aeronautics Shopfloor: Next Generation of Flexible & Adaptive CMMs in Aeronautics for high-performance in-line quality inspection (MANUNET Era-Net Call)

**Re BLADE** – Research in advanced “intelligent” knowledge-based processes in Turbine Blades’ manufacturing (2010 SME Call)

**SME COACT** – Fostering a competitive supply chain in aeronautics: Collaborative Product Development Ecosystems for SMEs in Manufacturing (2010 SME Call)

**DAFICS** – All Electrical Aerial Transport Vehicle Composite Structure (2010 AAT Call)

**ESVIA** – Embedded System Vertical Integration for Aeronautics (2010 AAT Call)

**i-TURBINE** - Research in advanced “intelligent” knowledge-based processes in Turbine Blades’ manufacturing (2010 AAT Call)

**AEROPTIMUM** – Aeronautics Knowledge-based Production Optimisation. High Density and Multi-Dimensional Digital Representation and Simulation of Composite Parts, Processes and Activities in Aeronautics (2010 AAT Call)



*TRANSONIC* – Configurations studies on the aerodynamic performances of some new airfoils at transonic speeds for a new future air transportation concept

Ideas for the proposals came directly from the Don Q Air SMEs but only in one of the proposals, it is in fact the Don Q Air company being the project coordinator. In the remaining cases, the coordination task was transferred to more experienced entities but the SME who gave the idea was present in the consortium, playing a key role in it.

In overall, the participation of Don Q Air SMEs in proposals that were directly supported and elaborated by the consortium was quite high. There are total 23 impacts of 18 companies which also exceeds the goal of enabling 10-12 companies in FP7 project proposals.

During the July 2009 GA workshop (described in T 2.2), a number of projects, chosen from the overall pool of projects presented, were selected to be fully supported for 3<sup>rd</sup> Call submission. During the second GA meeting, November 2009 in Brussels, status of project preparation was discussed. In the end, six proposals were submitted and below outcomes of this activity are presented:

ACRA – Aircraft Cabin Crashworthiness Prediction

AHAMS – Automated flight Hazard Mitigation System

SACC – Small Airplane Cockpit Climate

SASHA – Small Aircraft Avionics Solutions for Hazard Alleviation

SESRA – Single Engine Spin Resistant Aircraft

SAT-rdmp – Small Air Transport - Roadmap

First 5 projects were L1 collaborative project, with SAT-rdmp being a CSA SA. Out of all six proposals, only SAT-rdmp has successfully passed the evaluation and was recommended for negotiations

During the 2<sup>nd</sup> and 3<sup>rd</sup> round of AAT calls, IPPT PAN and remaining partners invested a lot of efforts to disseminate information about their SMEs to potential project coordinators and to include companies in the proposals presented during ie. 2<sup>nd</sup> and 3<sup>rd</sup> Call AeroPortal workshop, by ACARE, IMG4, EUROMART, AeroPortal, EASN, external entities (Airbus, Thales, Sagem).



Each of groups were provided with the SMEs catalogues and requested to provide information on the profiles of partners sought for the respective projects.

The overall response for the queries was good, but it was very hard to join new partners at the time when information about those proposals is release for public view. Yet in some cases this action was successful.

### **Task 4.2 Best Practices Guide**

The “Best Practices Guide” was prepared by the consortium after the end of the project. Goal of this guide was to gather the experiences all partners have learnt throughout the project realization, especially for the Polish, Romanian and Turkish cases. The document provides guidelines for a successful participation in RTD projects within FP7, with a special emphasis on the SMEs that were the main target group of the project.

The “Best Practices Guide” is available as Deliverable 9 on the Don Q Air project website: [www.kpk.gov.pl/dongair/index.html](http://www.kpk.gov.pl/dongair/index.html) .



## ***WP 5 Dissemination***

### **Task 5.1 Project Web Site**

Project website was established during first three months of the project lifetime.

Main goal was to provide basic information about the project activities, as well as to give up-to-date information about current project activities, various aeronautical events, recent FP7 calls for proposals, partner searches, public project reports, project newsletters and others.

In the second phase of the project, starting from 2008, several new additions to the website were presented. All partner have contributed to adding new content:

- Profiles of companies and institutions who submitted interest in participating in project activities
- Project ideas and technology offers/requests submitted by companies and institutions will be available on the website
- General Aviation activities

Information about current calls for proposals for the AAT sub-scheme as well as JTI Clean Sky was also published on the project website along with project Newsletter.

There were 6 newsletters foreseen and released during the project lifetime. The publication of the issues has been done mainly in relation with the calls for proposals for aeronautics that have been opened during the life time of the project.

- **DonQ Air NEWSLETTER No.1** – April 2007
- **DonQ Air NEWSLETTER No.2** – November 2007
- **DonQ Air NEWSLETTER No.3** – October 2009
- **DonQ Air NEWSLETTER No.4** – December 2009
- **DonQ Air NEWSLETTER No.5** – December 2009
- **DonQ Air NEWSLETTER No.6** – May 2010

### **Task 5.2 Internal Dissemination Activities**



### IPPT PAN

#### Establishment and development of cooperation link with national stakeholders

During second period of the project, IPPT PAN has held a large number of meetings (conferences, workshops, working-group meetings, etc.) with representatives of Polish aeronautical community, both research and industrial aiming at fostering the collaboration and identifying opportunities for including the serviced companies in research activities at EU-scale.

#### Cooperation with Polish GA community

A very important meeting was organized on 16.02.2009. It was entitled „Crisis as an opportunity for development of GA in Poland” and it has gathered all stakeholders (universities, R&D units, large and small companies and clusters, national aviation regulators) of Polish General Aviation sector.

Goal of this meeting was to discuss on the necessity and level of involvement of Polish partners in the GA initiative started by European Parliament with its GA resolution. The meeting included presentations of some SMEs interested in involving themselves in this sector at EU scale (ie. Microtech and Franklin – companies supported by DonQ Air) as well as discussion on possible ways of contribution of Polish community towards development of this area. The summarizing outcome of this event was agreement on the need for deep involvement in the EU General Aviation community.

During the meeting it was also planned to pursue some follow-up activities:

- the idea to organize and European General Aviation workshop (realized in 7-8.07.2009 in Warsaw)
- meetings with EGAMA to discuss possible ways of cooperation

Starting from second half of 2009, IPPT PAN has established and a very close relation with Ministry of Economy. As one of the activities the Ministry is realizing is the support to development of national strategic R&D programmes, the Ministry quickly became much interested in developing such programme for Polish aeronautical sector, taking into account involvement of the community in various fields, General Aviation included. During a number of meetings, IPPT presented the Polish GA potential and a vision of importance of this sector for Poland. As a consequence of these meetings, preliminary basis for such strategy was established.



IPPT has supported the preparation of an article entitled „The Polish Aeronautical Industry and Development Opportunities” which was signed by the Minister of Economy and published in „The European Files”. The article underlined three main pillars of Polish aviation sector: rotorcraft, aeronautics engines and general aviation (GA) and identified the latter as to be of “a high political agenda during the Polish presidency in 2011.” Such affirmation allows to positively think on the increase of involvement of Polish entities, and especially small companies, in European aeronautics research activities in coming years.

IPPT (with support of national aeronautical stakeholders), has supported Ministry of Economy in their participation to 22.06.2010 ACARE MSG meeting, where the Deputy Director of the Economy Development Department has given presentation entitled “Strategic Initiatives Towards Strategic Research Agenda Goals in Poland”, which had very good reception among the participants of the meeting.

In May 2010, National Centre for Research and Development (entity established to perform the tasks within science and innovation policy in Poland) launched an initiative aiming at identifying possible strategic research programmes. IPPT has supported Polish Aeronautical Technology Platform and other entities in submitting their expressions of interest for such programmes. Out of all such EoI’s submitted, two of them aimed on development of GA and Regional Aircraft programmes.

### **CARSA**

CARSA has contributed to all Newsletters coordinated by ROSA, and has presented the Don-Q-Air project in several internal meetings of the Innovalia association to which CARSA belongs

### **TUBITAK**

#### **List of Meetings participated/organized in Turkey**

- **7 April 2008** - event to give the recent information about Aeronautics and Air Transport and Clean Sky JTI, **Ankara, Turkey**
- **25 April 2008** - “Eskisehir Aeronautics Industry and Clustering”, **Eskisehir, Turkey**
- **25 July – 1 August 2008** - Technoparks Info Days, **Ankara, Turkey**





- **13-14 November 2008** - ESBAS “1st İzmir Global Aerospace Conference (İGAC’08)”, **Izmir, Turkey**
- **19 February 2009** - meeting organized with a small group of people to evaluate the actions for clustering models, **Eskisehir, Turkey**
- **20 March 2009** - ESBAS invited the companies, organizations to discuss the model and the activities that a clustering should do. ESBAS set up Advisory Group for Association, **Izmir, Turkey**
- **23 October 2009** - info day in Istanbul Technical University Faculty of Aeronautics and Astronautics, **Istanbul, Turkey**
- **27 October 2009** - meeting was to give the latest information about the 3<sup>rd</sup> Call of Aeronautics, **Ankara, Turkey**
- **24 December 2009** - R&D info day for TAI’s subcontractors, **Ankara, Turkey**
- **3 March 2010** - event is to inform about the procedure to involve Level 2 projects, Clean Sky JTI’s calls, **Ankara, Turkey**
- **5 March 2010** - meetings about national and international R&D funding programmes, **Eskisehir, Turkey**
- **12 March 2010** - ESBAS organized a meeting to inform companies about ongoing activities in aeronautics and to evaluate the activities on clustering in aeronautics, **Izmir, Turkey**
- **14 May 2010** - Joint info day with Marie-Curie Programmes, **Ankara, Turkey**
- **12,17,20 May 2010** - Joint 1-1 meetings with SMEs, **Ankara, Turkey**
- **2 June 2010** – Meeting with high level representatives of Turkish aeronautics in Turkish Airlines Headquarter, **Istanbul, Turkey**
- **11 June 2010** – meeting with Turkish aeronautics representatives and site visit to KaleBaykar Makine Inc. (Don Q Audited company) during international unmanned vehicles workshop, **Istanbul, Turkey**

## ROSA

ROSA has contacted aeronautics entities (universities, institutes, large companies – given the fact that they cooperate with SMEs of many occasions, and also include them in their supply and cooperation chains) and SMEs and conducted internal meetings with the entities. Within these internal meetings, the partners presented the project and the support that it can offer in order to



support their ideas to be submitted as project proposals on the FP6 and FP7 aeronautics call.

### **Task 5.3 External Dissemination & Demonstrator Activities**

Each project partner contacted and disseminated information on project activities via various channels.

Key players of each country were contacted, including universities, R&D centres, large companies, clusters, chambers and associations and the proposal for future collaboration was submitted. Many of such entities often cooperate with SMEs, therefore it was very important to try to identify such companies.

Project partners also used available contact database and by means of email, telephone and personal contacts disseminated information on project activities.

Project partners organized, co-organized and participated in a number of national and international events, aiming at boosting European cooperation in aeronautics. During such meetings, many presentations were made on DonQ Air activities as well as many new contacts were established with various organizations.

#### IPPT PAN

##### General Aviation involvement

Much of the IPPT PAN involvement in this task was connected to the General Aviation activities.

After the national GA workshop organized in February 2009 (described in T5.2) several actions at European level were undertaken by Polish GA community, with big involvement of IPPT PAN.

During the period between February and June, IPPT coordinated the work on creating and submitting the community inputs for topics for the 2010 AAT call Work Programme in the field of small aircraft research. This action, along with cooperative efforts of the whole EU GA community was successful with European Commission publishing two topics in the 3<sup>rd</sup> Call.



In parallel, Polish community developed the concept of GA\_ATS Level 2 proposal, which was presented to Eurocontrol (Jan '09) and ACARE MSG (Feb '09). In the second half of 2009, following the extensive discussion within informal EGAC (European General Aviation Community) group, the idea was abandoned in favour of the possibility of engaging in preparation and lobbying in preparation of a Level 2 topic for the General Aviation engine project. This work was done in cooperation with EGAMA.

IPPT PAN has also met with representative of the European Parliament "Sky and Space Inter-group". Goal of the meeting was to discuss about potential common fields of interest in the GA sector, which the EP group deemed as a sector with very strong potential for development.

- "1<sup>st</sup> FP7 Aeronautics Call information Day" 23.01.2007, Warsaw, Poland
- "Meeting of Partner Council of the Centre of Advanced Technologies "Aeronet – Aviation Valley"" – 26-27.02.2007, Rzeszów, Poland
- "European Transport in FP7" 1-2.03.2007, Warsaw, Poland
- "New business opportunities in automotive and aviation industry" 9.05.2007, Poznan, Poland
- 21-22 October 2008, General Meeting of CAT Aeronet with ASD EqIMG, Rzeszow, Poland
- 9.12.2008 Training – Aeronautical research financing in FP7, Warsaw, Poland
- 16.02.2009, "Crisis as a chance for Polish General Aviation community", Warsaw, Poland
- 2-3.03.2009, Joint Meeting of the Centre of Advanced Technologies AERONET " Aviation Valley" and Canadian delegates", Rzeszow, Poland
- 3.09.2009, "Airport processes management" conference, Warsaw, Poland
- 19.11.2009, Aviation Security Fairs "Safety in Aviation and Navigation", Zurich, Switzerland
- 23.11.2009, "Second General Aviation Workshop", Polish Science Contact Agency (Pol SCA) in Brussels, Belgium
- 14-15.12.2009, 2<sup>nd</sup> Annual Conference of the Key Project "Modern Material Technologies for Aviation Industry", Rzeszow, Poland

*SMEs catalogue*



As one the ways to better disseminate information about the chosen companies, that expressed their interest in extending their relationship with potential partners across Europe, IPPT PAN prepared a catalogue of 26 SMEs with the aim of disseminating it to largest stakeholders of the aero-community: ACARE, IMG4, EUROMART, EASN, coordinators of projects from 3rd Call AeroPortal workshop, coordinators of projects prepared by AeroPortal and others (ie. Airbus, Thales). Catalogue had very good reception, and some contacts with Polish companies were established. It is available at the project website: [http://www.kpk.gov.pl/donqair/sme\\_profiles.html](http://www.kpk.gov.pl/donqair/sme_profiles.html)

### CARSA

- Attendance to the UAV-NET Workshop No. 16 "Are we ready for Unpiloted Aircraft?" on the 18th October 2007 in Madrid.
- FP7 Workshop on Level 2 Aeronautics Project Proposals "Industry's Approach to the 2nd Aeronautics Call" held the 12th December 2007 in Brussels.
- Attendance to the FP7 Information Day on the Aeronautics and Surface Transport 2nd Call organised by the Centro para el Desarrollo Tecnológico Industrial (CDTI) and Universidad Politécnica de Madrid (UPM) on the 13th December 2007 in Madrid.
- Control exhibition 08 in Stuttgart Germany.
- National workshop in by CIT Andalucía. Sevilla. 29th January 2008.
- JTI Clean Sky: Current Status and Opportunities for the Spanish Industry, organised by the CDTI. 3rd July 2008.
- SESAR JU and Spanish ATM Capabilities, organised by the CDTI. 23rd July 2008.
- UE Research and Innovation Circles. Aerospace. IMADE. Madrid. 20th February 2009.
- Plan Avanza 2. MITYC. Madrid. 20th February 2009.
- Patenting research. Chamber of Commerce Madrid. 10th March 2009.
- Clustering. Clunet. Growing clusters through internationalisation and networking policies. Madrid. 5th May 2009.
- Metromeet International conference on industrial dimensional metrology. Bilbao. 26th March 2009.



- Control 09 international exhibition in metrology. Stuttgart. 5th May 2009.
- Embedded World 09 international exhibit. for embedded software, hardware. Germany. 3rd March 2009.
- CEM International Congress. Santander. 1st June 2009.
- EUSPEN. The 9th International euspen Conference. Held at the Kursaal, San Sebastian. 2nd June 2009.
- PRIT 2009. Paris. 30th November 2009.
- Programa Innpacto. Ministerio de Industria Turismo y Comercio. Madrid. 25th May 2010.
- Inncorpora. MITYC. Madrid. 7th June 2010.

### ROSA

For maximize the efficiency of the dissemination activities, the internal dissemination activities foreseen in the project – the 3 DonQ Air seminars - were linked to the external dissemination activities. Therefore the 3 seminars mentioned for Romania in the 3.2 section were in fact separated sessions of bigger events, basically infodays or brokerage events.

### TUBITAK

#### **26 January 2007, Istanbul**

EU 7th Framework Programme Transport Thematic Conference was organized with the support of Turkish Airlines Technic Inc (<http://www.turkishtechnic.com>) in Istanbul.

#### **12-13 February 2007, Ankara**

EU 7th Framework Programme Turkey Forum: National Launch Conference was organized in Ankara with the support of TOBB ETU (TOBB University of Economics and Technology) and TuR&Bo-ppp (Turkish Research and Business Organizations). Andrés SIEGLER (Director, European Commission DG Research, Directorate Transport), Glenn Watson (AIRBUS-UK, ALCAS Project Manager) and Paola CHIARINI (AeroSME Project Manager) attended this conference for Transport (including Aeronautics) Session.



### **24-25 April 2007, Istanbul**

Another forum on FP7 was organized in Istanbul with the support of TuR&Bo-ppp (Turkish Research and Business Organizations). The aim of this forum was to increase the relationship between the potential project proposers and participants with the related NCP.

### **7 May 2007, Ankara**

Meeting with aeronautics related companies in Undersecretariat for Defence Industries (SSM) to inform them about opportunities in FP7 and to explain Don Q Air project. Companies participating in this meeting were of the highest potential in aeronautics.

### **Information Day for the 2nd Aeronautics Call on the 23rd of November in Ankara**

This information day was designed to give information about 2nd Call and activities related with the 2nd Call. Audited companies attended this and received more information on FP activities. Some experiences from Turkish SMEs participating in proposals submitted to first Call were presented.

### **Information Day for the 2nd Aeronautics Call on the 30th of November in Eskişehir**

Organized with cooperation of Eskişehir Chamber of Industry (ESO) with training seminar after the main event

### **Aeronautics 2nd Call Networking Cocktail in TuR&Bo Office on the 11th of December, 2007 in Brussels**

The Scientific and Technological Research Council of Turkey (TUBITAK) and Turkish Research and Business Organisations (TuR&Bo) organized a Networking Cocktail followed by a reception on the 11th of December, 2007 in Brussels.

The meeting was organized in the framework of the FP7 Workshop on Level 2 Aeronautics Project Proposals "Industry's Approach to the 2nd Aeronautics Call" 12th December 2007 in Brussels which was held by AeroSME together with the Industrial Management Group (ASD-IMG4).

Aeronautics 2nd Call Networking Cocktail was an opportunity to meet with the Turkish aeronautics companies and discuss current activities and potential cooperation areas while providing a platform where project proposal ideas would be presented.

2008 – 2010 events from Turkey are covered in T 5.2 description



### **Conclusions**

Don Q Air project has had a big impact on Polish, Romanian and Turkish aeronautical SMEs.

First of all, it had big influence on every single company that was a part of the Top Excellence Group. Each of them, after receiving the Technological Audit, were identified with the potential that could be used by them in terms of both the future company development as well as directions of the international R&D cooperation that could be followed by each company. The Technological Audits allowed to identify very large number of project ideas, that were at the later stage converted into project proposals submitted with the assistance of Don Q Air partners.

Despite of the fact, that none of the 9 proposals that were supported by Don Q Air has succeeded in passing the evaluations, this work had great benefit for the SMEs that took part in preparation of the projects. Also, Audits allowed companies to be more independent in their own initiatives on engaging in European R&D financing activities, which has resulted in some of them preparing and submitting proposals to JTI Clean Sky calls as well as taking part in national funded programmes.

The lessons learnt from the preparation of proposals will allow them to be better prepared for the forthcoming calls, not only in FP7 Aeronautics scheme, but also in JTI CS and other European and national schemes aiming at funding R&D activities.

Project partners were also very active in supporting their clients in joining them into proposals being prepared by key EU aeronautical stakeholders. Project consortium (consisting of three Aeronautics NCP's) had very well developed contacts within those bodies. This way they were able to provide them with catalogues of their SME clients as well as support the projects that were elaborated within 2<sup>nd</sup> and 3<sup>rd</sup> Call. Due to specificity of the process of preparation of AAT projects, information about possible opportunities for additional partners was published at the time when consortia were at the very late stage of formalisation, so it was very hard to include the Don Q Air companies. But in some cases it was possible and also SMEs looked for such opportunities on their own. It has resulted in participation of the companies in a number of Level 1 and Level 2 proposals.



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On the other some bilateral collaboration activities were procured with the support of Don Q Air project. Such case was observed in Poland – Turkey cooperation. Members of Eskisehir Aviation Cluster participated in one of the events organized by Aviation Valley from Poland. Afterwards, Turkish cluster was in constant contact with their Polish counterparts and exchanged experiences with regards to creation and operation of such cluster (Eskisehir was at that stage beginning to create their cluster), aiming at more extensive collaboration in future.

Don Q Air project had also its impact on creating opportunities for contributing to development of new sectors in aeronautics. Such case was followed with regards to the European Parliament's resolution on the development of General Aviation sector, announced at the beginning of 2009. Some of the project partners were engaged in those activities already in 2008, creating groups of interest at national level. IPPT PAN has supported national stakeholders in preparation of proposals of GA related topics for the 3<sup>rd</sup> AAT Call Work Programme. At the later stage, it has co-organized a European workshop on GA with active participation of key EU stakeholders. One of the aims of this event was to identify, and at later stage give extensive support, ideas for projects for the 3<sup>rd</sup> AAT Call. Six such projects were submitted for the Call.

In parallel, extensive work was done to create inputs for the 4<sup>th</sup> Call Work Programme, which ended with Level 2 topic for General Aviation engine project being announced by EC. It is foreseen that a number of representatives from Poland, Romania and Turkey could participate in this proposal, also including SMEs serviced by Don Q Air.

Given the above, it is expected that the project will also have its indirect influence on their SME clients in their future undertakings.