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1 Project Summary

The objective of AERODAYS-06 was to **support the aeronautics thematic priority of the European Commission**. As a traditional event, the Fifth Community Aeronautics Days Conference was held from **19 - 21 June 2006 in Vienna, Austria**. This Conference brought together all relevant stakeholders from all over Europe including Russia and the Ukraine to network, to present their results and to discuss future RTD work.

The conference has marked the **start of the 7th Framework Programme (FP7)** of the European Commission. This was an ideal opportunity to present and review the status of European aeronautics RTD work. Key representatives including the European Commission had actively been involved in the strategic planning of the conference. The EC had presented present FP7 details.

Particular attention had been given to the **involvement of the new member states**. Selecting Vienna as the location for the venue is therefore most suitable. **Austria's presidency** of the European Union added importance to the conference. A large participation of students and young researchers had been a particular objective of the organisers. To this end, a special **student participation programme** had been part of the comprehensive conference programme.

The conference provided an ideal platform for discussing political, industrial and research topics in the extended Europe, assisting a policy which pursues an intelligent **combination of top-down and bottom-up approaches**. As previous Aeronautics days, the proposed Fifth Community Aeronautics Days addressed the technological and industrial development of the European Aeronautics sector providing a high-level, future oriented perspective coming from politics, the industry and the research community, in response to Europe's social needs and expectations. Moreover, the Conference offered a **unique forum for government officials, decision makers, managers, researchers, engineers and journalists from all over Europe and beyond** to discuss and reflect on an RTD roadmap for aeronautics in line with the concept and objectives of the European Research Area. About **850 participants** attended the three days of the Aerodays conference.



Fig.1: Aeronautics Days 19.06.06

2 Objectives and achievements

2.1 Strategic Objectives and achievements

On 1 May 2004 the EU has been enlarged by 10 new members. One of the main issues of the enlargement process was/will be to foster the integration of the new member states into the social, economic and political life in Europe. The strategic objective of this AERODAYS-06 conference was to make a significant contribution for reaching this goal by organising the Fifth Community Aeronautics Days in Vienna, Austria. As its predecessors, this Conference **brought together all relevant stakeholders**, political and public authorities, decision makers, research community from the old and new member states together to exchange ideas, develop and support jointly the road for reaching the goals of the Vision 2020.

This approach **supported building networks and tight co-operations**.

The date of the conference was set to mark the start of the 7th Framework programme. While attracting a large part of the European aeronautics community it offered the European Commission to **disseminate their strategic view on the 7th framework programme** while at the same time receiving feed back from community. This had been achieved by e.g. organising specific plenary and parallel sessions. This approach allowed a wide distribution of crucial information on FP7 and on one hand provided engineers and scientist with first hand information necessary to effectively use the possibilities for their work and for support of the aeronautics priorities. The conference facilitated the growth of the knowledge society in aeronautics.

The Conference drew a picture of the **status of the aeronautics technology in Europe**. It invited previous (FP5) and present (mainly FP6) projects to report their results. Also national activities were reported and where ever possible a review on **non-European activities** was provided by invited speakers. Participants coming from leading and emerging aerospace nations as the US, Japan, China and India also participated in the conference. This view had been compared with the targets of the **Vision 2020** allowing to defining the respective milestones towards reaching the respective goals. ACARE¹ was directly involved into this process providing a "midterm" view of the Strategic Research Agenda 2 which was published in March of 2005.

Referring to **top-down** (e.g. ACARE, EU Aeronautics and Air Transport Policy) and **bottom-up approaches** (EU, national and international research achievements) the Fifth Community Aeronautics Days pursued the strategy of an intelligent combination of these instruments.

The venue of the conference, Vienna, had been intentionally chosen as being an ideal position to integrate the new eastern European countries into the European aeronautics networks. From most of the new member countries Vienna can be reached on short distance by train or car. This assured to reach one on the major targets of the event, namely bringing old and new member states together to review and to discuss the status of co-operations, to identify problems and to develop future plans. This joint approach significantly enhanced the **integration of the new member states** in support of the strategic objectives of the European Union.

Partners of the new and old member states had the possibility to network and to give examples of their expertise and achievements e.g. in a **display of hardware** during the conference.

Austria held the presidency of the European Union in the first half of 2006 (1 Jan to 30 June 2006) and within this frame the Austrian Federal Ministry for Transport, Innovation and Technology hosted the AERODAYS-06 conference in close cooperation with the European Commission, CEAS and ACARE. In combination with extensive press and media work during

¹ Strategic Research Agenda of the Advisory Council for Aeronautics Research in Europe (ACARE)

the Austrian presidency, it gave a substantial opportunity to raise more attention on the objectives of aeronautic research.

Apart from holding the EU presidency the **importance for Austria** organising the AERODAYS-06 aeronautics conference was manifold: with its relatively small but dynamic and fast-growing aeronautics industry Austria was welcoming the chance to present its capability vis-a-vis the European research and industry fabric. Hosting the conference fostered the position of its high tech industry.

The positive example of the Austrian aeronautics industry will support aeronautics and will provide further acceptance for this strategic industry. Austria was and will be established as an aeronautical link between old and new member states.

Following the below average **participation of small and medium-sized enterprises** in aeronautics, the conference particularly supported the participation of those companies. Projects like AeroSME, SCRATCH and ECARE provided first hand advice and support for smaller companies of the aeronautics sector.

2.2 Overview on measurable objectives and achievements

As previous Aeronautics Days, the Fifth Community Aeronautics Days 2006 addressed the technological and industrial development of the European Aeronautics sector providing a high-level, future oriented perspective coming from politics, the industry and the research community, in response to Europe's social needs and expectations. Moreover, the Conference offered a unique forum for government officials, decision makers, managers, researchers, engineers and journalists from all over Europe to discuss and reflect on an RTD roadmap for aeronautics in line with the concept and objectives of the European Research Area.

The following activities/items were part of the comprehensive conference programme:

- High level opening and closing sessions
- Conference incl. daily plenary sessions and several parallel technical sessions
- Session on European strategy: ACARE, GARTEUR activities, ERA-NET AirTN
- New administrative strategies and funding rules of FP7
- International forum including speakers from the US, Japan, India & China
- SME session
- Special support for new EU member states (location, sessions & reduced fees)
- Exhibition (FP5 & FP6 projects, institutions, Austrian industry)
- Internet homepage before and after the conference
- Conference proceedings on CD plus hardcopy of selected reviewed papers after the conference
- Excursions to Austrian aeronautics companies and infrastructures, resp.
- Student participation programme
- Conference material for each participant
- Press conference, extensive press and media work in the frame of the Austrian presidency

In the Vision 2020 the Group of Personalities has set the vision of European aeronautics being the world's Number 1 in aeronautics in 2020. The report sets goals in four areas of challenges, responding to society's needs. These areas are safety, environment, air transport capacity and transport quality and affordability. The Aeronautics Days 2006 supported reaching the "Vision 2020" goals by orienting the conference programme and conference goals along the activities mentioned above.

Being positioned right in time at the advent of FP7 the conference offered first hand information on the forthcoming framework programme and its aeronautics thematic priority.

The Conference brought together a large number of relevant stakeholders of the European aeronautics community. Large industry, small and medium sized enterprises, research organisations, universities, public authorities and decision makers participated in the event. The conference addressed the technological and industrial development of the European aeronautics sector and responded to the changes in the organisational and regulatory framework in air transport. About 850 researchers, engineers, managers, government officials and journalists from all over Europe attended this event to discuss and reflect on RTD roadmaps for aeronautics.

3 Relevance to the objectives of the specific programme and/or thematic priority

3.1 Scientific and Technical Aspects

The conference offered a comprehensive view of the technological achievements and ongoing activities of collaborative aeronautical RTD under the “Aeronautics & Space” thematic priority of the European Union’s **Fifth & Sixth Framework Programmes** for Research and Technological Development. In addition it provided an overview on national and international research activities within Europe as well as an overview on the activities of leading and emerging aerospace nations like the US, Japan, India and China. The conference offered a unique forum for researchers, engineers, managers, government officials and journalists from all over Europe to discuss and reflect on a future-oriented RTD roadmap for aeronautics in line with the concept and objectives of the European Research Area.

The results of EU funded RTD projects were presented in a large number of technical sessions making the aeronautics community aware of previous and present work. It provided a unique opportunity for participants to gain an overview of the aeronautics RTD work in Europe.

To ensuring the quality of the event, the balance of the programme and the excellence of the presentations a **programme committee** has been established, which includes governmental officials, representatives of the EC and representatives of CEAS, ACARE and industry. The programme committee offered scientific support for the content of the programme and for the proceedings.

Programme Committee for the AERODAYS 2006 conference in Vienna

Position	Name	Company	Organisation Representation	Country	Remarks	E-Mail
Chairman	R. Henke	Airbus	DGLR	D	Industry	rolf.henke@airbus.com
Vice Chair	F. Rammerstorfer	Technical University of Vienna	University	AT	Research	ra@ilsb.tuwien.ac.at
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The Conference was also aligned with ACARE's communication group (continuous information exchange) and IMG of ASD in order to guaranty an efficient information exchange.

3.2 Student participating program

The Aeronautics Days 2006 student participation programme offered the unique opportunity for students to take an active part in one of the most important aeronautical events.

The purpose of the student participation programme was to provide a forum for European students to present their individual projects by papers or posters in a competition for 1st, 2nd, and 3rd place CEAS Aeronautics Days prizes.

The fundamental objective of the student participation programme was to provide students with an educational experience that prepares them for their future as practicing aerospace engineers. Students attended and presented technical work as they would have at a professional meeting. In addition, they established professional relationships, learned from others, and improved their communication skills. Their work, both written and oral, was evaluated by professional members serving as judges, with the primary intent of providing substantial feedback on the quality of their work.

The application to the student participation programme was possible for students studying at European universities with valid student ID. The programme was open to PhD students as well. The students must have been not older than 30 years. Citizenship of a European member state was required. The contribution to the conference was an A3 poster (in English) or model/ exhibit with an aeronautically related topic. The topic of the contribution could have been real or fictitious and should sum up the student's interest or work in aeronautics. All students had to present their work during the exhibition with a 10 minutes presentation and a written paper (max. 8 pages).

The students accepted at the student participation programme got free access to the congress sessions. In addition, they received free accommodation and allowance to their travel expenses.

Students could also take part in the technical and social programme provided for the congress participants. Further offers to experience the city of Vienna were available as well.

Apart from the close contact to people who are actively involved in aeronautical-related topics, the impact of participation on education and future activities was of special interest for young students.



Fig. 2: Students participating programme, 21.06.06

3.3 Societal Aspects

Air transport is vital to Europe. It connects people and businesses inside and outside Europe. The demand for air transport is growing fast. On a global scale a 1% increase in GNP creates 1.5% growth in air transport. Despite the effects on September 11th 2001, European airframers and equipment suppliers still predict an average annual global passenger growth rate of 4.9% p.a. coupled with 6% p.a. in air freight.

This sustainable growth needs to be assisted e.g. with respect to the awareness and acceptance of society. The conference in particular tried to gain the attention of young people and tried to raise their interest for an education in aeronautics. A European wide competition between students offered the winners to be invited free of charge to the conference. National activities particularly in Austria are in planning.

In order to open the public's interest and understanding of the aeronautics industry an open day was part of the agenda. The Austrian Presidency provided some political support in realising these goals.

Growth in air transport will create additional employment in the European carriers, service providers and manufacturing industry. The industry will be forced to apply new technology to stay competitive and a competitive industry will create employment for young people looking for a challenging career.

The aviation sector is well aware that it has to find an acceptable balance between public expectations and the constant, fierce competitive pressures upon it. The imperatives for the sector are now to be "more affordable, safer, cleaner and quieter" reflecting the need to combine cost-effectiveness with an uncompromising attachment to safety and environmental objectives. Aeronautics must satisfy constantly rising demands for lower travel costs, better service quality, the very highest safety and environmental standards and an air transport system that is seamlessly integrated with other transport networks.

The key to securing these objectives is investment in research and technology according to a strategy that can meet the demands of the market as well as the needs of the community. Only the awareness of all concerned Europe stakeholders will enable to create the added value needed to make Europe the number one in aeronautics. The conference made a **significant contribution in raising awareness of all stakeholders.**

AERODAYS-06 facilitated the **exchange of information by disseminating the results of EU funded RTD work.** AERODAYS-06 was fully in line with the EU policy to create a European Research Area, to stimulate mobility in Europe, to create a Single European Sky, to improve safety, to reduce environmental impact and to strengthen industrial competitiveness.

4 Impact

The **status of the industrial RTD** work in Europe was presented. This was done through the presentation of technical results and through the high level panel of experts. Based on the findings the present technological strategy for reaching the Vision 2020 was reviewed. Conclusions were drawn and recommendations were defined by the panel of high level experts. This allowed the aeronautics community to update their RTD strategies and to focus on critical topics. This had/will have an impact on the industry which is relying on those RTD results.

The findings of the conference had/will have an impact on the EU aeronautics work programme of FP7 allowing the Commission to focus on the critical areas of the road to reaching **Vision 2020.**

An efficient **integration of the new member states** reduced the support needed by these countries and provided an added value to the industry as a whole. Significant aeronautical knowledge and experience exists in these countries which at present are at risk of being lost due to missing employment opportunities. The location of the conference in Vienna was particularly chosen for allowing interested parties from the new member states joining the conference.

The conference provided detailed **information on the goals and procedures of FP7. The whole conference structure was oriented along the FP7 priorities, which eased to draw respective conclusions.**

Publication of this information allowed applicants for funding to better find their way through to EU funding. It saved both the European Commission's and applicants' time and money. All information related to FP7 was provided by the European Commission.

Presenting **national research programmes** helped to streamline European research activities, to avoid duplication of work and an efficient use of resources.

The ERA-NET Scheme is about the coordination and cooperation of national and regional programmes and as such, aims at the national and regional programme owners and managers. These are, in most countries, either working in the ministries or working in national funding agencies, which implement programmes on behalf of their governments.

The **Air Transport Net “AirTN” ERA-NET** will step up the co-operation and coordination of national research activities in aeronautics through the networking of research activities at EU level. Furthermore, AirTN aims to expand the European dimension with an aeronautical network in order to improve the coherence and co-ordination of aeronautics. Considering that AirTN is at its early stage at the time of the conference, its activities could be introduced to an international audience and the network could be strengthened by gaining interest of current non-AirTN-Partners.

A specific **SME session** was organised addressing high priority topics as the future of the aeronautical supply chain or the integration of SMEs in European RTD projects. This is particularly important since with about 8 to 10% participation of SMEs in aeronautics projects it is still significantly less than the political target of 15%. However, most of the aeronautics supply chain was represented by SMEs.

Representatives of AeroSME, ECARE, SCRATCH which are all Specific Support Actions (SSA) for SMEs, were present during the conference and had the opportunity to presenting services like helping SMEs to join European RTD projects.

The **European Aeronautics Science Network (EASN)** was invited to contribute to the conference. This gave the conference a wide visibility in the academic community. In particular the student participation programme benefited from EASN's support.

The **dissemination** of the conference results were established by a number of tools like the web site (www.aerodays2006.org), conference proceedings, leaflets, etc.

5 Participants

5.1 List of participants

Parti c. Role	Parti c. Num ber	Participant name	Participant short name	Country	Date enter project	Date exit project
CO	1	Forschungs- förderungsgesellschaft mbH	FFG	A	Month 1 (start of project) 1 st October 2005	Month 12 (end of project) 29 th September 2006
CR	2	Bundesministerium für Verkehr, Innovation und Technologie	BMVIT	A	Month 1 (start of project) 1 st October 2005	Month 12 (end of project) 29 th September 2006
CR	3	Deutsche Gesellschaft für Luft- und Raumfahrt e.V.	DGLR	D	Month 1 (start of project) 1 st October 2005	Month 12 (end of project) 29 th September 2006

5.2 Management

The AERODAYS-06 project management was based upon the structure of the project as provided in Figure 1. The project was broken down into four major workpackages covering the cost management, the dissemination and communication, the coordination of all matters related to the conference facility and the coordination of the conference itself including the scientific/technical structure of the event. Each Workpackage contained a number of tasks as shown in Figure 3. The management structure was intentionally kept simple. Emphasis had been put on cost management (WP1) in order to assure a tight and careful control of the expenditures.

The contractual coordination of the SSA had been done by the coordinator in WP5.

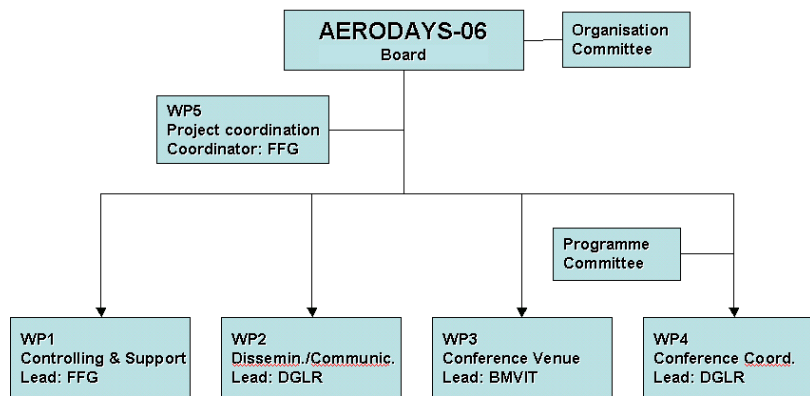


Figure 3: Management structure of AERODAYS-06

6 Conclusion

The Aeronautics Days 2006 were a great success. They met with the great approval of the participants. This Conference brought together all relevant stakeholders from all over Europe including Russia and the Ukraine. Beside large industry, small and medium sized enterprises, research organisations, universities, public authorities and decision makers, it also appealed to students and young researchers which attended the Conferences with a large participation.

The conference provided an ideal platform for discussing political, industrial and research topics in the extended Europe, assisting a policy which pursues an intelligent combination of top-down and bottom-up approaches. The Fifth Community Aeronautics Days addressed the technological and industrial development of the European Aeronautics sector providing a high-level, future oriented perspective coming from politics, the industry and the research community, in response to Europe's social needs and expectations.

A great opportunity was given to exchange ideas, develop and support jointly the road for reaching the goals of the Vision 2020.

European Commission disseminated their strategic view on the 7th framework programme and received a good feed back from community.

A good status of the aeronautics technology in Europe was given on the basis of examples of previous and present projects.

One on the major targets of the event, namely bringing old and new member states together to review and to discuss the status of co-operations, to identify problems and to develop future plans, was reached, because most of the new member states were attending the conference in Vienna, which is very close to all the eastern countries. This joint approach significantly enhanced the integration of the new member states in support of the strategic objectives of the European Union.

With its relatively small but dynamic and fast-growing aeronautics industry Austria was welcoming the chance to present its capability vis-a-vis the European research and industry fabric. Hosting the conference fostered the position of its high tech industry.



Fig. 4: Aeronautics Days