Austrian R&D-Strategy and Initiatives for the Aeronautics Sector

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Content

1. The Austrian aeronautics landscape
2. The Austrian RTI aeronautics strategy
3. TAKE OFF - the national aeronautics research and technology programme
4. Austrian catalogue of aeronautics competencies
The Austrian Aeronautics Landscape
Research and Development in General in Austria

- **Ranked 6** in OECD Innovation Score Board 2009
- R&D-quote 2010: **2.78% of GDP (€ 7.81 B)**

**Figure 2: Innovation Performance (2009 Summary Innovation Index)**

Data for the underlying indicators are for 2005 (3.4%), 2006 (34.5%), 2007 (13.8%) and 2008 (43.3%). The SII scores are shown in Annex E.
Figures about the Austrian Aeronautics Landscape

Screening of aeronautics sector

- 240 companies, 75% SMEs
- 13% employees in R&D
Companies according to the Segments

- **MS 1**: General aviation
- **MS 2**: Complex aircraft structures and components, innovative materials and production technology
- **MS 3**: Cabin equipment (including infotainment)
- **MS 4**: Equipment, aircraft electronics/avionics
- **MS 5**: Intelligent aircraft infrastructure, ground testing and testing equipment
- **MS 6**: Air traffic infrastructure
- **MS 7**: Aircraft basic systems
- **MS 8**: Propulsion
- **MS 9**: Others

n = 112, multiple entries
Austrian Aircraft and Austrian Contribution to international Aircraft Programmes
Austrian Contribution to the Boeing 787

Ranked 15th!
Austrian Contribution to the Airbus A380
The Austrian RTI Aeronautics Strategy
Research - Technology - Innovation
Austrian RTI-Strategy for Aeronautics

- **2006**
  - Initiative

- **2007**
  - Development

- **As of 2008**
  - Implementation
Analysis of General Trends in Aviation

Increasing Need for Mobility

Application of light-weight Technologies

Change of Cost-Structure in Aviation
Specific Situation of the Aviation Sector in Austria

Aeronautics/Supply/Industry

R&D-Aeronautics-Funding

Umsatz (M EUR)

F&E Aufwand 2006: 51,25 (+ 3,6%)

Beschäftigte

F&E Beschäftigte 2006: 405 (+4,4%)
## Main Goals of the Austrian RTI Aeronautics Strategy

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<tr>
<th>GOAL 1</th>
<th>Co-ordination and expansion</th>
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<td>AIR TRANSPORT SECTOR (OR AERONAUTICS SECTOR)</td>
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<th>GOAL 2</th>
<th>Extension and development of technological expertise</th>
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<td>AERONAUTICS INDUSTRY</td>
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<th>GOAL 3</th>
<th>Updating and opening up of new applications</th>
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<td>AIR TRANSPORT</td>
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According to Goal 2:

- 3 system-integrators (+1)
- 4 tier-1-suppliers (+1)
- 12 supply control operators (+6)
- 3 x sales
- 2 x number of employees
- ~70 companies with aviation as core business
According
Goal 3

- Using national added value potentials
- Application of „SESAR-technologies“
- Developing Austrian key technologies
- Becoming
  - Environmentally-friendly
  - safe
  - secure
  - Time efficient
  - Cost efficient

Air Transport System
Strengthening 6 Segments

- General Aviation
- Complex aerostructures and components, innovative materials and manufacturing techniques
- Cabin interior components (incl. infotainment)
- Aircraft equipment and avionics
- Intelligent aircraft infrastructure and test equipment
- Linked air transport infrastructure and ATM
1) Competitiveness

2) Safe, efficient, climate protecting and comfort-oriented air transport system (ACARE!)

3) Qualified researchers and technicians, ambitious co-operative research projects

4) Strengthening international image of Austrian research and development
1) Complex aircraft structures and components

2) Aircraft propulsion

3) Cabin equipment

4) Aircraft electronics/avionics

5) Intelligent aircraft infrastructure, test-equipment

6) Air traffic infrastructure and control applications
Results
TAKE OFF 2002 - 2010

- € 49 M funds
- 124 projects

- Grouping of topics
- Cooperation industry-science
- Qualification, certification
- Networking
- International activities (Eranet AirTN)
- Dissemination of results
1) Common Projects
   LH$_2$-Storage, Titanium Chip Removal, Profit

2) Common funding Germany/ Austria
   € 36.1 M

3) German partners
   e.g. Airbus Germany, DLR, EADS Germany, Diehl Aerospace GmbH, Fraunhofer e.v., Premium Aerotech, Eurocopter Germany, Diehl Aircabin, General Electric
Austrian Catalogue of Aeronautics Competencies
The Aeronautics Industry in Austria

- Catalogue of Austrian companies and competencies
- Published in March 2011
- Available on AirTN Stand 6
- Available as well on www.aeronautics.at
THE AERONAUTICS INDUSTRY IN AUSTRIA

www.aeronautics.at
Successful Measures in Aeronautics

1) Sector has common vision through RTI-strategy

2) Creating community based on research and technology programme and events

3) Focus on industry and science

4) Focus on leading companies and SME

5) Network activities on the national and the international level

6) Thorough overview of aeronautics sector
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