Aktuelle und zukünftige Herausforderungen in der Luftfahrtindustrie

TAKE-OFF
Wien - Tech Gate, 21.11.2012

Matthias Gramolla, VP Sourcing Strategy and Management, EADS Corporate Sourcing
EADS at a glance
EADS Sourcing Volume

Divisions developed to high level integrators with strong sourcing content

External Sourcing is 2/3 of Sales

3/4 of Sourcing is product related, >1/2 complex Systems, Equipment, Structures

Performance is to a large extent determined in the Supply Chain, Sourcing is a key lever for EADS success
EADS Employees Structure

By Divisions

- 69,300 (52%) AIRBUS (thereof 55,000 commercial A/C)
- 20,759 (16%) EUROCOPTER
- 16,623 (12%) ASTRIMUM
- 20,923 (16%) CASSIDIAN
- 5,510 (4%) HEADQUARTERS & OTHERS (IW, EADS-NA, EFW, ATR, others)

By Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>48,394</td>
<td>36.35%</td>
</tr>
<tr>
<td>Germany</td>
<td>47,051</td>
<td>35.35%</td>
</tr>
<tr>
<td>Spain</td>
<td>10,701</td>
<td>8.04%</td>
</tr>
<tr>
<td>UK</td>
<td>13,467</td>
<td>10.12%</td>
</tr>
<tr>
<td>USA</td>
<td>2,829</td>
<td>2.12%</td>
</tr>
<tr>
<td>RoW</td>
<td>10,673</td>
<td>8.02%</td>
</tr>
</tbody>
</table>

Total number of employees: 133,115

All figures as of December 31, 2011
Air travel remains a growth market

Despite economic uncertainties, world traffic continues to post strong growth

Air traffic has doubled every 15 years

Air traffic will double in the next 15 years

Source: ICAO, Airbus
World passenger traffic & GDP evolution

After a strong recovery, ASK traffic now growing at a slower pace

Source: IHS Global Insight, OAG, Airbus
Emerging markets, driving growth

Emerging Economies continue to lead the way

September 2012 data,
Source OAG (ASKs data), Airbus

Emerging Markets traffic up 6.4%
Western Europe traffic up 1.9%
US traffic up 0.7%

Emerging economies continue to lead the way
Airbus business development

Yearly deliveries (A/C), market share (%)

* % share of unit orders
Demand for over 27,000 new passenger aircraft

Fleet size (A/C), passenger A/C above 100 seats

Strong growth in passenger traffic, replacement of old fleets

+ 3.8 % per annum

Beginning 2012: 15,556

2031: 32,551

New A/C: 27,347

Growth:

- Single Aisle (70%)
- Twin-Aisle (25%)
- VLA (5%)

Replaced:

Stay in service:

Source: Airbus GMF

November 2012
Airbus firm order backlog evolution

2001
1,575 aircraft worth $130bn

2012
4,457 aircraft worth >$600bn

Airbus’ order book reflects strong traffic demand in Asia-Pacific

Data to end August 2012
* Lessors (19%), corporate & military aircraft (1%)
Increasing sourcing volumes due to production ramp-up

Outlook of Airbus sourcing volumes by 2020 (bn€)

- Aerostructure
- Material & Parts
- Propulsion systems
- Systems & Equipment
- Cabin
- EGP

Today ➔ A350 ➔ A320NEO

Vision 2020 Airbus GSN est.
Priorities for programs & business development

**SA**
- NEO/Sharklet
- US FAL

**LR**
- WV 80
- A332F, MRTT

**A380**
- Ops stability
- Sales stimulation

**A350**
- Ramp-up
- A350-1000
Challenges for the Airbus business…

- Global presence
- Large industrial volumes
- Cost competitiveness
- Dispatch reliability
- Innovation leadership
- Integrated service offerings
... and their implications for the supply chain

- Global presence
- Large industrial volumes
- Cost competitiveness
- Dispatch reliability
- Innovation leadership
- Integrated service offerings

- Global footprint
- Delivery performance
- Field support
- Lean operations
- Leading edge technologies
- Openness to new business models
EADS Supply Base – Aerospace Requirements

Number of suppliers vs. aggregated External Sourcing Turnover

- Long program life cycles
- Outstanding technical complexity
- Utmost requirements on safety, reliability and environmental impact (certifications !)
- Strong and long-standing mutual dependencies
- Often in single-source arrangements
- Long term return on investment

Suppliers must be able to cope with Aerospace and Defence specificities
Procurement Model - Risk-Sharing Partner Strategy

- High degree of vertical integration inside Airbus
- Local sourcing of BtP packages in an “extended workbench” approach

Focus of Airbus on system integration and selected buy technologies
- Sourcing of major components from a network of D&B risk sharing partners (“extended enterprise”!)
## Managing supplier performance: Improvement initiatives

<table>
<thead>
<tr>
<th>Airbus-driven projects with suppliers</th>
<th>Organizational optimization</th>
<th>Anticipatory processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Capability assessment &amp; improvement action follow-up at selection</td>
<td>➢ Creation of an integrated “Procurement Operations” unit as a part of the Procurement organization, incl. all ordering and quality mgmt tasks at internal sites and all supply chain development activities at supplier sites</td>
<td>➢ Transfer of Work process</td>
</tr>
<tr>
<td>➢ SQIP</td>
<td></td>
<td>➢ Financial Watchtower &amp; risk management process</td>
</tr>
<tr>
<td>➢ Specific initiatives (e.g. SPACE)</td>
<td></td>
<td>➢ “Firm commitment to order”</td>
</tr>
</tbody>
</table>
R&T Programme – Cutting edge technologies

Smart Wing Technologies
- Natural Laminar Flow
- Hybrid Laminar Flow

Innovative Power Plant
- Open Rotor configuration
- Geared Turbo Fan
- Advanced Turbo Fan
- Alternative Fuels

Configurations Integration

Systems for green operations
- All electric Aircraft
- Smart ground operations
- Energy management
- Fuel cells
- Air traffic management

Cabin innovations for the passenger
- Active surfaces
- Wireless cabin

Innovative Structures
- New materials, composites, advanced alloys
- Self healing, Structural health monitoring
- Nano technologies

Technology development with partners - Airbus as architect & integrator
Global Sourcing Drivers & Targets

EADS to significantly increase Global Sourcing

Market access approaches
- Direct industrial investment
- JVs with / M&A of local players
- Sourcing from local industry
- Pure export

4 Global Sourcing Drivers
- Value for cost
- Risk management
- Rare resources
- Market access

EADS Vision 2020 target: 40% Global Sourcing

Today

Western Europe

Sourcing

“Global” 29%

Revenues

2020

Western Europe

40% “Global”

Revenues

TAKE-OFF

November 2012

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Thank you for your attention!