

# Ascending

EADS Annual Review 2004

Special supplement:  
The A380 comes to life

Letter from the  
Chairmen of the Board



The EADS  
investment proposition



The world in which  
we operate



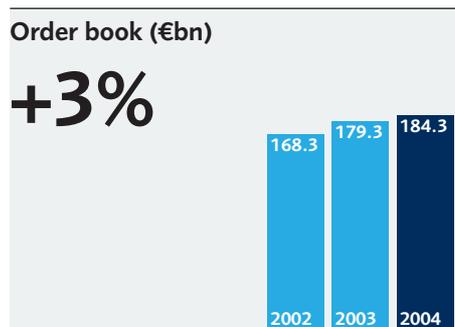
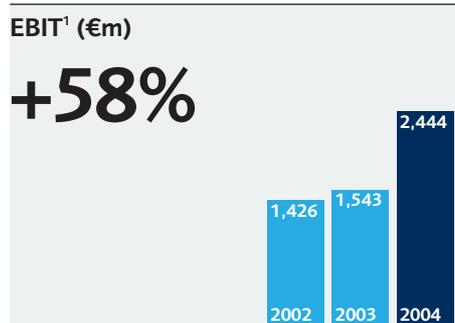
The A380 comes to life



The step beyond

**EADS is a world leader and driver of change in the aerospace and defence industry. We deliver, we are balanced, we are global, and positioned for growth.**

# Key figures 2004



Percentages used with the charts throughout this report refer to variation between 2003 and 2004

## EADS Group

		2004	2003	2002
Revenue	€m	31,761	30,133	29,901
EBIT <sup>1</sup> (Earnings before interest and taxes)	€m	2,444	1,543	1,426
EBIT <sup>1</sup> margin	%	7.7	5.1	4.8
Net income <sup>2</sup>	€m	1,030	644	212
Earnings per share <sup>2</sup>	€	1.29	0.80	0.26
Dividend per share	€	0.50 <sup>3</sup>	0.40	0.30
Net cash position	€m	4,058	3,105	2,370
Order intake	€m	44,117	61,150	31,009
Order book	€m	184,288	179,280	168,339
Workforce (number of employees)		110,662	109,135	103,967

<sup>1</sup> Unless otherwise indicated, EBIT figures presented in this report are pre-goodwill amortisation and exceptionals

<sup>2</sup> Compliant with IFRS 3 from 2004 (no longer goodwill regular amortisation); 2003 and 2002 restated for comparison

<sup>3</sup> To be proposed to AGM on 11th May 2005

## EADS Divisions

		2004	2003	2002
<b>Airbus<sup>4</sup></b>				
Revenue	€m	20,224	19,048	19,512
Order book	€m	136,022	141,836	140,996
Order book/annual deliveries (in aircraft)	years	4.7	4.8	5.0
<b>Military Transport Aircraft</b>				
Revenue	€m	1,304	934	524
Order book	€m	19,897	20,007	633
Order book/revenue	years	15.3	21.4	1.2
<b>Aeronautics<sup>5</sup></b>				
Revenue	€m	3,876	3,803	3,834
Order book	€m	10,171	9,818	10,162
Order book/revenue	years	2.6	2.6	2.7
<b>Defence and Security Systems<sup>5</sup></b>				
Revenue	€m	5,385	5,165	4,770
Order book	€m	17,276	14,283	13,406
Order book/revenue	years	3.2	2.8	2.8
<b>Space<sup>6</sup></b>				
Revenue	€m	2,592	2,424	2,216
Order book	€m	11,311	7,888	3,895
Order book/revenue	years	4.4	3.3	1.8

<sup>4</sup> Order intake and order book based on catalogue prices

<sup>5</sup> In this report, 2002 figures are adjusted according to the new structure of Aeronautics and Defence and Security Systems since 2003

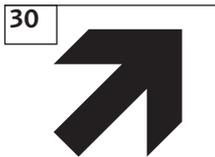
<sup>6</sup> Full year 2003 includes EADS Astrium at 100% (full year 2002 at 75%)

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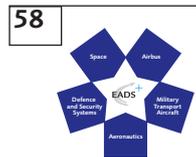
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**The complete EADS Annual Report Suite 2004 consists of:**



**EADS Annual Review 2004 (1)**



**EADS Financial Statements and Corporate Governance 2004 (2)**



**EADS Business and Legal Description 2004 (3)  
 (available upon request)**

 The online version of the EADS Annual Report Suite 2004 is available at the Investor Relations section of [www.eads.com](http://www.eads.com)



Left:  
**Manfred Bischoff**  
Chairman

Right:  
**Arnaud Lagardère**  
Chairman

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# Letter from the Chairmen of the Board

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**Dear EADS shareholders,  
For 2004, our Company reported a very satisfactory set  
of results, exceeding targets again, and rewarding us  
for the perseverance of our management and workforce  
in our multinational European Group.**

## **Continuous success**

EBIT rose substantially from €1,543 million in 2003 to €2,444 million, the cash position was extremely strong (€4.1 billion at year end 2004) and the order book ended the year at a new high of €184 billion, comprising €135 billion in commercial orders, and €49 billion from the defence businesses.

These achievements stem primarily from Airbus's success in a recovering civil aviation market. For the second year in a row, Airbus delivered more aircraft, and for the fourth year in a row it took more orders than Boeing. In addition, those positive achievements were supported by the remarkable turnaround of the Space Division after thorough restructuring, as well as the defence businesses' increasing contributions to the growth in revenue and orders.

Progress was reflected in EADS' stock price, which outperformed both its sector and market indices.

EADS derives its forward looking spirit from the dedication of its people, its innovative products and its global presence. More than 100,000 people work for EADS in Europe and across the world. All are highly committed to best practice. We have a competitive product portfolio that sets the standards in many areas of aerospace and defence. And our Group has proved resilient through the aviation downturn of the past few years, while also adapting to compete in world markets.



**Our strategic goals**

- To strengthen our competitive position further through our portfolio of new and advanced products.
- To become a Global Industrial Group through expanding local activities in the target markets of Asia, the United States and Russia.
- To deliver complete systems and service solutions, in order to meet the need of today's defence forces and homeland security agencies.
- To maintain our focus on innovation and technology.

As the civil aviation cycle recovers, it is now the time to benefit from the enormous reshaping and integration undertaken in the past five years. At the same time the Board has initiated several new internal projects to be able to manage continuous market pressure and unfavourable exchange rate developments in the future to safeguard the leading position of our aviation business. Meanwhile, our defence and space businesses have efficient transnational infrastructures and product portfolios suited to today's evolving requirements.

We have great faith in EADS' outlook due to the combination of our product portfolio, positive market developments, a strong order book, leading technology and management capability in all areas. Recognising both the achievement of 2004, and our outlook, the Board will be recommending an increase in the dividend from €0.40 in 2003 to €0.50 for 2004. This rewards our shareholders for loyalty through the turbulent geo-political and macro economic environment since EADS' market entry. It reflects the strong financial position as well as the prospects of the coming years.

**Dividend per share (€)  
(gross amount)**

**+25%**



After years of economic slowdown, EADS has embarked on a period of growth. To reflect EADS' soundness and confidence in the future, another dividend increase is proposed for 2004.

\* to be proposed at the AGM 2005

After the creation of EADS and establishment of a company with global reach in the last five years, we are now entering a new phase. The two Chief Executive Officers who led us through that period deserve huge credit for their dedication, their leadership and accomplishment in executing the strategy set by the Board. They have served all stakeholders well. They have also created a new, international model for the aerospace industry, and have demonstrated its effectiveness.

Thank you Philippe Camus and Rainer Hertrich!

Now that EADS' creation has been completed, this is a time of new opportunities and new challenges. EADS must now concentrate on generating sustainable growth in an environment where certain markets are expanding, others are pausing, and competition remains fierce everywhere. We must also ensure that all EADS businesses remain in strong positions as the aerospace and defence industry consolidates.

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**We have great faith in EADS' outlook due to the combination of our product portfolio, positive market developments, a strong order book, leading technology and management capability in all areas.**

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### **A leadership strategy**

In 2004, the Board decided a strategy to suit this new phase, reinforcing the strengths of the past, and at the same time addressing the challenges of tomorrow. This is a refinement of our previous strategy and the driving principle remains the same – value creation. We have absolute confidence in the ability of the new management to implement this, and to achieve our goal of becoming the leading global aerospace and defence company.

Our strategy has four key elements:

- To strengthen our competitive position further through our portfolio of new and advanced products. Businesses such as Airbus, Eurocopter, MBDA/LFK and EADS SPACE Transportation are already leaders in their markets, while other business areas have not yet reached that position. We intend to consolidate market leadership in the areas where we have it, and to improve our competitive position in the areas where we do not.
- To become a Global Industrial Group through expanding local activities in the target markets of Asia, the United States and Russia. In 2004, we took additional steps to change our focus from being primarily a European exporter to a global company with a worldwide presence through investments, acquisitions and programme partnerships. In this way, we intend to grow our international sales, to broaden our technology portfolio, to gain cost advantages and to increase natural currency hedging.
- To deliver complete systems and service solutions, in order to meet the need of today's defence forces and homeland security agencies for lead systems integration and service solutions. This is being driven by the US and European defence forces' transformation to network-centric warfare, and the need for a more efficient use of defence budgets.
- To maintain our focus on innovation and technology. Continuous innovation has been the basis of our past success. We are convinced it will be even more important in the future, as innovation cycles shorten and new competitors emerge. EADS has always invested more than its competitors in research and development – we are convinced that this is an important driver of long-term shareholder value.

### **The Board's vision for EADS**

In 2004, the Board had to decide on new strategic goals as the integration and initial competitive positioning of EADS was completed. The authorisation to offer the Airbus A350 long-range 245–285 seat aircraft demonstrates the strategic impetus it continues to provide. Meanwhile, management remained focused on driving forward all of our Divisions and delivering on its commitments.

The Board, as the decisive body of EADS, will continue to pursue profitable growth through setting the standards in our markets – that is defining and realising the products that customers need. This is how we strive to create long-term value.

In doing this, we acknowledge our corporate social and ethical responsibilities. Indeed, our corporate vision balances economic performance, consideration for all stakeholders' interests and caring for the environment. We believe that using this vision to guide our major strategic decisions is in the best long-term interests of our shareholders.

The A380 exemplifies this. It testifies to our innovation, labour and teamwork. Europe and the world as a whole have demonstrated the power of partnership in pioneering this new benchmark for flight in the 21st century.

For the future, the Board has taken action to guarantee continuity in its operations and its composition. It will remain committed to the success of EADS and the implementation of its strategy.

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Chairman  
**Manfred Bischoff**



Chairman  
**Arnaud Lagardère**

# The EADS investment proposition

To invest in EADS is to buy a share in a global company with leading positions in growth markets in the aerospace and defence industry.

We have a record for delivering on our targets for financial growth, and the goals that underpin them. As such, we have integrated many of Europe's aerospace, defence and space businesses, merging them into unified and efficient trans-national organisations.

With an order book increasingly balanced towards defence businesses, EADS is building resilience to civil aerospace cycles and triggering more synergies from its businesses.

EADS is pushing into the world's fastest growing markets, becoming part of their industrial fabric, and securing revenue for the long term.

Airbus enters the civil aviation upturn with more than 50% market share, and the most competitive portfolio of modern aircraft. Far-reaching reorganisation in the Space division has returned it to profitability, and there is the prospect of further growth. And across the defence businesses, a strong product portfolio has led to a sizeable order book, the prospect of significant future orders to come and consequent revenue growth.

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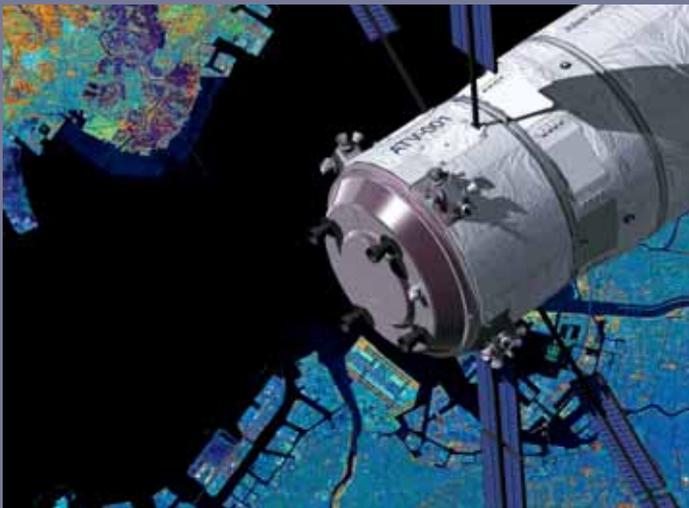
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**We deliver**



**We are balanced**



**We are global**



**We are positioned  
for growth**

# 1 We deliver



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Management is gaining a reputation that it can be trusted to deliver on its commitments.

Helicopters such as the EC130 secured Eurocopter's success as the world's number one helicopter manufacturer in 2004.

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# We deliver

EADS has delivered on its targets and its goals. In the five years since its creation, we have implemented an industrial reorganisation on a massive scale, merging a collection of national businesses into a global organisation that is a leader in international markets. We have increased the profitability of our businesses through both higher revenue and greater efficiency. All of these actions have led to the delivery of financial results that have met, or exceeded, publicly stated targets in every year.





1. With Air Berlin and Niki Luftfahrt a further major European low-cost alliance has decided in favour of the A320 Family.

2. Arianespace placed an order for 30 Ariane 5 satellite launchers. Here, the Ariane 5 ECA flight on 12th February 2005 in Kourou, French Guyana.

3. The NetCOS (Network Centric Operations Simulation) demonstrator is a multifunctional simulation system designed to develop and test new defence concepts.

4. At the Airbus final assembly line in Toulouse, the first A380s have been built and are progressing towards scheduled delivery in 2006.

5. The A400M military transport aircraft is an example of a successful transnational defence programme.



### Exceeding financial targets

In the volatile half decade since inception, EADS has met or exceeded all financial targets every year. In 2004, EBIT of €2.4 billion, up 58% over a year ago, surpassed our target, as did key measures such as revenue and free cash flow. EADS has grown EBIT 75% from €1.4 billion at the end of its first year, 31st December 2000.

### Achieving industrial goals

EADS has achieved its ambitious industrial goals. Leveraging the legacy of sometimes redundant investments from our founding companies, we have effectively organised competence centres throughout Europe with specific engineering, manufacturing and support specialisations. In each business area, there is now limited duplication and reinforced management control, regardless of national boundaries. As such, we have transformed a collection of national businesses into a pan-European integrated organisation. Airbus SAS was created in 2001, MBDA in 2001 and Astrium in 2000.

### Building profitable businesses

EADS has delivered strong performance and established global leadership in many of its businesses. The performance of each division has improved, and all now turn a profit. Airbus has become the market leader in commercial aviation for orders received over the past five years. It has made the highest number of deliveries since 2003. Furthermore, the A380 is built and progressing towards delivery in 2006 – it completes the aircraft range, and sets a benchmark for 21st Century aircraft technology. In Space, we have implemented a far-reaching and successful restructuring plan, involving a complete industrial reorganisation. The Division returned to profit in 2004. And in our defence businesses, we have secured major trans-national programmes such as A400M, Meteor, NH90, Eurofighter and Aster. These are now being implemented, meeting milestones and performance targets. The defence businesses have been consolidated for better efficiency and competitiveness. Further profitability increases are expected as they progressively reap the rewards of the restructuring undertaken between 2001 and 2004. The EBIT of the Defence and Security Division increased more than threefold from 2000 to 2004.

# 2 We are balanced



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EADS is a balanced leader in aerospace,  
defence and related services.

The Eurofighter is the most advanced  
multi-role fighter aircraft.

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# We are balanced

With revenue increasingly better balanced between civil and defence activities, EADS has built resilience to the civil aviation cycle. Defence businesses have accounted for a growing proportion of revenue during the past five years. In 2004, they made up 24% of total revenue. With a strong defence order book, EADS has established a firm foothold in businesses that evolve independently of the fortunes of airlines, so that defence is likely to account for a larger proportion of revenue in the next commercial aviation downturn. Furthermore, there are other synergies between civil and defence sectors, with technology and expertise developed in one benefiting product development in the other.





#### Increasing diversification

The critical strategic rebalancing of our portfolio of civil and defence activities is in progress. The revenue of defence businesses have increased by more than 50% from approximately €5 billion in 2000 to €7.7 billion in 2004. Growth in defence has more than compensated for the impact of the civil aviation slowdown and US Dollar weakness. In 2004, it has supported EADS' 5% revenue growth from €30.1 billion at year end 2003 to €31.8 billion. Further growth towards €10 billion defence revenue by 2006/2007 is underpinned by a full military order book. At year end 2004, there is an order book of €49.1 billion, up from €15 billion at year end 2000.

#### Moderating economic cycles

Rebalancing revenue between civil aviation and defence moderates the impact of civil aviation cycles. Civil aviation is highly cyclical, with pronounced peaks and troughs in demand, while defence is a steady growth industry. In the past 30 years, the number of annual deliveries of aircraft with more than 100 seats has fluctuated from as much as 8% to 9% of the existing fleet at the top of the cycle, to as little as a third of that at the bottom. Unchecked, such variations could be a source of vulnerability. The civil aviation cycle is now in a strong upturn after reaching a trough in 2003. When the next downturn arrives, the negative impact of falling civil aviation revenue should be cushioned by the stream of defence revenue embedded in our order book.

#### Exploiting synergies

In developing the balance between civil and defence revenue, we have found ways in which the two sectors reinforce each other. We have identified and exploited clear synergies between the civil and military businesses. Through transferring Airbus's competence in civil aviation, we have developed the Multi-Role Tanker Aircraft and military transport aircraft such as the A400M. And the M51 submarine-launched intercontinental ballistic missile, for which EADS received the series production contract early in 2005, shares technology developed for the Ariane civil launcher.



1. EADS will supply a fleet of five A330 Multi-Role Tanker Transport (MRTT) aircraft to the Royal Australian Air Force.

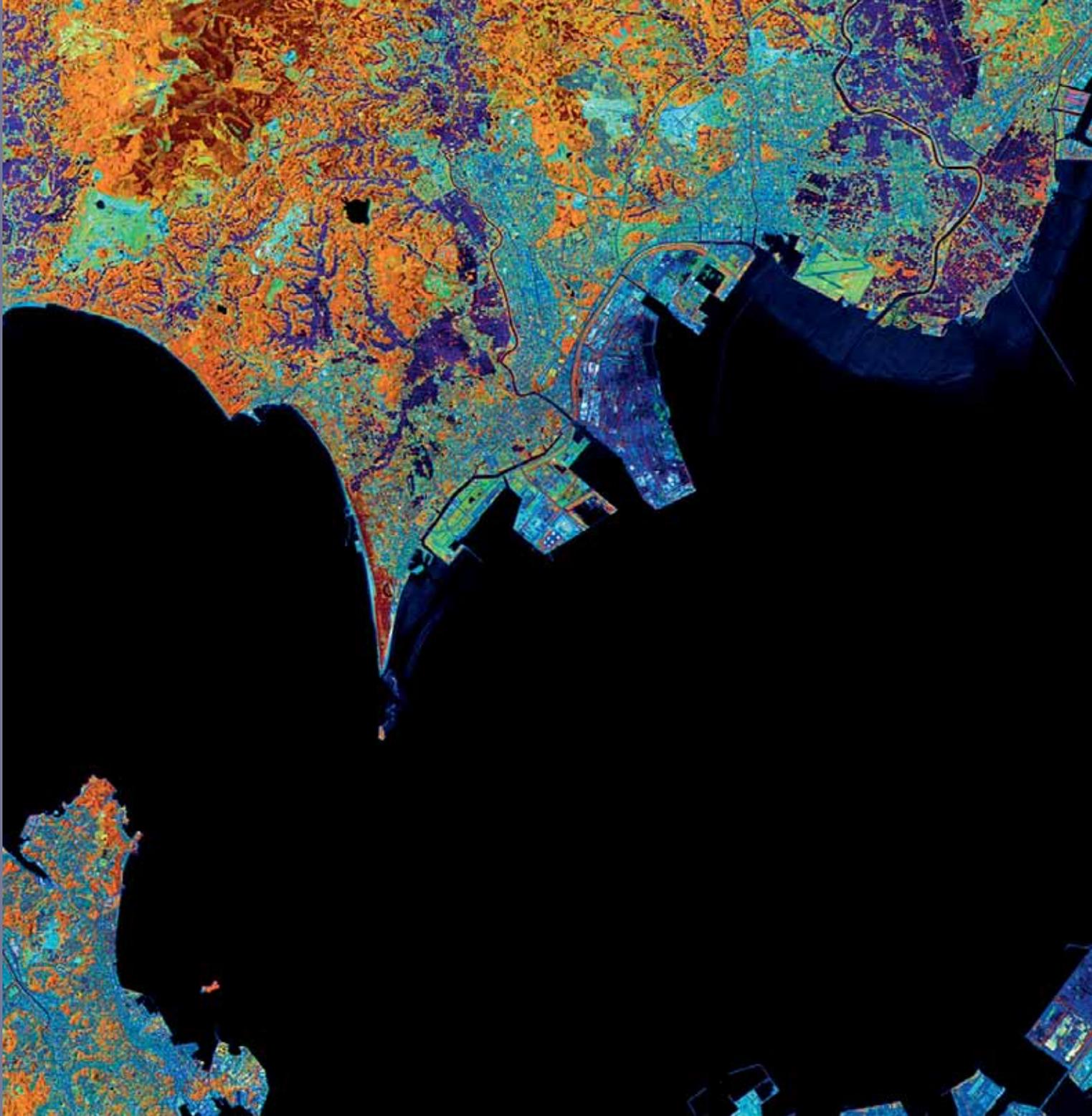
2. Eurofighter in final assembly line.

3. The first Tiger combat helicopters have been delivered following orders from France, Germany, Spain and Australia.

4. EADS' space activities contribute to both the civil and defence business.

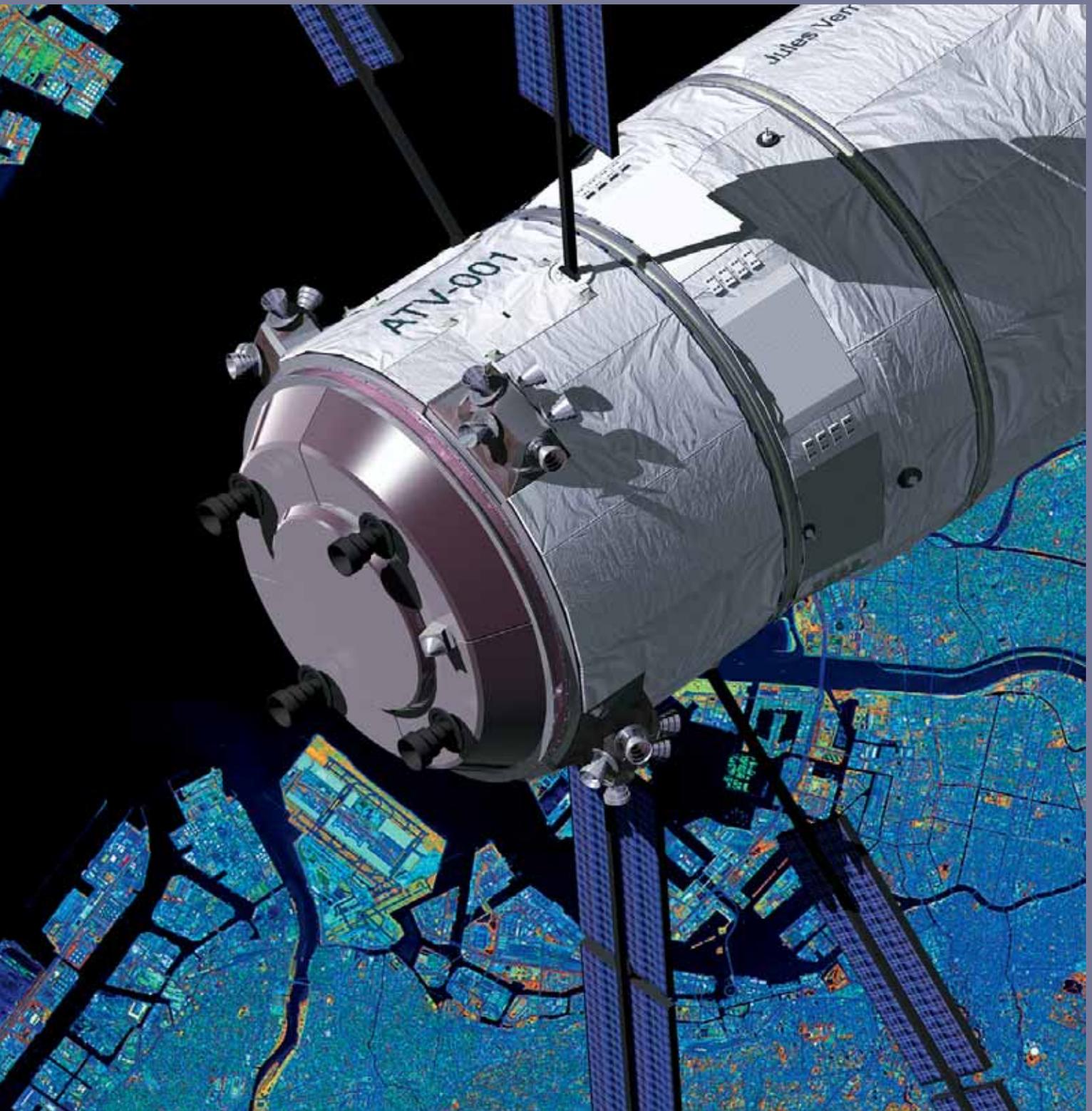
5. The A330-300 provides ultimate efficiency in the 300-seat class.

# 3 We are global



One integrated business  
with one culture today.

EADS is supplying the Automated Transfer Vehicle (ATV),  
an unmanned transport system to deliver fuel and other supplies  
to the International Space Station (ISS).



# We are global

EADS is a global leader, which reduces our dependency on the economies of individual countries or regions. Through our Global Industrial Strategy, we are extending our activities in those countries with the greatest growth potential, tying our fortunes to theirs by building industrial presences there. In the future, this should secure our ambitions for growth in revenue and EBIT. Additionally, our global positioning helps to reduce exposure to the strong Euro.



1. Eurocopter North America assembles and customises helicopters such as the EC130 in the United States.
2. With programmes such as EuroMALE, EADS puts strong efforts in the field of Unmanned Aerial Vehicles (UAV).
3. The popular A320 Family has played an important role in the restructuring of Aeroflot's European fleet.
4. EADS provides key elements for the European satellite navigation system, Galileo.
5. Globally, EADS employs more than 110,000 people.

### Global leader

EADS is a global leader. In the aerospace and defence sector, it ranks second in terms of revenue and first for orders. Our markets span the world and we generate revenue from all major markets. In 2004, some 27% were from North America, 16% from the Asia-Pacific region, 45% from Europe, and 12% from the rest of the world.

### Expanding in growth countries

While our people and assets are mainly based in our four home countries – France, Germany, Spain and the UK – the Global Industrial Strategy project initiated in 2004 is extending our activities in those markets which show the best growth potential. We have identified six priority countries: the United States, Russia, China, Japan, India and South Korea. This sound and harmonised global strategy not only ensures long-term, sustainable access to key growth markets, it also draws on the most motivated, best-suited technological, industrial, financial or human resources to promote local industry and serve our requirements. It fosters shared interests with these countries, their governments and their people.

### Cultural sensitivity

We are sensitive to the different approaches required by different markets, and will adapt to whatever is practical. This might take the form of a cooperation agreement, local industrial presence or outright purchase. In the US, our new helicopter plant in Mississippi answers the needs of the US Coast Guards and strengthens the local economy. In China, the fastest-growing and most promising commercial aerospace market, we have invested in AviChina, a local manufacturer. In Russia, we have developed partnerships for space launchers and a research and technology centre.

### Natural hedging

A beneficial side effect of the Global Industrial Strategy is natural hedging. As the proportion of our costs denominated in currencies other than the Euro increases, so the Group's exposure to the strong Euro is reduced.



# 4 We are positioned for growth



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Growth throughout our industry is now accelerating.  
We are positioned to be the beneficiary of this.

Airbus is benefiting from accelerating demand for aircraft  
from the growing markets in Asia-Pacific.

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# We are positioned for growth

EADS is positioned to reap the benefits of both the upturn in civil aviation and greater internal efficiency. With more than 50% of the market for new commercial airplanes, Airbus is set to be the prime beneficiary of an upturn that is gathering momentum. In Space, increased efficiency is currently driving EBIT growth, but revenue will also do so. Defence is growing steadily, with major programmes driving increasing revenue.



1. The NH90 has become a major export success and is setting the standard for naval and tactical transport helicopters.

2. EADS CASA is contracted to supply CN-235 Medium Range Surveillance Maritime Patrol Aircraft to the US Coast Guard.

3. The A320 is the original member of Airbus's single-aisle airliner family in this category.

4. The cryogenic upper stage of the Ariane 5 launcher.

5. Aircraft models are installed and tested in the anechoic chamber of the EADS Corporate Research Centre.





### Civil aviation upturn

Airbus has confirmed its market leadership just as the commercial aviation market swings into an upturn. According to Airbus forecasts, airlines will need 17,000 new aircraft over the next 20 years. If Airbus maintains its leadership, it could win more than half of these orders, representing over 425 deliveries on average each year. Downturns would see lower numbers, while cycle peaks would show higher numbers. After delivering 303/305 aircraft in the trough of the cycle in 2002/2003, Airbus is clearly set to increase volume rapidly to 400 units and beyond. Our order book supports this forecast.

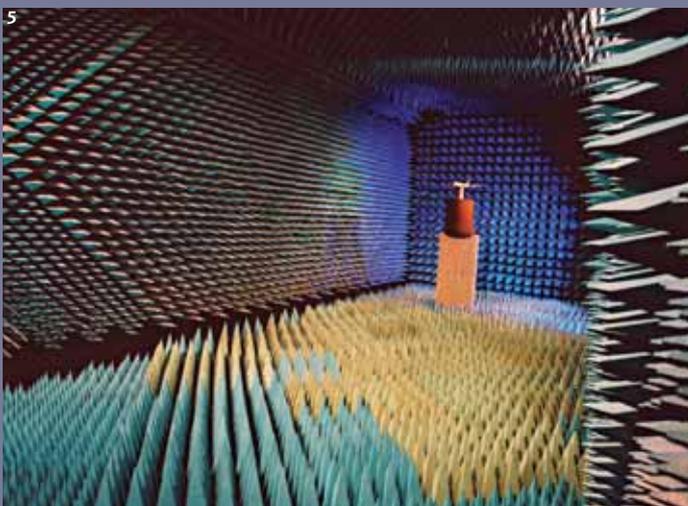
### Space turnaround

In Space, increased efficiency will be the primary driver of profit growth. The far-reaching industrial reorganisation has been completed, and satellite programme cost controls have been implemented. Space is now poised to expand its operating margins. Beyond this, Space is positioned for revenue growth. The order book has increased more than twice since 2000 to reach €11 billion at year end 2004. And we are seeing other growth opportunities from Paradigm (our secure communications service satellite company), which is winning export customers following the initial large contract from the UK Ministry of Defence in 2003, and from the future European navigation satellite system Galileo.



### Defence grows steadily

In Defence, major programmes are driving strong organic growth. Some such as the A400M transport aircraft, NH90 transport helicopter, Tiger combat helicopter, Eurofighter and Aster missile represent a substantial proportion of our order book and are already producing revenue. Beyond our platform business, we are positioning ourselves in the fast-growth services and homeland security markets. Services has won early successes in Germany with the NH90 Training centre, and in the United Kingdom where we are selected to provide air refuelling of fighter aircraft. Homeland Security is well-positioned to supply integrated systems and equipment to tackle terrorist threats, which have increased the need for effective border surveillance systems. We provide the full range of products to face this need, from Unmanned Aerial Vehicles, control and surveillance systems through radars, satellites and communication systems. In 2004, we won the prestigious order to supply Romania's border surveillance system.



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# A landmark year for EADS

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**Dear employees, customers, shareholders and suppliers,**  
EADS has been in existence for five years now, and we are proud to present the Company we have had the pleasure and honour to guide from its creation in July 2000 to the strong position it is in today.

EADS is often cited as the model integrated European company, with a singular spirit and efficient structure. We are very pleased with the way vision has become reality. We believe that we have been able to achieve this because we, personally, have worked together in mutual confidence and transparency, bound by a common sense of mission and duty to the Group, its employees and shareholders. We are proud that EADS is now recognised by all its stakeholders as an industrial, technological, social and financial success.

## **Industrial efficiency**

Five years ago, at EADS' inception, we inherited a collection of impressive defence, space and aeronautics businesses. These diverse national assets, though promising, were far from being a unified company, with the efficiency needed to become a leader in global markets.

Airbus was a European joint venture with no industrial assets, and no guiding strategy. The new EADS was a powerful driving force in the formation of the Airbus company, and it enabled Airbus to launch the A380, which is set to become the benchmark for airline technology in the 21st century.

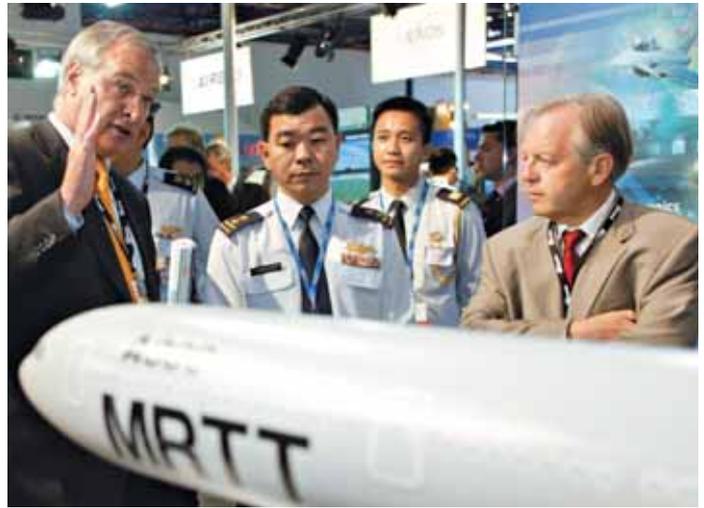
In space and defence, issues related to national interests and cultures made the realisation of synergies and the creation of an effective industrial group even more challenging. The willingness of European governments to design common defence and space policies had made great progress, but was not yet fully developed. The fantastic motivation of EADS people and the trans-national spirit of our management have overcome this resistance. We have transformed national organisations into integrated businesses which transcend Europe's historical boundaries.





Left:  
**Rainer Hertrich**  
Chief Executive Officer

Right:  
**Philippe Camus**  
Chief Executive Officer



Despite the difficulties, this has been achieved incredibly quickly in such areas as missiles and satellites. In 2001 we created MBDA (37.5% owned by EADS) with our fellow shareholders. MBDA is now the global leader in missile systems, and LFK, the German missile manufacturer, is poised to merge with it. In the space sector, we established Astrium in 2000 as the leading European satellite company.

At the same time, we have successfully extended our product range. In only five years, EADS has matured from being mainly a platform and equipment manufacturer into a global player able to meet the evolving demands of governments through an integrated offer. We are prime contractors for Private Finance Initiative-type service contracts such as Paradigm and the Future Strategic Tanker Aircraft in the United Kingdom; for integrated defence systems such as the Ground Based Air Defence programme in the United Kingdom (for which we have been pre-selected); and Alliance Ground Surveillance for NATO. Additionally, we provide homeland security solutions, contributing to the US Coast Guard Deepwater project and supplying the Romanian border surveillance system. EADS today covers the full spectrum of defence businesses. Moreover, we have effectively derived our civil successes into military products. The Multi-Role Tanker Aircraft and A400M military transport aircraft are among the best examples.

### **Technological excellence**

Since the creation of EADS, we have always devoted 6% to 7% of annual revenues to self-financed research and development (R&D) – a far higher percentage than our peers. Taking into account customer-financed R&D, the percentage is roughly doubled. This heavy investment is a prerequisite to ensure future competitiveness.

We have given new means to the Corporate Research Centre, a centralised team of more than 600 people located in Paris, Toulouse, Hamburg, Munich and Moscow. With a single management structure, all EADS R&D activities are coordinated to allow the transfer of knowledge across businesses and to avoid duplication.

We also believe that international cooperation is a key to unlock R&D success and affordability. In 2004, we launched the Advanced Technology Initiative, a global network which fosters innovation in technology, research and development all over the world. Beyond Moscow, we have set up partnerships in Singapore and China for R&D projects.

Among the most notable technological breakthroughs since the creation of EADS, we would like to mention the increasing use of composite materials in our civil aircraft, the development of electronic fly-by-wire controls for aircraft refuelling booms and a hyper-sensitive electronic device that detects explosives.

### **Social success**

Our successes of tomorrow will stem from the men and women working for EADS. We have carefully implemented a working environment which is both socially responsible and attracts the most talented individuals. From scratch, we have also created a group-wide Human Resource policy for people management, salary compensation and industrial relations.

This is really cutting-edge because French, German, Spanish and UK social laws are very different, as are the rules for union representation. Before EADS, there was no existing legal framework – so we designed and implemented a structure to fit the need. A few months after the creation of EADS, unions and works councils from France, Germany and the UK established an unprecedented trans-national committee – the European Works Council.

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**EADS is now on an improved growth trajectory. EADS has proved resilient in the downturn. The actions taken during the past few years in terms of both restructuring and industrial integration have left EADS extremely well positioned to benefit from the market upturn.**

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We are proud that EADS is an exemplary employer. It is, according to an independent survey, one of the industrial groups where European engineers most want to work. We have strived for a better balance between men and women. Our personal commitment was to raise the proportion of women to at least 20% of newly recruited engineers. In 2004, we have slightly exceeded this commitment.

In total, EADS has created more than 10,000 new jobs across the countries in which we operate over the past four and a half years.

#### **Financial progress**

EADS is also a great financial success. All financial targets have consistently been met or exceeded. In a market environment burdened by terrorism and threats, and also by the global economic slowdown, we have performed better than expected every year.

We have increased the operating margin from 5.8% in 2000 to 7.7% in 2004. EBIT has increased by 75% from €1.4 billion to €2.4 billion, with every division contributing to this outstanding growth. Defence & Security Systems has been the most notable success, increasing its pro forma EBIT more than three-fold since 2000. Space has accomplished a dramatic turnaround. And Airbus, with its completed product range, is benefiting from the start of the market upturn and the favourable currency hedges initiated in the early years of EADS.

EADS' balance sheet is stronger than ever. We have not only maintained our net cash position but boosted it from €3.0 billion at the end of 2000 to €4.1 billion at year end 2004.

Furthermore, EADS is now on an improved growth trajectory. EADS has proved resilient in the downturn. The actions taken during the past few years in terms of both restructuring and industrial integration have left EADS extremely well positioned to benefit from the market upturn.

We leave EADS with an outstanding order book of €184 billion. Most particularly, our defence programmes have supported this, with their order book growing from around €15 billion at the end of 2000 to €49 billion at year end 2004.

The financial strength of EADS, its potential for growth and the transparency of our financial communications have earned EADS broad recognition in financial markets. The EADS share price has increased by +22% between inception and 31st December 2004. In the same period, the CAC40 Index has lost -41%.

#### **Conclusion**

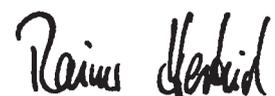
In summary, we are very grateful to all the people who work for EADS or who have placed their confidence in EADS by investing in our shares, selling to us, or purchasing from us. Without them these industrial, technological, social and financial successes would not have been possible.

As we look to the future, we believe that EADS should continue to build on the strong foundations established during this initial phase. EADS has gathered a powerful set of attributes: a highly motivated and skilled workforce, a complete and competitive product range, a large and global customer base, a sound financial base and a unique trans-national spirit.

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Chief Executive Officer  
Philippe Camus



Chief Executive Officer  
Rainer Hertrich

# EADS at a glance



A320 Family



C-295

## EADS Group

### A business under five Divisions

EADS is a global company with five Divisions focused on different segments of the aerospace and defence industry. Airbus is the largest of the Divisions, accounting for more than 60% of total revenue. With a highly competitive product portfolio, it consistently captures half of the world's orders for commercial aircraft. The other Divisions all have solid positions in their markets, supported by portfolios of young and innovative products. EADS is the market leader in many areas of the commercial aviation, defence, homeland security and space markets. Many of its Business Units carry widely recognised brand names.

## Airbus

Airbus is the world's leading aircraft manufacturer. Its customer focus, commercial know-how, technological leadership and manufacturing efficiency have propelled it to the forefront of the industry. Today, Airbus consistently captures half of all commercial airliner orders and continues to broaden its scope and product range by applying its expertise to the military market.

### 2004 key achievements

- Consolidate market position as leading commercial aircraft manufacturer
- A380 milestones, e.g. A380 final assembly line inauguration
- Successful expansion of product line by offering A350
- Initial benefits from Route 06 cost saving programme

## Military Transport Aircraft

Military Transport Aircraft (MTA) designs, manufactures and sells modern transport aircraft. It is responsible for the heavy transport A400M programme, as well as Military Derivatives which combine the efficiencies of Airbus aircraft with in-house innovations such as the state-of-the-art flight refuelling boom. MTA has the leading market share for Medium and Light transports, offering advanced mission systems for purposes such as maritime patrol. It also designs and manufactures advanced aerostructures.

### 2004 key achievements

- Single bidder status for FSTA programme
- First export commitment for A400M
- Royal Australian Air Force contract for five A330 MRTT
- Official signature of the US Deepwater contract
- Algerian Air Force order for six C-295s





## Aeronautics

Aeronautics encompasses businesses that are leaders in their markets. These are Eurocopter in helicopters, EFW in aircraft conversion, and ATR in turboprops. Additionally, the Division includes Socata, the light plane manufacturer and Sogerma, the aircraft maintenance company. All of the Division's businesses have aerostructure activities, focusing on advanced technologies and innovative product design.

### 2004 key achievements

- Stable profitability in difficult market conditions
- Success in helicopter export campaigns (Eurocopter)
- Robust passenger-to-freight orders (EFW)
- Good position of cabin interiors (Sogerma)
- Growth in regional turboprop second-hand aircraft market (ATR)
- Recovery of Socata

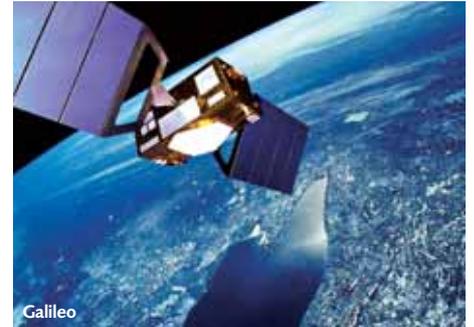


## Defence and Security Systems

The Defence and Security Systems (DS) Division was created in 2003 as the main pole of EADS' defence and security activities. By combining Missile Systems (MBDA and EADS/LFK), Defence and Communications Systems (DCS), Defence Electronics (DE), Military Aircraft (MA) - including EADS' activities in the Eurofighter programme - and Services within one Division, EADS has better equipped its defence business to meet the needs of customers requiring integrated defence and security solutions.

### 2004 key achievements

- Order book +21% thanks to Eurofighter Tranche 2 order
- Progress in UAV business
- Successful launch of homeland security business
- Progress in US through Racal acquisition and Lockheed Martin cooperation in radar business
- Successful transatlantic cooperation in NATO AGS and MEADS



## Space

EADS Space is Europe's pre-eminent space group and the third largest worldwide. It has played a formative role in the consolidation of Europe's space industry, and is the lead European supplier of satellites (EADS Astrium), launchers (EADS SPACE Transportation) and space services (EADS SPACE Services). Over the past two years, it has been extensively reorganised and its order book has expanded substantially.

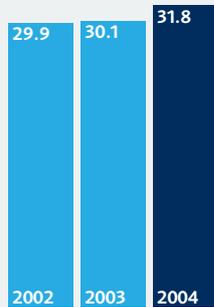
### 2004 key achievements

- Successful turnaround achieved, paving way for profitable growth
- Major order intakes secure future activity
- Creation of true transnational organisation through in-depth integration
- Validation of Paradigm business model of providing shared space services to multiple governmental bodies

Revenue (€bn)

**+5%**

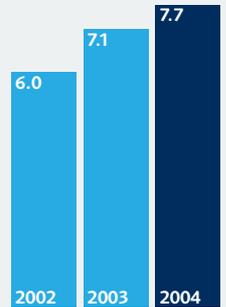
Airbus and the defence businesses were the chief drivers of the increase in revenue, allowing growth across all five Divisions. With a constant US Dollar, revenue growth would have been 7%.



Defence businesses' revenue (€bn)

**+8%**

Revenue from the defence businesses have increased by 8%. They account for approximately one quarter of EADS revenue.

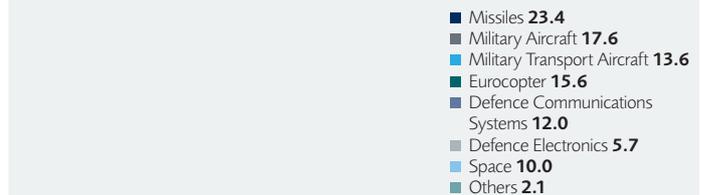


Revenue breakdown by geography in 2004 (%)

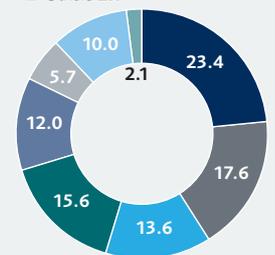


Europe accounts for the greatest percentage of revenue, with North America generating the second highest percentage, closely followed by Asia Pacific.

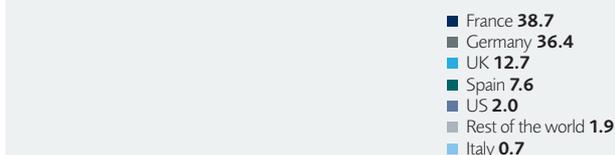
Revenue in defence activities in 2004 (%)



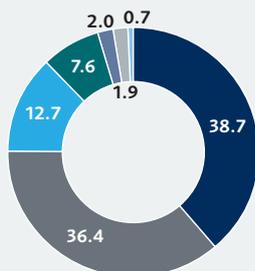
Revenue from the defence businesses amounted to €7.7 billion. The largest contributors were helicopters, missiles (MBDA), Military Aircraft, A400M and other mission aircraft (MTA) and secure communication (DCS).



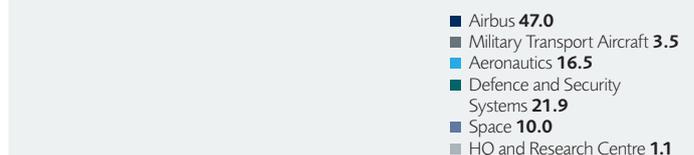
Employees by country at year end 2004 (%)



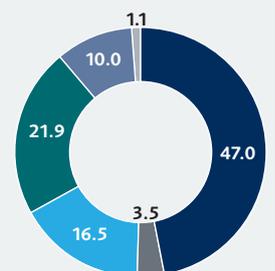
In total 97% of EADS' total workforce is located in Europe on more than 80 industrial sites.



Employees by business sector at year end 2004 (%)



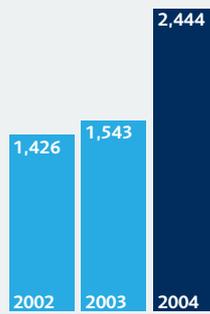
There was a small increase in employees during 2004, mainly as a result of expansion at Airbus and in spite of restructuring in the Space Division. The total number of employees is now 110,662.



### EBIT<sup>1</sup> (€m)

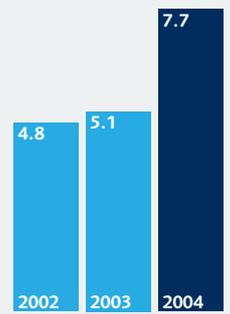
# +58%

The strong EBIT<sup>1</sup> growth (+58%) follows solid profit improvements at Airbus and Space, which respectively reaped the benefits of the aviation market recovery and increased efficiencies.



### EBIT<sup>1</sup> margin (%)

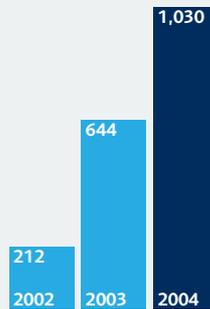
EADS' EBIT<sup>1</sup> margin pre-R&D rose to over 14%, allowing the EBIT margin to climb from 5.1% to 7.7% in 2004, an unprecedented level for EADS



### Net income (€m)

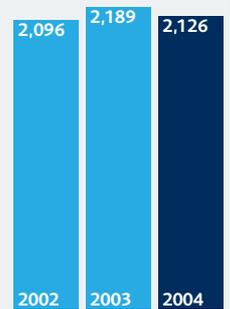
# +60%

Net income was up 60% from €644 million in 2003. The 2003 figure (reported at €152 million) was restated for comparison following implementation of IFRS 3.



### Self-financed R&D (€m)

R&D expenditure in 2004 reflected EADS' continued high level of investment in innovation. It accounted for nearly 7% of EADS revenue.



### Net cash position (€m)

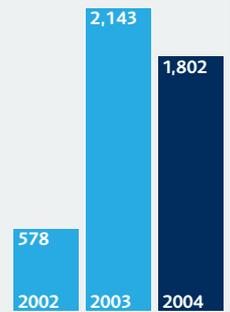
# +31%

EADS' net cash position remained strongly positive and expanded by 31%, providing robustness and flexibility.



### Free cash flow (€m)

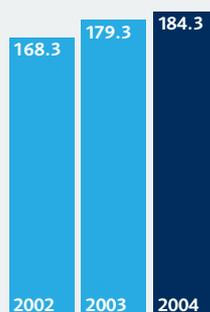
Free cash flow before customer financing was again strongly positive, thanks to solid results and continuing reduction of working capital requirement.



### Order book (€bn)

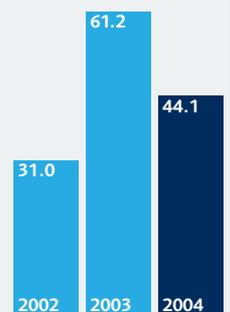
# +3%

The EADS order book increased by nearly 3% and would have increased by 7% at a constant US Dollar exchange rate. The defence businesses portion has continued to increase significantly.



### Order intake (€bn)

The EADS order intake remained considerably higher than the level of revenue and amounted to €44.1 billion in 2004, including €11.4 billion from defence businesses.



时间 Time	登机口 Counter	备注 Remarks	航班号 Flight	始发站 To	经停站 Via	起飞时间 STD	变更时间 ETD	柜台 Counter	备注 Remarks
08	F-6	NG	MU 5138	南京 NANJING		15:25		F-6	
05	F-6	ING	CZ 6148	长春 CHANGCHUN		15:30		F-6	
09	F-6	OTMG	MU 5168	杭州 HANGZHOU		15:30		F-6	取消 CANCELLED
05	H01-H14	CALL	MU 5162	上海浦东 SHANGHAI		15:30		F-6	延误 DELAYED
5:10	F-6	DING	CA 1407	成都 CHENGDU		15:35		F-6	
5:10	F-6		357 MU 5	深圳 SHENZHEN		15:40		F-6	
5:10	F-6	JING	CZ 6204	哈尔滨 HARBIN		15:40		F-6	
5:15	F-6	BOARDING	CZ 8822	大连 DALIAN		15:40		F-6	
5:20	H01-H14		HU 7397	大连 DALIAN		15:40		H01-H14	
5:25	F-6		3U 132	重庆 CHONGQING		16:00		H21	



As global economic recovery develops into sustainable expansion, the upturn in aviation is gathering momentum. Airlines are ordering increasing numbers of new aircraft. In defence, there is steady growth in government spending and European institutional and defence space budgets are expanding from a low base. Yet there remain uncertainties in the form of high fuel prices, pressures to rein in defence spending and the volatile US Dollar.

#### Commercial aviation recovers

After three years of downturn, the commercial aviation upturn is firmly under way. Traffic has now exceeded the levels reached at the previous peak in 2000, and airlines are ordering increasing numbers of new aircraft. But high fuel prices are intensifying the pressure on airlines caused by fierce competition, with the result that many are sustaining heavy losses. In this difficult financial environment, demand for the aircraft with the greatest operational and fuel efficiencies is larger than ever.

According to the International Civil Aviation Organisation (ICAO), scheduled traffic measured by revenue passenger kilometres increased by approximately 14% in 2004 compared with 2003. International traffic experienced the greatest recovery. The International Air Transport Association reports a 15.3% rebound after 2003 when Asia's SARS epidemic and the war in Iraq suppressed activity.

航班号 Flight	终点站 To	经停站 Via	起飞时间 STD	变更时间 ETD	柜台 Counter	备注 Remarks
142 KL 3	湛江 ZHANJIANG	长沙 CHANGSHA	16:35		F-6	
MU 3126	武汉 WUHAN		16:40		F-6	
HU 7882	西安 XI'AN		16:50		H01-H14	
CZ 6365	海口 HAIKOU		16:55		H19	
SU 146	成都 CHENGDU		17:00		H20	
HU 7111	昆明 KUNMING		17:00	17:05	H01-H14	
HU 7141	成都 CHENGDU		17:00	17:05	H01-H14	
MU 5120	上海虹桥 S		17:00		F-6	
MU 5158	南京 NANJING		17:00		F-6	
CA 1547	杭州 HANGZHOU		17:05	18:10	F-6	

航班号 Flight	终点站 To	经停站 Via
CA 1571	青岛 QINGDAO	
CZ 3112	广州 GUANGZHOU	
CZ 6134	大连 DALIAN	
CZ 8812	汕头 SHANTOU	
SU 182	万县 WANXIAN	
CA 1363	长沙 CHANGSHA	
CA 4142	重庆 CHONGQING	
HU 7135	长沙 CHANGSHA	
HU 7683	上海虹桥	
HU 7881	广州 GUANGZHOU	



China has become one of the strongest air traffic growth markets.

2004's spike in fuel prices caused airline industry losses to soar. US airline net losses for the 11 largest passenger airlines (excluding ATA, which is in bankruptcy and has not reported financial results) soared to \$9.2 billion in 2004, worsening from \$2.4 billion lost by the same carriers in 2003. The strong Euro has cushioned European airlines from the full impact of the fuel price rise. In Asia, robust recovery in traffic is driving airline profitability back to levels last seen before the 2003 SARS epidemic.

In this tough market, the low-cost carrier business model is increasingly successful. Airlines are becoming more efficient through improving their operational environments, and rationalising their fleets around cost-efficient and larger aircraft. The North American legacy airlines' business model appears unsustainable, as these airlines shrink operations and focus on profitable routes, particularly international routes. Filing for Chapter 11 bankruptcy is enabling them to cut costs through restructuring their operations. Yet it may be prolonging intense competition by preventing the weakest airlines from disappearing.

To recover financially, the airline industry needs to adapt to high fuel costs and the emergence of low-cost carriers. While fuel costs have fallen from their late 2004 levels, geopolitical uncertainty and structural constraints mean they are likely to remain high by historical standards. Growing traffic, fuel ticket surcharges, fuel price hedging, higher productivity and operational cost reductions in areas such as labour are only partly mitigating the pressures on profitability.

On a global basis, traffic is gravitating to the most competitive airlines. Low-cost carriers are continuing to take market share, particularly on the short-to-medium haul routes, where cost-efficient medium-sized aircraft are required. One important success factor for low-cost carriers is their focus on the core function of transporting passengers while outsourcing non-core activities such as maintenance.

Looking forward, the recovery in traffic is expected to continue. The ICAO forecasts traffic growth of 5.4% in 2005 and 5.2% in 2006. Orders for new aircraft will grow with rising traffic, and as older, less economical aircraft are retired sooner than expected. Aircraft manufacturers will need to be innovative both in product development and the way manufacturing is organised to remain competitive.

### Defence grows steadily

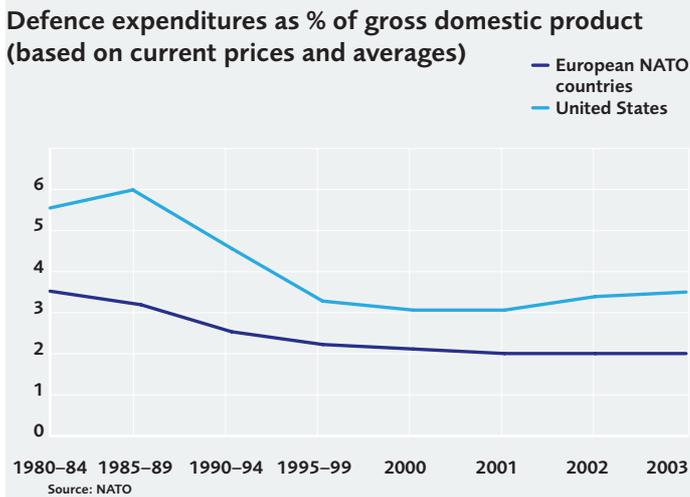
With by far the biggest defence procurement budget, the United States dominates global defence spending. In 2004, EADS estimates the United States spent \$125 billion on procurement and research, compared with Europe's \$55 billion and the rest of the world's approximately \$135 billion. In terms of growth, EADS expects US defence spending to expand by an average of approximately 5% per annum for the next five years. Defence expenditure in Europe and the rest of the world will move roughly in line with growth of Gross Domestic Product (GDP), with Asian expenditure increasing the most.

In the United States, the need to rein in public sector expenditure and the experience of recent military campaigns is leading to a shift in spending patterns. Expenditure on weapons programmes such as F/A-22 Raptor fighter jets, warships and stealth submarines is being cut back. At the same time, the White House is seeking more money for elite special forces.

Within Europe, the United Kingdom and France have the biggest budgets and are expected to have the greatest growth. European governments are updating equipment as well as acquiring integrated systems and service contracts. In Asia, there is demand for procurement of sophisticated equipment such as helicopters, combat aircraft and unmanned aerial vehicles from western companies. In the Middle East, the combination of unrest and higher oil prices may lead to higher procurement.

Europe's defence companies are currently in the middle of a wave of consolidation as they build the scale needed to match their US peers. During 2004, there were mergers between the French defence companies Sagem and Snecma as well as the German shipyards of Thyssen Krupp and HDW. Meanwhile, UK company BAE Systems acquired land systems business Alvis, and Italy's Finmeccanica acquired GKN's part of UK helicopter company AgustaWestland. Additionally, Finmeccanica and BAE Systems agreed to merge their avionics businesses to form a new, larger company.

The European Council's establishment of the European Defence Agency in 2004 was an important step towards greater alignment and integration of defence and security policies. It is likely to lead to more pan-European, and better coordinated, procurement, with larger production runs.



1. The increase in oil price strengthens the global need for highly efficient aircraft.

## Rise of the low-cost carrier

The business model is increasingly spreading

Within ten years, low-cost carriers will have further increased their market share in the airline industry. The competitive strength of their business model will force major changes on existing airlines. Legacy airlines can choose to adapt or suffer the consequences.

The strength of the low-cost carriers' business model lies in the way it focuses solely on carrying passengers, enabling airlines to strip costs to the minimum. How they do so varies somewhat from one airline to another, although there are some practices that many share. For legacy airlines, matching such low costs is difficult because they are encumbered with ageing fleets of comparatively inefficient aircraft, expensive labour forces and routes that become uneconomic to operate.

There are three distinguishing features that low-cost carrier business models tend to share:

- Fleets built around one type of aircraft, which leads to lower pilot training and maintenance costs;
- Point-to-point short-to-medium haul routes and larger cabins, which minimises turnaround time;
- Optimum efficiency in all operations, especially in the use of aircraft and labour.

Airbus estimates that by 2014, low-cost carriers will account for approximately 40% of all intra-European and US traffic. That compares respectively with 15% and 22% today. In Asia, the rise of the low-cost carrier is only just beginning, but is equally swift.

Already, the world's two biggest airlines by stock market capitalisation are Southwest Airlines and Ryanair – both low-cost carriers. In short, low-cost carriers are the most dynamic and swiftly rising segment of the airline business.

Historic annual change in air traffic growth (%)



Procurement trends:

The largest shares of both European and US defence budgets belong to air combat, missiles and mobility (helicopters and transport aircraft). There is also growing demand for Network Enabled Capabilities which enable coordinated operations between air, naval, ground and space assets. This provides information dominance, minimal response times and precision strike capabilities. Examples of current projects include: the US Coast Guard's Deepwater programme, NATO's Air-Ground Surveillance (AGS) programme, and the Medium Extended Air Defence System (MEADS). The defence industry is currently repositioning itself to provide the required capabilities in concept development and experimentation, and system architecture and design. It is simultaneously offering the underlying technology for systems and electronics. Information technology companies will play an increasing role in providing key capabilities.

Another important trend is the bundling of hardware products and service contracts. The UK's Future Strategic Tanker Aircraft (FSTA) contract, which involves outsourcing support activities to a private sector consortium, is pioneering this type of solution. Similar arrangements are expected to spread rapidly to continental Europe, with significant contract values and durations (up to 20 years). The industry faces a challenge in meeting customer requirements while simultaneously mastering related risk assessment and allocation, long-term project management and legal structuring.

### Homeland security spending unpredictable

Growth in homeland security spending is difficult to predict due to the arbitrary nature of threats. In the immediate aftermath of September 11, 2001, there was a remarkable increase in US Government spending. Since then, the growth trajectory has flattened. In 2005, it is estimated that spending will stand at €42.4 billion\* globally, with more than half of that accounted for by the United States. Over the next five years, it is estimated that spending in the United States alone will be \$115 billion\*. Key growth sectors include intelligence, counter terrorism, crisis management, mass transportation security, border security, protection of infrastructure and large events.

Governments are increasingly acquiring integrated security systems. Examples of this include Romania's integrated border surveillance project and the security for Beijing's 2008 Olympic Games.

Within Europe, initiatives in the areas of security research and technology, the European Gendarmerie Force and border control may generate further homeland security spending.

### Space environment remains difficult

For the European space industry, the environment remains extremely tough. Recovery in the telecommunications satellite market has been limited, and severe budget constraints are holding back both defence and exploration expenditure. Additionally, the weakness of the US Dollar is undermining the competitiveness of European satellite manufacturers.

#### Defence:

In Europe, the total annual defence space budget is nearly €1 billion across all national programmes. It is mainly focused on telecommunications satellites (Skynet 5 Paradigm in the UK, Syracuse in France, Satcom BW in Germany, Sicral in Italy) and reconnaissance satellites (Helios 2 and Pleiades in France, SAR-Lupe in Germany, Cosmo Skymed in Italy). Budgets are expected to double due to spending on new applications presently at demonstration stage such as early warning systems, signal intelligence and navigation. Export opportunities exist in image intelligence and secured communications services.

The US annual defence budget is by far the largest worldwide at approximately \$17 billion (according to official sources), but this market is closed to non-US companies. The country has completely integrated its military satellites into its defence systems, and is now developing new generation military space systems.



1. Eurocopter's Tiger is designed to leading-edge engineering standards as a multimission helicopter.

2. The Skynet 5 system is a key project for secured satellite communications of the UK forces.

\*Source: Civitas Group, a strategic advisory and investment services firm serving the homeland security market

## Armed forces buy bundled services

Defence ministries seek greater efficiency

**As global defence budgets are squeezed, the procurement of complete service packages – design, build, finance and operate – rather than of just equipment, is increasingly being viewed as a way of getting better 'value for money'. Governments believe that the private sector can offer greater efficiency than the public sector, provided that contracts are signed in a true partnership spirit with appropriate risk sharing.**

**Therefore, defence expenditure on private sector services is expected to grow steadily over the next decade. While the United Kingdom's Ministry of Defence pioneered this approach, countries in Asia, Australasia, Europe and North America are now following.**

**While this approach may not be appropriate for the front line of battle, it is becoming widely accepted in the provision of support services. Typically, this has already encompassed outsourcing of training, logistics and maintenance. But, in the United Kingdom, recent high-profile long-term contracts include Future Strategic Tanker Aircraft (FSTA – worth £13 billion) for aerial refuelling and Paradigm Skynet 5 (worth over £2.5 billion) for satellites.**

**Defence companies are following this significant change in their customers' procurement behaviour closely, as it will provide them with stable long-term revenue.**

**Finally, they may derive additional profit opportunities from third-party revenue.**

European civil institutional programmes:

European spending on space is likely to grow over the next few years. The European Union is planning to increase its annual budget from a low level to approximately €1 billion to €1.5 billion from 2007. This will fund earth observation, navigation, meteorology and science programmes. The recommendation is expected to be endorsed by the end of 2005, giving a new impetus to Europe's civil institutional space programmes.

Additionally, ESA's budget of approximately €2.5 billion is likely to remain stable. The ESA 2004 'European Guaranteed Access to Space' programme (EGAS) is supporting the European launcher industry, and is funding production of 30 Ariane 5 ECA satellite launchers. Following the past few years' downturn in commercial activity, European governments regard this as necessary in order to safeguard Europe's independent access to space.

Commercial telecommunications:

EADS expects satellite orders to average 15–20 a year for the foreseeable future. In 2004, satellite operators ordered 14 new satellites, down from 22 in 2003. Private equity funds have now acquired most of the telecommunications satellite operators, which will limit levels of investment. Consequently, growth related to development of high definition television could be at the low end of expectations, and commercial satellite orders will mainly be to replace satellites that have reached the end of their service life. This indicates a value of approximately \$2 billion a year.

Exploration:

In January 2004, President George W. Bush presented the new US Vision for Space Exploration, focusing the National Aeronautics and Space Administration (NASA) on manned missions to the Moon, and then to Mars. The Space Shuttle will be retired around 2010 following completion of the International Space Station (ISS). The United States plans to operate the ISS until 2016, and then to return astronauts to the Moon.

This secures Europe's contribution to the ISS (Columbus module and Automated Transfer Vehicle operations), although the original schedule has been delayed. Additionally, it means Europe has to decide what connection it would like its space exploration programme to have with that of the United States.

# Airbus consolidates market position

Airbus is the world's leading aircraft manufacturer. Its customer focus, commercial know-how, technological leadership and manufacturing efficiency have propelled it to the forefront of the industry. Today, Airbus consistently captures half of all commercial airliner orders and continues to broaden its scope and product range by applying its expertise to the military market.

## Airbus benefits from aviation market upturn

Airbus has recovered strongly from the aviation industry's economic downturn, with 2004 proving to be a year in which both orders and deliveries rose substantially. Airbus consolidated its market position, delivering more planes than its competitor for the second year in a row (54% revenue market share-gross based on \$ catalogue price), as well as continuing to win the greatest number of orders. This success reflects Airbus's strategy of using innovation and technology to design high performance, efficient aircraft that meet airline demands for greater flexibility and lower costs.

2004 was a significant year for Airbus. The first A380s were assembled ready for test flights in 2005 and entry into service in 2006. As the world's first fully double-deck commercial aircraft and the most technologically advanced civil aircraft in production today, the A380 is set to become aviation's flagship for the 21st century. Not only do the Airbus families of aircraft enable airlines to determine the optimum combination of both 'hub-to-hub' and 'point-to-point' routes, but, thanks to commonality, they give existing Airbus operators an unparalleled level of flexibility.

The success of the A330 long-range aircraft prompted Airbus to offer airlines a longer range sister-ship, the A350. Programme launch is expected in 2005, with the first aircraft likely to enter service by 2010. The new aircraft will combine the most popular aspects of the market-leading A330 with new features in terms of cabins, engines, materials and aerodynamics. It will incorporate new technologies developed for the A380, enabling fast and substantial improvements in performance and economy at limited cost. Both variants of the aircraft – the A350-800 and A350-900 – retain the commonality of the Airbus fly-by-wire family. Compared with its nearest competitor, it offers approximately 10% more seats, similar range, a lower fuel burn per seat mile and a lower cash operating cost per seat. This programme continues the Airbus tradition of working closely with customers to develop products that best meet their needs.

(€m)	2004	2003	Variation
Revenues	20,224	19,048	6%
EBIT	1,922	1,353	42%
Order intake	25,816	39,904	-35%
Order book	136,022	141,386	-4%

## In number of aircraft

	2004	2003	Variation
Deliveries	320	305	5%
Order book	1,500	1,454	3%

## Revenues by markets (in % of external revenues)



1. The A340 takes off – in the long-range sector, the A330/A340 Family has confirmed its position as market leader.

2. Cockpit commonality is a unique feature of Airbus's new generation of jetliners.

Airbus made substantial financial progress during the year. Higher deliveries – 320 units compared to 305 in 2003 – were the greatest factor in a 6% increase in revenue to €20.2 billion for the year to 31st December 2004 (€19.0 billion in 2003). EBIT grew by 42% to €1.92 billion (€1.35 billion 2003). The EBIT margin expanded to 9.5% (7.1% in 2003).

Airbus won 370 firm orders during the year worth a total of \$34 billion, equivalent to a market share of 57% by volume and 54% by value (based on \$ catalogue price). Thirty-seven customers chose Airbus, 18 of which were new customers. Some 34% of new 2004 orders originated from Europe; 21% from North America; 28% from Asia; and 10% from the Middle East. At year end, the 1,500 units strong backlog included orders from over 11 low-cost carriers.

### The world's best-selling aircraft

The single-aisle A320 Family, which comprises the A318, A319, A320 and A321, is the preferred choice of both full service and low-cost carriers. Some 279 A320 Family aircraft were ordered in 2004, accounting for 64% of its market segment overall and about 80% of the low-cost market. With crude oil prices high for most of the year, the advantages of these aircraft in terms of offering the most favourable economics without sacrificing comfort were even more apparent. These efficient new-generation aircraft typically consume 20% less fuel per seat than mid-generation aircraft and 40% less than older-generation aircraft.

The Airbus Corporate Jetliner (ACJ), a vital part of the A320 Family targeting the top end of the business jet market, also enjoyed a successful year, providing still more evidence of the aviation upturn. Both Azerbaijan Hava Yollari (AZAL), buying on behalf of the Republic of Azerbaijan, and Eurofly have signed contracts to buy the A319-based ACJ, underlining the comfort of Airbus cabins and benefits of the technologically advanced single-aisle family.

### Long-range dominance

In the long-range sector (275–375 seats), the A330-300 and A340 Family received 56 orders, giving it a 57% market share, and confirming its position as market leader. In addition, 23 orders were received for the A330-200.

At the end of 2004, the A330 had the fastest-growing operator base, having gained 13 new operators in 16 months. Airbus achieved significant new orders from Turkish Airlines and China Eastern. It won repeat orders from Emirates, Iberia and Air Tahiti for the A340, and Qantas, Eva Air, Qatar and Cathay Pacific Airways for the A330. New operators for the A330 during 2004 included Yemenia, China Airlines, Egyptair and Lufthansa, and for the A340, South African Airways and Air Canada.

Rapid expansion in the long-range sector is confirmed by Airbus's Global Market Forecast, which predicts that over the next ten years up to 60 new long-haul routes could be opened profitably on the trans-Pacific market and between Europe and Asia. This bodes well for the new A350.

### The most technologically advanced commercial aircraft in production

In 2004, Thai Airways International and Etihad Airways joined the ever-growing list of A380 customers, taking the overall tally of orders by the year end to 139.

Six out of the nine most profitable airlines, based on 2004 first half net profit margins, have ordered the A380. These include Emirates, Singapore Airlines, Qantas and Korean Air, all of which anticipate that big aircraft with low unit costs will maximise their future profitability. Airlines such as Thai and Etihad fly key trunk routes, and see the A380 as the cornerstone for these routes with passenger preference in mind.

The A380 reinforces Airbus's reputation for technological leadership. Its structure comprises 25% composites. Compared with its nearest competitor, it uses 12% less fuel to carry 35% more passengers further, with half the noise energy at take-off and 15% lower operating costs.



3. The Australian airline Qantas placed a repeat order for the A330.

4. The A320 Family is the right choice for the low-cost market.

The A380 met all its key deadlines through the year, including the electrical and hydraulic powering up of the systems in the first A380, the first flight tests and certification of the Rolls-Royce Trent 900 – the launch engine. Furthermore, the huge industrial process that supports construction is now a reality. In France, the final assembly line is in Toulouse, and the central fuselage section is put together in Saint Nazaire. In Germany, structural assembly of the forward fuselage takes place in Hamburg. In the UK, the wings are assembled at Broughton and the landing gear at Filton. Finally, in Spain, the horizontal tail planes are assembled at Puerto Real. Four aircraft were assembled during the year.

Airbus designed the A380 in collaboration with some 60 major airports, ensuring airport compatibility and a smooth entry into service. San Francisco, Munich and Frankfurt are already fully equipped, New York has started work and Heathrow has plans under way. Los Angeles is also gearing up to start work after having its master plan approved by the City Council at the end of 2004.

The project has met its targets for weight and cost within an acceptable level of tolerance. In terms of performance guarantees, the A380 fulfils all commitments to customers and was within 1% of its internal target maximum take-off weight at the year end. There is a risk of costs exceeding the initial 1999 \$10.7 billion programme estimate by €1.5 billion. This is due to the unforeseen development of two different layouts for the A380 freighter; more ambitious noise reduction targets; an initial underestimate of the cost of systems development. These extra costs will have little impact on future profitability and to offset them, management is concentrating on optimising recurring costs of series production.

#### Cost saving programmes

In order to retain price competitiveness and increase profitability, there is an ongoing programme to reduce unit cost and grow productivity. Called Route 06, the programme's target is to remove €1.5 billion from the cost base by 2006. The first significant savings are expected in 2005, when around 30% of the total savings target should be achieved. The programme is on schedule, with all necessary measures identified and under way. About two-thirds of the savings are expected to be generated by sourcing economies.

These savings are being accompanied by a striking reduction in lead times. In 2003, there was a nine-month period between the buyer of a single-aisle aircraft stating its required specification, in terms of engines and cabins and so on, and delivery. At the end of 2004, this time had been reduced to seven and a half months. By 2006, the lead time will be six months. For long-range aircraft, the time was 12 months in 2003. It will be nine months by end 2007.



1. FedEx ordered up to 60 new freighter conversions in 2004.

2. A319 final assembly line in Hamburg.

3. The A380 successfully took to the skies on 27th April 2005.

### Adjusting to Dollar weakness

Route 06 is helping Airbus adjust to the low level of the US Dollar. The rising proportion of procurement priced in US Dollars, from US and non-US suppliers, is also a key factor.

Airbus is working on a far-reaching transformation of procurement, seeking to achieve a better match between revenue earned and procurement in particular countries. With China a major growth market for air travel, there is an initiative to source more from the country.

Between 2000 and 2006, the value of Airbus procurement from China will grow by four times. It will double again by 2010. China should join Airbus in a risk-sharing partnership for up to 5% of the A350 programme, and Airbus plans to open an engineering centre in the country in 2005, which will employ up to 200 people by 2008.

Similarly, Airbus has a ten-year \$800 million cooperation agreement with Russian industry, where it expects to expand activities at the Moscow engineering centre established as a joint venture with Kaskol. In Japan, local industry expects to earn about \$4.6 billion over the next 20 years from the A380 programme.

Airbus also spends some \$7 billion per year, 40% of its annual procurement budget, in North America. This supports approximately 140,000 North American jobs and makes Airbus the US aerospace industry's largest export customer.

### Delivering quality

There has been considerable progress in the achievement of on-time, on-cost and on-quality deliveries. Through a programme of improvement stretching across all departments, 97% of deliveries passed the quality threshold in these areas at the end of 2004. This compares with just 90% in mid-2004, which itself was a remarkable improvement on two years earlier.

Quality improvements have extended to customer support. There has been extensive progress in the time taken to perform major repairs on in-service aircraft in 2004. The number of pending major in-service technical problems has been cut by 25% in 2004 alone. The objective is to cut this number by as much again in 2005. The reactivity of customer support has improved significantly. By the end of 2004, Airbus technicians were providing support for grounded aircraft anywhere in the world within two hours.

Also within the scope of customer support, Airbus opened a new maintenance training centre at the single-aisle centre in Finkenwerder, Hamburg. The facilities include mock-ups of auxiliary power units as well as maintenance training devices. The centre complements the main Airbus training facilities in Toulouse, Miami and Beijing. It underlines the global commitment to offering a premium service level to Airbus operators.



### Strategic objectives

- Confirm leadership on global markets
- A380: ensure mature and on time Entry Into Service
- Secure a robust launch of A350
- Continue ramp-up: deliver on time and on quality 350 aircraft or more in 2005

### Outlook

Airbus has entered the commercial aviation upturn as market leader, and is poised to continue the growth of its deliveries. It currently has the most comprehensive and modern range of aircraft, placing it in prime position to benefit from the recovery.

Based on current firm orders, aircraft deliveries should increase from 320 in 2004 to more than 350 in 2005. Revenue should reflect this volume increase, but the effect will be moderated by Dollar weakness – should it persist. The proportion of Dollar revenue not hedged by financial instruments (although naturally hedged by Dollar denominated procurement) is converted to Euros at prevailing foreign exchange market rates.

Self-financed research and development is expected to continue at around the same level, mostly due to the continuing development of the A380 – the passenger and freighter versions are due for entry into service in 2006 and 2008 respectively. The new A350 project will only marginally impact the 2005 research and development budget, but is expected to increase in the following years.

Airbus 2005 EBIT is anticipated to grow from 2004. It will benefit mainly from the increase in deliveries, and from the progressive benefits of the Route 06 cost savings plan. These factors should significantly over compensate for the negative impact of a slightly lower proportion of larger aircraft deliveries, and for the effect of a weaker US Dollar from the few aircraft not yet hedged and the maturing of less favourable hedges.

# Driving revenue and order book growth

2004 was a year in which recent product development increased the Division's forward momentum. The A400M new heavy transport aircraft was the main contributor to revenue growth, while the A330 Multi-Role Tanker Transport (MRTT) won a substantial export order. Meanwhile, the more mature products of the EADS-CASA Medium and Light aircraft business continued to expand market share, and Aerostructures also grew.

The A400M programme's accomplishment of contractual and industrial milestones was the main contributor to the 40% growth in revenue to €1.30 billion for 2004 (€934 million in 2003). Growth in revenue is not fully reflected in EBIT, partly due to the fact that profit for A400M and Military Derivatives is booked to the various EADS Divisions according to their participation. Additionally, the restructuring process initiated in 2003 and completed in 2004 led to a cost of €28.0 million (€17.0 million in 2003). But for this one-off restructuring cost, EBIT would have grown rather than falling slightly to €26.2 million compared with 2003's figure of €30.1 million.

Following the restructuring, MTA is more streamlined with the skills required for the new A400M and Military Derivative programmes. While approximately 500 staff typically in support functions have left, approximately 200 skilled employees such as engineers have been recruited to improve productivity and contribute to new programmes.

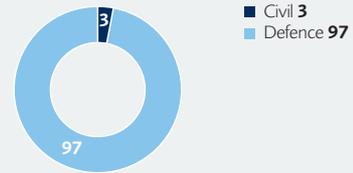
The most significant single order was the Australian Defence Forces December 2004 contract for five A330 MRTT aircraft worth €730 million. In the Medium & Light aircraft and Other Derivatives segment, 22 aircraft were ordered in 2004. MTA's order book was €19.89 billion at the year end (€20.0 billion at year end 2003).

## A400M on track and campaigning for exports

Leveraging the expertise of MTA and Airbus, the A400M offers the world's air forces a replacement for their ageing fleets of heavy transport aircraft. Following the order for 180 aircraft placed in May 2003 by OCCAR (Organisation Conjointe de Coopération en Matière d'Armement), acting on behalf of seven European nations, the A400M already has a large order book stretching 20 years.

(€m)	2004	2003	Variation
Revenue	1,304	934	40%
EBIT	26	30	-13%
Order intake	1,176	20,326	-94%
Order book	19,897	20,007	-1%

## Revenue by markets (in % of external revenue)



1. The A400M is the only aircraft that provides strategic lift without sacrificing any tactical attributes.

2. The C-295 meets the expanded operational capabilities required by today's military missions.

3. The A330 MRTT is the tanker/transport solution for the 21st century.

The South African government is set to become the first export customer, following its late 2004 selection of the A400M as its next-generation heavy transport aircraft. South Africa has signed a Declaration of Intent for purchasing at least eight aircraft worth more than €750 million. As part of the agreement, South African industry will receive high-value work packages relating to the A400M, so becoming a key participant in the programme.

In total, the potential export market is estimated to be more than 200 aircraft over the next 20 years.

Construction of the final assembly line was started in Seville, Spain and the aircraft's first flight will take place in 2007. In the meantime, revenue from this programme will steadily grow.

### **Military Derivatives gains its first contract for the A330 and refuelling boom**

Military Derivatives such as tanker aircraft have all the advantages of the Airbus commercial aircraft on which they are based, combined with in-house innovations designed for military applications, such as the state-of-the-art flight refuelling boom.

The Australian Defence Forces contract was the first for both the A330 MRTT, and the refuelling boom currently under development in the Division. Additionally, it was an export order. The A330 MRTT is a derivative of the Airbus A330 passenger plane. The total contract, including the Qantas through-life-support, amounts to €1.2 billion.

Through its role as 40% shareholder in the Air Tanker consortium, EADS is also negotiating to supply the A330 MRTT to the UK's Royal Air Force. The UK Government selected Air Tanker in January 2004 to take forward negotiations for its Future Strategic Tanker Aircraft programme (FSTA). The whole contract could be worth over €10.0 billion and stretches until 2027. If it proceeds, MTA will deliver 17 A330 MRTTs to Air Tanker. EADS has been awarded the preferred bidder status in early 2005.

The first two A310 MRTT aircraft were delivered to the German and Canadian air forces during the year.

### **Medium and Light transport aircraft and Other Derivatives consolidate market position**

EADS CASA consolidated its leading market position in the Medium and Light transport aircraft and Other Derivatives segment.

In February 2004, the US Coast Guard officially signed orders for two CN-235 Medium Range Surveillance Maritime Patrol Aircraft for its Integrated Deepwater System Programme. Additionally, in November 2004, the US Coast Guard ordered one of the six aircraft options. The value of the Deepwater contract programme for MTA, including all the options, spare parts and integrated logistic support, is approximately \$300 million.

### **Aerostructures grows**

Through technological excellence in the use of composite materials, as well as in advanced automation processes, Aerostructures continues to grow its revenue. The Business Unit designs, manufactures and certifies complex aeronautical structures. Programmes such as the A380 Fan Cowl and Belly Fairing together with Falcon F7X Horizontal Tail Plane were particularly active during the year. First deliveries for the A380 Fan Cowl and Belly Fairing took place during 2004.

### **Contribution to A380**

In accordance with its expertise in composite materials and in advanced automation processes, MTA is developing and manufacturing key elements for the A380 programme such as:

- Fan cowls for the Trent900 and GP7200 engines;
- Belly-fairing and metallic parts of the main landing gear doors.



### **Strategic objectives**

- Gain global leadership in military transport markets with a complete family of aircraft
- Deliver A400M on time and to stated quality specifications
- Continue to win contracts for Airbus Military Derivatives
- Penetrate US tanker and military transport market
- Confirm leadership in Medium-Light Military Derivatives segment

### **Outlook**

Looking forward, the Division's prospects appear increasingly bright. Investment in the development of the A400M and the A330 MRTT is beginning to be rewarded by large contracts stretching over the next 20 years, and current negotiations may lead to additional orders. Longer term opportunities for tanker aircraft include France, NATO and the United States.

Meanwhile, the EADS CASA Medium and Light aircraft and Other Derivatives businesses, as well as Aerostructures, are continuing to sustain the performance of the division.

Revenue are expected to grow significantly in 2005, boosted mainly by the next steps of the A400M programme. Other businesses, including the beginning of the A330 MRTT Australian contract, Medium and Light aircraft deliveries, as well as the modernisation of Brazilian P3 Orion, are expected to contribute overall revenue slightly above the 2004 level.

Higher revenue and the early benefits of restructuring will feed through to increased EBIT in 2005.

(€m)	2004	2003	Variation
Revenue	3,876	3,803	2%
EBIT	206	217	-5%
Order intake	4,339	3,661	19%
Order book	10,171	9,818	4%

# Helicopters propel Aeronautics

2004 was another successful year for Aeronautics. Eurocopter, the Division's largest business, is in the beginning of further strong growth. Profit improvement at Eurocopter was offset by the weakness at Sogerma, which was impacted by the MRO (maintenance, repair and overhaul) market uncertainties, and by the weakness of the US Dollar at year end. There were also strong orders at EFW which converts civil aircraft to freighters, and ATR, the leading 40 to 70 seat turboprop manufacturer.

Eurocopter represents 72% of the Division's revenue, which increased by 2% to €3.87 billion during 2004 (€3.80 billion in 2003). Both civil/parapublic and military customers such as Germany and France contributed to higher helicopter activities. Aeronautics EBIT remained at a high level, achieving €206 million, down from €217 million in 2003. Overall, the EBIT margin of 5.3% was slightly lower than 2003's 5.7% largely due to Sogerma's weakness.

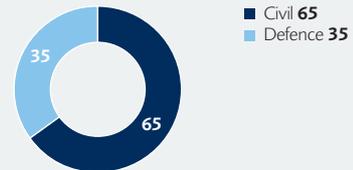
Eurocopter once again won orders that secured its leading position. New orders for Eurocopter increased by 26% compared to 2003. Some 295 helicopters were sold. EFW and ATR increased their orders. At €4.34 billion, the Division's new orders were 18.5% higher than in 2003, expanding the order book substantially to €10.17 billion at the year end (€9.82 billion 31st December 2003).

## Robust export demand for helicopters

Demand for helicopters from outside Eurocopter's home markets of France, Germany and Spain was robust, representing approximately 70% of the year's orders by value. The NH90 military transport helicopter is a good example of export success. With its fly-by-wire electronic control system, which improves handling, it has now become the reference machine for tactical and naval transport helicopters. The Sultanate of Oman ordered 20 NH90s in July 2004.

In the United States, Eurocopter won a major homeland security contract in October 2004. The Integrated Coast Guard Systems joint venture company awarded a contract to provide reengineering kits for 95 HH-65 Dauphin surveillance and search-and-rescue helicopters for the US Coast Guard. Eurocopter is also preparing to bid for a Department of Homeland Security requirement with 55 EC120 light single engine helicopters, with options for five more.

Revenue by markets  
(in % of external revenue)



1. The NH90 military helicopter is a growing export success.

2. The EC135 is the preferred helicopter for police and emergency medical service missions as well as for corporate and VIP transport.

3. EFW increased production in order to meet a growing number of orders for freighter conversions.

EADS has a stated strategy of growing through becoming part of the industrial fabric of its customers' home markets, and through forming equitable industrial partnerships. In 2004, Eurocopter progressed this strategy in the United States and China. In the United States, it opened a 2,400-acre production site in Columbus, Mississippi. The facility employs 100 engineers, technicians and administrative staff to assemble and customise helicopters for US customers such as the Department of Homeland Security and the US Coast Guard. Furthermore, Eurocopter and the China Aviation Industry Corporation II (AVIC II) agreed to develop and manufacture a new advanced 6-7 tons helicopter.

#### **EFW, ATR, Socata experience upturn**

Within the EFW and ATR Business Units, orders increased. FedEx granted EFW a large order for up to 60 freighter conversions in September 2004. A light recovery in the turboprop market benefited ATR (50% owned by EADS) as airlines accepted that these planes are more economical and more environmentally friendly than jets on short haul flights. Twelve turboprops were ordered in 2004, compared to seven in 2003, which was a particularly difficult year. Both EFW and ATR increased production to meet the growing volume of orders. In 2004 eight passenger aircraft were converted to freighters and 13 new ATR were delivered. Socata delivered 34 TBM light aircraft, the highest number for several years, while 14 TB aircraft were delivered. The light aircraft manufacturer is now back on a profitable growth track.

The growth of Airbus, and the production ramp-up of the A380, drove an upturn in aerostructure orders at all of the Division's Business Units. The whole Division received approximately 8.6% of revenue from Airbus business in 2004.

#### **Focus on efficiency**

Aeronautics aerostructure activities are benchmarked at a world-class level, and are participating in the productivity requirements of Airbus's Route 06 programme. Productivity improvements are being achieved through greater automation and the involvement of strategic countries with lower cost structures. Aeronautics is continuing to increase its performance and competitiveness for the future.

A new CEO and CFO were appointed at Sogerma recently, to oversee a return to profitability. Seat activities increased and a new cooperation with Hamilton Sundstrand was founded for Auxiliary Power Unit activities.

#### **Contribution to A380**

- Nose lower structure (Socata).
- Nose landing gear doors (Socata).
- Airbus doors (Eurocopter).
- Floor panels (EFW), cockpit panels (Sogerma).
- Pilots seats (Sogerma).



#### **Strategic objectives**

- Maintain leadership in the civil helicopters market.
- Leverage EADS' role as an original equipment manufacturer ('OEM') to benefit from the steadily growing conversion and customer service markets

#### **Outlook**

Looking forward, the Aeronautics Division has a considerable medium-term momentum. There is a substantial order book and a number of major sales campaigns are under way. New military models such as the NH90 transport and Tiger combat helicopters are reaching the market. Meanwhile, aircraft models like regional turboprop aircraft (ATR-42/ATR-72) and general aircraft (TBM), or activities like aircraft conversion, are resisting to the competition. Furthermore, the volume of the many aerostructure activities sold by all Business Units are benefiting from the civil aerospace upturn.

Overall, revenue should grow significantly in 2005, mostly driven by Eurocopter. 2005 Aeronautics' EBIT is expected to reflect the continuing improvement of Eurocopter performance, offset by the impact of a weaker US Dollar and by ongoing recovery programmes, namely in the Sogerma business.

# Networking the future

In its first full year of operation, the Defence and Security Systems (DS) Division succeeded in significantly expanding its order book, while making progress in the integration of its businesses. The Division also advanced its ability to provide Network Enabled Capabilities that use information technology to develop integrated defence and homeland security solutions.

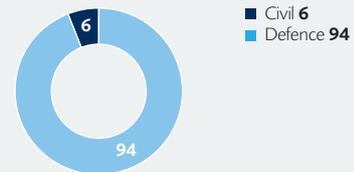
Revenue increased by 4.2% to €5.39 billion in 2004, mainly driven by the deliveries of the Storm Shadow/Scalp long-range cruise missile to the United Kingdom and France, and the Acropol communications network deployment for the French police. EBIT increased by 34% to €228 million, up from €171 million in 2003, helped by the release of the Euromissile litigation provision (€106 million). Overall, the EBIT margin improved to 4.2% in 2004, up from 3.3% in 2003.

The order book ended the year at an all-time high of €17.3 billion, growing by 21%. New orders were 35% higher than 2003, mainly due to Eurofighter Tranche 2 contract received in December 2004, that will be worth €4.3 billion to EADS. Other notable contributors were Acropol contract, border surveillance system contracts and A400M sub-contracts.

There was progress in many of the areas identified as strategically important to the Division, including Unmanned Aerial Vehicles (UAVs) and transatlantic cooperation. In UAVs, successes included the September 2004 Request for Proposal for the procurement of EuroHawk; industrial participation in the Dassault-led Unmanned Combat Air Vehicle (UCAV) project NEURON; and appointment as prime contractor for the EuroMALE drone demonstrator programme. The best example of successful transatlantic cooperation was the September 2004 contract for design and development of the MEADS (Medium Extended Air Defence System) programme.

(€m)	2004	2003	Variation
Revenue	5,385	5,165	4%
EBIT	228	171	33%
Order intake	8,457	6,288	34%
Order book	17,276	14,283	21%

Revenue by markets  
(in % of external revenue)



1. The Eurofighter Tranche 2 contract was signed in December 2004.

2. EADS provides integrated systems for Homeland Security.

3. The Aster surface-to-air missile meets both land and naval requirements.

## Supporting defence and security transformation

DS is actively supporting NATO in the transformation of its forces. It is participating in NATO Supreme Allied Command Transformation (SACT) with its partner SAIC, and is also joint-lead member in the TIPS consortium, which NATO downselected to develop the Alliance Ground Surveillance System (AGS).

Additionally, the Division is involved in Bulle Opérationnelle Aéroterrestre (BOA), initiated by the French Defence Minister in June 2004. BOA is a concept aimed at the future net-centric battlefield approach.

## Streamlining and refocusing the Division

The Division invested €88 million in restructuring programmes in 2004, €39 million more than in 2003. Military Aircraft reorganised AS Lemwerder, acquired in 2003, transferring employees to Airbus and Eurofighter production. Within Defence and Communication Systems (DCS), the year's investment in restructuring led to 400 departures in 2004 and will lead to 200 more in 2005. In order to increase efficiency by centralising specific tasks, three shared service centres were established.

DCS announced in November 2004 the sale of EADS Enterprise Telephony Business to Aastra Technologies for completion in 2005. Additionally, the Services divestiture plan was completed in 2004 when Multicom was sold to Toadcom.

## Providing integrated defence and security solutions

Defence and Communications Systems (DCS), as the EADS Systems House, are targeting better response to requirements for global solutions and integrated systems. Activities include: tactical and strategic UAVs, Communications Command Control and Intelligence (C3I), Air and Naval Defence, Homeland Security Solutions, and Communication and Information Networks. Orders rose by 39% compared with 2003. Highlights included the EuroMALE programme and the Acropol contract. Homeland Security scored early successes with border surveillance contracts.

Defence Electronics (DE), the EADS Sensors and Avionics House, provide critical elements for data gathering, data processing and distribution and self-defence. The year's highlights included Eurocopter contracts totalling €300 million to equip military helicopters. In the United States, the Division signed a partnership agreement with Lockheed Martin to evaluate opportunities for the TRS-3D naval radar system.

Military Aircraft is responsible for the design, development, production and in-service support of complex airborne weapon systems. It is also a tier one commercial aircraft supplier. Highlights included the December 2004 Eurofighter Tranche 2 contract and the delivery of nine single-seater aircraft. The Business Unit also managed structural work for the A380, for which orders could total approximately €1.6 billion by 2022.

Missile Systems (comprising MBDA and EADS/LFK) provide a complete range of missiles for air superiority, land control and sea power missions, including the most evolved technological solutions in strike weapons and missile defence. Deliveries of the Storm Shadow/Scalp long-range cruise missile to the United Kingdom and France contributed significantly to MBDA's achievement of approximately €3 billion in revenue, of which EADS consolidates €1.5 billion. Additionally, the French armament agency awarded MBDA a development and procurement contract for Exocet surface-to-surface anti-ship missiles. Spain confirmed its intention to procure EADS/LFK's TAURUS air-to-ground guided missile system in a German-Spanish government-to-government agreement, while German series production is under preparation.

The Services Business Unit's activities include outsourced services, test and related services, and system engineering services. Following the October 2004 acquisition of Racal Instruments Group through EADS North America, EADS Test & Services ranks first in Europe and second in the United States for testing equipment, solutions and services.



## Strategic objectives

- Strengthen EADS' leading role in new and innovative systems and solutions for defence and homeland security
- Actively support transatlantic cooperations and European procurement initiatives with a focus on our customers' transformation processes
- Drive the global expansion of EADS' defence and security business
- Substantially contribute to the growth of EADS' defence business with increased profitability

## Outlook

In 2005, management will continue the process of strengthening the Division's Lead Systems Integration capabilities through sharpening the focus on core businesses, and fostering further efficiencies.

Longer-term opportunities are fuelled by the important programmes that are expected to progress during the year. EuroHawk and NATO AGS are awaiting design and development, and risk reduction study contracts, while German Bundestag approval of German participation in MEADS should clear the way for the design and development contract. Advances in the EuroMALE programme are also expected. Additionally, DS looks forward to growing its Homeland Security business.

Current solid order book offers good visibility for future revenue of Missiles and Military Aircraft businesses. Overall, the 2005 revenue of the Division could decline primarily due to the recent disposal of Multicom and Enterprise Telephony activities.

2005 EBIT will reflect continuing improvement of recurring business profitability, even considering further DS investments in strategic projects and restructuring plans to foster efficiencies. 2005 EBIT will not benefit from the non-recurring positive effect of €106 million, which had been included in 2004 EBIT due to the release of a provision for litigation.

# Reaping the benefits of restructuring

In an exceptionally tough commercial environment, EADS SPACE finalised an exceptional turnaround. Following successful implementation of the restructuring programme, EADS SPACE can operate profitably even in today's adverse conditions. Furthermore, new orders during the year were significantly in excess of current annual revenue for the second year in a row, indicating positive revenue prospects as these orders will be fulfilled over several years.

Progress made on defence contracts, on the powerful ECA version of the Ariane 5 launcher and the initial ramp-up of Paradigm, generated a 7% increase in revenue to €2.59 billion (€2.42 billion in 2003). After three years of losses due to restructuring, development programme overruns and low profitability contracts, EADS SPACE met its target of breaking even in 2004, posting an EBIT of €10 million, a remarkable improvement from the €400 million loss in 2003. This reflects the first effects of the streamlining and industrial re-engineering of the Division.

The high level of new orders underpins future revenue. In May 2004, Arianespace placed an order worth approximately €3.1 billion for 30 Ariane 5 launchers.

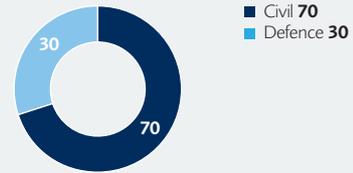
The French Ministry of Defence's production order for next-generation M51 ballistic missiles also made a significant contribution, as did the order from the European Space Agency (ESA) for six automated transfer vehicles (ATV), an unmanned transport system for the delivery of fuel, other supplies and re-boost of the International Space Station (ISS). The order book stood at €11.3 billion at the year end (€7.9 billion at year end 2003). It provides good revenue visibility and supports further profit improvement.

## Restructuring completed

Following the streamlining of Space undertaken since 2002, EADS SPACE is able to operate profitably in spite of the severe decline in telecommunications satellite activity since the end of the 1990s, tighter government budgets and the weak US Dollar.

(€m)	2004	2003	Variation
Revenue	2,592	2,424	7%
EBIT	10	-400	103%
Order intake	5,658	6,062	-7%
Order book	11,311	7,888	43%

Revenue by markets  
(in % of external revenue)



1. The powerful Ariane 5 ECA launcher takes off from Kourou in French Guyana.

2. With the successful satellite launch in December 2004, the Helios reconnaissance system has reached a new stage.

3. EADS Astrium is part of the consortium building the Herschel space telescope for the European Space Agency (ESA).

EADS reacted to the downturn by transforming what was previously a series of businesses organised along national lines into an integrated pan-European organisation. Management removed the duplication of capabilities arising from the heritage of separate national businesses while service functions have been centralised and sourcing has been strengthened. The satellite business can now operate profitably at a rate of two or three telecommunications satellites per year. Furthermore, there is sufficient flexibility for the Division to increase production when the upturn appears.

### Institutional activities underwrite the future

Europe's space exploration activities continued to evolve during the year, benefiting EADS SPACE which is playing a key role in meeting those needs.

Following the decision taken during the ESA Ministerial Conference in May 2003 to secure Arianespace's future, the agreement implementing 'European Guaranteed Access to Space' (EGAS) was signed in March 2004. This will safeguard Europe's long-term ability to launch satellites, which is regarded as a strategic asset.

EADS SPACE has a key role in Europe's contribution to the ISS. It is prime contractor for the development and production of the ATV. In October, the ATV development phase passed an important milestone when the mating of its two components took place. The first flight is scheduled for end of 2005. EADS SPACE is also prime industrial contractor for Columbus, a manned zero-gravity research module.

The ESA has awarded EADS two main contracts: Lisa pathfinder, a scientific mission, and Nirspec, part of the James Webb space telescope.

Galileo Industries, a consortium of industrial groups in which EADS holds 38%, won an order for two test navigation satellites in December 2004, following an earlier order for two test satellites in 2003. In parallel, EADS formed the iNavSat consortium together with Inmarsat, Thales and other partners to bid for the operating of this European navigation system during the concession phase.

### Defence grows

EADS SPACE continued to develop its leadership in Europe's military space programmes.

In 2004, Paradigm Secure Communications signed contracts to provide secure satellite-based telecommunications services to NATO, the Portuguese and other governments, so validating its business model. This follows the signature of the initial £2.5 billion Paradigm contract with the UK Ministry of Defence in October 2003. Negotiations are proceeding to provide similar services to the German defence authorities. Paradigm Secure Communications, a 100% subsidiary of EADS SPACE, owns and operates the Skynet 4 satellite system, and made a significant contribution to the 2004 Division's revenue growth. It is currently developing the Skynet 5 system.

Significant milestones have been achieved in the development of the new generation of French ballistic missiles, which led to the award of the corresponding production contract by the French Ministry of Defence.

The French defence authorities have also placed an order for Spirale, a missile early warning system demonstrator.

### Civil activities remain stable

Arianespace (28.7% owned by EADS) won seven new launch contracts, representing 40% of the open market. Starsem (35% owned by EADS, 15% by Arianespace) won four additional contracts.

By contrast, it was a weak year for communications satellite orders. Furthermore, the weak Dollar favoured US satellite manufacturers. EADS Astrium won one order for the new Eurostar 3000 platform in May 2004, awarded by the Canadian Telesat Company and launched three Eurostar 3000 satellites during the year.

In earth observation, a contract was signed with the Thai authorities, while Rocsat 2, a Taiwanese satellite, was also launched.



### Strategic objectives

- Further improve the cost base and shift from turnaround to growth
- Lead the European civil institutional business, and transform the EU/ESA space policy into budgets
- Develop a strong European military space business, as part of European defence
- Continue to enlarge scope through new services/applications, and target global footprint

### Outlook

EADS SPACE has adapted to the changing markets in which it is operating. While restructuring its own operations, it has also played a key role in the consolidation of Europe's entire space industry, and has offered new services to its customers in the field of secured communications. It has emerged as the continent's leading space group, with a critical role to play in Europe's future space ambitions.

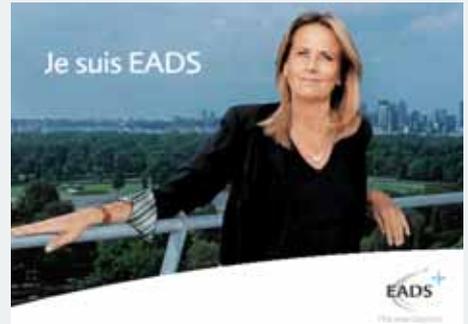
Despite a difficult environment (€/ \$ rate, gloomy telecommunication satellite market, severe limitations of national and European agencies), the current order book supports a moderate increase in 2005 revenue. Moreover, EADS SPACE – fully re-engineered and operational – is now poised for progressive expansion in its EBIT margin.

# An employer of choice

EADS has confirmed in 2004 its attractiveness on the European recruitment market. EADS and its Business Units have recruited more than 7,000 new employees – over 2,000 of them university graduates – during the year. The Group has become an employer of choice in Europe, with a strong image in France and Germany, where it has ranked respectively first and sixth as preferred employer for engineering students. EADS is investing continuously in recruitment and employee marketing among students to secure this strong position for the future.

EADS has made a strong commitment to increase its gender diversity. The general objective of recruiting at least 20% women in our annual graduate engineering recruitment has been achieved in 2004. This figure is 35% higher than the industry average. In addition, EADS has actively participated in the debates and initiatives in the area of educational and social policy promoting women's participation in the workplace, such as equal opportunity environments, work-life balance, etc. There have been a large number of joint initiatives with universities and schools to promote the aerospace industry as an attractive employer for women. Partnerships have been signed with the French engineering school 'École Centrale de Paris' and the Berlin University FEMTEC in Germany. In France, EADS sponsored the Irène Joliot Curie prize, which is awarded for actions taken to encourage women to study science, to promote the role of women in research and to highlight the exemplary careers of women in public or private research.

In its role as business partner and long-term change agent, Human Resources (HR) has set up several strategic workshops where Heads of HR departments, as well as talented young HR professionals, have worked out some key long-term challenging topics. These include: the impact of European demographic change on recruitment strategies; evolutions of future core competencies; new behaviours and relationships between employers and the new generation of employees; impacts of globalisation on long-term HR and recruitment strategies.



The 'I am EADS' advertising campaign places the spotlight on the people within EADS, emphasising the cultural diversity of the Group's workforce and the variety of activities performed across EADS. The aim has been to create a raised public awareness of EADS and to reinforce the Group's image as the leading company in the aerospace and defence industry.

### **Successful Employee Share Ownership campaign**

The Employee Share Ownership programme (ESOP) has been very successful in 2004. Organised for the fourth time, it has allowed EADS to raise €36 million from 11,000 employees in 13 countries. The number of employees subscribing increased by 38% and the amount of money invested rose by 73%. EADS employees owned approximately 3% of the Group's shares at year end 2004.

The Corporate Business Academy (CBA) launched several initiatives in 2004 to accelerate the preparation of the workforce to face global challenges. The Expand management development programme, preparing the transition between Senior Managers and Executive positions, made a collective study trip to Washington and Atlanta in the United States. A specific programme has been designed and run for top and senior management Vice-Presidents concerning the challenge globalisation poses to EADS, with specific focus on Asia (see case study).

The CBA has also organised several programmes promoting the EADS way of leading and managing people, such as FAST and EXPAND. Additionally, it has developed programmes for professional communities such as HR4HR – a specific development programme for talented young HR professionals. One major event of 2004 has been the opening of Villepreux, the EADS Centre for Executive Education in Bordeaux, in November 2004. This Domain offers cutting-edge facilities, and will be available to all EADS subsidiaries, as well as being the base for most of the CBA programmes. It is being attended by 1,500 to 2,000 executives and senior executives from the Group's different operations around the world. It aims not only to foster the knowledge that increasingly drives success in today's world, but also to build the strong corporate culture that is necessary for the Group's global development and competitiveness.

### **Key achievements**

- Deployment of the new performance-potential appraisal system.
- Opening of the EADS Executive Education Centre in Bordeaux.
- Successful ESOP campaign.
- Proactive social dialogue with pan-European and national bodies.
- EADS campaign to promote gender diversity.

## **CBA trip to China**

Senior executives explore Sourcing and HR possibilities

**In mid-November 2004, 20 senior executives spent a week in China exploring issues connected to EADS' Global Industrial Strategy with a particular focus on Sourcing and Human Resources. After two intensive days of meetings and visits in the capital Beijing with top speakers from the Government, the group split in two. The first group went to Harbin in the North to look into human resources and governance issues, while the second visited Xian in central China focusing on procurement. They visited six companies, either state-owned or joint ventures, with local or international management, working in Aerospace and Defence as well as other sectors. The learning expedition ended in the eastern port city of Shanghai, where both groups had another two days of meetings and visits. The 20 participants prepared a strategic report for the Chief Executive Officers with new disruptive ideas and breakthrough proposals for EADS' growth strategy in Asia.**

# Integrating the world's best suppliers

High quality suppliers are essential to EADS. Every year, goods and services valued at approximately two-thirds of revenue are procured, comprising systems and equipment, aerostructures, components, parts, materials and services. Sourcing is a vital management function, which ensures the quality and efficiency of the supply chain, establishing long-term relationships with the best suppliers globally.

Group-wide Sourcing activities secured further improvements during the year, notably through enhancing the sharing of risk and opportunity with suppliers. Cost continued to be reduced across the supply chain, while initiatives to source more from strategic countries such as China began to improve access to these important economies. Additionally, Sourcing stepped up monitoring of suppliers' commercial capabilities and stability.

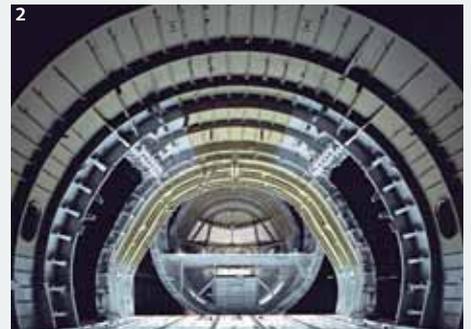
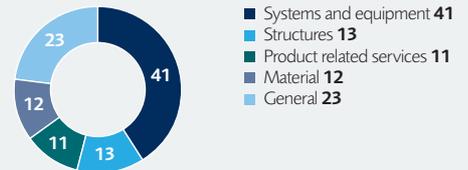
The sharing of key risks such as product development and exchange rate fluctuations with major suppliers was embedded into procurement policies during the year. With approximately two-thirds of revenue Dollar denominated, EADS is seeking to further increase its natural hedging by increasing Dollar denominated purchases above the current level of approximately 40%. As part of EADS' risk sharing approach, suppliers will also have a greater share of opportunities.

Through leveraging Group purchasing power with common suppliers, EADS continued to achieve substantial savings. During 2004, new efficiencies were accomplished by further professionalising joint procurement activities, and extending their scope to a wider range of commodities. Joint procurement activities have also led to more than 60 additional frame contracts, which all Business Units can benefit from.

## Sourcing by regions (%)



## Sourcing by material groups (%)



For EADS' broad variety of products it is essential to select the best suppliers.

1. Ariane tank.
2. Airbus 320 fuselage.

Searching for the best suppliers globally, EADS is actively examining opportunities in countries with specific sectors of expertise. In line with the EADS Global Industrial Strategy, Sourcing activities aim to support market access and to create a better regional match between costs and revenue. The Global Industrial Strategy aims to expand local activities in the target markets of Asia, the United States and Russia. In 2004, we took additional steps to change our focus from being primarily a European exporter to a global company with a worldwide presence through investments, acquisitions and programme partnerships. In this way, we intend to grow our international sales, to broaden our technology portfolio, to gain cost advantages and to increase natural currency hedging.

In general terms, the evaluation of suppliers improved during this year. Solid long-term supplier relationships are essential, especially for the sourcing of large and complex systems. This helps to ensure continuous excellence in supplier performance. We constantly evaluate supplier performance, sharing the results across Business Units. Performance targets are communicated to and agreed by suppliers, who commit to related improvement plans. In-depth analysis of key suppliers' financial situations is helping to reduce risk.

Looking forward, Sourcing will continue to seek efficiencies, while fostering a partnership approach with key suppliers through risk sharing and development of suppliers' capabilities. In particular, there is an objective to increase the integration of major suppliers in design, manufacturing and service processes, by helping them to evolve in ways that meet our future business objectives and increase their own competitive strengths.

#### Key achievements

- Secured procurement savings in line with targets.
- Procurement policies have been implemented in all EADS Business Units, providing common approach to procurement.
- Considerable part of EADS offset obligations fulfilled by Group-wide matching with Sourcing activities.
- Sourcing opportunities and suppliers in strategic countries investigated.
- Supplier Intelligence System implemented and operational.

## POWER

Improving procurement to enhance EBIT

**The POWER (Procurement Opportunities With Extended Range) project made substantial progress in 2004, achieving its ambitious targets for procurement savings and bringing procurement activities more into the spotlight. Furthermore, it met some of its 2005 savings objectives, because the costs associated with new or renegotiated contracts are generally valid for several years.**

**The project also started to generate ideas that will improve efficiency through reorganisation and greater transparency of processes in the business units. All of these measures are ultimately aimed at reducing procurement costs leading to improved EBIT results.**

**As the project has moved forward, cooperation has intensified across EADS. This has occurred within the Business Units; between Controlling and Purchasing (project management); and between the Business Units and the corporate functions Corporate Sourcing and Corporate Controlling.**

**To determine the positive effect on EBIT, the Business Units have developed special processes to measure and evaluate the impact of savings achieved when purchasing transactions take place on EBIT figures.**

# Building vital proprietary knowledge

Providing innovative products that respond to customer needs is the essence of EADS' success in the face of strong, global competition. Whether in the fields of civil aircraft, missiles, helicopters, space or integrated defence systems, superior products are driving competitive advantage. Research and technology provides the basis for innovation in products and processes. It is the acquisition of proprietary knowledge which is vital for the future.

Technology breakthroughs in the use of composite materials in aircraft structures, electronic fly-by-wire controls for aircraft refuelling booms and more automation in assembly lines were but a few of the technological achievements that contributed to specific product advantages in 2004.

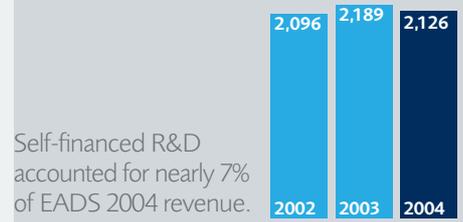
During the year, EADS continued to invest heavily in building the technologies that are vital for the products of the future. It also stepped up a programme of cooperation with universities and foreign scientific organisations to jointly develop new technologies.

EADS is committed to continuous innovation, which means a willingness to be daring in the application of advanced technology. It believes this is a prerequisite of success. A key element of this policy is a high level of cooperation with external scientific and applied research organisations. Such cooperation allows EADS to leverage the resources available in third-party organisations. These organisations in turn benefit from EADS' systems knowledge.

By investing substantially more in Research and Development (R&D) than its competitors, EADS intends to maintain its ability to deliver superior products. Additionally to governments financed R&D, the Group invested €2.1 billion in self-financed R&D during 2004 (€2.2 billion in 2003), representing 6.6% of total revenue.

While R&D encompasses the whole process from discovery of scientific knowledge through its application in innovative product design to series production, Research and Technology (R&T) covers the initial steps from discovery to feasibility demonstrations.

## Self-financed R&D (€m)



1. Acoustics laboratory – low noise emissions can be a source of competitive advantage for Airbus.

2. The Virtual Cockpit, a research project at the EADS Corporate Research Centre.

In 2004, the Divisions spent, on R&T alone, some €510 million (more than €450 million in 2003) on mid- and long-term research projects providing innovation for existing and new products, services and cost-efficient processes. A further €86 million (€85 million in 2003) was spent centrally by the Corporate Research Centre, which is focused on long-term strategic projects and technologies, many of them intended for cross-Group applications.

Evidence of successful R&T activities can be seen in innovative products and numerous technological breakthroughs as well as in the number of awards given to EADS development engineers and researchers. As a result, the Group owns more than 13,000 patents. Currently, key elements of the R&T portfolio are projects oriented towards EADS' role as a system provider and integrator, EADS' plan to grow in the defence business, its use of high performance materials, and its efforts to optimise cost efficiency in processes that are part of the EADS value generation chain.

#### **Accelerating progress**

Even so, there is a need to be aware of the technology challenges arising from globalisation, broader markets and growing competition, in particular in Asia. In March, EADS launched the Advanced Technology Initiative (ATI) to create a cross-company drive to increase efficiency in innovation and R&T. In its initial phase, the ATI is mapping and benchmarking EADS technologies in key areas. The subsequent forecasting phase will be dedicated to the identification of future technology trends, on the basis of product evolution requirements and the analysis of new emerging and disruptive technologies.

The ATI calls for actions to improve R&T processes, for increased interaction with pan-European initiatives and those in EADS home countries, for further external partnerships, and for the use of modern E-business tools to enhance management of technology knowledge. The results will help EADS take the decisions needed to be competitive in 2020.

#### **International cooperation**

Following the opening of a technology office in Moscow in 2003, international cooperation continued to advance in 2004. The Moscow office is undertaking an increasing volume of research projects with Russian partners such as the Russian Academy of Sciences. Projects are focused on the fields of materials and structures, information technologies, process engineering and flight physics.

In February 2004, EADS signed a Memorandum of Understanding with the Singapore Economic Development Board and launched an exploratory Research, Technology and Development mission to investigate the opportunities of increased collaboration on scientific and technology issues.

#### **Nurturing talent**

In September 2004, EADS created the Company Foundation for Research (Foundation d'Entreprise) in France with an investment of €24 million over five years. The foundation is intended to nurture talent, ideas and knowledge by strengthening ties between public/private research, education and industrial and technical communities. It aims to support research through three complementary approaches: by allocating funds to multidisciplinary research programmes in aeronautics and space; by financing educational grants, scientific awards and conferences; and through investing in other foundations and associations of public benefit. Similar initiatives will follow in Germany, Spain, the United Kingdom, and the United States.

#### **Key achievements**

- In 2004, EADS patented more than 450 new inventions.

## **Refuelling boom for Airbus aerial tanker** Technology expands airborne refuelling envelope

**Leading-edge technologies are enabling EADS to develop a refuelling boom for an Airbus tanker, which will offer considerable advantages in operation. Electronic fly-by-wire controls, including an automatic load alleviation system, will give a larger refuelling envelope and improved controllability.**

**Manipulating the boom remotely from a position close to the flight deck, the operator will find that the load alleviation system greatly reduces the workload. Through sensors, the system automatically detects, and adjusts for the load in the boom.**

**Almost four tons (1,200 US gallons) of fuel per minute will be pumped to receiving aircraft. The operator will monitor progress through an artificial 3D-vision surveillance system, which includes daylight and low-light television and infrared options. With its advanced features, the flying boom is easily adaptable to future mission requirements – including the refuelling of Unmanned Aerial Vehicles.**

# Organisational structure

at 31st December 2004

The Board actively shapes the Group's mission and strategic priorities, which are implemented under the leadership of the Chief Executive Officers (CEOs), who provide the impetus for major operational initiatives. Group Functions and the Divisions carry out the instructions of the CEOs. Within the Divisions, the Business Units manage day-to-day business, and organise change resulting from the CEOs' initiatives. The five Divisions are Airbus, Military Transport Aircraft, Aeronautics, Defence and Security Systems and Space.

## Board of Directors

## Chief Executive Officers

## Group functions

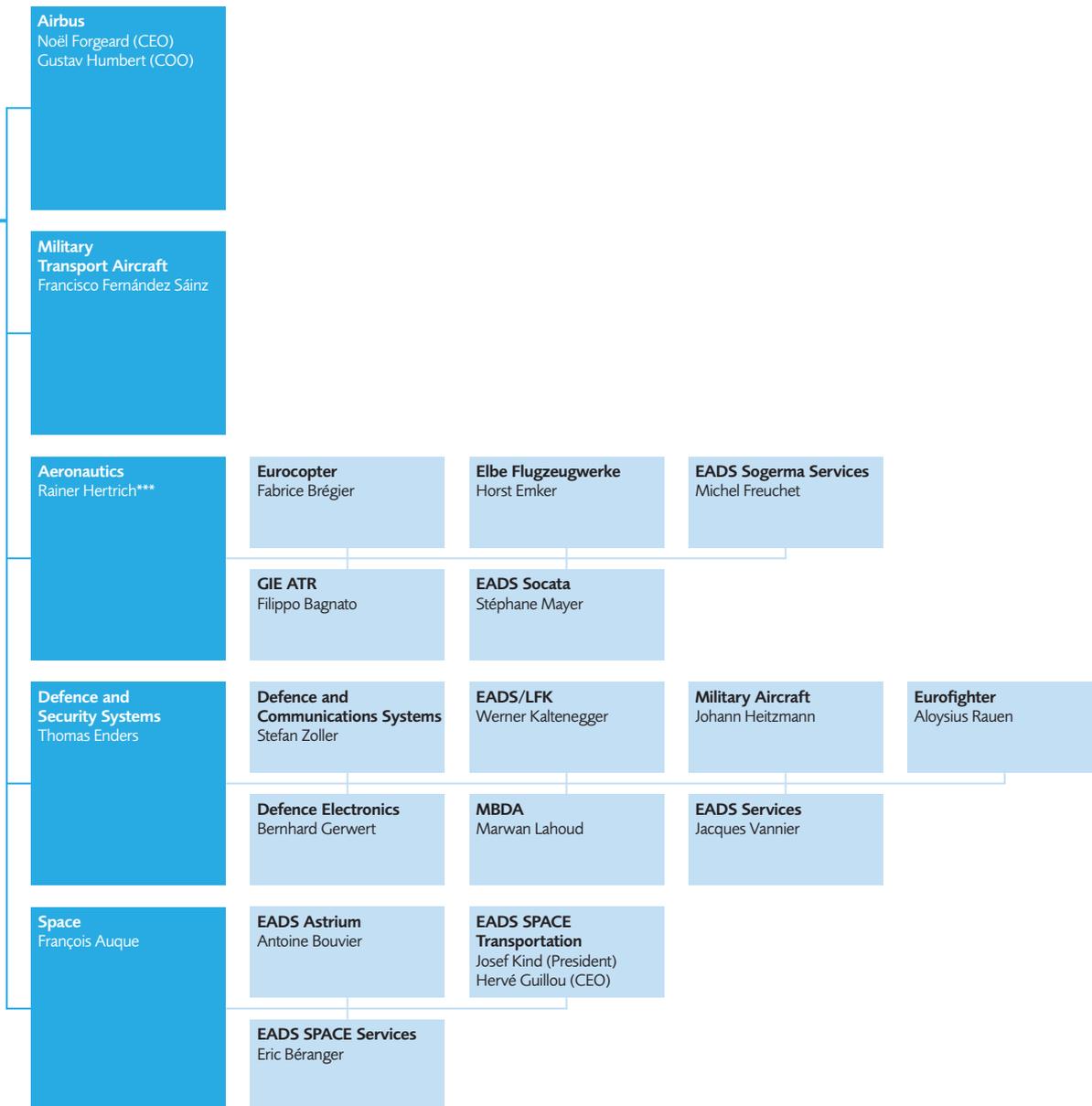


\* Resigned as of 12th July 2004  
 \*\* From 1st January 2005  
 ■ Executive Committee members

EADS is organised into five Divisions. Each is closely aligned to the specific needs of customers in its sector. At the same time, the integration of the Group allows for the maximum generation of value from information exchange, technology sharing and working practice synergies. This enhances each Division's product and service offering.



## Divisions    Operating companies



\*\*\* In addition to his function as CEO

# Executive Committee

The Chief Executive Officers (CEOs) are supported in their operational tasks by an Executive Committee made up of the Heads of each operational Division, the Head of EADS North America and the Heads of the four major functions in the Group.



**Philippe Camus**  
Chief Executive Officer

Mr. Philippe Camus was previously Chairman of the Management Board of Aerospatiale Matra. In 1982, he joined the general management of the Lagardère Group where he was Chairman of the Finance Committee of the Matra Group until 1992, appointed Chairman and Managing Director of the Finance Committee of the Lagardère Group in 1993, and then Managing Partner of Lagardère in 1998. Mr. Camus is a former student of the École Normale Supérieure de Paris, an agrégé in Physical Sciences and Actuarial Science and a graduate of the Institut d'Études Politiques de Paris.



**Rainer Hertrich**  
Chief Executive Officer,  
Head of Aeronautics Division

Mr. Rainer Hertrich started his career in 1977 at Messerschmitt-Bölkow-Blohm (MBB). In 1994 he became Senior Vice-President for Corporate Controlling of Deutsche Aerospace AG. In 1996, he was appointed Head of Dasa's Aero Engine Business Unit and Chief Executive Officer of Dasa's subsidiary MTU. In 2000 he became President and Chief Executive Officer of Dasa AG. At the end of 2001, he was elected President of BDLI, the German Aerospace Industries Association. Mr. Hertrich studied Business Administration at the Technical University of Berlin and the University of Nuremberg, graduating with a Bachelor of Commerce.



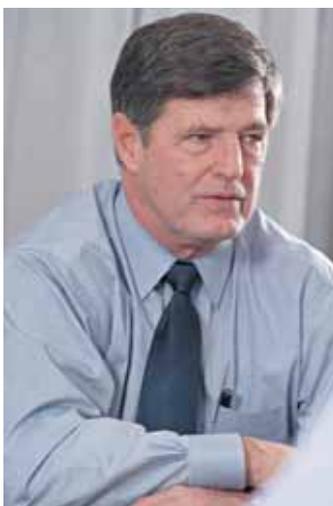
**Gustav Humbert**  
Airbus Chief Operating Officer

Previously a member of the Dasa AG Management Board responsible for the Commercial Aircraft Division, Mr. Humbert joined Messerschmitt-Bölkow-Blohm (MBB) in 1980, and became President and Chief Executive Officer of Daimler-Benz Aerospace Airbus GmbH in 1994. He holds a degree in Mechanical Engineering and Production Technology from Hanover Technical University as well as a PhD in Engineering from the University of Hanover, School of Machinery.



**Noël Forgeard**  
Head of Airbus Division,  
President and CEO of Airbus

Mr. Forgeard joined Matra in 1987 as Senior Vice-President of the Defence and Space activities. In 1992, he was appointed Managing Director of Lagardère and Chief Executive Officer of Matra Hautes Technologies. He joined Airbus Industrie as Managing Director in 1998 and became the first President and Chief Executive Officer of the Airbus integrated company in 2001. He graduated from the École Polytechnique and the École des Mines in Paris.



**Ralph D. Crosby Jr.**  
Head of EADS North America

Previously, Mr. Crosby was founder and President of the Integrated Systems Sector at Northrop Grumman Corporation, Corporate Vice-President and General Manager of the company's Commercial Aircraft Division and of the B-2 Division. He has a Bachelor of Science degree from the US Military Academy, Masters' degrees in International Relations from the Graduate Institute of International Studies in Geneva and in Public Administration from Harvard University.



**Jean-Paul Gut**  
Head of EADS International

Prior to July 2000, Jean-Paul Gut was Executive Chairman of Aerospatiale Matra Lagardère International and Group Managing Director of Defence and Space Transport at Aerospatiale Matra. In March 1998, Jean-Paul Gut was named Director of the Lagardère Group Board of Management, responsible for International Operations and the High Technology sector. He graduated from the Institut d'Études Politiques de Paris (IEP), with a Masters degree in Economics.



**Hans Peter Ring**  
**Chief Financial Officer**

Mr. Ring began his career at MBB in 1977. In 1987 he was appointed Head of Controlling of the Company's Missile business. Subsequently, he was named Head of Controlling of the Aviation and Defence Division of Dasa. From 1992-1995, he was CFO and Member of the Board at Dornier Luftfahrt, a Dasa AG subsidiary. In 1996, he was appointed Senior Vice-President of Controlling of Dasa and subsequently, of EADS. Hans Peter Ring was appointed CFO of EADS in 2002. He holds a degree in business administration.



**Jean-Louis Gergorin**  
**Head of Strategic Coordination**

Mr. Gergorin began his career with the French Government, becoming Head of Policy Planning at the French Foreign Ministry and a member of the French German Committee on Security and Defence. He then joined the private sector, holding senior strategic positions at Matra, Lagardère and Aerospatiale Matra. He graduated from the École Polytechnique and the École Nationale d'Administration (ENA) in Paris and is an alumnus of the Stanford Executive Programme.



**Thomas Enders**  
**Head of Defence and Security Systems Division**

Mr. Enders joined MBB/Dasa AG in 1991, after various posts in international research institutes, the German Parliament and the Planning Staff of the German Minister of Defence. After several years in the company's marketing sector, he became Corporate Secretary of Dasa AG in 1995. From 1996 to 2000 he was in charge of Corporate Strategy and Technology. Mr. Enders holds degrees from the University of Bonn and UCLA, California.



**François Auque**  
**CEO of EADS SPACE**

Mr. Auque joined Aerospatiale as Chief Financial Officer in 1991, after a career with the Suez Group and the French Cour des Comptes. He was Executive Vice-President Finance and Strategy of Aerospatiale, Chief Financial Officer and Group Managing Director for satellites and member of the Management Board of Aerospatiale Matra. He graduated from École des Hautes Études Commerciales (HEC), from École Nationale d'Administration (ENA), and from Institut d'Études Politiques of Paris (IEP).



**Francisco Fernández Sáinz**  
**Head of Military Transport Aircraft Division**

Previously General Manager of Airbus España. Mr. Fernández Sáinz joined CASA in 1971 as a design engineer, occupied various positions of Product Engineering Manager (1975), Project Manager (1979), Engineering Development Director of the Technical Directorate (1982), Vice-President of Engineering (1984) and Executive Vice-President Programs (1997). Mr. Fernández Sáinz is a graduate of Icade (Master in Business Administration) and is a Senior Aeronautical Engineer.

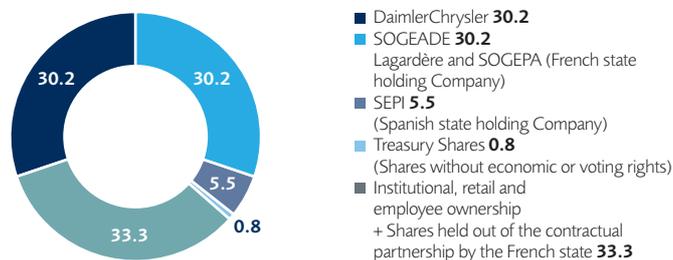


**Jussi Itävuori**  
**Head of Human Resources**

Mr. Itävuori joined EADS in September 2001. Previously, he worked for KONE Corporation since 1982 and was appointed in 1989 as head of Human Resources and member of Executive Committee of KONE Elevators. In 1995 he was appointed member of the Executive Committee and Head of Human Resources of KONE Corporation. He served in the Finnish Air Force as a pilot and officer. He has a Masters degree from the Vaasa School of Economics, Finland.

# Corporate Governance

## Capital structure as of 31st December 2004 (%)



In 2004, the Board of EADS continued to uphold the driving principles of maximising shareholder value, and compliance with applicable laws and Corporate Governance principles in the countries relevant to the Company, while also enhancing its focus on Corporate Governance best practices.

### Applicable rules

EADS N.V. is a Dutch company governed by the laws of The Netherlands – in particular, by Book 2 of the Dutch Civil Code – and by its Articles of Association. Since its shares are listed in France, Germany and Spain, it is also subject to various regulations which are set out in more detail in the EADS Financial Statements and Corporate Governance 2004 document, part of this EADS Annual Report Suite 2004.

It should be noted that some specific and national company law regulations (such as the French 'loi NRE' on Corporate Governance) are not applicable to EADS; nevertheless, the rules governing the proceedings of the Board, initially adopted by the Board in July 2000, were amended during the Board meeting held on 5th December 2003 to reflect the decision of the Board with respect to the enhancements in Corporate Governance as described below. In addition, EADS' previously existing Insider Trading Rules have been reinforced, building on the recent changes in the laws applicable to the Company in The Netherlands and in each country where EADS is listed. Those rules became effective on 1st January 2004. Furthermore, the Board adopted in its meeting on 10th December 2004 a Directors' Charter, an Audit Charter, as well as a Remuneration and Nomination Committee Charter. These Charters detail the rights and duties of the Directors in the light of Corporate Governance best practice and the enhanced roles of both Committees.

### The Board of Directors

The Board met seven times in the year 2004 and was regularly informed of developments through business reports from the CEOs, including rolling forecasts as well as strategic and operational plans. Topics intensively discussed and operations authorised at these meetings included EADS strategy, reorganisation processes (such as the continuing restructuring of the Space and Defence and Security Divisions), major business issues (such as the A350 launch decision, the Eurofighter Tranche 2 contract, the impact of US Dollar depreciation on EADS business, review of the EADS UAV programmes, the acquisition of Racal Instruments Defence Group in the US), and the approval of operational plans, budgets, hedging policy, remuneration (including a Stock Option Plan and an Employee Share Owning Plan) and the Group's financial results and forecasts. The Board also dealt with topics regarding personnel and human resources, such as management qualification as well as attracting, retaining and developing individuals of high potential in order to ensure the future quality of EADS' management and the multi-national leadership structure.

Following the changes to EADS' Corporate Governance decided in 2003 in light of the Corporate Governance best practices developed in jurisdictions relevant to EADS, the Board supervised the implementation of such decisions during the year 2004. Among other matters, the enhancement of shareholders' access to information was addressed through, for example the setting-up of specific Corporate Governance pages on EADS' website (such as pages regarding the Company's Corporate Governance principles, the Insider Trading Rules, and the Internal Rules for the Board of Directors).

### The Audit Committee

The Audit Committee met five times during the year 2004 to review the 2003 results as well as the first half-year results for 2004. As decided by the Board on 5th December 2003, the role of the Audit Committee was expanded with new tasks such as, in particular, the review of the quarterly financial reports. It also discussed extensively accounting changes impacting in particular Airbus results, as well as the influence of currency rates on EADS business.

### The Remuneration and Nomination Committee

The Remuneration and Nomination Committee, formerly named Personnel Committee, met four times during the year 2004 to review the compensation policy (including pension schemes), the bonus payments for 2003, and the ESOP and SOP for 2004, and to recommend the appointment of the Chief Executive Officers of the Company's main business units such as EADS Sogerma, Military Aircraft and Defence Electronics. Furthermore, this Committee made a recommendation to the Board on the name of a new member of the Airbus Executive Committee. The Remuneration and Nomination Committee also made recommendations regarding the appointment of the Chairmen of the Supervisory Board of EADS Deutschland GmbH and the Chief Executive Officer of Eurofighter GmbH.

Since the last self-assessment in 2004, which had already shown positive results, further progress has been made in implementing the described improvement measures. Also, the meeting attendance for Board and Remuneration and Nomination Committee meetings has further increased in 2004 compared to the previous year.

Continuous improvement and effectiveness of governance and management of the Group will remain a focus and a key success factor for EADS.

More details available:

 [Corporate Governance section of www.eads.com](http://www.eads.com)



**EADS Financial Statements and Corporate Governance 2004 (2)**

## Members of the Board of Directors

### Manfred Bischoff

Chairman of EADS  
DaimlerChrysler Delegate for  
the Aerospace Industry

### Arnaud Lagardère

Chairman of EADS  
General Partner and Chief Executive  
Officer of Lagardère

### Philippe Camus

Chief Executive Officer of EADS  
Deputy Chairman and Deputy Chief  
Executive Officer of Arjil Commandité  
– Arco (General Partner and Chief  
Executive Officer of Lagardère)

### Rainer Hertrich

Chief Executive Officer of EADS  
President of the German Association  
of Aerospace Industries, BDI

### Noël Forgeard

President and Chief Executive Officer  
of Airbus  
Member of the Board of Directors  
of Arcelor

### Hans Peter Ring

Chief Financial Officer of EADS  
Member of the Supervisory Board  
(Aufsichtsrat) and Shareholder  
Committee of M+W Zander – D.I.B.  
Facility Management GmbH

### Louis Gallois

President of SNCF

### Rüdiger Grube

Member of the Management Board  
of DaimlerChrysler

### François David

Chairman and Chief Executive Officer  
of COFACE

### Michael Rogowski

Chairman of the Supervisory Board  
of J.M. Voith AG

Pedro Ferreras resigned as member  
of the Board of Directors with effect  
as from 12th July 2004.

Mandates of all the members of the Board of Directors shall expire at the Annual General Meeting of the Company to be held on 11th May 2005.

Based upon the nominations of the main EADS shareholders DaimlerChrysler and SOGEADE (Lagardère and French State), the Board of Directors decided on 8th March 2005 to propose at such Annual General Meeting to appoint to the Board of Directors Manfred Bischoff and Arnaud Lagardère (to be designated as Chairmen), Thomas Enders and Noël Forgeard (to be designated as Chief Executive Officers), Jean-Paul Gut and Hans Peter Ring as Executive Directors, Juan Manuel Eguigaray Ucelay, Louis Gallois and Rüdiger Grube as Non-Executive Directors and François David and Michael Rogowski as Independent Directors.

# Corporate Social Responsibility

During 2004, EADS took steps to enhance its Corporate Social Responsibility (CSR) practices by designing a set of policies common to the entire Group, building on its already high standards. Approved shortly after the year end, the new CSR framework enables EADS to match the benchmark for its sector, to comply with potential new legislation, and to communicate achievements clearly.

This initiative will also support EADS in continuing to live up to its moral engagement as a signatory of the United Nations Global Compact, which it signed in 2003. The Compact lays down ten principles in the areas of human rights, labour, environment and anti-corruption. These are embedded in EADS' strategies, culture and day-to-day operations. EADS envisions participating in Global Compact initiatives and programmes in different countries.

A guiding vision and set of values underlie the policies. In order to ensure that CSR performance and progress can be verified, management is introducing a series of Key Performance Indicators (KPIs), which will be added to over time. Performance will be communicated to internal and external audiences.

As a defence company, EADS faces specific CSR related questions. The Group responds that its defence products and services contribute to the security of nations, and that, when carrying out its business, EADS complies with all applicable laws set up by responsible governments (arms export laws, embargo rules and Ottawa agreements, anti-corruption policy).

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## Transparency, reliability, shareholder value

**Thomas Müller**  
Chief Financial Officer, EADS SPACE

'Transparency and reliability are essential to the creation of long-term shareholder value. We believe two pillars support shareholder value. In brief, these are: developing a robust and successful business with rising overall results based on a growing but profitable order intake; and optimum use of resources. These allow you to pay rising dividends, and also enhance the overall value of the company. Only a lasting economic success story can sustain long-term total shareholder returns. By definition, such a company must be both transparent and reliable.'



EADS' approach to CSR is also driven by the specific nature of its activities and organisation. Long product lifecycles demand a long-term CSR vision – average lifecycles exceed 30 years. Additionally, the Group's decentralised structure highlights the importance of a coordinated CSR approach.

Management implemented the project, coordinated by the Corporate Secretary, in three phases. Initially, the project team assessed EADS' CSR environment in terms of regulations and peer group benchmarking. It then established the status of CSR within EADS and started defining a common policy. Finally, it designed a reporting system for internal reporting and external communication, and agreed quantitative and qualitative KPIs.

In early 2005, the Chief Executive Officers approved the project's recommendations.

**Policies**

The new CSR policies fall into five categories:

- In terms of **Business Ethics**, the policies detail proper business practices, compliance with laws regulating all activities and Corporate Governance standards. In particular, fighting corruption is a major challenge for international companies. EADS is committed to complying with all applicable national and international legislation.

- EADS pursues **Sustainable Growth** primarily through customer satisfaction, sustaining and protecting innovation, and fostering a mutually beneficial relationship with suppliers. It drives continuous improvements in the quality of its products, processes and people. EADS encourages suppliers to be responsible. It is committed to long-term relationships and partnerships, particularly in the development of technical know-how.

- In **Environmental Care**, EADS considers the monitoring and reduction of its operations' environmental impact, as well as the environmental performance of products throughout their lifecycles, to be of fundamental importance.

- In the area of **Employer-Employee Relations**, EADS considers the protection of the health and safety of employees in the work place a top priority. EADS is committed to offering equal opportunities to all. Furthermore, EADS ensures good working conditions and efficient management of skills and know-how.

- Finally, in **Corporate Citizenship**, EADS maintains an open dialogue with stakeholders and encompasses community interests in its global strategy.

**Diversity**

**Sabine Keuschen**  
 Director of Human Resources,  
 Military Aircraft, Defence and Security Systems Division

'By its nature EADS is very diverse in terms of structure and culture. My focus is on Spain, Germany and France because that is where Military Aircraft operates. There are not too many real differences between the countries, although there are cultural differences, which are respected and make professional life interesting. A great attribute of our company is our ability in networking and relationship management which supports the diversity of our business.'



**Equal opportunity**

Ensuring equal opportunities for women

EADS' policy of equal opportunities for women progressed during 2004, as it embarked on two initiatives to foster the recruitment of women. It has committed to ensure that at least 20% of engineering graduate recruits annually are women, and to communicate actively in schools and colleges to make the aerospace industry a more attractive employer for women.

Professional equality has been safeguarded by, among other measures, systems to make sure men and women of equivalent experience, skills and qualifications are hired on the same wages.

In France, the Group signed an agreement with trade unions in June. Broadly speaking, the agreement aims to increase recruitment of women, while taking steps to feminise many of the previously male-dominated professions, and guaranteeing fair treatment of women. Similar initiatives are under way in Germany, Spain and the UK.

## Practice

Each policy area is implemented through a specific organisation and underpinned by a set of procedures outlined below, which will evolve as necessary in line with the changes in policies.

For **Business Ethics**, there are procedures set up by international organisations governing transparency in the selection of business partners, appropriate remuneration for business services and the monitoring of contractual relationships. Additionally, the EADS Legal Affairs directorate, in coordination with the Division and Business Unit legal departments, is responsible for implementing and overseeing the procedures designed to ensure that activities comply with all applicable laws, regulations and requirements.

In terms of **Sustainable Growth**, three main thrusts have been identified: the Chief Quality Officer is in charge of stimulating, coaching and supporting the Business Units to implement continual improvements in On-Time and On-Quality Delivery to maintain and improve customer confidence in EADS. Innovation strategy is both centralised and decentralised. Centralised initiatives are conducted by both the Research and Technology network and the Corporate Research Centre, while the Business Units have responsibility for developing products and solutions that meet customer needs. It is the responsibility of Corporate Sourcing to deliver competitive advantage by winning, integrating and developing the world's best suppliers.

## Responsibility

**Jean-Yves Trochon**  
General Counsel, International Compliance Officer  
EADS International

'The globalisation process requires multinational companies to define and implement export business practices that comply with all applicable legislations. We are convinced that this traditional approach should be complemented by positive actions that meet growing demands of ethics and corporate social responsibility expressed by our stakeholders, including the communities of countries where we are present. We should try to contribute as much as reasonably possible to the development of these countries by providing more than just "customer satisfaction", but also "country satisfaction".'



## Business ethics

### Improving international compliance

Improving training in international compliance was further strengthened during 2004 as a way of enhancing anti-corruption practice. This is a concern for aerospace and defence companies operating in global markets. International compliance is also an area in which EADS performs rather well according to a peer group analysis carried out during the year.

At the International Compliance Programme (ICP) conference held on 14th October 2004, representatives from the Business Units and EADS International agreed that improving training was a priority for furthering implementation of the ICP within the Business Units.

During 2004, more than 20 training sessions were organised. Training in 2005 will include ICP rule changes to be adopted in the light of Corporate Audit recommendations.

In the area of **Environmental Care**, EADS has undertaken to implement standardised reporting and compliance levels at all of its sites. The Group is investing in research and development projects devoted to environmental improvements and processes. Management of environmental issues is the responsibility of the Business Units and sites.

For **Employer-Employee Relations**, EADS Group HR ensures that EADS, as an integrated Group, attracts, develops and retains a world-class workforce. There are also specific initiatives to promote diversity and career development. Management of Health and Safety is dealt with at site level according to applicable national regulations. EADS has established a security policy to improve the security of its employees and to protect EADS expertise.

In the area of **Corporate Citizenship**, EADS makes a variety of contributions in the form of sponsorships, donations, or partnerships. As part of the development of its Global Industrial Strategy, EADS is taking into account the possible impacts of business partnerships in certain countries, as well as the local development.

### Code of Ethics

As part of the process, an update of the Code of Ethics is being drawn up. EADS' initial Code was drawn up four years ago, at the time of the Group's creation. It emphasised values that were key success factors for achieving an integration of different companies into one Group. Following EADS' establishment as

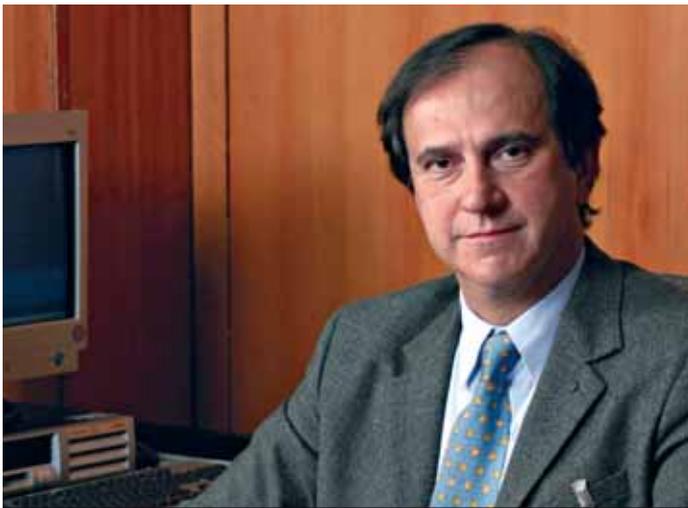
a market leader in many of its businesses, and an evolving legal environment concerning business ethics, the decision has been taken to update the code in order to reflect recommendations from various codes and laws, and to align with best practice.

It will guide all employees as to how they should behave on a daily basis. The Code addresses the principles of ethical behaviour in human resources (for example representation or equal opportunities), in business activities (for example international trading or competition), as well as the protection of the Group's asset, the respect for the environment and the sponsorship activities.

All employees will be sensitised through a systematic information campaign, aimed at raising the awareness of the importance of an ethical business conduct and emphasising underlying values.

### Way forward

Each of the above policies will be developed and implemented through specific action plans which aim to monitor Group progress against 'best practice' and emerging regulations. Further details of CSR policies, procedures and performance can be found in Book Three of the 2004 Annual Report.



## Excellence

**Cristobal Casado**  
Vice-President, Head of Development Human Resources and Quality,  
EADS Casa and Military Transport Aircraft Division

'We achieve excellence through satisfying our four most important stakeholders – customers, shareholders, people and communities. We have to be excellent in gaining our customers' confidence and satisfying their expectations. For our shareholders, excellence means being efficient; having optimised business processes and a robust supply chain; continuously improving the business. We have to have people with the best skills and competencies – motivated people with self-esteem and proud of being part of EADS. We also have to contribute to society, both in Europe and elsewhere in the world.'

## Customer satisfaction

Aiming to build even higher levels of customer trust

As part of a new initiative driving **Quality and Operational Excellence**, EADS is implementing an innovative approach to customer relationships. This focuses on further strengthening customers' confidence in the ongoing ability of the organisation to meet their needs, and their resulting loyalty to EADS.

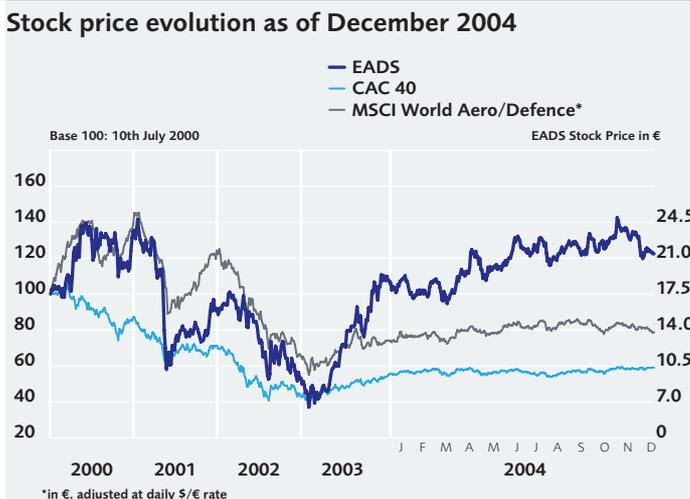
The approach aims to build upon the existing high levels of trust in the relationship and to drive continuous improvements to the benefit of both parties.

The **Military Transport Aircraft Division (MTAD)** has taken the lead in implementing this Customer Review process with key customers across the globe.

In late 2004, the planning and design activity was completed. Following this, MTAD employees will carry out a series of structured customer interviews and develop consequential action plans to drive improvements.

This approach is being introduced on a widespread basis across EADS during 2005.

# Owning EADS shares



## Stock price evolution in 2004

The institutional shareholder base broadened in 2004. US and UK investor holdings peaked in mid-year (55% of institutional shareholders), while the French shareholder base, having decreased to 20%, regained ground in the second semester, and German investor positions grew to 12%. Investors motivated by 'growth' prospects became more present, while the 'value' style receded slightly. Positions held by index funds increased by half during 2004, despite the reduced weighting of the stock in the CAC40 since December 2003.

The EADS share price evolved through three main phases – a hesitant start, robust outperformance and then a turbulent end to the year. Closing at €21.39 on 31st December, it was up 14% over the year, while the CAC40 progressed by only 6%, and the rest of the sector showed weaker performance. Average daily trading volumes of EADS on Euronext stood at 1.9 million shares.

**A hesitant start:** The consolidation period begun following the remarkable share price performance of 2003 lingered into the early months of 2004. Initial 2004 EBIT guidance on 8th January, below consensus, raised questions about profit growth, and the sudden slide of the US Dollar against the Euro bred nervousness. 2003 earnings were announced on 8th March, revealing remarkable cash flow while guidance was aligned with consensus. But it was not until the US Dollar displayed sustained appreciation that the EADS stock price moved upwards from its 2004 low of €16.55.

**Robust overperformance:** From 23rd March to 27th April the stock rose 31%, fuelled by Dollar strengthening, and an EBIT consensus hike of €150 million. Subsequently, guidance increases translated into improved market expectations: first on the first quarter earnings announcement of 12th May; at the Global Investor Forum held in Toledo on 21st June; at the Farnborough Airshow in mid-July; on the half year earnings release of 29th July where EBIT guidance was increased to €2.1 billion; and, finally, on the third quarter earnings announcement, when it was raised again to €2.2 billion with a promise of more than 315 Airbus deliveries. Investors confidently ignored the US Dollar slump which resumed at the end of August. Throughout the period, EADS stock price volatility was significantly less than market wide volatility. Only with the start of rumours concerning a potential merger with defence company Thales did volatility pick up again, and the stock of both companies start to appreciate. During that period, very large institutional shareholders added to their positions.

**Final turbulence:** After 11th November, when the stock had reached its 2004 peak of €24.90, the stock embarked on a 14% slide until year end. For the first time since March 2003, EADS stock was out of favour – as very high trading volumes in early December show. Press coverage of the CEO designation cast a shadow over all subsequent events.

An accumulation of negative newsflow led to a rising sense of uncertainty in the market: the US Dollar lost more than 7 cents against the Euro, falling to a record low of €1.36 in a short period, while oil prices remained volatile and high; the Thales merger story was perceived as a risk to the cash resources of the Company; the A350 'authorisation-to-offer' suggested that additional R&D might hamper medium-term profitability; 2005 financial guidance, issued on 10th December, appeared too conservative; the announcement of increased A380 non-recurring costs at completion raised further worries.

Year end profit taking and stop-loss orders drove the share price down to a strong support level at which core institutional shareholders decided to add to their positions. But from mid-December, the stock price rebounded as a concentrated stream of positive news reinforced the defence and space stories, and built confidence in the A350 programme.

# Glossary

## **Air-Ground surveillance**

A NATO ground surveillance system for combat monitoring

## **ATI**

Advanced Technology Initiative – a Group-wide drive to increase efficiency in innovation, research and technology

## **ATV**

The Automated Transfer Vehicle (ATV) is a multipurpose support spacecraft to carry supplies and fuel to the International Space Station (ISS)

## **CBA**

The EADS Corporate Business Academy

## **C3I**

Command, Control, Communication and Intelligence systems for defence forces

## **C4ISR**

Command, Control, Communication, Computers, Surveillance and Intelligence Systems for defence forces

## **Corporate Governance**

The control and monitoring of a company to ensure that management acts in the interests of stakeholders, no undue risks are taken and relevant legislation is complied with

## **Chapter 11 bankruptcy**

Chapter 11 of the US Bankruptcy Code protects a bankrupt company from its creditors while it reorganises its businesses with a view to becoming profitable again

## **CRC**

EADS Corporate Research Centre

## **CSR**

Corporate Social Responsibility – the responsibility of a company towards its employees, the environment, its customers and the wider community

## **Deepwater**

A comprehensive US Coast Guard modernisation programme for acquiring new aircraft and surveillance systems

## **EBIT**

Earnings Before Interest and Taxes – EADS uses EBIT pre-goodwill amortisation and exceptional items as a key indicator of its economic performance

## **ESA**

European Space Agency

## **EGAS**

European Guaranteed Access to Space

## **ESOP**

Employee Share Ownership Programme

## **EuroMALE**

A versatile, long-range Unmanned Aerial Vehicle produced by EADS

## **FAA**

The US Federal Aviation Authority

## **FSTA**

The UK Future Strategic Tanker Aircraft programme

## **Fleet commonality**

A feature of the Airbus family, allowing airlines to operate type variants of different sizes, while minimising the need for pilot re-training and re-certification

## **Fly-by-wire**

An aircraft control system relying on electronics rather than mechanical linkages

## **GBAD**

The new UK Ground Based Air Defence System designed to improve the country's air defence systems

## **GDP**

Gross Domestic Product, a measure of an economy's output

# Glossary

- Galileo**  
The European satellite navigation system currently being developed
- Hedge**  
A way of insuring against adverse foreign exchange rate fluctuations
- Homeland security**  
State security designed for border security, crisis management and large event protection
- Hub**  
A major, strategically-located airport from which 'spokes' radiate carrying regional traffic
- ICAO**  
International Civil Aviation Organisation – the 'United Nations' agency for international civil aviation
- ISS**  
The International Space Station
- KPI**  
Key Performance Indicator – a measure of corporate performance in a particular area
- LSI**  
Large System Integration
- MALE**  
A new Medium Altitude Long Endurance UAV being developed by EADS
- MEADS**  
Medium Extended Air Defense System, a ground-based air defence system
- MRO**  
Maintenance, Repair and Overhaul – referring to the aviation industry
- MRTT**  
Multi-Role Tanker Transport aircraft
- NASA**  
National Aeronautics and Space Administration, the US space agency
- Network centric**  
Information superiority is becoming ever more important in defence. 'Network centric' systems allow armed forces to tackle new tasks in reconnaissance and surveillance, sensor technology, and command and communications
- OCCAR**  
Organisation Conjointe de Coopération en Matière d'Armement (Organisation for Joint Armament Cooperation)
- Order book**  
Firm orders received by EADS
- R&D**  
Research and development – all activities related to the evolution of new products and services
- R&T**  
Research and technology – all activities in the field of research and generic technologies not directly attributable to products, and designed to maintain or expand knowledge or the technological base
- Single-aisle aircraft**  
An aircraft with one aisle. At Airbus, single-aisle is used for the A320 Family
- SOP**  
Stock Option Plan
- P to F conversion**  
Passenger-to-Freight conversion – adapting used airliners for cargo carrying purposes
- UAV**  
Unmanned Aerial Vehicle
- UCAV**  
Unmanned Combat Aerial Vehicle

# Addresses

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## Headquarters

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### European Aeronautic Defence and Space Company EADS N.V.

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## EADS North America

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# The A380 comes to life

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Special supplement



"The design, development, manufacture and flight testing of this 'Flagship of the 21st century', as Airbus calls it, is more than a massive engineering and industrial challenge. It also completes the Airbus product range and effectively marks the coming of age of Airbus as a fully integrated company."

**Extracts from a business school case study prepared by Victoire de Margerie, printed with the kind authorisation of Grenoble École de Management.**

This case is to be used as a basis for discussion and does not purport to evaluate the suitability of the managerial practices and choices it describes.

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# The A380 comes to life

## Direct operating costs (DOC) and non-DOC Criteria for Aircraft Evaluation

### Economics

- Investment cost (amortisation rates differ by class of asset)
- Direct production costs (per kilo)
- Production cycle times (impacts inventory levels and cash flows)
- Airline operating costs (performance, maintenance, etc)



### Commonality

### Added Value

- Performance
- Comfort
- Cabin flexibility
- Environment
- Family concept
- Development potential
- Cargo capability
- Infrastructure



1. Jean Pierson, in his leadership of Airbus from 1985 to 1998, oversaw the growth of the European firm from a one aircraft model to a range of technologically advanced aircraft. Pierson joined Sud Aviation in 1963 and became director of Concorde manufacturing in 1968.

2. Jürgen Thomas headed the A3XX\* exploratory programme. Between 1993 and 1995, he helped lead an Airbus-Boeing programme that looked into the possibility of jointly developing the VLTT. Thomas went on to head Airbus's Large Aircraft Division.

\* The A3XX designation refers to the project name of the A380 prior to its launch.

## Launching the A380 project

In the early 90's, Airbus had tried to avoid taking on the full budget for such a project by itself and had even tried to develop the successor to the B747 together with Boeing (the so-called VLTT project). In 1995, the industry was emerging from the worst cyclical downturn to date, which had wiped out such iconic airlines as PanAm and TWA, and had precipitated the downfall of McDonnell Douglas. At this time Boeing chose to pull out of the VLTT project, blaming a lack of market prospects in the high capacity long range aircraft (HCLA) segment. Jean Pierson, the General Manager of Airbus at the time, created the Large Aircraft Division and appointed Jürgen Thomas at its helm to start working on an A3XX project that was intended to position Airbus as a full Global Player, with a comprehensive line of products.

By 1996, the project team had listed 150 possible innovations, and set a global objective of rivalling the B747, through the use of brand new technology and improved comfort (Airbus knew from the experience of Concorde that innovation must also apply to the end-customer direct environment).

Each of those innovations was judged according to one fundamental criterion – safety – as well as a certain number of other key criteria (see chart above).

The A3XX basic design, finalised in 1999, provided 15 to 20% lower operating costs (2.9 litres kerosene consumption per 100 kilometres per passenger), 10 to 15% more range, 35% more seating as well as more available floor space, lower fuel burn, less noise, lower emissions and smaller turnaround time than the rival B747.

According to Airbus, the A380 only needs 323 passengers to break even compared to 290 for the B747 in a three class configuration on a typical route.

In 1999, Airbus also started considering the specific challenges of the A3XX industrial organisation.

As for every other Airbus model, fully equipped aircraft components would be manufactured in various specialised European plants: Wings (Bremen, Broughton, Nantes), Landing Gear (Filton, Goodrich), Propulsion (Toulouse), Nose and Centre Fuselage (Nantes, St Nazaire, Méaulte), Forward and After Fuselage (Hamburg), Empennage (Madrid, Puerto Real, Stade), Interiors (Laupheim).



1. The large rear fuselage section of the A380 awaits transfer to further integration downstream.
2. A six vehicle convoy makes its way through the French countryside with fuselage sections destined for the fifth production A380 and wings and horizontal tail plane for the sixth aircraft.
3. Manfred Bischoff and Jean-Luc Lagardère, Co-Chairmen of EADS, around Noël Forgeard, CEO of Airbus, on the day the A380 programme was launched; financial visibility to shareholders was a key condition of the decision to proceed.

Some components would then be air-lifted from their Competence Centre of origin by the Airbus Super Transporter A300-600ST – with the most voluminous cargo hold in the world – to the final assembly line (FAL) in Toulouse.

But in an important departure from tradition, due to the A380 size, the major part of aircraft sections would be delivered by surface transportation (sea and road) to Toulouse for structural assembly, final equipping (including engine installation) and production test flights. The aircraft would then be flown to Hamburg for cabin furnishing, customising and painting.

When EADS was created in July 2000, it brought together under one roof the French, German and Spanish interests in Airbus. As a result, it could achieve the necessary financial visibility to undertake such a major investment (expected total project cost was 10.7 billion US Dollar).

Events followed quickly: in June 2000, Airbus had been given the authorisation to offer (ATO) the new project – now christened the A380 – to customers. In December of 2000, the programme was formally launched with more than 50 commitments from five airlines and a leasing company. First delivery was planned for early 2006. In its supporting business plan, Airbus assumed it would capture 50% of the market segment over the following 20 years.

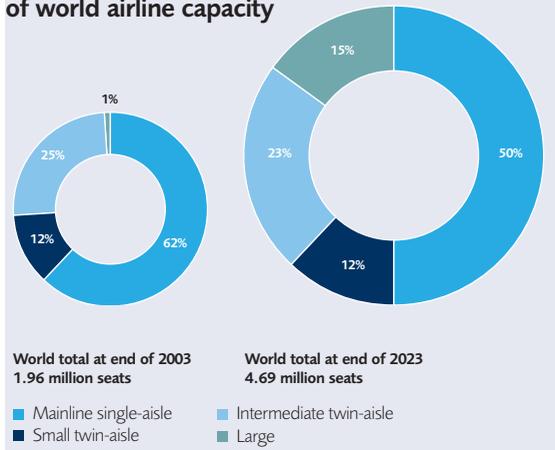
#### Market analysis

When Airbus launched its A380 project in 2000, Boeing held a monopoly position on the specific HCLA segment which allowed them:

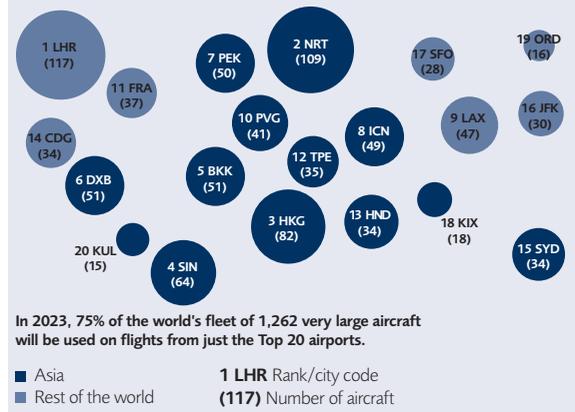
- to ‘milk’ the segment, i.e. to charge a substantial premium and use the proceeds to cross subsidise sales on other market segments (thereby creating high price pressure on Airbus sales in these segments).
- to be the only company able to offer a full range of aircraft to major commercial airlines (denying Airbus recognition as a full supplier by those majors).

# The A380 comes to life

## Very large aircraft will provide a significant share of world airline capacity



## 12 of the top 20 large aircraft airports will be in Asia Pacific



Source: The Airbus GMF analyses key prospective trends in passenger and freight transportation over 20 years, and derives a scenario for airline fleet demand. It is available on [www.airbus.com/media/gmf.asp](http://www.airbus.com/media/gmf.asp).

## Chinese traffic growth



Even though Boeing and Airbus market forecasts generally agree on the overall size of the market (see Boeing's yearly Current Market Outlook), Boeing professes a somehow different view on the HCLA segment. They believe that new medium-size aircraft can offer long-range services economically, and that passengers will prefer these to larger size aircraft to bypass hubs and fly 'point-to-point'. Airbus, on the other hand, believes that this fragmentation may occur, but that large city routes will continue to carry increasing passenger loads, both connecting and 'origin and destination'.

In December 2004, the Airbus Global Market Forecast (GMF) predicted that over the next 20 years mainline revenue passenger-kilometres would grow threefold at an average rate of 5.3% per year, while freight ton-kilometres, would grow at an even stronger 5.9% per year.

To accommodate this growth and to renew their fleets, the world's major carriers would require a total of almost 17,300 new passenger and cargo jets worth some \$1.9 trillion (2004 US Dollar).

This should include as many as 1,648 very large, quiet and economical aircraft such as the A380 (1,250 passenger aircraft and 398 freighters).

Overall, this period is expected to include the strongest traffic-growth recovery seen since 1980, highlighting the airline industry's resilience to the effects of recent world events (the terrorist attacks in the US and elsewhere, the Afghan and Iraq conflicts, the SARS epidemics, and the uncertainty over oil supply seen in the second half of 2004). In this respect, the events of 9/11 have not altered the original A380 business plan assumptions.

By 2023, the HCLA segment should provide 15% of world airline capacity in terms of seats, and until then, airlines in the Asia Pacific region are expected to represent 62% of the demand for very large passenger aircraft. Current A380 customers have already announced flight plans that will result in 130 weekly frequencies to China by 2010. The GMF also anticipates that 75% of the 2023 fleet of very large passenger aircraft will be used on flights from just the top 20 world airports (12 of which will be located in Asia Pacific).



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1. Philippe Jarry, Senior Vice-President Product Policy at Airbus: From 1996, as Vice-President of Market Development for the A3XX programme, he spent five years assessing the market and demonstrating the economic value of a 550-seat airplane to major airlines, airport authorities, government and media.

2. Many world airports and regional airspaces are congested: larger aircraft, like the A380, allow higher passenger turnover with limited take-off and landing slots.

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According to Philippe Jarry, Airbus Senior Vice-President for Product Policy, a certain number of trends are expected to shape the market for HCLA in the future:

- Airport constraints: a few countries are still adding airport capacity (Dubai can now welcome 60 million passengers) but many have decided to stop building airports except in the case of necessary relocation (such as Munich).
- Airspace utilisation: aircraft manufacturers can work on some parameters (such as wake turbulence) in order to reduce the diameter of the minimum aircraft security bubble, but distances cannot be reduced beyond a certain value in take-off and landing phases of flight.
- Demographics: In 2030, 75% of the world population will be based less than 50 miles away from a coast. The accumulation process nearby very large cities is also increasingly obvious: in 2003, five conglomerations worldwide had more than 20 million inhabitants and, by 2020, this number will have grown to 16 – including ten in the Asia Pacific region.

Those trends, from the Airbus standpoint, provide an obvious advantage to solutions such as the A380 that reduce costs and congestion as well as improve servicing of major cities, while complying with and/or anticipating environmental legislations.

#### **Partnership with customers**

To ensure the aircraft met the needs of its market, the A380 was designed in close cooperation with major airlines, airports and airworthiness authorities in so-called Customer Focus Groups (CFGs), a technique until then prevalent in the consumer goods industry.

## Assessing airline requirements

An interview with Pierre Vellay, Air France Senior Vice-President, New Aircraft and Corporate Fleet Planning

Pierre Vellay explains that airlines collaborate in new aircraft conception cycles that last from five to 10 years, and expect to use the same aircraft for a further 25 years. Foresight is crucial, not only to select the right technology (to be ahead of customer expectations) but also to stop technology improvement at the right time (in order to standardise a given aircraft definition and to optimise its overall maintenance – spare parts, training, repair...).

According to Vellay, there was a specific A3XX challenge: While European airlines needed minimum cost per passenger per mile on both mid- and long-haul routes (in order to fly both North Atlantic and Europe-Asia segments), Asian airlines sought to obtain minimum cost per passenger per mile on long-haul routes only (their only target market).

For example, redesigning the fan in order to minimise take off noise at Heathrow and consequently increasing the global aircraft weight by five tons was not a major concern for companies operating routes of 6,000 miles or more. But this was not suited to the needs of Lufthansa or Air France... However, these airlines accepted the trade-off to increase the sales prospects for the A3XX: the higher its expected volumes, the higher the residual value they might expect for the plane in the second-hand market (and the lower the financing costs to the airlines).

The kick-off CFG meeting took place in Carcassonne in June 1996; 16 commercial airlines were involved (later this grew to 22) and the objective was to review all possible questions of interest to customers deriving from the A3XX specific features (high gross weight, large dimensions, three decks, 'short' fuselage, long wing root chord):

- Airport compatibility (particularly the US Federal Aviation Administration mandatory 80x80m constraint, as well as runway/taxiway width and strength, runway/taxiway/building separation, turn radius, gate availability).
- Ground operations (including all that is connected to turnaround time: ramp servicing capability, disembarking and boarding of passengers, cargo loading, catering, cleaning, water and waste, refuelling).
- Maintainability.
- Cost and performance (payload and range).
- Family concept (passenger, freighter, mixed, long range, very long range, short range).

- Cabin (differentiation capacity, number of classes and comfort standard for each class, high speed IT connection with ground, cabin lining, trolley lift, installation of monuments, galleys, entertainment systems, audio, video, colour scheme, panels, carpets, and cabin operation, catering).
- Cockpit (modern man-machine interface; thanks to commonality, an A340 pilot will be able to convert to the A380 in seven or eight days of training).
- Propulsion (engine specifications).

The noise certification requirement is a typical example of a specification (QC2 instead of QC4) that emerged from the CFG.

The A3XX project team was convinced that an improvement over the B747-400 on the QC4 standard would satisfy their future customers.

Yet the dedicated CFG asked for a far more substantial progress (compliance with QC2 standards) in order to cope with the late night departure and early morning arrivals of the Asia-based customers and the result was a slightly modified engine (including a bigger fan).



1. Patrick Tejedor oversees Airbus's Toulouse industrial site.

2. Alain Ramier, Senior Vice-President A380 Development.

3. The massive central wing box is built with carbon composites which allows a one-tonne weight reduction.

4. The A380 cockpit maximises commonality with other families of Airbus aircraft to facilitate pilot transition and training across types.

### Innovations and new technologies

'Every new model has brought its number of innovations and new technologies,' explains Patrick Tejedor, the head of the Toulouse site, discussing how difficult it has always been to decide whether or not to incorporate an innovation or a new technology in a given project. It is necessary to balance the risks and advantages, in both the industrial and commercial dimensions. The dilemma is whether to push new technologies that improve safety, savings and environmental characteristics or whether to be conservative and minimise risk with respect to in-service reliability, reparability and maintainability.

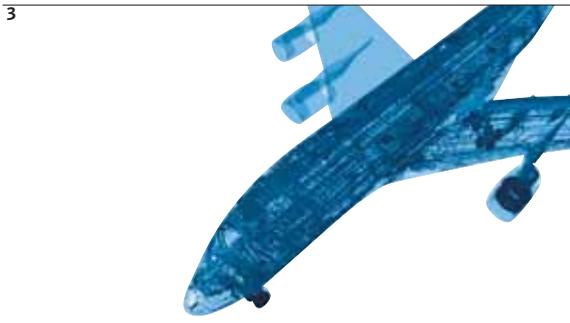
Finally, the decision to incorporate a new technology depends on project status: while it is easier in the beginning when the project design is not yet finalised and the budget appears under control, it becomes more difficult later when the slightest modification creates costly delays and the budget is usually under constraint. 'On the other hand,' says Alain Ramier, Senior Vice-President A380 Development, 'the later a new technology gets introduced, the more state of the art the options that can be offered to customers'.

Weight reduction that impacts both range and payload (one ton less in weight grants the airline operator with a positive choice between ten more paying passengers or one more ton of kerosene) has been pursued by the A3XX project team from day one of the pre-development activities with only one cost constraint (recurring costs saved for each kilo saved in weight).

Carbon structures provide a typical example:

- Initial trials with carbon fibre were done on the Falcon 10 and the first commercial application was the ATR 72 with the outer wings made out of carbon. From this came the possibility of assembling carbon and aluminium, or carbon and titanium, and a unique opportunity for Airbus to master the industrialisation process.
- A subsequent step came with the A340-600: a 16 meter long carbon body piece capable of withstanding 500T compression.
- On the A380, a carbon central wing box allows a one ton weight reduction.

# The A380 comes to life



1. Michel Comes, Systems Director A380 programme.
2. Jean-Claude Schoepf heads the A380 final assembly line.
3. Redesigned systems can make a big weight difference: 40% lower diameter hydraulic pipes saved 1,200 kilos.
4. The single A380 assembly station where fuselage sections and wings come together as one aircraft prior to fitting in customisation bays.

Altogether, composites make up 22% of the A380 weight, aluminium 61%, Glare 3%, titanium and steel 10%, with surface protection and miscellaneous materials accounting for the balance.

The use of some new industrial equipment can also help reduce weight: Airbus UK has introduced an inside skin milling machine at its Broughton site which replaces the current faceting process, lowers the weight of each wing panel and improves the stringer attachment to the skins themselves.

And Michel Comes, the Head of the Systems Development department explains that 'redesigned aircraft systems can make a big weight difference: a 1% measurement error of the 310,000 litres of fuel on board equates to the weight of about ten passengers'.

Some results were achieved by working in parallel directions: for instance the use of 40% lower diameter hydraulic pipes has saved 1,200 kilos; this improvement requires pressurising them at 5,000 psi, a level previously used only in military applications. But the higher yearly operating time of commercial aircraft – a few thousand hours, compared to the few hundred hours flown by combat aircraft – posed a challenge that had to be solved. Besides the pipe innovation itself, system management was also crucial to ensuring both the installation of these elements and their maintainability (access, timing of repair).

Improvements tied to weight, size, time and cost constraints have also been brought to the manufacturing process.

At the Final Assembly Line (FAL) in Toulouse, Jean-Claude Schoepf now runs the plant, after having managed the full A380 assembly organisation development project. He points to another far-reaching innovation that saved capital expenses, production costs and overall cycle time.

The transition from three stations for the assembly of the A320 to two stations for the A340-600, and finally to one station for the A380 has allowed a reduction of the necessary building surface (-€18 million in capital expenses), a reduction of the tooling required (-€8 million in capital expenses), lower inventories (half of an aircraft's final value) and eased safety constraints (no handling of 100 ton pieces).

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# Financial calendar 2005

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**Full year 2004 results release:**

9th March 2005

**First Quarter 2005 results release:**

9th May 2005

**Annual General Meeting:**

11th May 2005, Amsterdam, The Netherlands

**Global Investor Forum:**

20th and 21st June 2005, Paris, France

**First Half 2005 results release:**

27th July 2005

**Third Quarter 2005 results release:**

9th November 2005

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Airbus A340-300