

## 2005 Annual Report | Innovation for Generations



Facts and Key Figures for the Group (1)		
Key results in € million	2005	2004
Sales	2,148.6	1,918.0
Free cashflow <sup>*)</sup>	208.3	13.1
Depreciation and amortization	138.3	133.0
Research and development costs	45.7	57.7
Earnings before interest and tax (EBIT)	130.0	81.1
Earnings before interest, tax, depreciation and amortization (EBITDA)	268.3	214.1
Adjusted earnings before interest, tax, depreciation and amortization (adjusted EBITDA)	233.0	172.2
Earnings before tax (EBT)	58.7	6.5
Taxes	25.8	6.3
Annual net profit	32.9	0.2
Investments	83.5	65.9
Key balance sheet figures in € million		
Equity capital	528.3	217.0
Total assets	2,553.3	2,719.1
Fixed assets	1,535.3	1,591.8
Long-term debt (without passive deferred taxes)	767.6	1,080.8
Number of employees at year's end <sup>**)</sup>		
By company		
- MTU Aero Engines GmbH, Munich	4,607	4,816
- MTU Maintenance Hannover GmbH, Langenhagen	1,266	1,265
- MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde	504	522
- ATENA Engineering GmbH, Munich <sup>***)</sup>	0	463
- MTU Maintenance Canada Ltd., Canada	137	127
- MTU Aero Engines North America Inc., USA	198	190
- Vericor Power Systems LLC., USA	34	34
	6,746	7,417
By market segment		
- Commercial and military engine manufacture	4,805	5,469
- Commercial MRO	1,941	1,948
	6,746	7,417
By region		
- Germany	6,377	7,066
- North America	369	351
	6,746	7,417

Facts and Key Figures for the Group (2)			
Key figures in %	2005	2004	
Investments to sales ratio	3.9	3.4	
Return on sales return before tax	2.7	0.3	
Equity ratio	20.7	8.0	
Equity to fixed assets ratio	34.4	13.6	
Development costs as a percentage of sales (excluding provisions)	3.9	8.1	
Key share figures <sup>****)</sup>			
Number of shares (in thousands)	55,000	55,000	
Earnings per share in Euro	0.60	0.00	
Free cashflow per share <sup>*)</sup> in Euro	3.79	0.24	
Equity capital per share in Euro	9.61	3.95	

## 2005 Highlights

## March 30

The Clean technology demonstrator, which features newly-developed heat exchangers, is put through its paces for the first time at the University of Stuttgart's altitude test facility. The highly touted demonstrator performs as expected, burning about 25% less fuel than today's engines.

## April 15

The PW307 business-jet engine receives approval from Transport Canada. The maiden flight onboard the Falcon 7X takes place on May 5.

## April 15

Contract signing for delivery of 38 EJ200 engines that will power the 18 Eurofighters ordered by Austria.



## **June 6**

Shares of MTU Aero Engines Holding AG are traded for the first time on the stock exchange. At an issue price of  $\in$ 21, the stock is oversubscribed more than sevenfold. On June 10, the greenshoe option permitting the sale of additional shares is fully exercised.



### June 28

MTU Maintenance Hannover concludes an exclusive ten-year agreement with JetBlue for the maintenance of the airline's entire fleet of V2500 engines. The €750 million contract is the biggest in the history of MTU Maintenance.

## August 16

Western Europe's largest production test cell for propeller engines is completed at MTU Maintenance Berlin-Brandenburg in Ludwigsfelde. The facility will be used to perform acceptance testing of all TP400-D6 production engines, which will be assembled by MTU starting in 2007.

## August 16

LAN Airlines of Chile is the launch customer for the PW6000 engine. Production of the engine to power the Airbus A318 will commence in 2006. MTU will perform final assembly of the PW6000 production engines for Pratt & Whitney.

## August 25

MTU Maintenance Hannover obtains PW6000 production organization approval from the Federal Office of Civil Aeronautics (LBA). The Hannover facility takes over final assembly and testing of all engines of this type and delivers the engines directly to the Airbus final assembly line in Hamburg.

## September 5

MTU receives recognition as a family-friendly company by Renate Schmidt, German Minis-ter for Family Affairs, Senior Citizens, Women and Youth, and Wolfgang Clement, German Minister for Economics and Labor.

## September 19

MTU Aero Engines Holding AG is included in the German MDAX stock index.

## **October 10**

MTU Aero Engines and Lufthansa Technik agree to expand their joint Malaysian subsidiary ASSB, which specializes in blade repairs. By boosting production capacities and staffing levels, the company intends to quadruple its sales to \$20 million ( $\in$  17 million) by 2010.

## **October 21**

IndiGo Airlines decides to equip its 100 Airbus A320s with IAE V2500 engines. This is the biggest contract in the history of the IAE consortium. For MTU, which provides the low-pressure turbine for the V2500, this contract translates into sales in the amount of €155 million.





## **October 28**

The TP400-D6 engine developed for the A400M military transport successfully completes its first test run at MTU's Ludwigsfelde site in Berlin-Brandenburg.

## **November 16**

MTU Aero Engines and the German Federal Office for Defense Technology and Procurement (BWB) sign a contract to extend the Cooperative Model to include the RB199 (Tornado), J79 (Phantom), and RR250-C20 (Bo-105 helicopter) engines in addition to the Eurofighter's EJ200 engine. The ten-year contract is worth €370 million.

## November 30

OCCAR and MTRI sign a contract for the development of the uprated MTR390E. The first run of the MTR390E is planned for early 2007.



## **December 29**

The GP7000 receives type approval from the U.S. Federal Aviation Administration. This clears the way for testing of the engine on the Airbus A380, which is scheduled to commence in the spring of 2006.

### **Innovation for Generations**

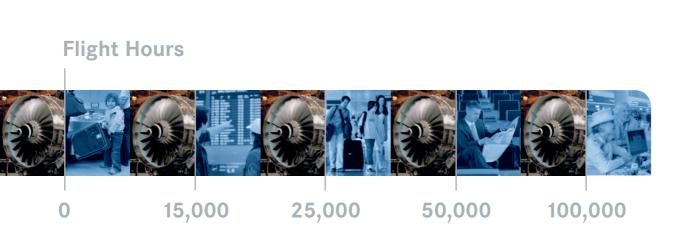


#### MTU Aero Engines stands for innovation.

MTU designs, develops, manufactures, markets and supports engines for commercial and military aircraft. The company is Germany's leading engine manufacturer, boasting a comprehensive product portfolio that also includes industrial gas turbines. Having carved out a leadership role in engine technologies, MTU produces low-pressure turbines and high-pressure compressors that are among the best on the market.

#### MTU Aero Engines fly generations.

The roots of MTU's rich history can be traced back to the dawn of powered flight nearly one century ago. The companies that would later form MTU were pioneers, playing leading roles in the early days of aviation. Today, almost every third com-mercial aircraft has MTU technologies onboard. Because of their durability and reliability, MTU's products remain in service for as long as 40 years: An aircraft engine can accompany people on their travels for a lifetime. As the world's largest independent provider of commercial engine maintenance services, MTU helps ensure long on-wing times.



From zero to 100,000: From development to recycling, an aircraft engine completes about 100,000 flight hours; this corresponds to about 40 years or an entire human generation. It is quite possible, therefore, that a traveller repeatedly comes across the same engine in the course of his life.

Foreword by the President and CEO	8 - 9
The Board of Management	10 - 11

Part I - MTU after the IPO12 - 25The Shares4 - 17Corporate Governance and Remuneration Report18 - 21Supervisory Board Report22 - 23The Supervisory Board24 - 25

# Part II - Innovation for Generations26 - 43Segments28 - 33Research and Development34 - 37Environment38 - 39History40 - 41Locations42 - 43

## Part III – Group Management Report44 – 672005 Financial Year Overview46 – 49Order Situation50

Order Situation50Operating Results51 - 56Financial Situation57 - 58Net Assets59 - 60Employees61Opportunities and Risks62 - 66Outlook66 - 67

- Consolidated Income Statement 70 71
  - Consolidated Balance Sheet 72 73
- Consolidated Statement of Changes in Equity 74 75
  - Consolidated Cashflow Statement 76 77

### Part V – Appendix Group 78 – 139

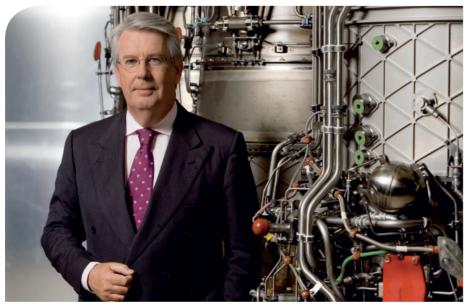
- I. Basic Principles 78 90 II. Notes to the Consolidated Income Statement III. Notes to the Consolidated Balance Sheet IV. Other Disclosures 120 - 128 V. Segment Information 129 - 134 Auditor's Report 135 Aggregated Balance Sheet of Group Companies 2005 136 - 137
- Comprehensive Income Statement for Group Companies 2005 138 139

## Part VI – Appendix140 – 148Shareholdings and Joint Ventures142Financial and Technical Glossary<br/>Contacts143 – 147

## Foreword by the President and CEO

#### Dear Shareholders:

I am very pleased to have assumed the helm at MTU Aero Engines as President and CEO on January 1, 2005. MTU's business model, its excellent technological position and the outstanding performance of its employees have impressed me from the outset. Around two-thirds of the company's sales are derived from the profitable aftermarket business, that is, from commercial and military engine maintenance and from the spare parts business. These combined strengths offer outstanding potential for the future.



Udo Stark President and CEO

In the company's nearly 100-year history there have been many significant changes, one of which certainly was the acquisition of MTU by private equity firm Kohlberg Kravis Roberts & Co. (KKR) on January 1, 2004. Another significant date in the year under review was June 6, 2005, when MTU's shares were listed on the Prime Standard segment of the German stock exchange. And on September 19, 2005, the company was included in the MDAX, the index for mid-size companies.

The decision to go public was made in February 2005, and was implemented in less than four months. For MTU and its employees, the placement of MTU's shares thus became the most significant event of the past financial year. The seven-fold oversubscription of the shares at the issue price of  $\in$ 21 and the 25% increase in the share price by the end of 2005 marked a great success.

KKR's decision to resell its shares came as no surprise, as this type of exit strategy is common practice for "short-term" investors.

Hence, at the beginning of February 2006, KKR sold the 29% share it still held after MTU's IPO. Once again, demand significantly outstripped the number of shares on sale. Placement with a large number of institutional investors is further evidence of the trust the market has in the company's economic and technical capabilities. MTU has thus achieved an important strategic goal: it has become a stand-alone company.

MTU now presents its first consolidated financial statements as a listed company, compiled in accordance with the rules of the International Financial Reporting Standards (IFRS). They document the strong position MTU has in all of its business segments. Order volumes grew by about €240 million to more than €3.65 billion. Sales increased by 12% to €2.15 billion and the result (expressed as adjusted EBITDA) rose by 35% to €233 million. Cashflow from operating activities reached €290 million, compared to €73 million in the previous year. The excellent cashflow position and the successful placement of MTU's shares enabled the company to repay more than €500 million in debt.

As a result, we are pleased to announce that our valued share-holders will enjoy a dividend payout totaling  $\in$  40 million – or 73 cents per share – for the financial year 2005.

MTU's individual business segments saw a favorable development

In the commercial engine business, sales in the year under review increased to €943million, from €880 million in the previous year. This positive development – and above all the high number of orders received – reflects the strong growth in the market for new engines. The cyclical upturn in the aircraft industry gained strong momentum in mid-2004, leading to a 26% increase in the number of modules and components delivered by MTU in 2005, compared to the previous year.

In the military engine business, financial year 2005 sales amounted to  $\leq$ 491 million, nearing the level of the previous year ( $\leq$ 496 million). The increase in sales generated by the EJ200 Eurofighter engine was, however, offset by the gradual retirement of the Tornado fleet from service. The Cooperative Model, which was finalized in November 2005 and provides for long-term maintenance of a number of engines operated by the German Air Force under the direction of MTU, will have a stabilizing effect in the coming years.

The commercial maintenance business showed particularly strong growth in this reporting year. Sales increased to  $\in$ 732 million from  $\in$ 576 million in the previous year. The fact that profit margins could be improved as well is a particularly welcome development.

With its well-balanced portfolio of products and services, MTU finds itself in an excellent position for the aviation industry's continued growth. Experts forecast the biggest increase in the number of future aircraft in the narrowbody segment. In this segment, MTU relies on the proven market success of the V2500 engine, in which it participates as a consortium partner. The company will also be deeply involved in the production of successor models. As a consortium partner in the GP7000 engine to power the Airbus A380, which is now entering production, MTU will also benefit from growth in the wide-body segment. Deliveries of new engines, which are expected to increase also in 2006, are investments in the growing installed base of MTU engines, which will yield long-term, profitable spare parts sales.

The cyclic upswing in the aviation industry is expected to continue unabated through 2006. Steady increases in passenger kilometers flown and in worldwide cargo volumes are also expected. Internally, MTU will continue to pursue its efficiency improvement programs at all locations. Against this backdrop, the company anticipates an increase in sales and further improvements in earnings for the business year currently underway.

The 2005 Annual Report now being presented is based on the results of the work of the entire MTU team. For this reason, I would like to express my thanks to all employees for their commitment and dedication.

Together with my colleagues on the Board of Management, I thank you, dear shareholders, for your trust and your investment in MTU. You have made it possible for us to strengthen and expand the company's market position. The future is promising, our markets are growing and MTU is profiting from this dynamic growth.

Sincerely yours,

Udo Stark

## **The Board of Management**



Udo Stark (born in 1947) President and CEO

Udo Stark, who studied Business Administration and graduated with an MBA from Harvard, took the helm of MTU at the beginning of 2005. Stark launched his professional career with the Akzo Nobel Group. In the 18 years he worked for the Dutch company, his last assignment being that of Board Chairman of Enka AG/bv, with responsibility for the chemical fiber business. From 1991 to 2000, he was Board Chairman of Frankfurt-based AGIV AG, a company specializing in special machinery construction. In 2001, Stark was appointed Chairman of the Shareholders' Committee of Messer Griesheim GmbH. From 2003 to 2004, he served as Chairman of mg technologies ag's executive board.

Reiner Winkler (born in 1961) Executive Vice President Finance, Human Resources and IT (CFO)

Reiner Winkler, who holds a degree in Business Administration, has served as Executive Vice President for Finance and Controlling at MTU since 2001. In May 2005, he became a member of the Board of Management of MTU Aero Engines Holding AG, with responsibility for Finance, Human Resources and IT. Winkler previously held managerial positions at Siemens AG as well as Daimler-Benz AG, now DaimlerChrysler AG. In 1993, he joined TEMIC Telefunken Microelectronic GmbH, a DaimlerChrysler subsidiary, where he became Managing Director for Finance and Controlling in 1998.





Dr. Michael Süß (born in 1963) Executive Vice President Technology (COO)

Dr. Michael Süß, who studied mechanical engineering and received his doctorate in industrial science, has been Executive Vice President Engineering and Production and COO since 2001. Dr. Süß became a member of the management board of MTU Aero Engines Holding AG in May 2005, with responsibility for Engineering and Production. Between 1995 and 1999, following positions at BMW AG as well as IDRA AG in Italy, Dr. Süß was responsible for the management of operations planning at Porsche AG. He later took over responsibility for the area of engine production. Starting in 1999, he was a member of the Board of Management of Mössner AG, where he assumed the position of Chairman after Mössner AG was sold to the Georg Fischer Group.

Bernd Kessler (born in 1958) President and CEO Commercial Maintenance

Bernd Kessler has a degree in mechanical engineering and also holds an MBA. He has been a member of MTU's management board since 2004. In May 2005, Kessler became a member of the Board of Management of MTU Aero Engines Holding AG, with responsibility for commercial MRO. Kessler began his professional career at Deutsche AlliedSignal Aerospace GmbH and later joined AlliedSignal Aerospace Services, where he was Managing Director of the company's Components North America subsidiary. Starting in 1999, Kessler was Vice President & General Manager at Honeywell Aerospace in Phoenix, Arizona (USA), where he was responsible for the Honeywell Aftermarket Services global business unit.







0 Flight Hours



## **0 Flight Hours**

When an engine takes off for the first time on the wing of an airliner, it has already been subjected to everything it might encounter in the air – extreme heat and cold, monsoonlike rain, freezing rain, pounding hail and bird strikes. Aircraft engines are put to the acid test early on in the development phase. To prove their airworthiness they must be able to withstand every conceivable stress.

The development of new engine types is generally triggered by the aircraft manufacturers. They design and develop new aircraft and then need new engines to power them.



The V2500 is among the best-selling engines in its class.

Engine manufacturers often form consortia or joint ventures to address a new project. They split development costs and activities among them and share the program risks and future revenues. MTU cooperates closely with the world's leading engine manufacturers, contributing innovative technologies and manufacturing processes.

Once the individual components are manufactured, the engine is assembled and put to the test. After the engine has successfully passed all stress tests it obtains type certification; approval authorities are the US Federal Aviation Administration (FAA) and the European Aviation Safety Agency (EASA). This clears the way: Now that the new engine is deemed airworthy, production can begin. The engine's hour meter is set to zero – about 100,000 flight hours now lie ahead of it.

## Full Thrust Debut on the Stock Exchange

#### The IPO

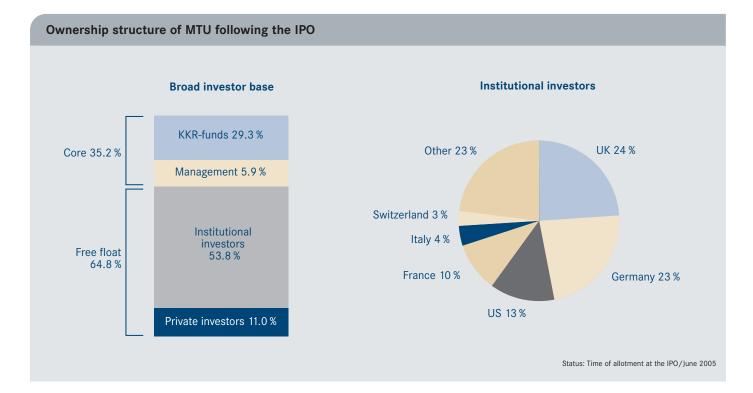
MTU Aero Engines' IPO was among the most successful of the year 2005. Trading of the MTU shares commenced on the Frankfurt Stock Exchange (Prime Standard) on June 6, 2005, at an issue price of  $\in$ 21. The issue price of the registered shares was at the upper end of the  $\in$ 19 to  $\in$ 22 range. At this issue price, the shares were oversubscribed more than sevenfold. After the greenshoe option had been fully exercised, 35.65 million shares were sold in total. All shares are fully entitled to dividends for the business year that began on January 1, 2005.

#### Shareholding structure

The percentage of free float shares in 2005 was 64.8%. The primary shareholder at this time, private equity firm Kohlberg Kravis Roberts & Co. (KKR), reduced its share in MTU to 29.3% at the IPO. After the IPO, management owned 5.9% of the shares. Approximately 83% of the free float shares were placed with institutional investors. The remaining shares were held by private investors. Many employees and management personnel also bought MTU shares.

High interest in MTU shares on the part of international investors is reflected in the shareholding structure. A total of 77% of the institutional investors come from outside Germany, in particular from Great Britain, the US, and France.





#### MTU shares in the MDAX

MTU Aero Engines Holding AG's shares were included in the MDAX, the index for mid-size companies, on September 19, 2005. MTU's shares thus count among the 50 most important mid-cap values on the German capital market. As regards the key criteria for inclusion in the index, on the qualifying date, August 31, 2005, MTU shares ranked 16th in trade volumes and 32nd in market capitalization.

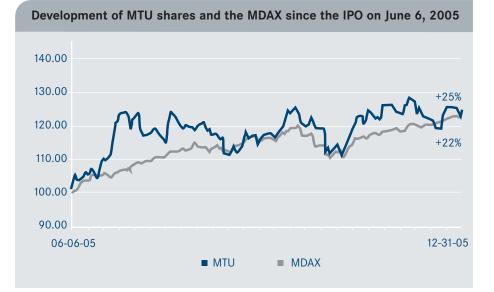
#### **Capital market environment**

In 2005, the international stock markets continued the previous year's upward trend. After the German and international indexes in 2004 achieved a positive year-end balance for the first time in three years, the MDAX gained about 35% in 2005 and finished trading at 7311.5 points. The trading year was driven by a positive business development worldwide. Later in the year, however, a few negative developments, such as the rising crude oil prices, interest and inflation fears and strongly fluctuating currency exchange rates prevented a stronger upward trend. In the last months of the year, the stock markets recovered again, bolstered by an overall more stable stock exchange climate.



#### Partial repayment of high yield bonds

Since the IPO, MTU Aero Engines has repaid a total of  $\in$  110 million of its high yield bonds in two tranches. The company used its strong liquidity position to repay its debt, thus significantly reducing future interest payments. The repayment was made at the contractually defined rate of 108.25%, plus the accrued interest. The original value of the high yield bond, issued in March 2004, was  $\in$  275 million. This leaves  $\in$  165 million outstanding.



#### Development of the MTU shares

MTU shares ended the year at €26.28, 25% higher than the issue price of June 6, 2005. Since the IPO, MTU shares thus outperformed the MDAX, which rose 22% in the same period. This favorable development of the share price was supported by a sustained rise in worldwide passenger traffic as well as increased deliveries of new engines.



Debut on the stock exchange floor: IPO of MTU Aero Engines Holding AG on June 6, 2005.

#### Investor relations

MTU places great emphasis on providing transparent and prompt information for investors and analysts. Since its official listing, MTU has stayed in continuous dialog with institutional investors, private investors and financial analysts to make sure MTU's shares receive fair valuation. In addition to the eight agency banks, by year's end eight additional analysts had begun observing MTU and its shares, and will in the future publish their recommendations and comments. Management presented the operating results for the year under review as well as the strategic orientation of the Group in road shows, company visits and capital market conferences. On October 11, the first Analyst/Investor Day took place at MTU in Munich. The company also held numerous meetings during the Paris Air Show in Le Bourget, the industry's most important trade show.

For more details, please visit our investor relations website at http://www.mtu.de or contact our investor relations office in Munich at +49-(0)89-1489-8313.

## Corporate Governance and Remuneration Report

MTU Aero Engines Holding AG places high value on good corporate governance on the basis of trustful cooperation between the Board of Management and Supervisory Board as well as with all business partners. Even before the IPO, MTU had integrated the key elements of the German Corporate Governance Code into its day-to-day business.

In its amended version of June 2, 2005, the German Corporate Governance Code (the "Code") outlines the essential statutory regulations for the management and supervision of companies that are listed on the stock exchange, as well as nationally and internationally recognized standards for responsible corporate leadership. Core elements are trustful cooperation among all bodies of the company, as well as responsible and transparent corporate management and supervision that is guided by sustained creation of value. On the occasion of the IPO, MTU carried out an in-depth review of the recommendations and suggestions of the Code and their implementation in day-to-day operations. In the process, MTU consistently implemented all regulations that relate explicitly to the observance and protection of the rights of a broad base of shareholders. As a result, MTU will appoint voting rights representatives for the first General Shareholders' Meeting after the IPO, which will take place on May 12, 2006. Shareholders who are unable to attend in person may exercise their voting rights through these representatives.



The headquarters of the MTU Group: the administration building of MTU Aero Engines in Munich

## Trustful cooperation among the company's bodies

The close and trustful cooperation practiced among all bodies of MTU as a public corporation testifies to good corporate governance. The qualifications and experience of the members of the Board of Management, who lead the company as a team, complement each other. The Board of Management regularly and promptly informs the Supervisory Board of the Group's current situation, including potential risks, and of strategic decisions and considerations.

The members of the Supervisory Board, which is comprised according to statutory regulations of six shareholder representatives and six employee representatives, possess the expertise, abilities, and technical experience required to properly fulfill their tasks. The Supervisory Board reflects the ownership structure of MTU; it includes a sufficient number of independent members. In the previous business year, there were no contracts for consulting, services or labor between MTU and any member of the Supervisory Board; in addition, no conflicts of interest subject to disclosure requirements arose among the Supervisory Board members. In the past financial year, D&O (director and officer liability) insurance coverage, with an appropriate deductible, had been taken out for the members of the Supervisory Board and Management Board.

#### Remuneration of the Board of Management with long-term incentive effect

Remuneration of the bodies of MTU is subject to clearly defined and transparent criteria. Remuneration of the members of the Board of Management includes fixed and variable components, and amounted in the past business year to €6,631,847, including non-cash benefits and share-based compensation. Of this amount, €3,644,575 was fixed, €2,750,000 was performance-related, and €237,272 was tied to the calculated annual value of the matching stock program that is described in detail in the following. The amount of the performance-related compensation (45% of the total remuneration) depends on the development of two performance data: the operating cashflow and the operating profit (adjusted EBITDA). These key figures reflect the business situation, the success and future prospects of the company. Both have developed very positively; the targets agreed with the Supervisory Board for the 2005 financial year were exceeded. Allocations to provisions for pension obligations to the members of the Board of Management, with the exception of the President and CEO, amounted to €2,577,664 in the year under review.

In line with the recommendations of the Code, a matching stock program (MSP) was established in 2005 as a long-term, incentive and risk-based compensation element, with a term of eight years. Under this program, the members of the Board of Management as well as a large group of top-level management staff will receive a compensation the amount of which depends on the development of the market value of the MTU shares. In accordance with the conditions of the MSP, each participant is obliged to purchase MTU shares with their own funds, up to a predefined maximum investment volume and at the current share price (MSP shares). These shares are credited to the MSP participants in a blocked security deposit for the duration of their participation in the MSP. On the date of the initial notice and thereafter 5 times in 12-month intervals, MTU Aero Engines Holding AG will allocate six virtual, so-called phantom shares for each MSP share owned. These phantom share options are considered "exercised" two years after their allocation, if certain performance goals are reached: The MTU share's average unweighted closing price in Xetra trading on the Frankfurt Stock Exchange during the 60 trading days preceding exercise of the phantom share options must be ten percent higher than the MTU share's average unweighted closing price in Xetra trading on the Frankfurt Stock Exchange during the 60 trading days prior to allocation of the respective tranches of the phantom shares.

When phantom share options are exercised, the difference between the stock market price of the MTU shares of the date of exercise and the stock market price of the MTU share on the date of allocation is paid by MTU Aero Engines Holding AG to the MSP participants in cash (plus a premium of 10%). The MSP participants are obliged to invest this money in turn in MTU shares, which are credited to them in a blocked security deposit with a two-year ban on sale. In total, the use of personal funds, linkage to the share price and long-term participation in the MSP offer the necessary incentive to create long-term shareholder value as called for in the Corporate Governance Code.

In the opinion of MTU, this voluntary, detailed presentation of the amount and composition of the performance-based remuneration as well as the MSP is a key element of the presentation of the Board of Management's remuneration. There is no individualized disclosure of the remuneration as per Section 4.2.4 of the Code, however, MTU strongly believes that such disclosure violates personal privacy rights. Here, the individual decision of each member of the Board of Management must be respected. On the other hand, details regarding the structure of the remuneration are essential for determining whether such compensation is appropriate and whether it creates an incentive for the Board of Management. As the Board of Management operates as a collegiate body, the incentives provided for the Board of Management as a whole are the decisive factor, not those for each individual member. Individualized reporting of Board of Management compensation will occur when the Management Compensation Publishing Act first comes into effect.

## Clear compensation structures for the Supervisory Board

According to § 12 of the Articles of Association, the members of the Supervisory Board receive a fixed annual payment of € 30,000 per year, payable at the end of the financial year. Compensation for the Chairman of the Supervisory Board is three times this amount; that of his Vice Chairman is 1.5 times this amount. Supervisory Board members who also belong to a committee are paid an additional €5,000 per year and committee chairmen €10,000 per year. In addition to their annual compensation, members receive an attendance fee of €3,000 for each board and committee meeting. MTU refrains from performance-based compensation for the Supervisory Board members, as provided for in Section 5.4.7 Paragraph 2 of the Code. It is MTU's belief, that performance-based compensation is not a suitable instrument for enhancing the control function of the Supervisory Board.

In total, the Supervisory Board received compensation of €451,666 for the past financial year. The compensation for the Supervisory Board is not reported individually as provided for in Section 5.4.7 Paragraph 3. In view of the total amount of the compensation and the stipulations of § 12 of the Articles of Association, MTU considers reporting of the total compensation as sufficient to permit assessment of its appropriateness. The amount of shares in the company held by all members of the Board of Management and by all members of the Supervisory Board will not be reported separately, as recommended in Section 6.6 of the Code. As the Board of Management and the Supervisory Board do not consult with each other regarding the exercise of their stock purchasing and selling rights, MTU does not consider reporting as

appropriate. Moreover, the legislator has not yet enacted a corresponding law, as such information is not deemed necessary. As of December 31, 2005, a total of about 5.9% of the MTU shares were held by Blade Management Beteiligungs GmbH & Co. KG, which pools the shares of the members of the Board of Management and the Supervisory Board as well as those of executive staff.

## Transparent reporting of financial statements

The Board of Management is responsible for the reporting of financial statements for the Group in accordance with International Financial Reporting Standards (IFRS). Individual accounts are compiled according to the provisions of the German Commercial Code (Handelsgesetzbuch). The internal system of controls in conjunction with uniform principles of accounting ensure that in all key areas an appropriate presentation of the assets, earnings, and financial situation, as well the cashflows of all group companies is generated. MTU also possesses a differentiated system to identify and control business and financial risks.

#### Timely information for all investors

Sound corporate governance of a publicly held company includes providing comprehensive, continuous, and up-to-date information for shareholders, investors, and prospective investors. MTU has comprehensive documentation and information as well as a financial calendar available on its website at http://www.mtu.de. The company provides shareholders with business development reports four times a year, in line with the financial calendar. The Board of Management provides quarterly and annual results to investors, analysts, and the media at regular intervals. Events that influence the share price are published as ad hoc announcements in accordance with statutory requirements.

On its website, MTU also provides information on the number of MTU shares and related derivatives acquired or sold by the Board of Management and the Supervisory Board. Pursuant to Section 15a of the German Securities Trading Act (WpHG), any member or close affiliate of a member must report such transactions if the value of the transactions meets or exceeds of €5,000 within any calendar year.

Published announcements of such transactions for 2005 can be found on the Internet at www.mtu.de.

#### Declaration by the Board of Management and Supervisory Board of MTU Aero Engines Holding AG pursuant to Section 161 of the German Stock Corporation Act (AktG) regarding the German Corporate Governance Code

The Board of Management and the Supervisory Board of MTU Aero Engines Holding AG declare that the recommendations of the June 2, 2005 version of the "German Corporate Governance Code Government Commission" published by the Federal Ministry of Justice in the official section of the electronic Federal Gazette have been and are being met. The Board of Management and the Supervisory Board of MTU Aero Engines Holding AG also intend to follow the recommendations of the German Corporate Governance Code in the future. The following recommendations are the only ones not been or being applied:

#### 1. Individualized reporting of Board of Management compensation (Code Clause 4.2.4)

The compensation for the Board of Management is not reported individually in the Notes to the Group Financial Statements. The compensation of the Board of Management is reported in compliance with the Code but broken down into fixed and variable elements and into components with a longterm incentive effect. This information is crucial for assessing whether the division of such compensation between fixed and

performance-related components is appropriate and whether the structure of such compensation provides adequate incentives for the Board of Management. We therefore regard the information about the overall compensation as sufficient to verify its adequacy. As the Board of Management operates according to the principle of collective responsibility, the incentives provided for the Board of Management as a whole are the decisive factor, not those for each individual member. Individualized reporting of Board of Management compensation will occur with respect to the business year 2006 when the Management Compensation Publishing Act will become first applicable.

#### 2. Form and Details of the Compensation of the Supervisory Board (Code Clause 5.4.7, Paragraphs 2 and 3)

There is no performance-related compensation for the members of the Supervisory Board. We are of the opinion that a fixed compensation is appropriate and that it should not be related to the performance of the company. In our judgement a performance-related compensation is not suitable to enhance the control tasks of the Supervisory Board.

The compensation for the Supervisory Board is not reported individually or broken down into its elements. The compensation of the members of the Supervisory board will be reported in a total amount. In view of the level of compensation and the stipulations of the Articles of Association (§ 12 of the Articles of Association) we consider a reporting of the total compensation as sufficient to evaluate its adequacy.

#### 3. Reporting of the total ownership of shares in the company (Code Clause 6.6)

The amount of shares in the company held by all members of the Board of Management and by all members of the Supervisory Board will not be reported separately. As the Board of Management and the Supervisory Board do not consult with each other regarding the exercise of their stock rights, we do not regard such reporting as appropriate. Also the legislator has not yet enacted a corresponding law as such information is not deemed necessary.

Munich, December 2005

For the Board of Management

For the Supervisory Board

M.J. Mlrs /

Udo Stark CEO

Johannes P. Huth Chairman

## Report of the Supervisory Board for the 2005 Business Year



Johannes P. Huth Chairman of the Supervisory Board

On May 19, 2005, MTU Aero Engines Erste Holding GmbH was converted into MTU Aero Engines Holding AG and became a public company. At the time of conversion, MTU Aero Engines Erste Holding GmbH already had a Supervisory Board formed pursuant to the German Codetermination Act. In accordance with the Conversion Act, this body remained in place after the conversion.

The Supervisory Board kept itself continuously up-to-date on business developments and the situation of the company during the financial year 2005. In addition, it oversaw the work of the Board of Management. Each month, the Board of Management presented comprehensive written information on the status of MTU's assets, the financial and earnings situation and important business events to the members of the Supervisory Board. The Supervisory Board discussed core strategic questions with the Board of Management and, after careful consideration and examination, endorsed the corresponding strategic orientation of MTU. The Supervisory Board reviewed all business activities subject to approval according to statutory requirements, the Articles of Association or the Management Board's rules of procedure; the Supervisory Board discussed these matters with the Board of Management and endorsed them without exception.

Meetings of the Supervisory Board

During the financial year 2005, five Supervisory Board meetings and two teleconferences were held in which resolutions were adopted. One resolution was adopted through a written circulation procedure. All Supervisory Board members participated in more than half of the meetings. In addition, the Chairman of the Supervisory Board was regularly updated on the company's current situation and of significant business transactions.

In its meetings and teleconferences, the Supervisory Board, along with the Board of Management, dealt extensively with business developments involving MTU and its associated companies, the market situation in general, MTU's competitive position, the repayment of credits from group companies, the development of the dollar exchange rate and hedging measures. It was informed of MTU's risk management system and of measures taken for protection against risk.

The Supervisory Board was informed in detail on the status of current engine programs, particularly the competitive situation for the MTR390, the progress of the GP7000 (Airbus A380) and TP400-D6 (Airbus A400M) development programs, and the status of the "V2500 Select" program (Airbus A320). The Supervisory Board also extensively dealt with the Cooperative Model before the contract was signed. This model provides for a new and closer partnership between MTU Aero Engines and the Bundeswehr (German armed forces). As regards the group companies, the Supervisory Board was kept informed in particular detail on the situation of the US subsidiary, MTU Aero Engines North America Inc., as well as on the sale of ATENA Engineering GmbH.

Prior to the IPO, the Supervisory Board examined the proposed restructuring into a stock corporation by conferring closely with the Board of Management while providing guidance during preparations for taking the company public and approving the share issue price. The Supervisory Board was thoroughly involved in all matters relating to Corporate Governance and also examined the efficiency of its own activities. In the joint declaration with the Board of Management of December 13, 2005 in accordance with Section 161 of the German Stock Corporation Law (AktG) the Supervisory Board declared that MTU Aero Engines Holding AG fully complies with the recommendations of the Code, with three exceptions. The complete declaration is available on the company's website.

#### **Committee meetings**

The Supervisory Board has formed three committees with parity representation: the Audit and Finance Committee, the Personnel Committee, and pursuant to Section 27 Paragraph 3 of the German Codetermination Act the Mediation Committee. The latter did not have to convene during the year under review. Members of the Personnel Committee during the year under review were: Johannes Huth, Günter Sroka, Harald Flassbeck and

Reinhard Gorenflos, who served until December 31, 2005. The Personnel Committee convened twice in the past financial year and dealt with Board of Management personnel matters, in particular the amount of compensations and the results of the efficiency audit. The Audit and Finance Committee came together three times during the financial year 2005. Members in 2005 were Babette Haas, Johannes Huth, Günter Sroka and Reinhard Gorenflos (until December 31, 2005). The Audit and Finance Committee focused its activities on the annual financial statements for MTU Aero Engines Erste Holding GmbH, which it recommended to the Shareholders' Meeting for approval. An additional focal point was the consolidated financial statements for MTU Aero Engines Erste Holding GmbH, which the committee reviewed and recommended for approval by the Supervisory Board. Auditors were involved in the discussions on both the annual accounts and consolidated financial statements. Other activities included the further development of the risk management system and the areas to be examined in the 2005 internal audit. In addition, the committee identified the focus for 2005 financial statement audit.

#### Review of the annual financial statements and approval of the consolidated financial statements

MTU Aero Engine Holding AG's annual financial statements, the consolidated financial statements as well as the management report and group management report for the financial year 2005 were audited and fully certified by independent auditor from Deloitte & Touche of Munich, whose selection was approved during the Shareholders' Meeting. The audit reports as well as the documents to be audited were distributed to each member of the Supervisory Board in a timely manner. Based on the results of the pre-audit by the Audit and Finance Committee, which the chairman of the Audit and Finance Committee presented to the Supervisory Board, the Supervisory Board thoroughly reviewed the consolidated financial statements, the management report and the

#### group management report for MTU Aero Engines Holding AG for fiscal 2005, as well as the recommendation of the Board of Management for appropriation of the year's net profit. The auditor also attended the Audit and Finance Committee meeting on March 13, 2006 and in the balance sheet meeting of the Supervisory Board on March 22, 2006, and presented the most important results of his audit.

The final results of the Supervisory Board's review of the annual financial statements, the consolidated financial statements, the management report, the group management report, and the recommendation for the appropriation of profits, did not give rise to any objections on the part of the Supervisory Board. The annual financial statements and management report presented by the company's Board of Management for the financial year 2005 were approved by the Supervisory Board during its meeting on March 22, 2006. The Supervisory Board affirmed the recommendation of the Board of Management for the appropriation of the net profit for the year. The consolidated financial statements and group management report for MTU Aero Engines Holding AG for the financial year 2005, which were presented by the Board of Management, were approved by the Supervisory Board during its meeting on March 22, 2006.

#### Changes within the Supervisory Board

The following changes took place within the company's Supervisory Board during the year under review: former CEO, Dr. Klaus Steffens, was named to the Supervisory Board in a resolution of the Shareholders' Meeting of December 30, 2004. He succeeded Mr. Ned Gilhuly of Kohlberg Kravis Roberts & Co Ltd. The Supervisory Board thanked Mr. Gilhuly for his valuable services during 2004. Based on a proposal by the company, the Munich Register Court named Dr. Jürgen M. Geißinger, President and CEO of INA-Holding Schaeffler KG, Herzogenaurach, Germany, to the Supervisory Board of MTU Aero Engines Holding AG, effective October 4, 2005. Geißinger succeeded Oliver Haarmann of Kohlberg Kravis Roberts & Co. Ltd., who retired from the board as of October 1, 2005. The move came as a result of the change in MTU Aero Engines' ownership structure in the wake of the company's IPO. The Supervisory Board thanked Mr. Haarmann for his contribution during 2004 and 2005.

In 2006, Mr. Lewis R. Hughes was named to the Supervisory Board in a resolution of the Munich register court on January 27, 2006. He replaces Mr. Reinhard Gorenflos of Kohlberg Kravis Roberts & Co. Ltd. The Supervisory Board thanked Mr. Gorenflos for his valuable assistance during 2004 and 2005.

In its meetings on December 13, 2005 and March 22, 2006, the supervisory board has appointed Dr. Rainer Martens to succeed Executive Vice President and COO Dr. Michael Süß, whose term of office expires in 2006, on the board of management. The appointment is for a three-year term, beginning on April 15, 2006. Dr. Martens will take over the responsibilities Dr. Süß, who resigns from his office effective April 30, 2006, has had in his role as chief operating officer. The supervisory board thanks Dr. Süß for the valuable services he has rendered to MTU.

The Supervisory Board sincerely thanks the Board of Management as well as all employees of MTU for their success and their committed efforts during the 2005 business year. The thanks of the Supervisory Board also go out to the shareholders who have placed their trust in MTU.

Munich, March 22, 2006

Johannes P. Huth Chairman of the Supervisory Board

#### Harald Flassbeck

Senior Representative of the IG Metall Administrative Center, Munich Additional mandates EADS Deutschland GmbH MTU Aero Engines GmbH\* MAN Nutzfahrzeuge AG

## **The Supervisory Board**

#### The Supervisory Board

#### Johannes P. Huth

Chairman of the Supervisory Board Managing Director of Kohlberg Kravis Roberts & Co. Ltd., London Additional supervisory board mandates and/or mandates on comparable supervisory entities of foreign or domestic commercial companies A.T.U. Auto-Teile-Unger Holding GmbH Demag Holding S.àr.l. Deutsche Gesellschaft für Kunststoff-Recycling mbH Duales System Deutschland GmbH FL Selenia S.p.A. mannesmann plastics machinery GmbH MTU Aero Engines GmbH\* Wincor Nixdorf Aktiengesellschaft Zumtobel AG

#### Günter Sroka

Deputy Chairman Chairman of the Group Works Council of MTU Aero Engines GmbH, Munich Additional mandates MTU Aero Engines GmbH\* Dr.-Ing. Jürgen M. Geißinger

(beginning October 4, 2005) President and CEO of INA-Holding Schaeffler KG in Herzogenaurach Additional mandates MDL Mitteldeutsche Leasing AG MTU Aero Engines GmbH\* Tower Automotive, Inc.

#### **Reinhard Gorenflos**

(until December 31, 2005) Managing Director of Kohlberg Kravis Roberts & Co. Ltd., London Additional mandates Demag Cranes & Components GmbH Demag Holding S.a.r.l. Duales System Deutschland GmbH mannesmann plastics machinery GmbH MTU Aero Engines GmbH\* Zumtobel AG

#### **Oliver Haarmann**

(until October 1, 2005) Funds Manager, Kohlberg Kravis Roberts & Co. Ltd., London Additional mandates A.T.U. Auto-Teile-Unger Holding GmbH Duales System Deutschland AG mannesmann plastics machinery GmbH MTU Aero Engines GmbH\*

#### Babette Haas

Head of the Business Administration Division, IG Metall Executive Committee, Frankfurt Additional mandates EDAG Engineering & Design AG MTU Aero Engines GmbH\* Harmann Becker Automotive Systems GmbH

#### Josef Hillreiner

Chairman of the Works Council of MTU Aero Engines GmbH, Munich Additional mandates MTU Aero Engines GmbH\*

#### Louis R. Hughes

(beginning January 30, 2006) Chief Executive Officer of GBS Laboratories, LLC., Herndon, Virginia Additional mandates ABB Ltd. AB Electrolux British Telecom plc (until March 31, 2006) Maxager Technology, Inc. MTU Aero Engines GmbH\* Sulzer AG

#### Michael Keller

Director Rotor/Stator & Production Service of MTU Aero Engines GmbH, Munich Additional mandates MTU Aero Engines GmbH\*

#### Prof. Dr. Walter Kröll

Former President of Helmholtz-Gemeinschaft Deutscher Forschungszentren e.V., Bonn Additional mandates Wincor Nixdorf AG Siemens AG MTU Aero Engines GmbH\*

#### Josef Mailer

Full-time member of the Works Council of MTU Aero Engines GmbH, Munich Additional mandates MTU Aero Engines GmbH\*

### Dr.-Ing. Klaus Steffens

Former President and CEO of MTU Aero Engines, Munich Additional mandates MTU Aero Engines GmbH\*

#### Prof. Dr. Sigmar Wittig

Chairman of the Management Board of the German Aerospace Center (DLR, Deutsches Zentrum für Luft- und Raumfahrt), Cologne Additional mandates MTU Aero Engines GmbH\*

#### **Committees of the Supervisory Board**

#### Personnel Committee

Johannes P. Huth, Chairman Reinhard Gorenflos (until December 31, 2005) Dr. Jürgen M. Geißinger (as of February 16, 2005) Günter Sroka Harald Flassbeck

#### Audit and Finance Committee

Louis R. Hughes (as of February 16, 2006) Reinhard Gorenflos, Chairman (until December 31, 2005) Johannes P. Huth Günter Sroka Babette Haas

#### Mediation Committee

Johannes P. Huth, Chairman Reinhard Gorenflos (until December 31, 2005) Dr. Jürgen M. Geißinger (as of February 16, 2005) Günter Sroka Harald Flassbeck

<sup>\*</sup> Group mandate within the meaning of Section 100 Paragraph 2 Sentence 2 of the German Stock Corporation Law (AktG)

## Part II – Innovation for Generations





## 15,000 Flight Hours

By the time an engine reaches 15,000 hours, it has covered a distance equivalent to the Frankfurt-Sydney-Frankfurt route about 250 times. In the life of a modern aircraft engine, that is not much. Routine maintenance work is enough to keep the engine in good shape; as a rule, it is not yet necessary to overhaul the engine. Before every take-off, the co-pilot inspects the aircraft and engine – among other things, checking for bent fan blades and oil leaks.



The V2500 is one of the best-selling engines in its class.

The airlines' technicians also check the engine regularly. They use boroscopes to look into its interior, diagnose hairline cracks or damage, and initiate minor repairs. Due to the high safety standards in aviation, the life of an aircraft and its engines is documented in minute detail: Every technical characteristic and even the smallest anomaly are reported to the flight control center, and the data is recorded there.

## **Thrust for Decades**

As the world's fifth-largest engine manufacturer, MTU is one of the big players in the industry. Germany's Number One engine manufacturer develops and manufactures components and modules for commercial and military engines and assembles complete engines. In the military engine arena, MTU is the national partner of the German Armed Forces (Bundeswehr). In addition, the company is the world's largest independent provider of commercial engine maintenance services. Moreover, MTU uses its know-how from engine construction in the industrial gas turbine business.

## Commercial Engine Business – the Growth Driver

MTU derives the major part of its sales from the development and production of commercial engine components and modules in all thrust classes. In the commercial new engine business - including spare parts the company is an important market participant: Almost every third commercial aircraft has MTU modules and components onboard. Technologically, MTU's low-pressure turbines and high-pressure compressors are world class. In the commercial new engine business, MTU cooperates with the Who's Who in engine manufacture, its most important partners being Pratt & Whitney, General Electric, and Rolls-Royce. MTU maintains close links with each partner through cooperative ventures.

In the year 2005, the development activities in the commercial engine business concentrated on the two most important future programs: the GP7000, the engine for the mega-Airbus A380, and the PW6000, the engine for the single-aisle Airbus A318. MTU holds major stakes in both engine programs: In the GP7000, it holds a 22.5% share as a risk-and-revenue-sharing partner and in the PW6000 it has a total 33% share in the program. Today these program workshares do not yet reflect in the sales figures; over the mid-to-long-term, however, they will represent an important volume of business.

In addition to the manufacturing business, the production of spare parts is the second essential revenue generator in the commercial engine business. MTU produces spare parts for all modules in which it is involved as a partner. An important role is played by the high-pressure turbine of the CF6 engine, which powers Airbus and Boeing mid- and long-haul aircraft, and the low-pressure turbine of the V2500 engine, the preferred engine for the Airbus A320 family of aircraft. As a risk-and-revenue-sharing partner in a total of ten commercial engine-family programs, MTU also profits pro-rata from the sale of spare parts.

The commercial engine business will profit from an aviation market that will continue to grow. Experts predict an average long-term annual growth in passenger kilometers flown of more than 5%, they estimate the market for new engines in the next 20 years at over 40,000.

## GP7000: Most Important Commercial Engine of the Future

The GP7000 is the most important future commercial program for MTU. The engine to power the Airbus A380 is the first engine to be developed and built jointly by Pratt & Whitney and General Electric. MTU delivers the low-pressure turbine and the turbine center frame and is also involved in the production of the high-pressure turbine. With its risk-and-revenue-sharing stake of 22.5%, it is the third-largest partner in the program. The GP7000 has developed into the preferred engine for the Airbus megaliner: by the end of 2005, more than half of all engines ordered were GP7000s. In late 2004, the GP7000 successfully completed its first test flight on the wing of a Boeing 747. In December 2005, it received FAA certification and in the spring of 2006, it is scheduled to begin flight testing on the A380.

MTU employs about 300 people in both the development and the production of the GP7000. The program also creates about 1000 additional highly qualified jobs among suppliers.

#### PW6000: MTU Cracking the High-Pressure Compressor Market

With the high-pressure compressor it developed for the PW6000, the engine for the single-aisle Airbus A318, MTU for the first time launched a compressor on a commercial core engine, allowing the company to penetrate a tough-to-crack market – a success of strategic significance. In addition to the compressor, it is also contributes the lowpressure turbine. Final assembly of all engines is performed exclusively at MTU Maintenance Hannover, which received PW6000 production organization approval in August 2005.

The total program share of about 33% is the biggest workshare MTU has ever had in a commercial jet engine. In November 2004, the PW6000 was approved by the US aviation authority FAA and won its first customer in August 2005, LAN Airlines, Chile. Volume production begins in 2006.

#### Bestseller V2500

The International Aero Engines (IAE) consortium's V2500 engine which powers the Airbus A320 family, has developed into a best-selling engine: More than 5,000 orders and options have already been recorded in the order books; about half of the engines on order have already been delivered. This "green engine", as it is called by experts because of its particular environmental friendliness, is especially popular in the Asia-Pacific region, which has seen a real boom for the V2500 in recent years. To meet customer requirements even better, IAE has launched the "V2500 Select" engine upgrade and aftermarket support program. Among other things, it provides for longer maintenance intervals. MTU, which is a co-founder of the IAE consortium, is the world's leading provider of maintenance services for the V2500.

#### PW300/PW500: Power for Business Jets

MTU also provides plenty of thrust for business jets: The German industry leader is participating in the PW300 and PW500 engine families, which have found homes on small, mid-size and large business jets. For the Pratt & Whitney Canada engines, MTU develops and manufactures the lowpressure turbine including the turbine exit case and the mixer; it holds a 25% share each in the PW300 and PW500.

The engines are used on aircraft such as the Learjet 60, Cessna aircraft, the Gulfstream G200, and the new Dassault Falcon 7X. The latter is powered by three PW307 engines. The design concept of the PW307 is based on the proven PW306, however, it offers more thrust, provides improved efficiency, and burns less fuel. MTU's share is 15%. The PW307 was certified in April 2005, and the first flight on the Falcon 7X followed a few weeks later. Flight testing will continue until early 2007. MTU expects a total market of up to 320 aircraft and up to 1,000 engines, including spare engines.

The total business jet market promises good growth rates: In the year 2005, sales rose by 27%. The market for aircraft powered by PWC engines in which MTU holds a stake even grew by 43%.



The V2500 is one of the most important current production programs and MTU's most important maintenance program.

#### Military Engine Business: Technological Pace-Setter's Business

As technological pace-setters, military engines are another mainstay of MTU: The company develops highly advanced modules and components, including turbines, compressors, control and monitoring systems, and innovative manufacturing and repair processes.

In the military arena, MTU has for decades been the national market leader: As the German lead company for nearly all aircraft engines flown by the German Armed Forces (Bundeswehr), it provides enabling technologies, develops and manufactures engines and components, overhauls them, provides technical-logistic support for its products, and trains military and civilian employees of the armed forces. As the German partner in the European engine programs, the Munich-based company cooperates with the European engine manufacturers. Looking back on more than 30 years in the business, MTU has positioned itself as a reliable partner of choice, contributing key components to the most important military engine programs in Europe. Beyond the borders of its home market, it benefits from export sales under the European military programs.

## Major Military Programs in the Years Ahead

The most important military programs in the years ahead are the EJ200 for the Eurofighter, the TP400-D6 for the Airbus A400M military transport, and the MTR390 for the Tiger attack-escort helicopter.

Worldwide the EJ200 is considered the most advanced engine in its class. MTU is developing and producing the Eurofighter engine jointly with Avio, ITP, and Rolls-Royce. Its share is 33% in development and 30% in production. The company provides the low-pressure and high-pressure compressors, the electronic engine control system, and is responsible for engine assembly and testing of the engines operated by the German armed forces. Production contracts are placed for three tranches; currently, production is ramping up for Tranche 2 deliveries.

Under the Tranche 2 contract, MTU will produce 147 complete engines for the German Air Force (Luftwaffe). Furthermore, by 2012, it will produce a total of 519 low-pressure and high-pressure compressor modules and 519 digital control and monitoring units, which will be installed in the engines operated in Germany and in the other participating nations. The engines of the second tranche will be fitted with a new engine control and monitoring unit, the so-called DECMU (digital engine control and monitoring unit), for which MTU has system design responsibility. The DECMU combines control and monitoring



MTU Aero Engines excels in blisk technology, for which it is a global leader.

functions in a single unit and is more flexible and less costly than the two systems previously required. The new control unit is designed in such a way that it readily accommodates future engine modifications. The first engines of Tranche 2 will be delivered in the spring of 2007.

In the meantime there are first export wins: Austria has ordered 18 Eurofighters. Intensive sales negotiations are under way with other European and non-European countries.

With the Cooperative Model of joint industrymilitary maintenance for the EJ200 engine the Bundeswehr and MTU are blazing new trails: The EJ200 engines will now be maintained at a single site – MTU. That pools the resources, limits storage capacity requirements, and ensures short cycle times. The personnel of the partner, the Luftwaffe, will remain involved in the overall process. Starting in 2006, the Cooperative Model will be extended to other important Luftwaffe engines as well to include the RB199 (Tornado), J79 (Phantom), and the RR250-C20 (Bo-105 helicopter) engines.

The TP400-D6 is the engine to power the A400M military transport, and, at 11,000 shp, it is the most powerful turboprop in the Western world. The work is being coordinated by Europrop International, or EPI for short. MTU participates in the consortium with a share of 28%; Snecma and Rolls-Royce plc.

also hold 28%, and Spain's ITP 16%. For the TP400-D6, MTU is developing and producing the intermediate-pressure spool, including the IP compressor and turbine. In addition, it is involved in the control system. MTU Maintenance Berlin-Brandenburg in Ludwigsfelde plays a particularly important role for the partners: That is where the development tests, the exclusive final assembly, and the acceptance tests for all production engines will be conducted. The facility's new test cell is the only one in Europe for this engine. It was completed in August 2005. In October, the engine successfully passed its first test run. The first flight of the A400M powered by TP400-D6 engines is slated for 2007.

First export orders have already been received for the A400M with the TP400-D6: South Africa has signed a contract for the purchase of eight A400M aircraft, and Malaysia for the purchase of four; Chile has issued a declaration of intent to buy three aircraft.

The MTR390 engine for the German-French Tiger support and anti-tank helicopter was developed in collaboration with Turbomeca and Rolls-Royce. The engine has since entered the production phase. 110 production engines had been delivered by the end of 2005. MTU's activities in the MTR390 program concentrate on the technologically advanced core engine with the combustor and high-pressure turbine as well as a number of accessories.

The Tiger has already won some export customers: Australia has ordered 22 units and Spain 24. The Southern Europeans will be the first Tiger operators to receive the MTR390 Enhanced, a 14% uprated version which will be developed together with Spain's ITP in the period from 2004 to 2008. The new model version will provide additional impetus to MTU's export business.



Under the Cooperative Model, MTU and Bundeswehr employees work shoulder-to-shoulder in the EJ200 engine assembly shop.

#### **Commercial Maintenance: Global Leader**

The maintenance of commercial aircraft engines is one of MTU's core competencies. In the commercial maintenance business, MTU is the world's largest independent provider of engine maintenance services, with annual sales of  $\in$ 732 million (\$911 million) in an overall annual volume of about \$14 billion\*. With its licenses, MTU covers about half of this market and enjoys above-average growth. In the mid-term, MTU expects to increase its annual sales in the maintenance business to about  $\in$ 1 billion. AeroStrategy estimates the market development in this period at an annual volume of about \$17 billion\*.

MTU has pulled its repair, overhaul and maintenance activities together into a function that operates a network of maintenance shops: MTU Maintenance. The company and its subsidiaries have established a worldwide presence: In addition to the German locations in Hannover and Ludwigsfelde (Berlin-Brandenburg region), MTU also operates sites in Zhuhai (China), Vancouver (Canada), Kuala Lumpur (Malaysia), and Brazil. The technology is continuously shared among the subsidiaries. That ensures the same high standard of service worldwide. Major areas include the maintenance of engines in which MTU Aero Engines has a risk-and-revenuesharing stake, for instance, the CF6, PW2000, or V2500.

\* commercial engines for 35-plus seaters

MTU Maintenance is also becoming increasingly involved in programs that are not in MTU's manufacturing portfolio, such as the CFM56 and CF34 engine families. The CFM56 family comprises five different models that equip the Airbus A320 twin-jet family, the long-haul A340 transports, and the standard and next-generation Boeing 737. With a backlog of nearly 14,000 orders from about 300 customers, the CFM56 is the hottest selling engine for commercial aircraft and thus an attractive market, in which MTU Maintenance is continuously increasing its share.

The CF34 is the best-selling engine in its class worldwide. Its main applications are business jets and regional jets with 50, 70, and 100 seats. Today the CF34 is front runner on 50-seaters. Bombardier's and Embraer's 70- and 100-seaters are also equipped exclusively with this engine. All of MTU's maintenance activities for the CF34 have been pulled together at MTU Maintenance Berlin-Brandenburg. In the mid-term, MTU Maintenance expects to increase its annual sales in the commercial maintenance business worldwide to about €1 billion. That would be equivalent to a world market share of 6%.

The Maintenance Group wants to expand its portfolio step by step: the new Engine Pool Services have already been added. Airlines are provided with lease and spare engines of the most popular types wherever in the world they are needed. In addition to aircraft engines, MTU Maintenance also maintains industrial gas turbines, heavyweights in the portfolio being GE's LM2500 and LM6000 series of IGT. In the commercial maintenance business, the total contract volume as of December 2005 was worth about  $\in$ 3.1 billion. The largest new customer was JetBlue: An exclusive ten-year agreement was signed with the airline for the maintenance of its V2500 engines.

With a value of €750 million, the order is the largest in the history of MTU Maintenance. An agreement worth \$300 million was concluded with Shanghai Airlines for the maintenance of PW2000 and CF34 engines. Other new contracts covered the maintenance of CF34-8 engines for Hong Kong Express and of CFM56 engines for the B737 fleet of the Brazilian low cost carrier GOL.



The newly introduced flowline principle shortens cycle times – a benefit to the customer.

## Research and Development: Propulsion for the Future

Its innovative technologies and processes keep MTU at the forefront of the engine business. The company's research and development activities make sure MTU will maintain and expand its technological leadership position.



High efficiency, low noise, low weight: The GP7000 low-pressure turbine sets standards.

The MTU experts work closely with the three big OEM partners Pratt & Whitney, General Electric, and Rolls-Royce, as well as with all European engine companies, along with universities and research institutes, such as the German Aerospace Center (DLR). The common goal is to produce quieter, more fuel-thrifty, and cleaner engines that provide maximum operational safety. For air travel to remain the only truly global means of transportation, both economic and ecologic aspects must be front and center in all development efforts.

Research and development at MTU focuses on compressors, turbines, and engine control and monitoring systems. MTU develops new engine modules and components as well as innovative processes that make the development, manufacture, and maintenance of engines more efficient, faster, and more environmentally friendly.

#### Work on current products

Last fiscal year the spotlight was on three engine programs: the PW6000, the GP7000, and the TP400-D6. The PW6000 was a big success: For the first time in its annals. MTU has developed and built a commercial high-pressure compressor and has thus for the first time manufactured a core component for a commercial engine. The technology for this compressor, which is unique in its class, was developed under the Engine 3E technology program sponsored by the German government, in which MTU has a major role. The high-pressure compressor of the PW6000 is characterized by the highest stage pressure ratio worldwide and has demonstrated its safety and reliability in all flight conditions – even when operating close to the surge limit. In 2005, the PW6000 sucessfully completed the flight test phase on the Airbus A318 and has since been selected by a first customer.

In the GP7000 program, MTU is responsible for the low-pressure turbine and the turbine center frame. The six-stage low-pressure turbine is characterized by particularly high efficiency, low noise level, and low weight – making it a prototype for the engine of the future. The GP7000 provides the power for the mega-Airbus A380. Flight testing of the GP7000 on the Airbus A380 is scheduled to begin in April 2006, and the first four engines have already been delivered to Toulouse.

While the GP7000 and PW6000 have already received certification, approval in the third large development project, the TP400-D6, is planned for the end of 2007. The MTU team's contribution to the most powerful turboprop engine in the Western world includes the intermediate-pressure compressor, the intermediate-pressure turbine, and the intermediate-pressure shaft. MTU is also collaborating with Snecma on the engine and propeller control system. So far, the first five milestones of the program have been completed. On October 28, 2005, the engine of the A400M military transport successfully completed its first test run at MTU Maintenance Berlin-Brandenburg in Ludwigsfelde and has already achieved the maximum rating.

Also in the military area, a specialized team is working on the further development of the MTR390. The new version of the engine for the Tiger attack-escort helicopter - the MTR390 Enhanced - provides 14% more power. As a result, the combustor and highpressure turbine from MTU's workshare are exposed to higher temperatures. New thermal barrier coatings and an optimized cooling system for the turbine are designed to withstand such temperatures. Testing of the engine starts in 2006; the combustor has already been tested successfully this year on MTU's test rig. The MTR390 Enhanced version is scheduled for approval in the year 2007.

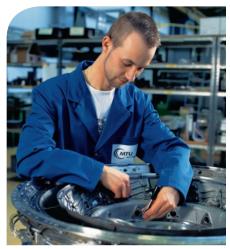
#### Research for future engine generations

The geared-fan concept promises to reduce fuel consumption by 10% and to lower the noise level by 50%. MTU works together with Pratt & Whitney Canada and Avio on a geared fan demonstrator, the ATFI (Advanced Technology Fan Integrator). What makes this concept special is a reduction gear connecting the low-pressure shaft and the fan. It ensures that the fan and the low-pressure turbine each operate at their optimum speed. Last financial year, the ATFI high-pressure compressor developed by MTU successfully completed a test run in the core engine. Another key component of the geared fan is the highspeed low-pressure turbine, which runs about three times as fast as a conventional unit. It is of pivotal importance to the optimum design of the overall system.



Engine of the future: the Advanced Technology Fan Integrator (ATFI) – here a segment of the high-speed low-pressure turbine.

MTU has specialized in this component and is the worldwide leader in this area. In a large number of test runs, its excellent efficiency was demonstrated again and again, so that the high-speed low-pressure turbine is almost ready for use in the development of production a engine.



Interturbine duct of the Clean technology demonstrator.

If fuel burn is to be reduced even further, additional components, such as heat exchangers, have to be integrated. While heat exchangers are often found in stationary gas turbines, their use in aircraft engines has so far been prevented, primarily because of their weight. As part of the EU program Clean (Component validator for environmentally friendly aero engines), key technologies were tested for a recuperated engine. The heat exchanger uses the residual energy in the exhaust gas to heat the compressor air before it flows into the combustor. That contributes decisively to a reduction in fuel consumption. The MTU heat exchanger is characterized by its very compact design and low weight. The results obtained with the Clean demonstator are very promising, with the fuel consumption expected to be 15 to 20% below current levels.

Additional research programs are:

- Silencer: an EU-sponsored program in which national technology leaders like MTU work on novel engine blades designed to lower perceived engine noise by 50%. In 2005, MTU tested several alternative ways for noise reduction.
- JTDP (Joint Technology Demonstrator Program): a joint program with Pratt & Whitney that uses a PW6000 development engine to test component technologies for highpressure compressors and low-pressure turbines in engines for medium-haul aircraft.
- Vital (Environmentally Friendly Aero Engine): an EU-sponsored project that looks into new technologies for noise and weight reduction of conventional turbofan engines. Five companies from five nations are working on this project: MTU, France's Snecma, the U.K.'s Rolls-Royce, Sweden's Volvo Aero, and Italy's Avio.

To promote new key technologies and integrate them in the overall aircraft system, MTU last financial year joined forces with EADS, Liebherr, and the Bavarian state government to found the "Bauhaus Luftfahrt". One of the topics studied under a long-term research project will be hybrid aircraft engines. The work also focuses on alternative aircraft concepts and alternative approaches to the integration of engines in the aircraft as well as long-term scenarios for the development of aviation.

# Innovative technologies for novel products

MTU is committed to the continuous improvement of its manufacturing and maintenance procedures. Methods developed to production maturity by MTU last financial year included processes for improved protection of components against wear, new manufacturing and repair processes, and new measurement methods for blisks. Blisks - integrally bladed rotor disks - are high-tech components used in compressors. They are a textbook example of MTU's innovative power: The disks and the blades are machined from one single piece and are no longer assembled from separate components. The advantages: increased component stability and strength, higher aerodynamic efficiency and lower weight. A number of patents have been granted in the area of blisk technology.

MTU's patent portfolio covers all areas necessary for the company's operation. MTU currently holds some 1,800 patents and patent applications; each year about 100 new applications are added. That places the company in a top ranking in the industry.

MTU and Pratt & Whitney are developing a new high-pressure compressor that could be used in engines for new generation single-aisle airliners. Among other things, its extremely lightweight construction makes it the compressor of choice for conventional engines and engines with reduction gears. The component tests are slated to begin in September 2006.



High-speed milling is one of the processes used in the production of blisks.

# **Environmental Protection: An Essential Corporate Goal**

For MTU Aero Engines, responsibility for the world outside it is not a compulsory exercise but comes natural with the responsibility the company assumes for its employees, customers, partners and neighbors. Protection of the environment is among its essential corporate goals and is firmly anchored in its corporate philosophy. It is pursued in harmony with other corporate goals and the best interests of the staff and the public. Compliance with the environmental policy is monitored by the Board of Management. The company's products and work processes are scrutinized against stringent environmental criteria over the product's entire life cycle from development through production to maintenance. Central environmental concerns are the recycling of residual material, remediation of environmental damage, and the reduction of energy and water consumption and of noise and pollutant emissions. The company is resolved to continuously advance and steadfastly improve its environmental protection effort.

With its products, MTU contributes to cleaner and quieter air traffic: Conventional propulsion systems are being improved, and new, more environmentally friendly systems are being developed. Since the 1950s, fuel consumption has been reduced by about 70%; there has also been progress in noise reduction: Today's engines are perceived



Its low emissions make the V2500 the "green engine".

to be only half as loud as their predecessor models. And this development is continuing: Future engines are expected to burn 20% less fuel, make 50% less noise, and produce 80% less oxides of nitrogen.

MTU pursues these goals in national and international technology programs: Clean, ATFI, Vital, and Silencer are the great projects that involve cooperation on a European or international scale.

By using novel repair techniques, too, MTU effectively helps the environmental effort, repairing where others might discard, true to its motto: Repair beats replacement. Thanks to its innovative repair techniques, about 70% of the engine blades are allowed a second, third and fourth life. This benefits the environment and customers alike, the latter having to pay much less than what new parts would have cost them.

MTU has the progress made in its environmental activities regularly audited through audits and management reviews. Environmental management systems coordinate and monitor all activities at the company's various locations and ensure that the same high standards are applied worldwide. Goals and actions are outlined and published regularly in environmental statements. For MTU the open dialog with customers, partners, public agencies, and neighbors is a matter of course. Employees are informed comprehensively and are made sensitive to these environmental concerns through training.



Will benefit the environment: The engine of the future. Shown here is the ATFI demonstrator.

MTU's environmental efforts are worth taking a look at. For the Munich headquarters, for example, the 2005 environmental performance statement shows that the recycling rate is being maintained at a constant high level. Noise abatement is being improved continuously: By means of a noise map and special software, different noise levels are simulated to derive concrete abatement measures. On the largest engine test stand, extensive modifications were carried out, and noise emissions were reduced by half.

Through the considerate use of ground water for cooling purposes, several million cubic meters of drinking water are saved. Safety heat exchangers are used to prevent thermal pollution caused by the discharge of hot water into the environment.

# An Eventful History: A Company with a Tradition and a Future



Standard engine of many historic German aircraft: the BMW VI.

From the dawn of aviation to the era of modern engine technology – MTU has seen the entire history of aviation. In the course of the 100-year history of powered flight, it has been playing a major role in driving progress of aircraft engine development.

MTU Aero Engines GmbH is a successor to BMW Flugmotorenbau GmbH, which was established in 1934. That company had its origins in Rapp Motorenwerke, which was founded in 1913 by flight pioneer Otto Rapp on Munich's Oberwiesenfeld and was renamed BMW in 1917 and BMW Flugmotorenbau GmbH at the end of 1934. In 1938 the company moved to Munich-Allach, where MTU Aero Engines is located to this day.

At the end of World War II, Germany was compelled to quit aircraft engine building. The Allach engine factory was turned into a repair shop for US military vehicles. This phase lasted until the mid-1950s. 1954 marked the beginning of a new political era in Germany, and aircraft engine production was resumed. BMW Studiengesellschaft für Triebwerkbau GmbH was founded in 1954 and BMW Triebwerksbau GmbH in 1957. The latter reentered engine manufacture under license agreements. In 1959, it started building, under license, General Electric's J79-11A engine for the Lockheed Starfighter F104.

In 1960, M.A.N. took over a 50% share of BMW Triebwerksbau GmbH and picked up the remaining 50% share five years later; with this move, BMW exited the aero engine business altogether. BMW Triebwerksbau GmbH was merged with M.A.N. Turbomotoren GmbH and renamed M.A.N. Turbo GmbH. The new company won orders for the license manufacture of the Rolls-Royce Tyne engine, which powers the Breguet Atlantic marine reconnaissance/antisubmarine warfare aircraft and the C-160 Transall airlifter.

In 1969, Motoren- und Turbinen-Union München GmbH, or MTU München for short, was founded. The move came in the wake of an agreement between Daimler-Benz AG and M.A.N. AG to merge their respective aircraft engine and high-speed diesel engine activities. In the process, MTU München (aircraft engines) and MTU Friedrichshafen (diesel engines) were formed, with the latter to become a directly-managed DaimlerChrysler subsidiary later, in 1995. 1969 also marked the launch of development of the Tornado engine RB 199-34R. This engine is MTU's most successful military engine program to this day.

In the 1970s, MTU increasingly complemented its military engine activities with development work on commercial engines. In 1971, MTU entered the commercial engine business and concluded a cooperation agreement with General Electric on the manufacture of the CF6-50 engine for the Airbus A300.

In 1979, the growing demand for engine repair, maintenance and overhaul services prompted the formation of MTU Maintenance Hannover at Langenhagen. With this move, MTU launched into the commercial engine maintenance business, creating a new business unit.

In 1985, MTU became a wholly-owned Daimler-Benz AG company. That year, it started collaborating with Pratt & Whitney Canada. In 1989, MTU became part of Deutsche Aerospace AG (Dasa), the organization that combined practically all of the German aerospace industry under its roof. In 1991, MTU began expanding its network of maintenance locations and acquired MTU Maintenance Berlin-Brandenburg and Airfoil Services Sdn. Bhd. in Kuala Lumpur, Malaysia. That same year, MTU and Pratt & Whitney signed an agreement on their strategic alliance for cooperation in the commercial turbine engine segment, which gave MTU a right to participate in Pratt & Whitney's commercial engine programs.

In 1992, MTU Maintenance Berlin-Brandenburg set up the Pratt & Whitney Canada Customer Service Centre, a joint venture with Pratt & Whitney Canada, in Ludwigsfelde.

In the mid-1990s, the world economy moved into turbulences caused by the first war in Iraq, an oil crisis, and a weak dollar. Commercial aviation saw a drastic collapse. MTU, too, was hard hit by the crisis. The company was quick to react to the challenge and emerged from the downturn in 1996.

In November 1998, MTU acquired MTU Maintenance Canada. Also added to its global locations were MTU Maintenance do Brasil and MTU Aero Engine Design and Vericor in 1999, MTU Maintenance Zhuhai in 2000, and MTU Aero Engine Components in 2001.

In the year 2000, Dasa was incorporated into the European Aeronautic Defense and Space Company, or EADS. MTU München became a wholly-owned subsidiary of DaimlerChrysler and was renamed MTU Aero Engines. In 2002 a development and design center was opened in Ludwigsfelde. Development work is now done at three locations: Munich, Rocky Hill, Conn., and Ludwigsfelde. In 2003, the company pooled its activities in the US market, merging MTU Aero Engine Design and MTU Aero Engine Components under the roof of MTU Aero Engines North America (AENA). Early that year, MTU was awarded the 23rd Innovation Award of the German Industry for the high-pressure compressor it developed for the PW6000.

In 2004, DaimlerChrysler sold MTU Aero Engines to Kohlberg Kravis Roberts (KKR), a global private equity company, following negotiations that had lasted for almost a full year.

MTU Aero Engines' successful initial public offering followed in June 2005. The listing on the stock exchange increased the equity capital of MTU to more than €500 million. That put MTU on a sound financial basis for the future. In early February 2006, KKR sold all of its 29% share it had retained in MTU after the IPO. With this move, MTU had reached an important strategic goal: being a stand-alone company.



The EJ200, engine for the Eurofighter, is considered the most advanced engine in its class.

# Locations: A Strong Local Presence Around the Globe

MTU Aero Engines is Germany's leading engine manufacturer. It designs, develops, manufactures, markets and supports commercial and military aircraft engines and industrial gas turbines. It has content on engines in all power and thrust categories and across all major engine components and subsystems. The company cooperates with the world's major engine makers. A technology leader in essential engine areas, MTU has affiliates in all major markets and regions worldwide.

### MTU Aero Engines Holding AG

MTU Aero Engines Holding AG manages the companies of the MTU Group.

#### MTU Aero Engines GmbH, Munich

MTU Aero Engines is headquartered in Munich. The head office controls the global network of subsidiaries, the company's maintenance activities and the research and development activities.

At the Munich location, commercial and military engine components and subsystems are developed, manufactured, assembled, tested, and marketed. In addition, the company develops new production and repair processes and maintains military engines.

MTU commercial maintenance activities are combined under the roof of MTU Maintenance. The company operates shops in Germany, China, Canada, and Brazil, which makes it the world's largest independent provider of commercial engine maintenance services. All of MTU's maintenance locations have engine services, accessory services and high-tech repair services in their portfolios.

#### **MTU Maintenance Hannover GmbH**

MTU Maintenance

nada Ltd

MTU Maintenance Hannover repairs and overhauls mid-size and large commercial engines, including GE CF6-50s and CF6-80C2s, Pratt & Whitney PW2000s, IAE V2500s and CFMI (General Electric/ Snecma) CFM56s. For the V2500, MTU Maintenance Hannover is the worldwide market leader.

Rounding off the portfolio, the company also offers customer training, maintenance training, financing support, and 24-hour service. The Engine Pool Services provide spare engines to airlines and operators of gas turbines as needed.

In August 2005, MTU Maintenance Hannover has obtained PW6000 production organization appproval. The PW6000 is assembled exclusively on MTU Maintenance Hannover's final assembly line. With this capability added, all three German locations now have a final assembly line for new engines. Final assembly of military jet engines is performed in Munich; in 2007, MTU Maintenance Berlin-Brandenburg in Ludwigsfelde will begin assembling the TP400-D6.

# MTU Maintenance Berlin-Brandenburg GmbH

MTU Maintenance Berlin-Brandenburg in Ludwigsfelde maintains small engines and industrial gas turbines. It supports PT6A, JT15D, PW200, and PW300 series engines and GE's CF34 engine family. In the area of industrial gas turbines, MTU Maintenance Berlin-Brandenburg specializes in GE (LM series) turbines.

MTU Aero Engines North America Inc.

MTU Maintenance do

Brasil Ltda.

Vericor Power Systems LLC.

The Ludwigsfelde site is responsible for the assembly of low-pressure turbines for nearly all engine programs in which MTU has a share. Currently, a final assembly line is being set up for the TP400-D6. In the future, this MTU subsidiary will assemble all the engines of this type manufactured in Europe. On the TP400-D6 test stand, which was

MTU Maintenance Hannover GmbH MTU Maintenance Berlin-Brandenburg GmbH

27

On the TP400-D6 test stand, which was completed in August and is the Western world's largest production test stand for turboprop engines, the TP400-D6 successfully completed its first run in October 2005.

#### MTU Maintenance Canada Ltd.

The focus of MTU Maintenance Canada in Vancouver is on the maintenance of CF6-50 and CFM56 engines.

### MTU Maintenance do Brasil Ltda.

MTU Maintenance do Brasil concentrates on the marketing and sale of maintenance services in support of engines and industrial gas turbines in the South American region.

#### MTU Maintenance Zhuhai Co. Ltd.

MTU Maintenance Zhuhai, a joint venture with China Southern, secures MTU a foothold in the growth market China. The company opened shop in early November 2002 and was honored with the Asia-Pacific Independent MRO Operation of the Year Award 2004. The Chinese shop repairs and overhauls V2500 and CFM56 engines.

Apart from its MRO companies, MTU Aero Engines has further affiliates and joint ventures that operate both inside and outside aerospace.

### MTU Aero Engines North America Inc.

MTU Maintenance Zhuhai Co. Ltd.

> MTU Aero Engines North America (AENA) designs components for engines in which MTU and Pratt & Whitney are partnering, such as the PW6000 and GP7000. The East Hartford-based company manufactures rotating components, such as disks, rings and shafts. Through AENA, MTU to some extent participates in US military engine programs in which it holds no formal stakes, such as the Joint Strike Fighter and Raptor. AENA has two different locations near East Hartford, Conn.

### Vericor Power Systems LLC.

Vericor Power Systems is headquartered in Atlanta, Ga., and markets, distributes and supports TF and ASE series marine and industrial gas turbines.

# Part III – Group Management Report





# 25,000 Flight Hours

An engine usually requires its first overhaul after five to seven years in service, or after 20,000 to 25,000 flight hours. The overhaul may become necessary for safety concerns identified, such as a defect, but often also for economic considerations: An increase in fuel consumption may be attributable to worn blades. An overhaul will bring the amount of fuel burnt to the original level.



Das V2500 gehört zu den meistverkauften Triebwerken seiner Klasse.

The engine in need of repair or overhaul is removed from the wing and hauled to one of MTU's maintenance facilities for a shop visit. To assure uninterrupted revenue service, airlines can be provided with MTU lease or spare engines. Upon arrival at the shop, the engine is stripped into its more than 50,000 detail parts. Each part is cleaned to remove contamination and corrosion, and is then inspected for damage. Depending on the result of inspection, parts may be reinstalled, repaired or replaced. The cost of repairs is often substantially lower than the price of a new part. Some parts can be repaired up to three or four times. At the end of the shop visit, the engine is tested on the test stand. If the engine passes the acceptance run, it is returned for reinstallation. After each overhaul, the technicians reset the engine's hour meter to zero, since the overhauled engine parts are now as good as new, their remaining life being up to 100% the life of a brand-new part.

# Group Management Report of MTU Aero Engines Holding AG

# Substantial growth in revenues and earnings – an overview of financial year 2005

MTU Aero Engines Holding AG and its affiliates (hereinafter referred to as "MTU" or "Company") have substantially increased their revenues and earnings in financial year 2005. Revenues increased by 12.0%, from €1,918.0 million in 2004 to €2,148.6 million in 2005. Commercial engine maintenance saw a particularly dynamic growth; revenues in this business unit increased by 27.1%, from €575.9 million to €732.1 million. Contributing to this strong increase were numerous new customers, such as China's Shanghai Airlines, or the US' JetBlue and America West. JetBlue, for instance, has signed an exclusive 10-year contract for the maintenance of the V2500 engines that power its fleet of Airbus A320-family aircraft.

In the commercial engine business, too, MTU benefited from its well-balanced product portfolio in the year under review. The number of orders received increased in both existing programs, such as the V2500 (Airbus A320 family) and the PW2000 (Boeing 757 and C-17), and in new programs ramping up for production, such as the PW6000 for the Airbus A318 and the GP7000. The GP7000 for the Airbus A380 already boasts a market share of more than 50% even before production is launched.

The military engine business was marked by three key events in 2005: First, MTU strengthened this business unit over the long term with the expansion of the Cooperative Model of joint industry-military engine maintenance with the German Air Force. Second, the EJ200 order from Austria demonstrates the Eurofighter's export prospects. And third, an order for an upgrade of the T64 helicopter engines improves capacity utilization in this business segment.

The positive business development in all business segments led to significant improvements in the earnings and cashflow situation for the financial year. MTU in 2005 increased adjusted EBITDA by 35.3% to €233.0 million, from €172.2 million in the previous year. EBIT grew by 60.3% to €130.0 million in 2005, from €81.1 million the previous year. During the same period, cashflow from operational activities quadrupled from €72.9 million to €290.1 million. The positive business development also allows the company to pay a dividend.

The Board of Management and the Supervisory Board will propose to the General Shareholders' Meeting, held on May 12, 2006, a dividend payment of  $\in 0.73$  per share, which is equivalent to a distribution volume of  $\in 40.15$  million. The dividend rights cover the full financial year 2005.

The MTU share was admitted to trading for the first time on June 6, 2005. The successful 35,650,000 share issue was a key event for the financial year. 20,650,000 of these shares were originally owned by the existing majority shareholder, and 15,000,000 shares resulted from the increase in equity. The net proceeds of the emission amounted to €294.7 million.

In 2005, MTU essentially utilized these assets and additional inflows of liquidity from its operational activities for the repayment of existing liabilities. The net financial liabilities of the company decreased from  $\in$ 838.0 million to  $\in$ 237.2 million within one year. The equity ratio of 20.7% underscores MTU's solid post-IPO financial position.

### The Airline Industry on a Steep Upturn Trend

During financial year 2005, MTU benefited from accelerated growth in worldwide air traffic, which recovered from the fallout of the events of September 11, 2001, the war in Iraq, and the SARS outbreak. According to IATA (International Air Transport Association), global passenger traffic (measured in passenger kilometers) in 2005 increased 7.6% over the the previous year, and cargo traffic (measured in freight ton kilometers) by 3.2%. This growth was particularly strong in Asia and North America.

On the US market, the insolvency of major airlines such as Delta Airlines and Northwest Airlines was cause for concern. It is apparent, however, that major parts of the fleets continue operating even under Chapter 11 bankruptcy protection, and keep the US market growing despite such proceedings. Even the sharply rising fuel prices, with the price for kerosene soaring 42% in 2005, has not weakened the upturn in the airline industry in the long run. The airlines managed to recoup some of these additional costs from their passengers by imposing fuel surcharges on ticket sales.

The growth in commercial air traffic necessitates an expansion of global flight capacities. During the financial year, the number of Airbus and Boeing new deliveries increased by 10.4%, from 605 to 668 aircraft. During that same period, the number of engine deliveries (not including spare engines) to airlines increased by 8.8%. The commercial MRO business, too, saw a marked increase in 2005. The management consulting firm AeroStrategy is forecasting sustained growth at an average annual rate of about 7% from 2004 to 2014.



The V2500 is on its way to becoming a bestseller

The military business, characterized by longterm, multinational alliances, saw stable development in 2005. Despite tight budgets, the new Eurofighter with its EJ200 engines has entered service with European air forces almost on schedule. Many national armed forces, including Germany's, are replacing their Panavia Tornados powered by RB199 engines with Eurofighters, which will result in a decline in the military spare parts and maintenance business. However, business is expected to pick up again over the next several years with the procurement of the Airbus A400M military transport powered by TP400-D6 engines.

### MTU's strategic orientation

MTU and its affiliates are among the world's largest manufacturers of engine modules and components. In the commercial arena, the company is the world's largest independent provider of maintenance services for aircraft engines. Its activities span the entire life cycle of an engine program – from the development, design, testing and production of new commercial and military engines and spare parts to maintenance services for commercial and military engines.



The GP7000 to power the A380 is one of MTU's key programs in the years ahead.

MTU's activities break down into two businesses: the commercial and military engine business, and the commercial maintenance, repair and overhaul (MRO) business. In its commercial engine business, the company designs, develops and manufactures modules and components as well as spare parts for non-defense engine programs, and performs final assembly. In the military business, MTU focuses on the development and manufacture of engine modules and components, the production of spare parts, final assembly and repair and overhaul services. The commercial MRO business covers all of the company's activities in the field of maintenance, repair and overhaul and logistic support services for commercial engines.

Through technological leadership and product quality, MTU has established a strong market position. Its primary customers are leading engine manufacturers such as Pratt & Whitney and General Electric with whom the company is working closely together, the programs involving a variety of engine families. MTU also is a shareholder in IAE, the consortium for the manufacture of the V2500 engine family. In addition, the company also collaborates on a number of projects with other manufacturers of engine modules and components, such as Volvo Aero, ITP, and Avio. MTU has major roles in key European military engine programs and, through its alliances, is the German industrial lead partner for the engines flown by the German Armed Forces. It is by far the largest external service provider to the German Armed Forces in the field of repair and overhaul of military engines.

# MTU's organization and accounting standards

When preparing for the IPO, MTU in 2005 put a simple and transparent corporate structure in place by merging the two general partner and limited liability companies from the previous structure into their respective parent companies. At the same time, MTU Aero Engines Zweite Holding GmbH and MTU Aero Engines Dritte Holding GmbH were merged into MTU Aero Engines Erste Holding GmbH, since both companies had been relieved of their original financing function. MTU Aero Engines Erste Holding GmbH was then transformed into a stock corporation under the name of MTU Aero Engines Holding AG. This company now manages the operational activities of MTU Aero Engines GmbH and its subsidiaries via MTU Aero Engines Investment GmbH. MTU Aero Engines Investment GmbH is also the issuer of the high yield bond. The consolidated financial statements of MTU Aero Engines Holding AG are prepared according to the International Financial Reporting Standards (IFRS), account being taken of the interpretations of the International Financial Reporting Interpretations Committee (IFRIC). The companies reported in the consolidated financial statements are listed in the Notes to the Consolidated Financial Statements under Item 1.2.

In compiling the annual accounts and consolidated financial statements it was necessary to make certain assumptions and estimates that affect the reported amount of assets and liabilities. These forecasts are made to the best of our knowledge and in good faith to ensure that the consolidated financial statements provide a realistic and accurate picture of the company's assets, finances, and earnings. The following aspects in particular are affected by these estimates and assumptions:

- Value of goodwill and other intangible assets
- Valuation of accounts receivable
- Analytical parameters for provisions for pensions
- Risk assessment for the remaining provisions
- Revenues from long-term contracts and the commercial MRO business

The Notes to the Consolidated Financial Statements contain additional information.

# **Order Situation**

### Significant increase in orders

In financial year 2005, MTU increased its order backlog from  $\in$  3,408 million to  $\in$  3,649 million as of December 31, 2005, which is equivalent to 1.7 times the 2005 revenues earned by MTU.

In the commercial engine business, the order backlog increased by 21.4% to  $\in$  1,844 million compared to  $\in$  1,519 million the year before. This growth resulted primarily from the success of campaigns for the V2500 engine powering the Airbus A320 family and the new GP7000 engine to power the Airbus A380. The first order received from launch customer LAN Airlines of Chile for the PW6000 also had a positive effect.

In the military engine business, the order backlog decreased to  $\leq$  1,590 million in late 2005, from  $\leq$  1,717 million the year before. MTU managed to reduce the high 2005 order backlog especially through deliveries under the EJ200 program in support of the Eurofighter. This was counteracted by the receipt of an order from Austria for 18 Eurofighters with 38 engines worth  $\leq$ 94 million; deliveries under this contract will begin in 2007.

	12/31/2005		12/31/2004	
	in $\in$ million	%	in $\in$ million	%
Commercial and military business	3,434	94.1	3,236	95.0
- of which: Commercial business	1,844	50.5	1,519	44.6
- of which: Military business	1,590	43.6	1,717	50.4
Commercial MRO				
Engines received	215	5.9	172	5.0
Order backlog	3,649	100.0	3,408	100.0
Commercial MRO				
Order value of contracted engines	2,896		1,953	
Expected order volume	6,545		5,361	

### Order backlog equals 1.7 times 2005 annual revenues



With the high-pressure compressor it developed for the PW6000 to power the A318 engine, MTU for the first time launched a compressor on a commercial core engine.

The expansion of the Cooperative Model of industry-military engine maintenance with the German Air Forces in 2005 will strengthen MTU's military engine business long-term. In the future, not only the EJ200 for the Eurofighter, but also the RB199 for the Tornado, the J79 for the Phantom and the RR250-C20 for the Bo-105 helicopter will all be repaired under MTU's industrial leadership. The 10-year agreement is worth totally €370 million.

The order backlog in commercial engine maintenance increased by 25.0%, to  $\in$ 215 million. Also, in the financial year, the order value of MRO services under existing longterm contracts increased by  $\notin$ 943 million, to  $\notin$ 2,896 million. This increase is to a major part attributable to a ten-year agreement inked with the US' JetBlue. The expected order volume, at  $\notin$ 6,545 million, was 22.1% above the previous year's level. This order volume is equivalent to three times MTU's 2005 annual revenues.

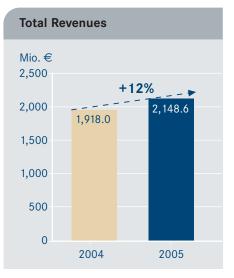
# **Operating Results**

### Increased revenues in new business and in MRO

In the financial year, MTU increased its revenues by 12.0% to  $\leq$ 2,148.6 million, from  $\leq$ 1,918.0 million the prior year. The commercial MRO performed particularly well, with revenues increased by 27.1% to  $\leq$ 732.1 million in 2005, compared to  $\leq$ 575.9 million the year before. This growth, which outpaced the overall market growth, stems primarily from the acquisition of new customers.

In the period under review, revenues earned in the commercial engine business increased by 7.2% to  $\in$ 943.4 million, from  $\in$ 879.9 million the year before. MTU's revenues from the manufacture of new engine modules and components rose by 26.3%. This success was primarily driven by growing sales of the V2500 (Airbus A320 family) and CF6 (Airbus A300, A310, A330, Boeing 747 and 767, MD 11) engines, which have been in production for some time.

Revenues in the military engine business, at €491.4 million, remained virtually unchanged compared with the previous year (€495.7 million). In this business, the EJ200 engine program is a steady source of revenues as the Eurofighter is being introduced into service. On the other hand, the European air forces have begun to phase out their fleet of Tornados and RB199 engines. The helicopter engine MTR390 for the attack-escort helicopter Tiger had a positive effect on revenues.



### Overview of income

# MTU Group with significantly improved income in 2005

	Financial ye	Financial year 2005		Financial year 2004	
	in € million	%	in $\in$ million	%	
Revenues	2,148.6	100	1,918.0	100	
Cost of sales	-1,864.8	-87	-1,627.6	-85	
Gross profit	283.8	13	290.4	15	
R&D costs	-45.7	-2	-57.7	-3	
Selling costs and gen. administrative costs	-112.8	-5	-155.7	-8	
Other operating income and expenses	4.7	0	4.1	0	
Result before financial result (EBIT)	130.0	6	81.1	4	
Financial result <sup>*)</sup>	-71.3	-3	-74.6	-4	
Result from ordinary activities	58.7	3	6.5	0	
Income taxes	-25.8	-1	-6.3	0	
Net Income	32.9	2	0.2	0	
Result per ordinary share in €	0.60		0.00		

\*) Incl. share of income/loss in joint ventures accounted for using the equity method.

# Reconciliation from EBIT to EBITDA adjusted

in € million	Financial year 2005	Financial year 2004	Change in %
EBIT (operative result)	130.0	81.1	60.3
+ Depreciation/amortization fixed assets (current)	75.0	70.5	6.4
+ Depreciation/amortization hidden reserves fixed assets $^{*)}$	63.3	62.5	1.3
EBITDA	268.3	214.1	25.3
- Consumption of R&D provision	-38.1	-98.2	-61.2
+ Restructuring costs	2.8	6.7	-58.2
+ Profits in order backlog	0.0	27.0	-100.0
+ Direct transaction costs	0.0	22.6	-100.0
EBITDA adjusted	233.0	172.2	35.3

\*) Depreciation/amortization on hidden reserves disclosed within the scope of the purchase price allocation.

# Growth demands higher up-front expenditures

During the financial year 2005, the increasing proportion of revenues from new engines production and the accelerated growth in maintenance have led to an increase in costs of sales to €1,864.8 million, from €1,627.6 million in the prior year. Costs of sales above all include material costs, personnel expenses, scheduled depreciation and amortization, additions and disposals of inventories as well as expenditures that were charged to MTU by consortium lead partners for marketing new engines.

The company's successful development work over the past several years has steadily increased the proportion of revenues earned through engine manufacture. Compared to spare parts production, the manufacture of new components requires more up-front expenditures, which is reflected in the cost of sales. The rapidly growing maintenance business, too, requires additional materials and outside services, which again increase the cost of sales. Therefore gross profit, at €283.8 million, was €6.6 million less than in the prior year. A decline in selling, administrative and R&D costs nonetheless led to a 60.3% improvement of EBIT, which stood at €130.0 million.

#### Rapid pace of development pays off

MTU has invested heavily in fundamental development work over the past years, the aim being to rejuvenate its product line. Now that the GP7000 (Airbus A380) and PW6000 (Airbus A318) have attained production maturity, growth prospects for the next several years are excellent. The total research and development (R&D) expenditure for fiscal year 2005 was €171.9 million, equally divided between self-financed and outsidefunded activities. The decline in R&D expenditures from the previous year (€232.8 million total expenditures) resulted primarily from the near-completion of the GP7000 and the PW6000 development programs. In the military engine business, development costs are typically borne by the contracting agency. In financial year 2005, these costs amounted to €88.1 million (2004: €76.9 million), spent mostly on work on the TP400-D6 for the Airbus A400M and on the MTR390 Enhanced for the Tiger combat helicopter.

In the commercial engine business, MTU finances its development work for the most part from its own funds; self-funded expenditures in financial year 2005 amounted to  $\in$ 83.8 million, compared with  $\in$ 155.9 million in 2004. Most of the money was spent on final work on the GP7000 and PW6000 engines. According to IFRS, the company is required to capitalize and depreciate these expenditures over the period in which the company expects to generate revenues from these engine programs. Depreciation begins with the delivery of the first engine. Within the scope of purchase accounting, MTU has furthermore formed a provision (the "R&D provision") in the amount of the present value of its development costs of €144.5 million for the GP7000 and PW6000 engine programs, effective January 1, 2004. The funds used to fulfil these liabilities are shown as a comsumption of R&D provisions. The 2005 comsumption equated to €38.1 million, compared to €98.2 million in the prior year. As of December 31, 2005, the R&D provision still amounted to €15.8 million, taking accrued interest into account, and will be used in 2006.

In its income statements for 2005, MTU listed expenditures for research and development in the amount of  $\leq$ 45.7 million, compared to  $\leq$ 57.7 million in 2004. This item includes MTU's expenditures for fundamental development activities. The company participates in major research programs at both the national German and EU level, while at the same time driving its own initiatives to develop new manufacturing and maintenance processes and new materials.

#### Strongly improved results of operations

For the year ended December 31, 2005, MTU has reduced its overheads in sales and administration by 27.6% to  $\in$  112.8 million. While **selling costs** declined slightly by 0.9% to  $\in$  67.4 million in 2005, general **administrative costs** came down to  $\in$  45.4 million, which is 48.2% less than the year before. However, in 2004 this item included direct transaction costs amounting to  $\in$  22.6 million as well as other indirect expenditures from the acquisition of the company. Not affecting income in 2005 were the direct expenditures to the amount of  $\in$  20.3 million for going public. They were recognized in equity.

Increasing revenues and decreasing expenditures for research, development, sales, and administration have led to a significant increase in the operative result for the year ended December 31, 2005. The EBIT increased by 60.3% from  $\in$  81.1 million in 2004 to  $\in$  130.0 million.

### **Research and Development Expenditures**

in € million	Financial year 2005	Financial year 2004
R&D, total	171.9	232.8
- R&D financed from outside	88.1	76.9
- R&D financed by MTU	83.8	155.9
R&D financed by MTU	83.8	155.9
Consumption of R&D provision	-38.1	-98.2
R&D according to income statements	45.7	57.7

The significantly increased operative result and the improved financial result have led to an increase in the **result from ordinary activities** by  $\in$ 52.2 million to  $\in$ 58.7 million in 2005. After taxes, MTU has earned a **net income** of  $\in$ 32.9 million against  $\in$ 0.2 million in 2004. The reconciliation from the consolidated net income IFRS to the net income of MTU Engines Holding AG as per the German commercial code (Handelsgesetzbuch – HGB) which forms the basis for the dividend payment of  $\in$ 0.73 per share is presented in the Notes to the Consolidated Financial Statements.

Depreciation and amortization included in the items cost of sales, research and development costs, selling costs, and general administrative costs have slightly increased in the period under review. They amounted to €138.3 million after €133.0 million the year before. The financial result was improved as well in 2005. It amounted to €-71.3 million after €-74.6 million in 2004. This decrease is mainly due to the repayment of financial debt and consequently lower interest. The funds for this repayment came from the issuing proceeds as well as from operational activities. A counter effect was the higher exchange rate of the US Dollar because of the revaluation associated with it and the premium for the upfront repayment of the high yield bond. The repayments are documented in the following overview:

The key performance indicator that MTU uses for its operational activities is the adjusted EBITDA. For its calculation, the EBIT of the consolidated income statements is increased by depreciation and amortization. This produces the Earnings before Interest, Taxes, Depreciation and Amortization (EBITDA). From that, the Group eliminates special effects and, in doing so, obtains the "EBITDA adjusted". These special effects include the consumption of the R&D provision for the GP7000 and PW6000 engines as well as profits in the order backlog. Additonally, measures outside the direct business of MTU, in particular direct transaction costs from the sale of MTU and restructuring costs, are eliminated.

### EBITDA adjusted



#### Significant Reduction of Debts in 2005

Repayment of loans	in € million
Liabilities to banks	157.2
High yield bond	112.3
Shareholder loan from Blade Lux Holding Two S.a.r.l.	69.7
Vendor loan by DaimlerChrysler	185.5
Repayments, total	524.7

#### Improved result in both segments

Both the commercial and military engine business (OEM-business) and commercial maintenance (MRO-business) have contributed to the substantial improvement of the result for the year ended December 31, 2005. In the commercial and military engine business, MTU earned an adjusted EBITDA of € 162.4 million in 2005, which is an improvement by 23.7% over the amount of € 131.3 million of the previous year. The increase in this segment stems from both the growing new engine business and the high level of the spare parts business. The margin, the gross profit, in the commercial and military engine business is 14.1%.

In its MRO-business, MTU was able to achieve an above-average increase of its adjusted EBITDA. As the revenues in this segment increased by 27.1% to  $\in$ 732.1 million, the adjusted EBITDA improved by 68.9% from  $\in$ 42.7 million the year before to  $\in$ 72.1 million in 2005. Consequently, the margin in the MRO-business has almost doubled to 10.9%.

Improved Result in Both Segments				
	OEM-business		MRO-business	
in € million	2005	2004	2005	2004
Revenues	1,434.8	1,375.6	732.1	575.9
Cost of sales	-1,232.2	-1,117.6	-652.3	-543.5
Gross profit	202.6	258.0	79.8	32.4
in %	14.1	18.8	10.9	5.6
EBIT	94.4	84.9	37.1	-2.0
EBITDA adjusted	162.4	131.3	72.1	42.7
EBITDA adjusted in % of revenue	11.3	9.5	9.8	7.4

# Improved Result in Both Segments

# **Financial Situation**

# Significant increase in operative cashflow

MTU has significantly improved its financial situation in 2005. The cashflow from operating activities has approximately quadrupled from €72.9 million in 2004 to €290.1 million. Decisive factors in this case were improvements in the working capital and the increased profit in the operational business. Furthermore, unusually high advance payments were received from customers in the military engine business. The cash used in investing activities increased by 36.8% to

Change in Cash and Cash Equivalents			
2005	2004		
290.1	72.9		
-81.8	-59.8 <sup>1)</sup>		
208.3	13.1		
-227.2	-190.7 <sup>2)</sup>		
6.3	0.4		
-12.6	-177.2		
	290.1 -81.8 208.3 -227.2 6.3		

1) Excludes cash outflow reflecting payment of consideration for the acquisition

2) Excludes cash inflow relating to the acquisition

€81.8 million for the year ended December 31, 2005, due to higher additions to fixed assets and intangible assets.

The positive development of the operational business of MTU in 2005 is underscored by the free cashflow, the balance from the cashflow from operating activities and the cash used in investing activities. Free cashflow improved in 2005 to €208.3 million after €13.1 million the year before.

Its issue of 15 million shares in June 2005 has earned the company equity funds in the amount of  $\in$ 294.7 million after deduction of expenditures for going public. MTU has applied these funds and a large portion of the positive cashflow from its operative activities for the repayment of loans. The funds used in the cashflow from financing activities amounted to  $\in$ 227.2 million as compared to  $\in$ 190.7 million the year before.

# Significant reduction of financial debt

In 2005, MTU reduced its net financial debt by 72% using funds from going public and from the positive development of its operative business. The following table shows the net debt of the company as of December 31, 2005, compared to the previous year:

### **Reduction of Net Financial Debt in 2005**

in € million	12/31/2005	12/31/2004
High yield bond (incl. accrued interest)	168.4	280.7
Vendor Ioan DaimlerChrysler (incl. accrued interest)	0.0	185.5
Liabilities to banks	17.0	174.2
Liabilities to related companies	0.3	162.4
Finance leasing agreements	53.2	51.9
Loan from Province of British Columbia to MTU Maintenance Canada	14.2	11.8
Financial debt total	253.1	866.5
Net cash	15.9	28.5
Net financial debt	237.2	838.0

In September 2005, MTU prepaid €80 million of the high yield bond set up in March 2004, followed by another €30 million in November 2005. Taking into account the accrued interest, these upfront repayments reduced the outstanding amount of the bond with an interest of 8.25% to €168.4 million. In 2005 the company furthermore repaid the loan from DaimlerChrysler in the amount of  $\in$  185.5 million that had been granted at the time DaimlerChrysler sold MTU. The company also repaid the loans from related companies Blade Lux Holding Two S.a.r.l and Forex UK Ltd. in the amount of €162.1 million. On top of that, MTU reduced its liabilities to banks. These amounted to €17.0 million at the end of 2005 as compared to  $\in$  174.2 million the year before.

In contrast, liabilities from finance leasing increased by  $\leq 1.3$  million to  $\leq 53.2$  million in 2005. MTU uses this favorable form of financing for the utilization of land and buildings at MTU Maintenance Hannover GmbH by means of a long-term lease agreement. Additionally, MTU uses finance leasing for the long-term lease of engines for the "e-pool services" – the company leases out engines to customers for the duration of maintenance and repair work.

## **Net Assets**

# Going public sustainably strengthens equity

The positive development of its operative business is also reflected in the balance sheet of MTU. At the same time, going public leads to a sustained boost in the equity base and to an increased equity ratio from 8.0% to 20.7%.

On the assets side of the balance sheet, the **intangible assets** with limited useful lives (without goodwill) have decreased by  $\leq 25$  million to  $\leq 561$  million due to amortization. This balance sheet item basically comprises program values, program-independent technology and customer relations that were capitalized as a result of purchase accounting.

Also mainly by depreciation the book value of **property, plant, and equipment** decreased by  $\in$ 31 million to  $\in$ 546 million. In 2005,  $\in$ 42 million of depreciation is attributable to depreciation on capitalized hidden reserves as a result of purchase accounting. In contrast, MTU increased its investments for the year ended December 31, 2005, by 42% to  $\in$ 78 million from  $\in$ 55 million in the year 2004. The focus of the investing activities was on equipment for the engine programs GP7000 and PW6000 at the Munich site as well as for the CFM56 at the Hanover site. In addition, MTU completed its test stand for the TP400-D6 at Ludwigsfelde in 2005.

**Financial assets** increased by €1 million to €48 million in 2005. This increase mostly comes from the MTU Maintenance Zhuhai joint venture, accounted for at equity. The decrease of the **long-term receivables and other assets** by €39 million to €1 million is mostly due to the realization of positive fair values from foreign currency forward exchange transactions. In 2005, the positive development led to an increase in inventories by €70 million to €518 million. Especially the upcoming series production of the GP7000 and PW6000 engines induce a corresponding build-up of inventories in the commercial engine business. In the military engine business, the increase in inventories essentially stems from the series production of the first tranche of the EJ200. Inventories are also being stocked up in commercial MRO due to the steep rise in business volume. In both the military engine business and commercial MRO, a substantial part of the inventories is financed through advance payments received.

The positive business development with increasing revenues has led to **increased trade accounts** receivable for the year ended December 31, 2005 – the accounts receivable went up by  $\in$ 24 million to  $\in$ 418 million in 2005. This increase was furthermore caused by the exchange rate of the US Dollar, which went up during the course of the year. The realization of positive market values from forward exchange contracts of the US Dollar and the receipt of tax refund claims led to a decrease of the **short-term receivables and other assets** by  $\in$ 145 million to  $\in$ 59 million in 2005.

Cash and cash equivalents amounted to €16 million as of December 31, 2005. The decrease against the cash and cash equivalents of the previous year of €28 million primarily comes from the repayment of debt. On the liabilities side of the balance sheet, equity increased to €528 million for the year ended December 31, 2005, against €217 million the year before. In the process of transforming MTU into a Aktiengesellschaft, the subscribed capital was increased by €38 million to €40 million by transfer from additional paid-in capital. Going public included an additional increase in subscribed capital of €15 million, so that the subscribed capital amounted to €55 million as of December 31, 2005.

Out of the net issue proceeds of going public, €288 million were allocated to the **capital reserves** after taking into account the costs of the Offering and the income taxes thereon. In contrast, especially the realization of positive market values from forward exchange contracts of the US Dollar and the impairment of the current FX contracts led to a reduction



The interturbine duct of the GP7000 is a technologically highly sophisticated component

in equity by €25 million within the scope of the accumulated other equity. In 2005, the provisions for pensions increased by €19 million to €378 million due to planned allocations. The other provisions increased by €26 million to €239 million as of December 31, 2005. This increase is mainly due to the expected final tax payments for the year 2005. In addition, MTU increased the provision for price reductions, for outstanding cost on invoiced orders, and for obligations to the workforce from variable income accruals. Consumption of the provision for contractual development obligations under the GP7000 program, however, led to a decrease in the provisions created for that purpose. As with

the accounts receivables, the positive development of the operative business led to an increase in the **trade payables** for the year ended December 31, 2005; liabilities increased by  $\leq 62$  million to  $\leq 289$  million. In the commercial engine business, this increase was especially caused by program specific payables to cooperation partners. In commercial MRO, it was the strong increase in revenue that led to higher trade payables.

The increase in the **other liabilities** by  $\in$  147 million to  $\in$  616 million in 2005 primarily comes as a result of higher advance payments in the military engine business and in commercial MRO. In addition, the payables to the workforce from vacation and flex-time credits have increased. Furthermore, the higher exchange rate of the US Dollar made for negative market values from forward exchange contracts.

The contingent liabilities for the year ended December 31, 2005, amounted to €151 million after €138 million in 2004. This increase is mainly due to the higher exchange rate of the US Dollar and significantly affects MTU's liability for undertakings relating to riskand-revenue-sharing contracts based on US Dollars, above all for marketing concessions for engines. These include guarantees for bank borrowings and leasing payments as well as guarantees for residual values of leased airplanes. In each case, MTU is internally liable to the amount of its program share. There are also guarantees for bank borrowings to non-consolidated joint ventures. Here, the major portion goes to MTU Maintenance Zhuhai. Furthermore, there is a contingent liability which applies to MTU Aero Engines GmbH for its subsidiary MTU Maintenance Berlin-Brandenburg for the benefit of the investment bank of the state of Brandenburg (ILB). This liability only takes effect if MTU Maintenance Berlin-Brandenburg does not make proper use of sponsored assets and if the company were unable to settle possible refund claims by ILB.

### **Employees**

# A highly-skilled and well-qualified workforce

As of December 31, 2005, MTU had a workforce of 6,746, which is 671 fewer employees than the previous year. The lower level compared to the year before is attributable primarily to the sale of Atena Engineering GmbH, effective June 30, 2005, whose staff of 463 has still been on MTU's payroll on December 31, 2004. MTU also continued its efficiency improvement programs throughout 2005. Personnel expenditures decreased to €503.9 million in 2005 compared to €510.0 million in the prior year. This relatively moderate decrease is a result of higher performance-based compensation in 2005, an increase in vacation and flextime credits, higher overtime pay and severance packages for employees who voluntarily opted out of their employment contracts during financial year 2005.

96% of the 6,746 employees at MTU have completed qualified vocational training. Roughly 27% are technical college or university graduates. MTU invested €2.9 million in continuing education and advanced training programs for its experienced team of highly-qualified employees in Germany alone. On average, every employee at the German locations spent 3.7 days on internal and external training. The success of occupational safety training programs is underscored by the very small number of work-related accidents at all of the company's German sites compared to the industry average. Here, the MTU Maintenance Hannover facility stands out with an annual rate of only two accidents per 1,000 employees. The high level of occupational safety is also reflected in the high health rate at all locations, which topped 95% again for the year ending December 31, 2005.

Team and leadership potential development is one of the topics high on MTU's agenda. MTU has long championed a teamwork approach and been supporting the required processes in all departments. Detailed analyses have shown that a team approach leads to increased quality and efficiency, cost savings and stronger identification of the employees with the company. By the same token, MTU encourages teamwork across geographical boundaries. For example, MTU Maintenance Hannover employees provide training to their counterparts at MTU Maintenance Zhuhai in China to impart the knowhow needed to maintain state-of-the-art aircraft engines.

MTU revamped its leadership development program in 2005. The company now takes a holistic approach to human resources development across all hierarchy levels. To date, nearly 100 employees have enrolled in the "Building on Talent" program, the "First Leadership Program", and the "Professional Leadership Program" to enhance their career opportunities. MTU's commitment to training and education is a mainstay of its ability to recruit and retain young professionals. As of December 31, 2005, the company trained a total of 295 apprentices to become industrial and engine technicians, mechatronic technicians, electroplating experts, or sales engineers. In partnership with the vocational academies in Berlin and Stuttgart, MTU furthermore offers training in business administration and industrial and mechanical engineering. Beginning in 2005, young professionals have the opportunity to earn advanced technical college entrance qualification alongside their trade certification in three-year dual training programs.

In order to attract and retain employees, MTU supplements its advanced training programs with a flexible salary system, comprehensive fringe benefits and a well-rounded healthcare plan. The company places significant emphasis on work/life issues to enable employees to balance career and family. For its committed efforts, MTU was awarded a certificate in September 2005 by Renate Schmidt, German Federal Minister for Family, Senior Citizens, Women and Youth, and Wolfgang Clement, German Federal Minister for Economic Affairs and Labor, in recognition of its family-friendly personnel policies.

# Diversification reduces risks

The commercial engine business has an oligopolistic structure. MTU predominantly markets its products under risk-and-revenuesharing arrangements. Here, the lead partners in the consortium determine the prices, conditions, and concessions. MTU, as a consortium partner, is bound to these conditions to the extent of its program share. The customers in this segment, and in the commercial MRO business, are the airlines. Some of them have been hard hit financially by the global turbulences the industry has experienced in the wake of the terrorist attacks of September 11, 2001. The drastic rise in fuel prices further exacerbated this situation in 2005, causing the major US carriers Northwest Airlines and Delta Airlines, among others, to seek protection under Chapter 11.

And yet, the young engine fleet and MTU's diversification are decisive factors in reducing these risks. Airlines tend to favor new engines because these require less maintenance. Comparisons in the industry show the MTU engine fleet to be among the youngest. This young engine fleet is developed and produced by MTU in cooperative ventures with various consortium partners, which significantly reduces dependence on any of these consortia. The growth of global air traffic allows airlines, even when under Chapter 11 bankruptcy protection, to utilize the majority of their capacities, generating a corresponding demand for spare parts and maintenance.

# **Opportunities and Risks**

#### High on the agenda:

a forward-looking risk management The aviation industry and the global engine business are highly competitive. For MTU, therefore, a forward-looking risk management is a central element in securing and shaping its future. The company does not merely limit itself to complying with the statutory requirements stipulated in the German law on the control and transparency of business operations. Rather, MTU has implemented a comprehensive risk management system in all business segments. This system, which serves to identify, assess and minimize risks, is overseen by the Board of Management, allowing it to recognize and head off potential risks on an on-going basis. Standardized guidelines for all companies of the Group ensure that all risk managers are in a position to adequately identify risks in their respective areas and provide information regarding potential preventive measures. The following section outlines the key risk areas that have a sustained influence on MTU's business operations, assets, finances, and earnings.

In the military engine business, MTU in firmly embedded in international cooperations. The customers are national and multinational government agencies whose budget varies with the level of public spending. However, MTU's diversity in the military business eliminates the dependence on a particular contractor. Past experience has also shown that under the individual procurement programs a reduced demand in one country is offset by higher procurement levels in another country. Recent examples are Austria's decision to buy the Eurofighter and the export contracts received for the Tiger helicopter.

In the spare parts business, new competition has emerged from companies which manufacture parts under the FAA's system of Parts Manufacturer Approval (PMA) and sell them at cheaper prices than the engine consortia. In the commercial MRO business, Designated Engineering Representatives (DER) are vying for a piece of the cake. DERs are independent experts approved by the FAA who develop repair methods for engine parts. MTU expects DER repairs to play only a minor role in the market. In the spare parts business, MTU maintains its competitive edge over the PMAs first and foremost by developing advanced technologies.

MTU minimizes its risks throughout all business segments through its existing installed engine base, which is on a growth path. The market cycles for aircraft, and hence for engines, on the one hand, and for maintenance services and spare parts on the other, are typically not the same, thus balancing the risks. Furthermore, MTU spreads its risks by offering a wide range of products in virtually all aircraft engine performance categories.

### Safety is a high priority

MTU's products are subject to the most stringent safety standards. For this reason, the company requires various approvals, in particular from the Federal Office of Civil Aeronautics (LBA) in Germany and the FAA in the US. These approvals are valid for a specific time period and are renewed only after repeat qualification. Detailed and accurate descriptions of all production and repair processes ensure consistent compliance with all relevant regulations.

MTU also requires official approvals for the operation of certain production facilities, such as test stands and electroplating equipment. These approvals are maintained through strict adherence to the regulations and appropriate documentation. MTU holds certification to DIN EN ISO 14 001, adding another level of risk prevention through sound environmental practices.

#### Partnerships reduce development risks

In the commercial and military engine business, MTU undertakes to perform development work which may be plagued by unexpected delays. The company ensures strict adherence to time schedules by employing a highly qualified workforce that receives regular training. Furthermore, through its involvement in collaborative efforts, it works in partnerships beyond corporate boundaries, which makes balancing of risks easier.

Long-term contracts ensure supplies In some areas of raw materials, parts, components and third-party services provisioning, MTU strives to reduce its reliance on outside suppliers by securing the services of multiple vendors. On the other hand, MTU has longterm agreements in place with single-source providers as a hedge against short-term fluctuations in supplies. This two-pronged strategy also reduces the risk of short-term price hikes.

# A long product life cycle protects revenues

In the commercial engine business, multiple forms of concessions to customers are common practice in marketing series engines. Through risk-and-revenue-sharing contracts, MTU shares in these concessions to the extent of its program share. The fact that the cooperation partners have a common interest to a large degree helps prevent excessive concessions during contract negotiations. Furthermore, risks are spread across the programs. More generous concessions to major customers during the launch phase of a program are largely offset by a decline in the marketing costs for older programs. In the commercial spare parts business, catalog-based pricing is used. These prices are subject to annual adjustment. Revenue risks emanate from the OEM's activities to bolster sales through replacement campaigns or special conditions. In this case, although lower prices are accepted, the increased volume has a positive effect on revenues. The military engine business is mostly subject to long-term contracts where the risk of short-term price changes is eliminated. In the commercial MRO business, more than half of the revenues are based on mid- and long-term maintenance agreements. Therefore, the risk of price drops is limited here as well.



Every move must be exactly right: Assembly work on a V2500 engine fan at MTU Maintenance Hannover, the world's leading provider of maintenance services for this engine.

# Forward-looking accounts receivable management

In the commercial engine and commercial MRO businesses, airlines are direct and indirect customers of MTU. A large number of the carriers are facing financial difficulties, are planning or carrying out restructuring measures or mergers or are under bankruptcy protection. This affects the value of the accounts receivable, both MTU's and its cooperation partners'.

The consortium lead partners in the commercial engine and spare parts businesses have an extensive accounts receivable system in place. In the commercial MRO business, MTU tracks its open accounts receivable in short cycles in cooperation with the sales department. In addition, potential risks are assessed and precautions taken as necessary before contracts are concluded. Where available, the company protects itself against political credit risks by means of export credit guarantees.

# Top priorities: employee recruiting and employee retainment

MTU's businesses are characterized by intense competition for the highly skilled employees needed to develop and manufacture world-class high-tech products. As a result, MTU's human resources team has made the recruiting and retainment of key employees a top priority of its activities. To this end, it utilizes a flexible compensation system, attractive fringe benefits, a comprehensive internal and external training and education program and a well-balanced healthcare plan.

#### Insurance against catastrophic risks

In the aviation industry, accidents can never be ruled out completely despite strict compliance with manufacturing quality standards and utmost diligence in performing maintenance work. In the military engine business (excluding exports), MTU is largely exempt from product risk liability through government agency indemnification. The remaining liabilities, first and foremost aviation product liability, especially in the commercial engine business, are covered by comprehensive insurance. Other risks that could threaten the continued existence of the company, such as fire and interruption of business operations, are covered as well. No insurance cover has been taken out for the risk of terrorist attacks because of the excessively high premiums. Management liability is covered by D&O insurance with appropriate deductibles. Furthermore, there is coverage against risks which do not threaten the existence of the company.

### Strongly reduced debts cuts interest charges

MTU's financial debt carries interest rate risks. For the high yield bond, the interest rate is fixed for the entire maturity period. Lease liability interest rates are also fixed for their respective maturity periods. For the revolving credit facility, which currently amounts to  $\in 17$  million and is otherwise burdened only by guarantees, the company has to pay interest at a variable rate that reflects current market rates. Moreover, certain factors, such as a deteriorating financial situation within the company, could cause further increases in the interest rate.

In the year ending December 31, 2005, MTU cut its financial debt by 72% and hence significantly reduced the interest-rate risk. In addition, a portion of the company's US Dollar surpluses were used to pay interest on the remaining liabilities, concluding interest rate swaps for the purpose.

# High priority on dollar hedging

The US dollar is the common transaction currency in the commercial engine and commercial MRO businesses. The largest share of labor costs and a portion of purchased materials and services, however, accrue in euros. Although MTU settles these purchases in US Dollars to the extent possible, a permanent surplus in US Dollars remains, for which an exchange risks exists. A sustained rise in the exchange rate of the euro against the dollar in particular can have a negative impact on the company's assets, finances, and earnings.

To minimize this exposure, MTU typically conducts forward exchange contract transactions in US Dollars. These hedging transactions are based on a strategy that looks at the current US Dollar exchange rate and, depending on the expected trend, provides a hedging scenario that may be negative, neutral, or positive with regard to the anticipated rate. Based on the action options available, forward sales contracts may follow. The valuation of these hedging transactions is explained in the Notes section.

In 2005, MTU's hedging transactions extended across a period of two years, with the volume decreasing year by year. At the end of 2005, MTU had sold \$560 million at an average exchange rate of \$1.27 to  $\in$ 1.

# Outlook

#### MTU stays on a growth track

In 2006, MTU expects to benefit from the positive development of the global air traffic in all of its businesses. The airlines are feeling the effects of their restructuring and consolidation efforts undertaken to recover or increase their profitability after a decade of turbulence in the industry. The generally anticipated stabilization of fuel prices will also help the aviation industry regain its footing.

In the commercial engine business, the company has a well-balanced portfolio of products. In 2006 production of the GP7000 engine for the Airbus A380 and the PW6000 engine for the Airbus A318 will kick off, so that these programs will generate revenue for the first time. Proven engines, such as the JT8D-200 for the Boeing MD-80 series and the CF6 for various Airbus and Boeing aircraft, are the backbone of further growth. The company can also count on a number of programs that will remain in production for a protracted period of time; here, the installed base of engines will generate an increasing demand for spare parts. These include the V2500 for the Airbus A320 family and the Boeing MD-90, the PW2000 for the Boeing 757 and C-17, the PW4000Growth for the Boeing 777 and the PWC programs for business and regional jets. MTU expects revenues and earnings from the commercial engine business to stay on a positive track.



Visual inspections are key to quality assurance at the highest level

MTU expects the military engine business to remain stable. With a basic workload secured, this segment should make an appropriate contribution to earnings. Production deliveries of the first tranche of EJ200s for the Eurofighter are underway. The contract for the second tranche has been signed, and production preparations have begun. Following Austria's decision to buy the Eurofighter, other countries, too, are expressing interest in the EJ200. MTR390 production is on schedule. The contract for the development and production of the uprated version, the MTR390 Enhanced, has been signed, so that additional engines will be delivered once the development is completed. The development of the TP400-D6 for the Airbus A400M is progressing as planned. First contracts for the engine have been inked with export customers. The signing of the agreement on the expansion of the Cooperative Model with the German Air Force in late November 2005 marked a major milestone in MTU's military business. Beginning in 2006, this contract will yield additional revenues and earnings. These activities will to some degree soften the impact of the partial retirement of the Tornado fleet and its RB199 engine.

In the commercial MRO business, the successful acquisition of new customers in 2005 should result in capacity utilization continuing to run at a high level, increasing revenues and improving earnings. Following the IPO and major repayments of debts, MTU is financially well positioned for the anticipated growth. A revolving credit facility which is presently debited with €17 million and guarantees, provides the flexibility needed to cover the company's financing needs for 2006 and beyond.

#### Expected revenues and earnings

Against the background of the development in all three business segments, MTU expects an increase in sales and again an earnings improvement for fiscal year 2006.

#### Events after the end of the financial year

There were no substantial events affecting the company's assets, finances and earnings after the accounting date. On February 2, 2006, the fonds managed by KKR sold their remaining 29.3% share in MTU to institutional investors.

Munich, February 20, 2006

M. J. M

Udo Stark

Bernd Kessler

l 4 Rein atulals

Dr. Michael Süß

Reiner Winkler





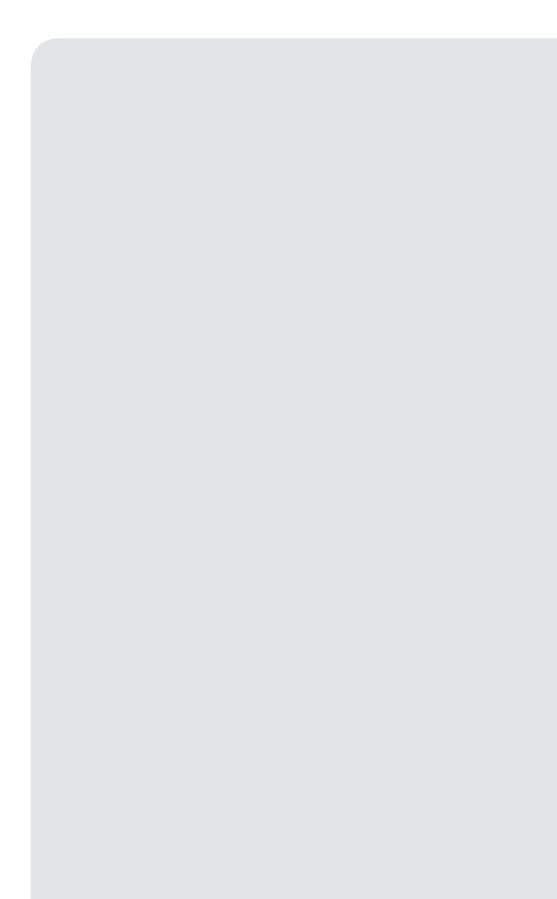
# 50,000 Flight Hours

50,000 flight hours: at this point an engine has reached middle age and usually has two or three overhauls behind it. Parts that have been subjected to extremely high temperatures must be replaced – such as parts of the turbines and combustion chambers. The way how an aircraft is operated has a direct effect on the engine. Engines for longhaul aircraft such as the Boeing 747 require fewer repairs than those for short-haul aircraft.



The V2500 is among the best-selling engines in its class.

The reason: different stress levels caused by frequent or less frequent take-offs and landings. Aircraft engines that are flown a great deal over water – such as on the Amsterdam-New York route – also require more frequent repair, since salty sea air ingested accelerates corrosion. The pilots' flying style also has a direct effect: Airlines who urge their pilots to fly smoothly have to spend less money on maintenance and replacement parts.



# **Consolidated Income Statement**

# Consolidated income statement

	Appendix	Gro	oup
in € million		2005	2004
Revenues		2,148.6	1,918.0
Cost of sales	(6.)	-1,864.8	-1,627.6
Gross profit		283.8	290.4
Research and development costs	(7.)	-45.7	-57.7
Selling costs	(8.)	-67.4	-68.0
General administrative costs	(9.)	-45.4	-87.7
Other operating income and expenses	(10.)	4.7	4.1
Result before financial result		130.0	81.1
Financial result	(11.)	-73.5	-72.8
Share of income/loss of joint ventures accounted for using the equity method		2.2	-1.8
Result from ordinary activities		58.7	6.5
Income taxes	(12.)	-25.8	-6.3
Net profit		32.9	0.2
Loss carried forward		-0.1	-0.3
Retained earnings/accumulated loss (-)		32.8	-0.1
Earnings per share in €	(13.)	0.60	0.00

# **Consolidated Balance Sheet**

### Assets

	Appendix	Gr	oup
in € million		12/31/2005	12/31/2004
Non-current assets			
Intangible assets	(16.)	941.7	968.6
Property, plant and equipment	( 17.)	546.0	576.6
Financial assets	(18.)	47.6	46.6
Other assets	(20.)	1.5	40.4
Deferred tax assets	(29.)	0.0	2.3
		1,536.8	1,634.5
Current assets			
Inventories	(19.)	518.2	448.1
Receivables	(20.)	418.4	394.6
Other assets	(20.)	58.8	203.8
Cash and cash equivalents	(21.)	15.9	28.5
Prepayments	(23.)	5.2	9.6
		1,016.5	1,084.6
Balance sheet total		2,553.3	2,719.1

## Equity and Liabilities

	Appendix	Gro	Group	
in € million		12/31/2005	12/31/2004	
Equity	(24.)			
Subscribed capital		55.0	2.2	
Capital reserves		453.8	203.7	
Accumulated other equity		-13.3	11.2	
Retained earnings/accumulated loss (-)		32.8	-0.1	
		528.3	217.0	
Non-current debt				
Pension provisions	(25.)	362.5	344.7	
Other provisions	(26.)	31.3	56.7	
Financial liabilities	(27.)	229.8	621.2	
Other liabilities	(28.)	144.0	58.2	
Deferred tax liabilities	(29.)	250.8	367.7	
		1,018.4	1,448.5	
Current debt				
Pension provisions	(25.)	15.3	14.2	
Other provisions	(26.)	207.2	156.2	
Financial liabilities	(27.)	23.3	245.3	
Trade payables		289.3	227.1	
Other liabilities	(28.)	471.5	410.8	
		1,006.6	1,053.6	
Balance sheet total		2,553.3	2,719.1	

# **Consolidated Statement of Changes in Equity**

## Consolidated statement of changes in equity

	Subscribed capital
in € million	
Balance as of January 1, 2004	0.0
Financial instruments (Forward foreign exchange transactions)	
Translation differences	
= Profit not stated in income statement	0.0
Net profit	
= Total income	0.0
+ Capital/capital reserves increase	2.2
Balance as of December 31, 2004 / January 1, 2005	2.2
Financial instruments (Forward foreign exchange transactions)	
Translation differences	
= Profit not stated in income statement	0.0
Net profit	
= Total income	0.0
Capital increase from company funds	37.8
Capital increase new issue	15.0
Transaction costs resulting from capital increase (IPO)	
Matching Stock Program (MSP)	
Total as of December 31, 2005	55.0

Conitol	Retained		A			Total
Capital reserves	earnings/ accumulated loss (-)	Translation differences	Matching Stock Program	ated other equity Derivative financial instruments	Subtotal	Iotai
201.5	-0.3	0.0	0.0	0.0	0.0	201.2
				12.2	12.2	12.2
		-1.0			-1.0	-1.0
0.0	0.0	-1.0	0.0	12.2	11.2	11.2
	0.2					0.2
0.0	0.2	-1.0	0.0	12.2	11.2	11.4
2.2						4.4
203.7	-0.1	-1.0	0.0	12.2	11.2	217.0
				-27.2	-27.2	-27.2
		2.0			2.0	2.0
0.0	0.0	2.0	0.0	-27.2	-25.2	-25.2
	32.9					32.9
0.0	32.9	2.0	0.0	-27.2	-25.2	7.7
-37.8						0.0
300.0						315.0
-12.1						-12.1
			0.7		0.7	0.7
453.8	32.8	1.0	0.7	-15.0	-13.3	528.3

# **Consolidated Cashflow Statement**

## **Consolidated cashflow statement**

	Appendix	
in € million		
Net profit		
+ Depreciation and amortization		
+/- Profit/loss of associated companies		
+/- Profit/loss on disposal of assets		
+/- Increase/decrease in pension provisions		
+/- Increase/decrease in other provisions		
+/- Change in non-cash taxes <sup>1)</sup>		
+/- Matching Stock Program		
+/- Increase/decrease in inventories		
+/- Increase/decrease in receivables (excl. derivatives)		
+/- Increase/decrease in liabilities (excl. derivatives)		
Cashflow from operating activities <sup>2)</sup>	(31.)	
- Investments in intangible assets and property, plant and equipment		
- Acquisition of MTU Group		
- Investments in financial assets		
+ Proceeds from asset disposals		
+ Repayment of loans		
Cashflow from investing activities	(31.)	
Free cashflow		
+/- Increase/decrease in financial liabilities		
+/- Change in market value of derivatives		
+ Acquisition of MTU Group		
+/- Capital increase after deduction of transaction costs		
Cashflow from financing activities	(31.)	
Exchange rate movements in equity		
Exchange rate movements in fixed assets		
Change in consolidation		
Change in cash and cash equivalents		
Cash and cash equivalents as at January 1		
Cash and cash equivalents as at December 31	(31.)	
1)†s	ax navments	

 1) tax payments
 2) interests paid interests received

Group				
2005	2004			
32.9	0.2			
138.3	133.0			
-2.2	1.8			
2.3	-1.7			
19.5	15.9			
29.1	-51.5			
-88.4	-2.4			
0.7				
-75.0	-29.8			
47.3	-79.8			
185.6	87.2			
290.1	72.9			
-83.5	-65.9			
	-766.6			
-0.5	-0.1			
0.7	3.4			
1.5	2.8			
-81.8	-826.4			
208.3	-753.5			
-613.4	-269.6			
91.5	74.5			
	766.6			
294.7	4.4			
-227.2	575.9			
2.0	-1.0			
-3.7	1.4			
8.0				
6.3	0.4			
-12.6	-177.2			
28.5	205.7			
15.9	28.5			
77.4	40.3			
86.0 28.2	62.0 23.3			
2012	2010			

## I. Basic Principles

## 1. General information

MTU Aero Engines Holding AG and its subsidiary companies (hereinafter referred to as MTU Aero Engines Holding AG or the Company) is among the world's leading makers of engine modules and components, and is the world's leading independent provider of commercial aircraft engine services.

The business activities of the Group range through the entire lifecycle of an engine program – from development, construction, testing and production of new commercial and military engines and spare parts, to maintenance, repair and overhaul of commercial and military engines. The activities of MTU focus on two segments: Commercial and military engine business, and Commercial Maintenance, Repair and Overhaul business.

In the commercial and military engine business, the company develops and produces modules and components as well as spare parts for commercial engine programs and also handles their final assembly. Where military engines are concerned, MTU focuses on the development and production of modules and components for engines, production of spare parts and final assembly as well as maintenance services for these engines. The commercial maintenance, repair and overhaul business includes activities in the area of maintenance and logistical support for commercial engines.

MTU Aero Engines Holding AG (parent company) with its headquarters at Dachauer Str. 665, 80995 Munich, Germany, is registered under HRB 157 206 in the registration court's commercial register at the local court of Munich.

The consolidated financial statements was approved for publication by the Supervisory Board of MTU Aero Engines Holding AG on March 22, 2006.

#### 1.1 IFRS Accounting standards

The consolidated financial statements of MTU Aero Engines Holding AG of December 31, 2005, is compiled in accordance with Inter-national Financial Reporting Standards (IFRS) and the guidelines of the International Accounting Standards Board (IASB) of London. Standards applicable as of the balance sheet date were used. The designation "IFRS" also includes applicable International Accounting Standards (IAS). All interpretations of the International Financial Reporting Interpretations Committee (IFRIC), formerly the Standing Interpretations Committee (SIC), which are authoritative for the 2005 business year, have been applied.

The duty to prepare a consolidated financial statements is defined by Section 290 of the German Commercial Code (HGB). Pursuant to Article 4 of Regulation (EC) No. 1606/2002 of the European Parliament and the Council of July 19, 2002, the Group is obligated to apply the international accounting standards pursuant to Articles 2, 3 and 6 of the standards cited above. The consolidated financial statements exempt MTU Aero Engines GmbH, Munich pursuant to Section 264 Paragraph 3 No. 4, and is published through the commercial register of Munich (registered office of the company).

In order to improve clarity, various entries of the consolidated income statement and consolidated balance sheet are combined. These entries are separately accounted for and explained in the appendix. The consolidated financial statements have been prepared in Euro. All amounts are disclosed in millions of Euro (in  $\in$  million) unless otherwise stated.

The year-end financial statements of the consolidated companies are prepared as of the balance sheet date of December 31, 2005, of MTU Aero Engines Holding AG, Munich. The annual financial statements for Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde, which is valued at equity, are prepared as at November 30 of the calendar year. The statements are included in the consolidated financial statements at this balance sheet date.

#### Early adoption of modified standards

As part of the Improvement Project, the IASB has produced a series of amendments to existing IAS as well as issuing new IFRS, which as a rule are to be applied in the business year beginning January 1, 2005. The following standards were already applied by MTU Aero Engines Holding AG in its 2004 consolidated financial statements:

## IFRS 1 "First-time adoption of International Financial Reporting Standards"

## **IFRS 3 "Business combinations"**

Business combinations are stated in the financial year 2004 in accordance with IFRS 3. IFRS 3 is closely related to the revised standards by IAS 36 and IAS 38, which likewise have been applied early.

## Newly issued accounting regulations

The following standards, which were revised as part of IASB's improvement projects, were applied for the first time in 2005:

- IAS 1 (Presentation of financial Statements)
- IAS 8 (Accounting Policies. Changes in Accounting Estimates and Errors)
- IAS 16 (Property, plant, and equipment)
- IAS 24 (Related party disclosures)

In addition, IASB has issued new or revised and amended standards in 2004, which are being followed. These are, in particular:

- IFRS 2 (Share-based Payments)
- IFRS 5 (Non-current assets held for sale and discontinued operations)

## 1.2. Changes in corporate law

#### 1.2.1. Merger agreements

MTU Aero Engines Verwaltungs GmbH was merged into MTU Aero Engines Investment GmbH through a resolution of the shareholders' meeting on March 15, 2005. With the merger agreement of March 15, 2005 (UR No. S 0455/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005. MTU Aero Engines Dritte Participation GmbH was merged into MTU Aero Engines Investment GmbH through a resolution of the shareholders' meeting on March 15, 2005. With the merger agreement of March 15, 2005 (UR No. S 0459/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005.

MTU Aero Engines Zweite Verwaltungs GmbH was merged into MTU Aero Engines Dritte Holding GmbH through a resolution of the shareholders' meeting on March 15, 2005. With the merger agreement of March 15, 2005 (UR No. S 0467/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005.

MTU Aero Engines Zweite Participation GmbH was merged into MTU Aero Engines Dritte Holding GmbH through a resolution of the shareholders' meeting on March 15, 2005. With the merger agreement of March 15, 2005 (UR No. S 0463/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005.

# IAS 36 (revised 2004) "Impairment of assets"

The modifications to IAS 36 essentially relate to goodwill. This is no longer systematically amortized, but rather is now subjected to an annual "impairment-only" approach.

## IAS 38 (revised 2004) "Intangible assets"

The primary modification of IAS 38 concerns the distinction of useful economic life into unlimited and limited lifetimes. Intangible assets with unlimited useful economic lifetimes are no longer amortized on a scheduled basis, but rather are now subjected to an annual "impairment-only" approach in accordance with IAS 36. Assets with a limited useful economic life continue to be amortized on a scheduled basis over their economic life.

## IAS 32 and 39 (revised 2004) "Financial instruments"

Early application of IAS 32 and IAS 39 (revised 2004) results in new classification of financial assets. Depending on the classified category, changes in fair value are recognized in the income statement or directly in equity until disposition of the financial asset. Receivables and liabilities are valued at amortized cost. Transitional guidelines pursuant to IAS 39 No. 105 ff were applied accordingly. MTU Aero Engines Dritte Holding GmbH was merged into MTU Aero Engines Zweite Holding GmbH through a resolution of the shareholders' meeting on April 27, 2005. With the merger agreement of April 27, 2005 (UR No. S 0771/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005.

MTU Aero Engines Zweite Holding GmbH was merged into MTU Aero Engines Erste Holding GmbH through a resolution of the shareholders' meeting on April 27, 2005. With the merger agreement of April 27, 2005 (UR No. S 0775/2005), the merger was carried out by absorption through transferral of assets as a whole. With regard to the law of obligations and to taxes, the merger was internal and effective as of January 1, 2005.

#### 1.2.2. Change of legal form

MTU Aero Engines Erste Holding GmbH (HRB 151 251), was transformed into an Aktiengesellschaft (German public limited company) by way of a transformation resolution passed in May 2, 2005 within the scope of the Umwandlungsgesetz (German Corporate Transformation Act) via a change of legal form. This transformation was entered in the commercial register on May 19, 2005, under number HRB 157 206. Also by way of a shareholders' resolution passed in May 2, 2005, the share capital of MTU Aero Engines Erste Holding GmbH was increased by €37.8 million according to the rules for a capital increase from company funds from €2.2 million to €40.0 million prior to the change of legal form. For this purpose, an amount of €37.8 million was withdrawn from the capital reserves and transformed to become ordinary share capital. No new shares were

issued. The capital increase took effect when it was entered in the commercial register on May 19, 2005.

In the General Meeting on May 30, 2005, a resolution was passed to increase the company's share capital against capital contributions by  $\in$  15.0 million from  $\in$  40.0 million to  $\in$  55.0 million by issuing 15.0 million new no-par value bearer shares. The new shares, which carry dividend rights from the start of the current fiscal year, were issued with a nominal amount of  $\in$  1.00. The capital increase took effect when it was entered in the commercial register on June 3, 2005. The purpose of the capital increase was to place the shares as part of the company's initial public offering.

#### **Conditional capital**

Conditional capital of  $\in$  19.25 million was also created by way of a resolution of the General Meeting on May 30, 2005. This capital is to be used to grant shares to the holders of convertible bonds or bonds with warrants.

#### Authorized capital

According to a resolution by the General Meeting on May 30, 2005, the Board of Management is authorized, subject to approval, to increase the share capital on or before May 29, 2010, against cash contributions on one or several occasions by a total of up to  $\in$ 5.5 million, whereby it is possible to exclude shareholders' subscription rights (Authorized capital I).

In addition, according to a resolution by the General Meeting on May 30, 2005, the Board of Management is authorized, subject to approval, to increase the share capital on or before May 29, 2010, against cash and/or non-cash contributions on one or several occasions by a total of up to €19.25 million, whereby it is possible to exclude shareholders' subscription rights (Authorized capital II). The Company's Board of Management was further authorized to issue, with the consent of the supervisory board, bearer or registered convertible bonds, warrant bonds, profit participation rights, or profit-linked bonds (or combinations of such instruments), on one or more occasions, through May 29, 2010. Such Bonds are to be with or without fixed maturity, up to an aggregate nominal amount of €750.0 million, and to grant the holders of convertible and/or warrant bonds conversion or option rights for up to an aggregate of €29.25 million in the registered share capital of the company, in accordance with the detailed terms and conditions of such convertible bonds and/or warrant bonds.

#### 1.2.3. The Initial public offering (IPO)

The new shares of the company were issued on June 6,2005 on the Frankfurt Stock Exchange, Amtlicher Markt, using book-building and with a subscription period from May 25, 2005 to June 3, 2005. After the subscription offers had been received within the bookbuilding window at prices of between €19.00 and €22.00 per share, the issue price was set at €21.00 per share. Initial listing on the first day of trading was at  $\in$  21.89. A placement volume of 31 million shares plus a green shoe option of 4.65 million shares resulted in a placement volume of €748.65 million. Of these proceeds, a total of €294.7 million accrued to MTU Aero Engines Holding AG after the deduction of costs from the capital increase of 15 million shares. This amount was mostly used to repay debt. The remaining proceeds from the issue accrued to the company's former main shareholder, Blade Lux Holding Two S.a.r.l., Luxembourg.

## Shareholding structure as

of December 31, 2005 The following synopsis shows the shareholders and their participation in the capital following the IPO.

Shareholdings following the IPO			
	No-par		
Name of shareholder	shares	in %	
Blade Lux Holding Two S.a.r.I.*)	16,092,080	29.26	
Blade Management Beteiligungs GmbH & Co. KG	3,257,920	5.92	
Free float of stock	35,650,000	64.82	
Total	55,000,000	100.00	

\*) Incorporated under the laws of Luxembourg. Shareholder is Blade Lux Holding One S.a.r.I., Luxemburg, whose shares are in turn held by KKR European Fund, Limited Partnership with 75%, and KKR Millenium Fund, Limited Partnership with 24.04%, as well as KKR Partners, Limited Partnership, with 0.96%.

#### 1.2.4. Changes in consolidated entities

With an agreement dated May 17, 2005, ATENA Engineering GmbH, Munich with its shares ATENA INDIA PRIVATE LIMITED and EUROAER GmbH, were sold effective June 30, 2005. ATENA Engineering GmbH was then no longer consolidated. As the sale had an overall insignificant effect on the portrayal of the Group's net worth, the financial statements does not include a separate presentation of assets and liabilities pursuant to IFRS 5. The profit from the sale is referred to in the explanation under text item 10 (Other operating income and expenses). The principal groups of assets and liabilities that were classified under the "Commercial and Military engine business" market segment up to the time of the sale are classified as follows up to June 30, 2005:

## Assets of ATENA Engineering GmbH as of June 30, 2005

in € million	
Non-current assets	4.3
Inventories	4.3
Current receivables and prepaid expenses	4.7
Non-current provisions and liabilities	-0.5
Current provisions and liabilities	-7.6
	5.2

## 2.4. Consolidated as well as non-consolidated companies included:

	Con- solidated yes/no	Con- solidated method <sup>*)</sup>	Share holding in %
Shares in subsidiaries			
MTU Aero Engines Investment GmbH, Munich	yes	full	100
MTU Aero Engines GmbH, Munich	yes	full	100
MTU Maintenance Hannover GmbH, Langenhagen	yes	full	100
MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde	yes	full	100
MTU Maintenance Canada Ltd., Richmond, Canada	yes	full	100
Vericor Power Systems L.L.C., Atlanta, USA	yes	full	100
RSZ Beteiligungs- und Verwaltungs GmbH, Munich	yes	full	100
MTU Aero Engines North America Inc., Rocky Hill, USA	yes	full	100
ATENA ENGINEERING INC., Hartford, USA (i.L.)	no	at cost	100
MTU Versicherungsvermittlungs- und Wirtschaftsdienst GmbH , Munich	no	at cost	100
MTU Maintenance do Brasil Ltda., Sao Paulo, Brazil	no	at cost	99.99
MTU München Unterstützungskasse GmbH, Munich	no	at cost	100
Shares in associated companies			
EUROJET Turbo GmbH, Munich	no	at cost	33
EPI Europrop International GmbH, Munich	no	at cost	28
MTU Turbomeca Rolls-Royce GmbH, Hallbergmoos	no	at cost	33.33
APA Aero Propulsion Alliance GmbH i.L., Munich	no	at cost	24.8
Turbo Union Ltd., Bristol, Great Britain	no	at cost	39.98
Equity participations in joint ventures			
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China	no	equity	50
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde	no	equity	50
Ceramic Coating Center S.A.S., Paris, France	no	at cost	50
Airfoil Services Sdn. Bhd., Shah Alam, Malaysia	no	at cost	50
Pratt & Whitney Canada CSC, (Africa) (PTY.), Ltd. Lanseria, South Africa**)	no	at cost	50
Other shares			
IAE International Aero Engines AG, Zurich, Switzerland	no	at cost	12.1
Gesellschaft zur Entsorgung von Sondermüll in Bayern GmbH, Munich	no	at cost	0.1

At cost = stated at fair value, but equivalent to costs of purchase. \*\*) Indirect participation.

The complete statement of Group share ownership is reported in the commercial

registry of the local court of Munich (HRB 157 206).

## 2. Consolidated Entities

## 2.1. Subsidiaries

The consolidated financial statements of MTU Aero Engines Holding AG include all major companies in which MTU Aero Engines Holding AG holds the majority of voting rights and has a controlling influence. These companies are consolidated as long as the controlling influence exists.

#### 2.2. Associated companies

Companies whose financial and business policy may be influenced by MTU Aero Engines Holding AG in a significant way (associated companies) are disclosed at equity and are initially recognized with their acquisition costs. A significant influence is assumed if MTU Aero Engines Holding AG directly or indirectly owns 20% or more of the voting rights of a company.

The joint ventures are stated using the equity method in the consolidated financial statements of MTU Aero Engines Holding AG.

#### 2.3. Insignificant participations

Three subsidiaries are not included due to insignificance. MTU München Unterstützungskasse GmbH, Munich, is not consolidated because the obligations are recognized in the consolidated financial statements. Five associated companies, three joint ventures as well as two other companies are not measured according to the equity method and are not included according to proportional consolidation. Their overall impact on the net worth, financial and earnings situation of the group is of minor significance.

## 3. Consolidation principles

Business combinations are accounted for using the purchase method as defined in IFRS 3. Under the purchase method identifiable assets and liabilities acquired are measured initially at their fair value. The excess of the group's interest in the net fair value of the identifiable assets and liabilities acquired over cost is recognized as goodwill. Goodwill is subject to regular review for possible impairment. If the fair value of the assets and liabilities exceed the acquisition cost, the remaining difference is immediately recorded in the income statement.

The effects of inter-company transactions have been eliminated. Accounts receivable and accounts payable as well as expenses and income between the consolidated companies are netted. Internal deliveries are recorded on the basis of market prices. Interim results are eliminated in the financial year.

In accordance with IAS 12, deferred taxes arising from timing differences are recognized as a result of the elimination of profits and losses due to transactions within the Group.

Shares in associated companies and equity participations in joint ventures are accounted for using the equity method from the point of acquisition, and are initially recognized at cost. Any difference between the acquisition costs and the fair values of the identified assets, liabilities and contingent liabilities which arise at the point of the acquisition are recognized as goodwill.

The company's share of an investee's profits or losses is recorded in the income statement. Program investment companies are associated companies. With regard to the special accounting treatment of these investments, please refer to text item 5.8.2.

All other equity participations (non-consolidated subsidiaries and other shares) are carried at fair value. If the fair value cannot be reliably determined, they are stated at cost (see explanation to text item 5.8.1., 5.8.3. and 5.8.4.).

## 4. Currency translation

The financial statements of consolidated companies whose functional currency is not Euro are translated into Euro in accordance with IAS 21 using the functional currency concept. The functional currency is the currency in which a foreign company generates most of its funds and makes its payments. Because the functional currency at all group companies is the corresponding local currency, the assets and liabilities are translated using the exchange rate applicable on the balance sheet date, and expenses and income are translated every month using the rate applicable at the end of the month. The effect of the exchange rate movements is included in a separate component of accumulated other equity, and does not have any impact on the net profit/loss for the year.

Foreign currency receivables and liabilities are translated using the exchange rate applicable on the balance sheet date. The following rates have been used for currency translation:

#### **Currency rates**

Currency	Reference date rate		Average rate	
	<b>12/31/2005</b> 1 Euro =	12/31/2004 1 Euro =	<b>2005</b> 1 Euro =	2004 1 Euro =
USA (USD)	1.1797	1.3621	1.2441	1.2438
Canada (CAD)	1.3725	1.6416	1.5087	1.6167
China (RMB)	9.5181	11.2875	10.1542	10.2988
Great Britain (GBP)	0.6853	0.7051	0.6838	0.6787
Malaysia (MYR)	4.4589	5.1825	4.7121	4.7280

## 5. Accounting principles and policies

The financial statements of MTU Aero Engines Holding AG as well as of the domestic and foreign subsidiaries are prepared using standard accounting and valuation methods in accordance with IAS 27.

#### 5.1. Revenues

**Revenues** from the sale of goods are recognized when the significant risks and rewards of ownership are transferred to the buyer, and the seller retains neither management involvement in, nor control over the goods. Further recognition criteria are the probability that economic benefits associated with the transaction will flow to the seller and the revenues and costs can be measured reliably. The company's customers are trading partners from risk-and-revenue-sharing programs, original equipment manufacturers ("OEMs"), joint sale companies, national governments, airlines and other third parties.

Revenues from contractual maintenance services (time and material contracts, fly-byhour contracts, Power by hour-contracts) in the maintenance, repair and overhaul ("MRO") business as well as construction contracts in the military business, are based on the percentage of completion method, in accordance with IAS 11 and IAS 18. If the final profit cannot be reliably estimated, IFRS requires the use of the zero-profit method, which recognizes revenues only to the extent of costs incurred that are expected to be recovered. Revenues are recognized less discounts for customers, price reductions and other rebates. The consolidated companies' foreign exchange contracts to hedge the potential volatility in future cashflows have been accounted for as cashflow hedges under IFRS. These financial investment instruments are measured at fair values, with the effective gains and losses on the hedging instrument, where they are effective, initially deferred in accumulated other equity. They are subsequently released to revenues, concurrent with the earnings recognition pattern of the hedged item.

#### 5.2 Cost of sales

Cost of sales comprises the productionrelated manufacturing costs of the sold products, development services paid, and the costs of products purchased for resale. In addition to the direct cost of material and production, they also comprise the indirectly allocatable overheads, including depreciation of the production installations, productionrelated other intangible assets, depreciation on inventories and commensurate productionrelated administration overheads. In addition to expenses charged by OEMs, cost of sales includes calculated costs for marketing new engines in the scope of risk-and-revenuesharing programs for customer acquisition costs.

#### 5.3. Research and development costs

The research costs are expensed as incurred. Development costs are capitalized when the recognition criteria of IAS 38 are satisfied. The **development costs** for engine programs in the series and spare part phase were capitalized at fair value as part of the program assets resulting from purchase price allocation (intangible assets). Development costs comprise all costs that can be allocated directly to the development process as well as reasonable amounts of development-related overheads. Financing costs are not capitalized. The program assets are amortized using scheduled amortization over the expected product life cycle (maximum of 30 years.) Development costs which do not qualify for capitalization are expensed as incurred.

#### 5.4. Public sector grants and assistance

Public sector grants and assistance are recognized in accordance with IAS 20 (accounting for government grants and disclosure of government assistance) only if there is adequate certainty that the related conditions are satisfied and that the grants and assistance will indeed be received. Revenue-based grants are deferred in the balance sheet and released to the income statement to offset the related expenditure that they are intended to reimburse. The grants and assistance are accordingly stated in the balance sheet when the book value of the assets is established.

#### 5.5. Intangible assets

Purchased **intangible assets** and internally generated intangible assets are capitalized in accordance with IAS 38 (Intangible Assets). IAS 38 requires capitalization if it is probable that a future economic benefit attributable to the asset exists and the costs of the asset can be measured reliably.

Intangible assets with a **limited** useful life are carried at cost of purchase or production and amortized on a straight-line basis over their useful life.

If there are indications that an intangible asset's carrying amount may be extraordinary, the asset is subject to an **impairment test**. The recoverable amount is calculated as the higher of the fair value less cost to sell and the value in use of an asset. An impairment loss is recognized immediately in the income statement if the carrying amount of an asset exceeds its recoverable amount. If the reason for an impairment in previous reporting periods is no longer applicable, a reversal is taken to the income statement, whereby the amortized costs of production or purchase must not be exceeded. Scheduled amortization, with the exception of goodwill, technology assets, and program assets, is normally applied over three years. Program assets are amortized over a period of maximally 30 years, whereas technology assets are amortized over a period of ten years and customer relations between 4 and 18 years.

Goodwill with an unlimited life in accordance with IFRS 3 is subject to an impairment test at least once a year. As for other reporting, the "Commercial and military engine business" and "Commercial Maintenance Repair and Overhaul business are viewed as cash generating units. The goodwill as of January 1, 2004, is allocated to both segments. The present value of the future net cashflows of each cash generating unit is compared with its carrying amount. If the present value is lower than the carrying amount, the goodwill is impaired. If the amount estimated for an impairment loss is greater than the goodwill, the difference is proportionately allocated to the other assets of the cash generating unit.

A test is conducted for each balance sheet date to determine whether grounds for the non-scheduled depreciation of the previous period still exist. If the recoverable amount of an asset has increased the impairment must be reversed, irrespective of the declared goodwill. The recoverable amount is the higher amount from the present value less the cost to sell and the anticipated value in use. The upper limit of the impairment loss reversal is determined by the acquisition cost less the cumulative scheduled depreciation that would have resulted if no non-scheduled depreciation had been recorded. The reversal of impairment loss is recorded in the income statement in the corresponding function areas. An impairment loss recognized for goodwill shall not be reversed in a subsequent period.

#### 5.6. Property, plant, and equipment

Property, plant and equipment are subject to wear and tear and are carried at cost of purchase or production less scheduled depreciation. Depreciation is applied using the straight-line method to reflect wear and tear. If there are any indications of impairment, the property, plant, and equipment is subject to an impairment test. An impairment loss is recognized immediately in the income statement if the carrying amount of an asset exceeds its recoverable amount. The recoverable value is calculated as the higher of fair value less the cost to sell and the value in use of the asset. If the reason for impairment in previous reporting periods is no longer applicable, the value is written up to an amount not exceeding the amortized costs. Minor value assets (worth less than €410) are expensed immediately in the year in which they are acquired.

Scheduled depreciation is based on the following useful life:

#### Useful life in years

in years	
Buildings	25 - 50
Lightweight structures	10
Property facilities	10 - 20
Technical equipment, plant, and machinery	5 - 10
Operational and office equipment	3 - 15

The depreciation applicable for machines used in multiple-shift operation is increased accordingly by way of shift mark-ups.

The costs of production of installations produced in-house comprise all costs that can be directly allocated to the production process as well as reasonable amounts of productionrelated overheads. These comprise productionrelated depreciation, pro rata administrative expenses and pro rata social costs. Financing costs are not considered as part of production costs or purchase.

If all opportunities and risks associated with ownership of a group company leased asset are primarily transferred attributable to the lessee, the leased asset is capitalized under property, plant and equipment, and an equivalent value is recognized under liabilities from finance lease (finance lease arrangements). The amount capitalized at the start of the basic lease period is the lower of fair value or present value of minimum lease payments. The capitalized leased asset is depreciated over its useful life, whereas interest is added in instalments to the leasing liability.

If all risks and opportunities associated with ownership of a leased asset are not attributable to the lessee, the lease payments are expensed as incurred (operating lease arrangements).

#### 5.7. Financial assets

Financial assets are recognized at the settlement date, the date on which the asset is delivered. When the financial assets are initially recognized, they are stated at fair value.

After the initial recognition, "available for sale financial assets" as well as assets in the category "fair value through profit and loss" are recorded at fair value. In general, the fair value corresponds to the market value. If a market price does not exist, the market value of the available for sale financial assets as well as market value of assets in the category "fair value through profit and loss" are determined using suitable valuation methods, e.g. discounted cashflow method, taking into account market data available at the balance sheet date.

Financial investments in equity instruments for which there is no active market price and for which no fair value can reliably be determined, are valued at acquisition cost. Changes in the fair value of assets in the category "fair value through profit and loss" are recognized with an impact on profits via the income statement, whereas changes in "fair value of available for sale" assets are recognized in accumulated other equity without having impacts on profits. Interest rate swaps that do not meet the strict criteria of IAS 39 for hedge accounting are classified as "held for trading" in the category "fair value through profit and loss".

Loans extended by the company which are not held for trading purposes (originated loans and receivables) as well as all financial assets which do not have a quoted market price in an active market and whose fair value cannot be reliably measured are carried at amortized cost, if they have a fixed maturity. In the case of current receivables, the amortized costs are equivalent to the nominal amount or the repayment amount.

In accordance with IAS 39 (Financial Instruments: recognition and measurement) regular checks are carried out to establish whether there are any objective sustantial indications of an impairment of a financial asset or portfolio. If such indications exist, the impairment loss is recognized in the income statement. Profits and losses from an available for sale financial asset are recorded directly in accumulated other equity until the financial asset is disposed, or until an impairment has been established. In the event of an impairment, the cumulative loss is withdrawn from shareholders' equity and transferred to the income statement.

#### 5.8.3. Equity participations in joint ventures

#### 5.8. Financial investments

Profits or losses attributable to joint venture companies accounted for under the equity method are allocated on a pro rata basis to the profit/loss and the corresponding book value of the investment. In the income statements, the allocated profit/loss is disclosed separately under the item "share of income /loss of joint venture accounted for using the equity method".

## 5.8.1. Shares in non-consolidated subsidiaries

The shares in non-consolidated subsidiaries recognized under financial assets are carried at fair value. If a quoted market price in an active market is not available and if a fair value cannot be reliably measured, the shares are carried at cost.

#### 5.8.2. Shares in associated companies

Shares in associated companies that are not accounted for under the equity method in accordance with IAS 28 are carried at fair value in accordance with IAS 39. If this value is not available, or if it cannot be reliably measured, the shares in associated companies are carried at cost. Equity participations in joint ventures that are not accounted for under the equity method are carried at fair value in accordance with IAS 39. They are carried at cost if a quoted market price in an active market cannot be reliably measured.

#### 5.8.4. Other shares

Other shares are carried at fair value in accordance with IAS 39. If a quoted market price in an active market is not available and if a fair value cannot be reliably measured, the shares are carried at cost.

#### 5.8.5. Impairment of financial assets

If there are indications that investments in non-consolidated subsidiaries, non-consolidated associated companies, in non-consolidated joint ventures and non-consolidated other equity participations might be **impaired**, IAS 39 is applied.

## 5.9. Financial assets - loans receivable

Loans receivable are carried at amortized costs based on their classification as financial assets. This item does not include any financial assets held for trading. 5.10. Inventories

#### 5.10.1. Raw materials and supplies

Raw materials and supplies are recognized at the lower of average costs of purchase or net realizable values. Costs of purchase comprise all direct purchasing expenses as well as other costs incurred bringing them to the current location and condition. The net realizable value is the estimated selling price generated as part of normal business transactions less costs of completion and less any selling expenses.

#### 5.10.2. Unfinished products

Unfinished products are recognized at the lower of cost of production or net realizable value. Cost of production comprises all expenses that can be directly allocated to the production process as well as reasonable amounts of production-related overheads. These include production-related depreciation, pro rata administrative expenses and pro rata social expenses.

#### 5.10.3. Financing costs of inventories

**Financing costs** are not considered as part of costs of production or purchase.

#### 5.11. Receivables and other assets

Receivables and other assets, except for derivative financial instruments, are loans and accounts receivable, which are recognized at amortized cost. Interest-free or low-interest receivables due in more than one year are discounted. Allowances are established all for estimated bad debts.

#### 5.12. Derivative financial instruments

At the company **derivative financial instruments** are used for hedging purposes in order to reduce currency and interest rate risks.

According to IAS 39, all derivative financial instruments, such as interest rate swaps, currency swaps, combined interest rate and currency swaps, and foreign exchange forward contracts are recognized at market value, irrespective of the purpose or intention for which they were acquired. Unrealized changes in market value of the derivative financial instruments treated as a hedge are recognized in accumulated other equity. Changes in other financial instruments are immediately recorded in earnings.

The consolidated companies are exposed to risks due to interest rate changes and currency risks based on securing the US Dollar cashflows from operational business as well as from financing. Accordingly, derivative financial instruments are used to manage these risks (cross currency swaps).

#### Hedge accounting

The company meets the requirements of hedge accounting for its foreign exchange forward contracts as cashflow hedges. Changes in the market value of foreign exchange forward contracts which are used for compensating for future cashflow risks from existing underlying transactions or planned transactions are initially recognized in accumulated other equity without any impact on profits. As a result, profit (loss) is recorded to the income statement at the same time at which the hedged underlying transaction has an impact on profits. Ineffective portions of the risk management instrument are immediately recorded in results for the period.

For swap transactions, the requirements of hedge accounting are not met. Changes in fair values are recognized in the income statement under financial result with an impact on profits.

Financing of the company has been provided in the currency "Euro" and is provided primarily in the form of loans, an issued bond and bank borrowings (Revolving Credit Facility). Current liquidity surpluses are invested on the money market securities. The consolidated companies are exposed to risks associated with changes in interest rates only as far as amounts are drawn from revolving credit. This does not include credit guarantees for which commissions but not interest are to be paid. Revolving credit has a term of 5 years, serves as a preventative liquidity provision and is only used for very current requirements; from this vantage point, no risk arises from changes in interest rates.

The following financial instruments were used during the financial year:

# 1. Forward foreign exchange transactions:

The purpose of forward foreign exchange transactions is to hedge US Dollar cashflows arising from operational transactions.

At the end of the year, there were currency forward foreign exchange transactions of US \$560.0 million, which have expiration dates till October 2007, with a fair value of  $\notin$ 416.8 million.

The change in market price value of the derivative financial instruments totaled  $\in$  27.2 million during the past business year. Proceeds from hedging activities from the accumulated other equity amounting to  $\in$  8.3 million were recorded in the revenues.

As of December 31, 2005, after deduction of deferred taxes, the change in fair value of the cashflow hedges transactions of  $\in$ -15.0 million (prior year:  $\in$  12.2 million) was recorded in accumulated other equity without any impact on profits.

#### Risk management and hedging policy

Cashflows, which are principally secured through forward foreign exchange transactions, are anticipated for the following periods and amounts. This assumes that these planned transactions will primarily be considered in the results for these periods:

business year	planned transactions (Underlying transaction in US\$ millions)
2006	380.0
2007	180.0
	560.0

There are no transactions for which hedge accounting had previously been used but that are no longer expected to occur.

## 2. Swaps

### Cross currency swaps

The goal is to protect against fluctuations in exchange rates and interest rates, using US Dollar income surpluses.

With this financial instrument, fixed Euro interest obligations have been swapped for fixed US Dollar interest obligations. Due to exchange rate fluctuations, a negative market price of  $\notin$ 7.7 million resulted on the balance sheet date (versus a positive  $\notin$ 5.2 million for the previous year).

#### 5.13. Cash and cash equivalents

Cash and cash equivalents comprise foreign currency holdings of  $\in$ 8.2 million and are valued using the exchange rate applicable at the reference date.

#### 5.14. Deferred taxes

Deferred tax assets and deferred tax liabilities are recognized for all temporary differences between the values reported in the tax balance sheets and the consolidated balance sheet ("balance sheet liability method"). The deferred tax assets and deferred tax liabilities were calculated using the tax rate applicable at the point at which the temporary differences are expected to reverse. Deferred tax assets and deferred tax liabilities are offset if the tax creditor and tax debtor is the same person and if maturities are congruent.

#### 5.15. Pension provisions

Pension provisions are established based on the projected unit credit method in accordance with IAS 19 (Employee Benefits). This method recognizes not only the pensions and acquired entitlements known on the balance sheet date but also estimated increases in pensions and salaries expected in future, with a conservative assessment of the relevant parameters. The calculation is based on actuarial reports. Actuarial profits and losses are only offset against the pension expense if they fall outside a range of 10% (target range) of the estimated obligation. In this case, they are spread over the future average remaining service time of the workforce. The expenses attributable to cumulative interest for pension obligations are recognized with financial results in the income statement. All other expenses attributable to pension obligations are included with the costs of the affected function areas.

#### 5.16. Other provisions

Other provisions are recorded if an obligation exists to third parties, it is probable that the provision will be utilized and, if probable, if the provision can be reliably estimated. For measuring the value of provisions with, for example, warranties and missing costs – consideration is given to all cost components including those in inventories. Non-current provisions due in more than one year are recognized with a settlement amount discounted to the balance sheet 's date. Provisions for part-time work for elderly people and anniver-saries are evaluated in accordance with statistical appraisals under IAS 19.

#### 5.17. Financial obligations

**Financial obligations** are initially recognized at cost of purchase equivalent to the fair value of the service rendered in return. Financial obligations that are valued at fair value are considered in the totals pursuant to transition regulations in accordance with IAS 39.105 ff.

Non-current liabilities due in more than one year are recognized with their present value. Liabilities, except for derivative financial instruments, are carried at fair value.

#### 5.18. Other comments

The claims of shareholders to dividend payments are recorded as a liability in the period in which the corresponding resolution is passed.

#### 5.19. Assumptions and estimates

The process of preparing consolidated financial statements in accordance with the requirements of IASB involves making assumptions and estimates which have an impact on the extent and disclosure of the reported assets and liabilities, income and expenditure as well as contingent liabilities. The assumptions and estimates primarily refer to the determination of estimated useful lives within the group, the statement and valuation of provisions and the extent to which future tax relief will be realized. The actual amounts may differ from the assumptions and estimates. Changes are reflected in the income statement at the point at which appropriate knowledge is gained.

The company assesses the value of its goodwill at least once a year (see "Accounting principles and policies"). For this purpose, the goodwill is allocated to cash generating units. The recoverable amount of the cash generating units is established on the basis of the value in use. This requires the use of estimates.

#### 5.20. Sensitivity analysis

The group makes estimates and assumptions relating to the future. Those estimates may not correspond precisely to subsequent circumstances. The estimates and assumptions involving a significant risk in the form of a major adjustment to the book values of assets and liabilities during the next financial year are discussed in the following.

#### 5.20.1. Goodwill

In line with its accounting policies, the consolidated companies assesses every year whether an impairment of goodwill is required. The utility value is determined by calculating the recoverable amount of the cash generating units. This requires the use of estimates.

If the actual gross profit on December 31, 2006, is 10% lower than management's estimate of gross profit on December 31, 2005, this would not indicate an impairment of goodwill or any other assets. Assuming a 10% increase in the discount rate before taxes which was applied for calculating the enterprise value using the discounted cashflow method (DCF), the company's goodwill and property, plant, and equipment would still not be impaired.

#### 5.20.2. Income taxes

The group bases the extent of provisions for expected tax audits on estimates with regard to whether, and if so to what extent, additional taxes will be payable. If the definitive taxation in relation to these business transactions differs from the initially assumed taxation, this will have an impact on the actual and deferred taxes in the period in which the taxation is definitively established.

# II. Notes to the Consolidated Income Statement

## 6. Cost of sales

Cost of sales		
in € million	2005	2004
Cost of materials	-1,330.7	-1,122.0
Personnel expenses	-377.9	-353.0
Depreciation and amortization	-128.8	-123.9
Other cost of sales	-27.4	-28.7
	-1,864.8	-1,627.6

On the balance sheet date, the value of MTU Maintenance Canada Ltd., Canada, was compared with its recoverable amount (cashflows), which resulted in a shortfall in the present value compared with the  $\in$ 2.4 million carrying amount of MTU Maintenance Canada Ltd. This amount reduces in the full amount the result for the accounting period and is primarily contained in the cost of sales. A small portion is included in administration costs due to the classification of functions.

The following asset groups were affected by the impairment of value:

in € million	
Intangible assets	0.5
Property, plant, and equipment	1.9
	2.4

The research and development costs in the amount of  $\in$ 57.7 million – included in the cost of sales for the previous year – were reclassified with their own position (text item 7) for the financial year 2005 in order to make comparison easier.

# 7. Research and development costs

## **Research and development costs**

in € million	2005	2004
Cost of materials	-33.3	-75.2
Personnel expenses	-44.9	-73.2
Depreciation and amortization	-5.6	-7.5
	-83.8	-155.9
Consumption of research provisions	38.1	98.2
Expenses	-45.7	-57.7

See text item 6 (Cost of sales) to compare new classification.

## 8. Selling costs

Selling costs		
in € million	2005	2004
Cost of materials	-9.2	-7.6
Personnel expenses	-44.2	-45.8
Depreciation and amortization	-2.2	-0.4
Other selling costs	-11.8	-14.2
	-67.4	-68.0

Selling costs contain mainly expenses for marketing, advertising, and sales personnel as well as write-downs in relation to trade accounts receivable.

## 9. General administrative costs

General administrative costs		
in € million	2005	2004
Cost of materials	-3.8	-4.4
Personnel expenses	-31.7	-29.8
Depreciation and amortization	-1.7	-1.2
Other administrative expenses	-8.2	-52.3
	-45.4	-87.7

General administrative costs for the previous year contained  $\in$ 41.8 million in transaction costs related to the acquisition of business enterprises on January 1, 2004.

# 10. Other operating income and expenses

Other operating income and expenses		
in € million	2005	2004
Income		
Income from the disposal of fixed assets	0.3	2.0
Insurance claims	2.8	1.1
Cost charged on to other companies	0.1	0.1
Other operating income	10.3	4.2
	13.5	7.4
Expenses		
Losses from the disposal of fixed assets	-2.6	-0.3
Insurance claims	-2.2	-2.1
Other operating expenses	-4.0	-0.9
	-8.8	-3.3
	4.7	4.1
The "Other operating income" is composed of the following:		
Divesting of ATENA Engineering GmbH	4.4	
Discontinuation of property transfer tax liability	3.8	
Other	2.1	4.2
	10.3	4.2
The "Other operating expenses" is composed of the following:		
Customs liabilities	-3.0	-0.3
Other	-1.0	-0.6
	-4.0	-0.9

## 11. Financial result

in € million	2005	2004
Income from non-consolidated subsidiaries	0.2	0.2
Income from associated companies	0.2	0.1
Net interest income	-73.9	-73.1
	-73.5	-72.8
Composition of net interest income		
Income		
Interest and similar income <sup>*)</sup>	28.9	23.3
Exchange rate gains from financing transactions	2.6	14.2
Exchange rate gains from valuations of currency holdings	41.8	9.3
Exchange rate gains from interest-currency swaps	4.4	5.2
Other financial income	0.3	2.5
	78.0	54.5
Expenses		
Interest and similar expenses	-86.1	-85.0
Interest expenses attributable to pension provisions	-18.3	-17.7
Exchange rate losses due to valuation of currency holdings	-29.8	-16.1
Interest expenses for developing provisions	-1.8	-4.8
Interest expenses due to finance leasing contracts	-2.9	-2.6
Exchange rate losses due to financing transactions	-13.0	-1.4
	-151.9	-127.6
	-73.9	-73.1
The "Interest and similar expenses" is composed of the following:		
Loan interest	-28.6	-28.0
Prepayment penalty for early payment of the High Yield Bond <sup>**)</sup>	-9.1	
Interest	-26.9	-47.5
Exchange losses due to financing contracts	-3.3	
Exchange rate losses due to valuation of interest-currency swaps	-12.9	
Interest expenses for other personnel costs	-1.6	-2.0
Losses from the disposal of financial assets	-1.3	
Interest relating to non-consolidated subsidiaries	-1.2	-7.3
Other	-1.2	-0.2

\*) Primarily interest
 \*\*) See text item 27

## 12. Income taxes

Income taxes		
in € million	2005	2004
Current tax expense	-122.0	-8.8
Deferred taxes expense	96.2	2.5
Income tax in accordance with the income statement	-25.8	-6.3

## **Tax reconciliation**

Calculation of the effective tax expense		
in € million	2005	2004
Result before income tax	58.7	6.5
Income tax rate (incl. trade tax)	40.4%	40.4%
Expected tax expense	23.7	2.6
Effects of valuation corrections and value adjustments of active deferred taxes	4.4	0.9
Effects of divestment of Group companies	-1.8	
Effects of operating expenditures not eligible for deduction and tax-free revenues	1.1	2.2
Effects of participations accounted for with the equity method	-0.9	0.7
Other effects	-0.7	-0.1
Total tax expense	25.8	6.3

Deferred tax assets and deferred tax liabilities are recognized for all temporary differences between the values reported in the tax balance sheets of the individual companies and the consolidated balance sheet using the liability method. Based on the good results in the past and the positive results to be expected, MTU Aero Engines Holding AG is confident that the future taxable income of MTU Aero Engines Holding AG and other subsidiary companies will be sufficient for realization of deferred tax assets. Up to December 31, 2005, all domestic deferred taxes were determined by temporary differences on the basis of a combined 40.4% tax rate. In the financial year 2005, the corporate tax rate was 25% plus the solidarity surcharge of 5.5% on the corporate tax charge. This results in a effective corporate

tax rate of 26.4%. The trade tax amounts to 14% after corporate tax is taken into consideration, which means the total tax rate comes to 40.4%.

The actual tax expense is  $\in 2.1$  million above the expected tax expense that would have resulted from application of the rate for tax on distributed earnings for MTU Aero Engines Holding AG. In the previous year, actual tax expense was  $\in 3.7$  million higher than expected.

Purchase price distributions associated with purchases made during the previous business year resulted in an additional depreciation volume of  $\in$ 63.3 million, which lowered earnings but was not taken into account for taxation.

Factors that affected the rise of the total tax rate included interest from purchase financing in the amount of  $\in$ 37.7 million, which was added in part when determining income tax, as well as  $\in$ 2.9 million in valuation allowances for tax losses carried forward for MTU Maintenance Canada Ltd., Canada, and  $\in$ 1.5 million for those of MTU Aero Engines North America Inc., USA.

Text item 29 details the balance sheet items under which the tax accruals and deferrals are classified.

## 13. Earnings per share

Earnings per share		
		2005
Net profit	in € million	32.9
Number of shares	pieces	55,000,000
Earnings per share <sup>*)</sup>	€	0.60
*) Undiluted result; there is no dilution effect		

# 14. Additional information relating to the income statement

# 14.1 Adjusted reconciliation of EBIT to EBITDA

Adjusted by the effects caused by the purchase price allocations for the acquisition of the group companies as well as the one-time special influences of the previous year, the following provisional results are produced:

## **Reconciliation of EBIT to EBITDA adjusted**

in € million	12/31/2005	12/31/2004
1. EBIT	130.0	81.1
+ Depreciation of fixed assets	138.3	133.0
2. EBITDA	268.3	214.1
- Consumption of research provisions	-38.1	-98.2
+ Restructuring costs	2.8	6.7
+ Profit in order backlog		27.0
+ Direct transaction costs		22.6
3. EBITDA adjusted	233.0	172.2

## 14.2. Financial instruments:

Comparison of valuation up to December 31, 2005

Comparison of valuation up to December 31, 2005			
in € million	Book value	Reconciliation	Fair value
Financial assets	526.3	0.6	526.9
Financial liabilities	1,157.9		1,157.9
Derivatives	32.9		32.9

The book values of the financial instruments were matched with their respective fair values. The fair value of MTU Maintenance Zhuhai Co. Ltd., China, was determined with the discounted cashflow method and compared to the book value. The shares in other joint ventures, in associated companies, and other shares correspond to the fair value (see text item 5.8.2. and 5.8.4.). Other assets and receivables correspond to the fair value in accordance with valuation allowances and currency translation as well as financial liabilities. Derivative financial instruments are assessed at market prices.

## 14.3. Personnel expenses

Personnel expenses		
in € million	2005	2004
Wages and salaries <sup>*)</sup>	403.3	408.9
Social security, retirement, and other benefit costs	100.6	101.1
- thereof for pensions: €31.4 million (€28.2 million in previous year)		
	503.9	510.0
*) Adjusted from previous year by €10.7 million		

The employer's part of social security contribution is  $\in$ 69.2 million ( $\in$ 72.9 million in the previous year), which is included as expenses.

#### 14.4. Statement of average number

#### of employees

Statement of average number of employees		
Headcount	2005	
Industrial/commercial staff	2,982	
Administrative staff	3,322	
Employees on temperary contracts	144	

Employees on temporary contracts	144	180
	6,448	7,257
Trainees	283	286
Students on work experience projects	167	139
	6,898	7,682

## 14.5. Cost of materials

Cost of materials		
in € million	2005	2004
Cost of raw materials and supplies	678.0	596.3
Cost of purchased services	696.6	614.0
	1,374.6	1,210.3

#### 14.6. Order backlog

The order backlog consists of firm purchase orders, i.e. orders the company is obliged to deliver, and the customers are obliged to accept and pay for the products or services. Order backlog is calculated as follows:

- Order backlog includes all orders that have been made directly to the company by a customer or issued by the ultimate customer of the leading partner of a commercial maintenance or made by the customer of a military engine consortium.
- Backlog with respect to commercial engine sales is recorded at list price and does not reflect concessions. MTU is charged these by the lead partner. They are included in the cost of sales.

2004 3.165

3,912

• For military programs, the customers typically commit to purchase a fixed number of aero engines at the time the production contract is signed, and the company therefore records as order backlog the entire contract value upon signing. As a result, the military business order backlog with respect to purchase orders is reduced over a long period of time, reflecting the delivery schedule agreed with the respective customer.

- In contrast, purchase orders for commercial engines are received from time to time, and are often concentrated around the launch of a new engine or during periods of particularly intense marketing. Spare parts orders are often filled in the period in which the order is received, and therefore the order backlog generally does not include substantial amounts for spare parts.
- Commercial maintenance backlog relates to purchase orders issued in relation to engines delivered for servicing. Not included in the order backlog are estimated future orders under non-current service agreements or "Fly-by-Hour and Powerby-the-Hour" contracts based on estimated flight hours for the life of the contract. As a result, the commercial maintenance order backlog is relatively low. In addition to a narrowly defined backlog of orders, the company displays the expected amount of engine repairs from the orders for "Flyby-Hour and Power-by-the-Hour" contracts below the fixed contracts, as well as the volume of contracts that would be expected to result.
- Once the revenues are recognized, an equivalent amount is deducted from the order backlog.

# III. Notes to the Consolidated Balance Sheet

The following overview displays the changes in assets and liabilities positions between December 31, 2005, and December 31, 2004. Detailed explanations can be found in the following statements appended to the respective positions:

<b>Calculation of change in asset and liability positions</b> (Calculation of change from December 31, 2005, to December 31, 2004)			
in € million			
Non-current assets			
Intangible assets	-26.9		
Property, plant, and equipment	-30.6		
Financial assets	1.0		
Other assets	-38.9		
Deferred tax assets	-2.3	-97.7	
Current assets			
Inventories <sup>*)</sup>	70.1		
Receivables	23.8		
Other assets	-145.0		
Cash and cash equivalents	-12.6		
Prepayments	-4.4	-68.1	
Change in assets		-165.8	
Equity		311.3	
Non-current debt			
Provisions	-7.6		
Financial liabilities	-391.4		
Other liabilities	85.8		
Deferred tax liabilities	-116.9	-430.1	
Current debt			
Provisions	52.1		
Financial liabilities	-222.0		
Trade payables	62.2		
Other liabilities	60.7	-47.0	
Changes in equity and liabilities		-165.8	
*) incl. divestment of ATENA GmbH €4.9 million			

# 15. Movements in consolidated fixed assets (1)

Movements in consolidated fixed assets (1) – Cost

in € million
Programme assets
Programme-independent technologies
Customer relations
Rights and licenses
Goodwill
Intangible assets
Land, leasehold rights and buildings including buildings on non-owned land
Technical equipment, plant and machinery
Other equipment, operational and office equipment
Advance payments and construction in progress
Property, plant, and equipment
Shares in subsidiaries
Shares in associated companies
Equity participations in joint ventures
Other shares
Loans to:
- Joint ventures
- Other shares
Other loans
Financial assets
Fixed assets

			Cost			
1/1/2005	Exchange rate differences	Disposal of ATENA	Additions	Transfers	Consolidated disposals	12/31/2005
377.5						377.5
124.7						124.7
56.5						56.5
54.6	1.9	-0.3	5.6	0.5	-0.4	61.9
382.6	0.7	-2.4				380.9
995.9	2.6	-2.7	5.6	0.5	-0.4	1,001.5
311.5	0.1		1.0	2.3		314.9
231.0	1.2		19.1	9.1	-4.8	255.6
121.7	0.5	-1.2	23.9	3.7	-2.1	146.5
17.2	0.1		33.9	-15.6		35.6
681.4	1.9	-1.2	77.9	-0.5	-6.9	752.6
0.6		-0.1	0.1		-0.1	0.5
0.4						0.4
44.1			2.4			46.5
0.1						0.1
			0.2		-0.2	
1.3					-1.3	
0.1						0.1
46.6		-0.1	2.7		-1.6	47.6
1,723.9	4.5	-4.0	86.2	0.0	-8.9	1,801.7

# 15. Movements in consolidated fixed assets (2)

Movements in consolidated fixed assets (2) – Depreciation

in € million	1/1/2005
Programme assets	0.6
Programme-independent technologies	12.5
Customer relations	4.7
Rights and licenses	9.5
Goodwill	
Intangible assets	27.3
Land, leasehold rights and buildings including buildings on non-owned land	9.3
Technical equipment, plant and machinery	58.0
Other equipment, operational and office equipment	37.5
Advance payments and construction in progress	
Property, plant, and equipment	104.8
Shares in subsidiaries	
Shares in associated companies	
Equity participations in joint ventures	
Other shares	
Loans to:	
- Joint ventures	
- Other shares	
Other loans	
Financial assets	
Fixed assets	132.1

	Depreciation				Net boo	k values
Exchange rate differences	Disposal of ATENA	Additions	Disposals	12/31/2005	12/31/2005	12/31/2004
		3.9		4.5	373.0	376.9
		12.4		24.9	99.8	112.2
		4.8		9.5	47.0	51.8
0.4	-0.1	11.4	-0.3	20.9	41.0	45.1
					380.9	382.6
0.4	-0.1	32.5	-0.3	59.8	941.7	968.6
0.1		9.4		18.8	296.1	302.2
0.1		62.4	-2.4	118.1	137.5	173.0
0.2	-0.4	34.0	-1.6	69.7	76.8	84.2
					35.6	17.2
0.4	-0.4	105.8	-4.0	206.6	546.0	576.6
					0.5	0.6
					0.4	0.4
					46.5	44.1
					0.1	0.1
						1.3
					0.1	0.1
					47.6	46.6
0.8	-0.5	138.3	-4.3	266.4	1,535.3	1,591.8

## 16. Intangible assets

Intangible assets comprise mainly the program assets activated by purchase price allocation (PPA), and program-independent technologies capitalized as a result of the acquisition as well as – primarly technical – software and the acquired goodwill.

**Goodwill** represents the amount by which the purchase price exceeded the fair value of net assets of the acquired company at the time of the acquisition. The goodwill is spread over cash generating units for the purpose of the impairment test.

An impairment test has been carried out for the year under review on the basis of the segments. There were no indications of any impairment. Detailed notes to the analysis and determination of the impairment test are shown under text item 35.3.

The increase in intangible assets primarily represents the purchase of software packages  $PLM^2$  ( $\in 1.6$  million), Unigraphics NX ( $\in 1.0$  million), and a patent right (Casing Treatment Invention  $\in 1.1$  million).

The carrying value of MTU Maintenance Canada Ltd., Canada, was below the comparable recoverable amount on the balance sheet date. The related impairment of value of  $\in$ 2.4 million reduces the intangible assets proportionately by  $\in$ 0.5 million and is classified under the "Commercial Maintenance, Repair and Overhaul business" market segment (see text item 35). Property, plant, and equipment make up the remaining amount.

All movements in the item "intangible assets" are stated in the list of assets (text item 15).

#### 17. Property, plant and equipment

Major additions in 2005 were: four CNC 5A milling machines ( $\in$ 2.6 million), three CNC milling machines ( $\in$ 1.4 million), two laserdrilling units ( $\in$ 1.6 million), one CND lasercutting unit ( $\in$ 0.7 million), one x-ray goniometer ( $\in$ 0.7 million), special equipment for GP7000 ( $\in$ 3.1 million), and TP400-D6 ( $\in$ 1.7 million), as well as three lease-pool engines ( $\in$ 1.5 million) and data processing hardware ( $\in$ 4.9 million). In addition, advance payments of  $\in$ 33.9 million were made for units under construction, which will be recorded for the corresponding asset group after completion or start of operation.

The carrying value of MTU Maintenance Canada Ltd., Canada, was below the comparable recoverable amount on the balance sheet reference date. The related impairment of value of  $\in$ 2.4 million reduces the property, plant and equipment proportionately by  $\in$ 1.9 million and is classified under the "Commercial Maintenance, Repair and Overhaul business" market segment (see text item 35). Intangible make up the remaining amount.

Land and buildings leased from Silkan Gewerbepark Nord Hannover-Langenhagen GmbH & Co. KG, Munich (an enterprise of the LHI leasing company), have been capitalized because a bargain purchase option has been granted to the company at the end of the leasing period. In addition, the company's fixed assets also comprise seven leased engine plants. For these assets, the company is required to make an additional payment at the end of the leasing period, if the disposal proceeds of the leasing assets fall below the book value. The liabilities of all leasing assets are recognized at their present value and amortization is applied every year. Details to the minimum lease payments of the lease contracts are as follows:

## Minimum lease payments for finance lease properties

#### in € million

- Total future minimum lease payments
- due within one year
- due between one and five years
- due later than five years

## Interest portion of future minimum lease payments

- due within one year
- due between one and five years
- due later than five years

Present value of future minimum lease payments

- due within one year
- due between one and five years
- due later than five years

The following net book values and lease payments collected applied on the balance sheet reference date for assets capitalized for finance leasing purposes:

#### Net book values/lease payments

in € million	Net book value 2005	Collected lease payments 2005
Land and buildings	28.6	1.8
Technical equipment and machines	17.0	3.1
	45.6	4.9

A further breakdown of the property, plant, and equipment summarised in the balance sheet as well as related movements in the year under review are included in the movements in consolidated fixed assets (text item 15).

## 18. Financial assets

## Composition of financial assets: Accounting of financial assets

in € million	2005	2004
Joint ventures accounted for with the equity method	42.3	40.1
Joint ventures accounted for at cost	4.2	4.0
Other shares accounted for at cost	1.1	2.5
	47.6	46.6

The joint venture accounted for with the equity method refers to MTU Maintenance Zhuhai Co. Ltd, Zhuhai, China. The joint ventures and other shares accounted for at cost include primarily non-substantial shares in non-consolidated subsidiaries, non-conso-

lidated equity participations in associated companies, as well as non-consolidated equity participations in joint ventures. Non-consolidated subsidiaries are minor companies for the Group.

12/31/2005	12/31/2004
5.8	3.4
32.9	26.5
34.5	41.2
73.2	71.1
3.2	1.5
10.7	5.3
6.1	12.4
20.0	19.2
2.6	1.9
22.2	21.2
28.4	28.8
53.2	51.9

The Group has summarised the following shares in the joint ventures and associated companies:

#### Shares in joint ventures and associated companies

in € million	Joint ventures 2005 <sup>*)</sup>	Associated companies 2005 <sup>**)</sup>	Joint ventures 2004 <sup>***)</sup>	Associated companies 2004****)
Disclosures to the income statement				
- Income	241.4	994.4	185.0	940.2
- Expenses	-239.8	-993.6	-197.8	-939.7
	1.6	0.8	-12.8	0.5
Disclosures relating to the balance sheet				
- Non-current assets	65.9	1.9	60.5	2.5
- Current assets	144.0	211.7	111.9	154.7
	209.9	213.6	172.4	157.2
Equity	40.3	2.2	35.2	1.8
Non-current debt	73.4	1.2	59.6	5.1
Current debt	96.2	210.2	77.6	150.3
	169.6	211.4	137.2	155.4

\*) Disclosed data for MTU Maintenance Zhuhai Co. Ltd., China are for 2005. The other joint-venture data for Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ceramic Coating Center S.A.S and Airfoil Services Sdn. Bhd. are for the 2004 business year, as the actuals are not yet available.

\*\*) Data for 2004 business year, as actuals for 2005 are not yet available.

\*\*\*) Disclosed data for MTU Maintenance Zhuhai Co. Ltd., China are for 2004. The other joint-venture data for Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ceramic Coating Center S.A.S and Airfoil Services Sdn. Bhd. are for the 2003 business year. Where 2004 annual reports were available, the previous year's numbers were updated.

\*\*\*\*) Data for 2003 business year, as actuals for 2004 are not yet available.

## 19. Inventories

#### Inventories

in € million	12/31/2005	12/31/2004
Raw materials and supplies	233.3	196.3
Work in progress	277.4	249.8
Advance payments	7.5	2.0
	518.2	448.1

Inventories are recognized at the lower of cost or net realizable value. The costs of production of unfinished products comprise the costs of raw materials and supplies, direct personnel expenses, other direct costs and overheads which can be allocated to production (based on normal operating capacity). Costs of purchase or production do not include any costs of debt capital. Discounts, bonuses, and concessions have

been deducted from the costs of purchase. Advanced payments received are recognized under liabilities.

## 20. Receivables and other assets

Receivables						
	12/31/2005			12/31/2004		
in € million	Current Due within one year	Non-current Due in more than one year	Total	Current Due within one year	Non-current Due in more than one year	Total
Trade receivables	269.9		269.9	304.9		304.9
Accounts receivable attributable to production and maintenance orders	148.5		148.5	89.7		89.7
	418.4		418.4	394.6		394.6

More details to accounts receivables from related companies are disclosed in "Other assets" (text item 20).

The previous year's amount of  $\in$ 55.9 million is therefore classified accordingly.

#### **Other assets**

in € million	Current Due within one year	12/31/2005 Non-current Due in more than one year	Total	Current Due within one year	12/31/2004 Non-current Due in more than one year	Total
Accounts receivable from related companies						
- Associated companies	26.3		26.3	46.1		46.1
- Joint ventures	0.4		0.4	9.8		9.8
Tax refund claims						
- Taxes on income	5.4		5.4	41.3		41.3
- Other taxes	11.6		11.6	11.9		11.9
Accounts due from employees	1.0		1.0	1.1		1.1
Accounts due from suppliers	11.8		11.8	13.6		13.6
Market values of derivatives						
<ul> <li>Forward foreign exchange transactions</li> </ul>			0.0	77.1	34.8	111.9
- Interest rate swaps			0.0		5.2	5.2
Other assets	2.3	1.5	3.8	2.9	0.4	3.3
	58.8	1.5	60.3	203.8	40.4	244.2

More details to accounts receivables from companies for which an investment relationship exists are disclosed in the chapter "Relationships with related companies and persons". The receivables are netted with the liabilities of the respective company. The market prices for hedging contracts and the market price for interest rate swaps in the amount of  $\in$  111.9 million and  $\in$  5.2 million turned negative with  $\in$  25.2 million and  $\in$  7.7 million during the past business year due to the change in the dollar exchange rate and are therefore accounted for under "Other liabilities" (text item 28).

## 21. Cash and cash equivalents

Cash and cash equivalents of  $\in$  15.9 million (previous year:  $\in$  28.5 million) include cash in hand, cash at banks, as well as current securities which are settled within three months of acquisition.

## 22. Deferred taxes

Please see text item 29 concerning income tax assets and liabilities.

## 23. Prepayments

The prepayments of  $\notin$ 5.2 million (previous year:  $\notin$ 9.6 million) consist primarily of prepayments for insurance premiums and rents.

## 24. Equity

Movements in the Equity of the Group are set out in the equity capital list.

#### **Capital reserves**

A total of €300.0 million accrued to MTU Aero Engines Holding AG from proceeds of the placement of the shares on the Frankfurt Stock Exchange, after the deduction of the face value of €1.00 per share from the capital increase of 15 million shares (see Principles). After deduction of €20.3 million in direct transaction costs and addition of the €8.2 million in income tax deductions from the transaction costs, this money was placed in capital reserves.

## Matching Stock Program (MSP)

In implementing its economic objectives the Group has set up a program for its managers to participate in its share capital as part of a matching stock program, which authorizes the subscription of "phantom stocks". On the date of subscription to the MSP, participants must have an existing employment relationship with MTU Aero Engines Holding AG or a German company in the MTU Group.

Five tranches of MTU stock options are allocated by the Group to the participants on June 6 of each year, from 2005 to 2009. Each tranche of allocated phantom stocks is subject to a vesting period of 2 years and can be converted to taxable remuneration upon achievement of average exercise thresholds. This remuneration is to be used to acquire stocks in MTU Aero Engines Holding AG. The purchases are made at the market price. The stocks must be held for two years after the options are exercised.

The fair value of the Phantom stocks is carried as an expense on a pro rata basis and simultaneously recorded in the equity (accumulated other equity) up to the options' maturity (strike date). The total expense which is to be recorded over the period to the strike date is calculated from the fair value of the options granted. Changes in valuations for non-market-related exercise thresholds (such as significant fluctuations in personnel) are considered in the assumptions relating to the expected number of exercisable phantom stocks. Changes in market conditions such as movements in share price performance and price volatility, on the other hand, do not lead to a different fair value.

On the balance sheet date, the company reviews the estimate of the number of options through to the end of the respective exercise period for an allocated tranche for which it is likely that these could be exercised. The impact of any changes to original estimates that may have to be taken into account are taken into account in the income statement and via a corresponding adjustment to equity for the remaining period until they become non-forfeitable. No more changes to valuation are made after the strike date (date on which the options become non-forfeitable). No changes in valuation were made up to the balance sheet date.

Each MSP share acquired from the program authorizes the holder to subscribe for six phantom stocks per tranche. There are a total of five tranches as part of the MSP. As a rule, MSP shares are not subject to any restraints on disposal. MSP shares authorize the holder to participate in dividends and subscription rights.

The exercise threshold has been reached if the strike price of the allocated options (phantom stocks) corresponds to the average, non-weighted closing price of the shares in XETRA trading over the last 60 stock market days on the Frankfurt Stock Exchange prior to the phantom stocks being exercised, and is above the average non-weighted closing price of the shares in XETRA trading over the last 60 stock market days prior to the allocation of the options plus a basic premium of 10%. Options require that the employee work for the company.

A total of 72,671 shares were subscribed within the MSP. This means that after taking into account employee fluctuations of 4% p.a., a maximum of 1,854,774 options (phantom stocks) could be exercised over the duration of the MSP up to the strike date of the last tranche on June 6, 2009. Disregarding fluctuations, a total of 2,180,130 phantom stocks resulted as of the end of the program on the balance sheet date, stemming from the shares acquired by the program's participants on June 6, 2005.

The average fair value of a phantom stock equals  $\leq 2.32$  and is determined with the Black-Scholes method. From this,  $\leq 0.7$  million as recognized in income statement for the period under review. Equity increased by the same amount (see Consolidated statement of changes in equity)

The assumptions upon which this is based include the following:

# **Program duration assumptions**

Stock price change p.a.	6.5 %
Expected volatility	20 %
Duration of each tranche	2 years
Risk-free interest rate per tranche	2.1% - 3.4 %
Fluctuation rate	4.0 %

Given MTU Aero Engines Holding AG's admission to official listing during the business year, a peer group of seven listed companies with similar business models was used to determine expected volatility. Dividend payments, however, were not considered in determining the average fair value of a phantom stock.

# Status of granted and exercised phantom stocks as of the balance sheet reference date at the expected average exercise price:

	Phantom stocks	Profit share per Phantom stock in € <sup>*)</sup>
Phantom stocks outstanding at the start of the period under review	0	
Phantom stocks granted during the period under review	2,180,130	2.32
Phantom stocks forfeited during the period under review	0	
Phantom stocks exercised during the period under review	0	
Phantom stocks granted during the period under review	0	
Phantom stocks outstanding at the end of the period under review	0	
Phantom stocks that could be exercised at the end of the period under review	0	
Total:	2,180,130	

\*) relates to the expected average fair value of the tranches still to be exercised during the years 2005 – 2009; an exercise price does not exist for the employee share option program. The basic price and the exercise price are determined by the average closing stock price 60 trading days before allotment or exercise.

# Accumulated other equity

Accumulated other equity represents the currency translation of financial statements of foreign subsidiaries, profit participation rights granted through the MSP, and the change in the valuation of financial instruments.

The estimated pension obligation (defined benefit obligation) has been calculated using actuarial methods based on a number of assumptions. IAS 19 is used for valuation purposes. Apart from life expectancy assumptions, the following assumptions were made:

# **25. Pension provisions** (Current and non-current)

Pension provisions are established for obligations arising from vested interests and current benefits paid to authorised active and former employees within the MTU Aero Engines Holding AG Group and their surviving dependants. Depending on the legal, financial, and tax circumstances of the particular country, there are various systems of retirement pension plans which, in general, are based on the length of service and remuneration of the employees.

A distinction is made between defined contribution plans and defined benefit plans. In the case of defined contribution plans, the company has no further obligations.

In the case of defined benefit plans, the company has an obligation to fulfill the commitments made to active and former employees (defined benefit plans). These benefits are principally reserved for as provisions in the consolidated financial statements. In Germany, most of the benefit commitments are applicable for MTU Aero Engines GmbH, Munich, MTU Maintenance Hannover GmbH, Langenhagen, as well as MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde. These commitments are reserved for by way of allocations to provisions. There are also benefits financed by employees (retirement and benefit capital as well as pension capital accumulation account).

# Additional assumptions

	12/31/2005	12/31/2004
Discount rate	4.25%	4.75%
Salary level trend	2.50%	2.50%
Pension level trend	1.75 %	1.75%

Future salary trends growth includes expected future salary increases, which are estimated every year on the basis of various factors, including inflation and length of service with the company.

Actuarial profits and losses may occur for valuation of benefit obligations, which are caused by such things as changes in calculation parameters or changes in estimates with regard to risk developments of pension obligations. Accrued actuarial profits and losses that do not exceed 10% of the cash value of the obligations are not accounted for. Actuarial losses that lie outside the 10% bandwidth of the scope of obligations for defined benefit pension plans are distributed from the following year over the average remaining lifetime of the staff. As of December 31, 2005, there were accrued actuarial losses of €64.3 million (previous year: €27.0 million).

The current underfunding in Germany is primarily a result of capital-induced changes in the discounting factor. Due to significantly reduced net yields from investments, pension, anniversary, and partial retirement obligations up to December 31, 2005, were discounted by 4.25%. The following financing status of the pension benefits was produced using the basis for calculation in accordance with IAS 19:

# Reconciliation of cash values as of the balance sheet date

in € million	12/31/2005	12/31/2004
Projected benefit obligations of benefit commitments (Defined benefit obligations)	442.1	385.9
Adjustment based on actuarial profits (+) and losses (-)	-64.3	-27.0
Total as of December, 31	377.8	358.9

The financial developments of the pension provisions can be derived as follows:

Movements in totals		
in € million	12/31/2005	12/31/2004
Total as of January 1	358.9	343.0
Disposal of ATENA Engineering GmbH	-0.5	0.0
Expenses from pension obligations	33.4	27.6
Pension payments	-14.0	-11.7
Total as of December 31	377.8	358.9
thereof due in within one year (current)	15.3	14.2
thereof due in more than one year (non-current)	362.5	344.7
	377.8	358.9

Pension obligations for the MTU Group of  $\in$  33.4 million (previous year:  $\in$  27.6 million) result from the defined benefit pension

system, composed of the following components:

Expenses from pension obligations		
in € million	12/31/2005	12/31/2004
Expenses for the pension claims earned in the year under review	15.1	9.9
Expenses from compounded interest of pension obligations	18.3	17.7
	33.4	27.6

The expenses attributable to compounded interest for pension obligations are recognized with financial result in the income statement, whereas expenses attributable to pension obligations in the year under review are included with the costs of the affected function areas.

# 26. Other provisions

(Current and non-current)

# Other provisions fall primarily under the following:

# Other provisions

in € million	Current Due within one year	12/31/2005 Non-current Due in more than one year	Total	Current Due within one year	12/31/2004 Non-current Due in more than one year	Total
Tax obligations	41.3		41.3	9.7		9.7
Personnel and social obligations	56.7	12.4	69.1	48.7	15.5	64.2
Obligations due to potential losses and warranties	10.9	18.9	29.8	10.8	20.3	31.1
Other obligations	98.3		98.3	87.0	20.9	107.9
	207.2	31.3	238.5	156.2	56.7	212.9

Movements in **current provisions** (due in less than one year) are as follows:

# **Current provisions 2005**

in € million	Balance 1/1/2005
Tax obligations	9.7
Personnel and social obligations	48.7
Obligations due to potential losses and warranties	10.8
Other obligations	87.0
	156.2

Provisions of €3.8 million (previous year: €5.0 million) for partial retirement and special payments of €34.4 million (previous year: €28.7 million) are contained in the personnel and social obligations.

Other obligations primarily concern  $\in$ 48.3 million (previous year:  $\in$ 35.6 million) in provisions for follow-up costs that mostly pertain to the EJ200 program, sales deductions of

€27.9 million (previous year: €10.2 million), as well as €15.8 million (previous year: €31.2 million) in development costs for the GP7000 program.

Management considers that the provisions are sufficient to cover the actual obligations based on historical experience.

# **Current provisions 2004**

in € million	Balance 1/1/2004
Tax obligations	1.1
Personnel and social obligations	26.9
Obligations due to potential losses and warranties	10.1
Other obligations	138.4
	176.5

112

Exchange rate difference	Disposal of es ATENA	Consumption	Dissolution	Allocations	Transfers	Balance 12/31/2005
		-8.9	-0.5	41.0		41.3
0.2	-2.6	-33.4	-1.6	45.4		56.7
0.4	-0.5	-3.1		3.3		10.9
0.1	-0.5	-63.3	-1.1	55.9	20.2	98.3
0.7	-3.6	-108.7	-3.2	145.6	20.2	207.2

Exchange rate differences	Disposal of ATENA	Consumption	Dissolution	Allocations	Transfers	Balance 12/31/2004
		-0.2		8.8		9.7
		-3.8	-0.2	25.8		48.7
-0.1		-1.9		2.7		10.8
		-67.5	-0.2	20.2	-3.9	87.0
-0.1	0.0	-73.4	-0.4	57.5	-3.9	156.2

Movements in **non-current provisions** (due in more than one year) are as follows:

# Non-current provisions 2005

in € million	Balance 1/1/2005	Consumption	Dissolution	Allocations	Transfers	Balance 12/31/2005
Personnel and social obligations	15.5	-3.0	-0.5	0.4		12.4
Obligations due to potential losses	20.3	-1.7		0.3		18.9
Other obligations	20.9				-20.9	0.0
	56.7	-4.7	-0.5	0.7	-20.9	31.3

The provisions for other obligations relate to development costs for the program GP7000 for the year 2006.

Management considers that the provisions are sufficient to cover the actual obligations based on historical experience.

Obligations due to potential losses relate to risks in the backlog of orders for contracts in commercial maintenance, repair and overhaul business.

# Non-current provisions 2004

in € million	Balance 1/1/2004	Consumption	Dissolution	Allocations	Transfers	Balance 12/31/2004
Personnel and social obligations Obligations due to potential losses	18.0 17.2	-2.8		0.3 3.1		15.5 20.3
Other obligations	52.7	-31.8				20.9
	87.9	-34.6	0.0	3.4	0.0	56.7

# 27. Financial liabilities

(Current and non-current)

All interest-bearing obligations of MTU Aero Engines Holding AG existing at the relevant balance sheet date are recognized under financial liabilities. They are composed of the following:

# Financial liabilities 2005 (Current and non-current)

	Current	Non-c	Non-current	
in € million	Due in less than one year	Due in more than one year and less than five years	Due in more than five years	Total 12/31/2005
Bonds				
High Yield Bond			165.0	165.0
Interest liability High Yield Bond	3.4			3.4
Liabilities due to banks				
Revolving Credit Facility	17.0			17.0
Accounts due to related companies	0.3			0.3
Other financial liabilities				
Finance leasing liabilities	2.6	22.2	28.4	53.2
Loan from the province of British Columbia to MTU Maintenance Canada		14.2		14.2
	23.3	36.4	193.4	253.1

In addition to the financial liabilities, an additional overdraft facility of  $\in$ 250.0 million is granted to the company. Of this a credit line of more than  $\in$  130.0 million has been agreed with the consortium of banks. Bilateral credit agreements (ancillary facilities) have been reached with three banks for the remaining  $\in$  120.0 million.

Of the  $\leq$ 250.0 million overdraft facility,  $\leq$ 17.0 million have been utilized through current account overdrafts and  $\leq$ 22.3 million are bank guarantees drawn for the benefit of a third party.

# Financial liabilities 2004 (Current and non-current)

	Current	Non-C	Non-Current	
in € million	Due in less than one year	Due in more than one year and less than five years	Due in more than five years	Total 12/31/2004
Bonds				
High Yield Bond			275.0	275.0
Interest liability High Yield Bond	5.7			5.7
Liabilities due to banks				
Senior Facility Agreement	174.2			174.2
Accounts due to related companies	63.5	98.9		162.4
Other financial liabilities				
Vendor loan			185.5	185.5
Finance leasing liabilities	1.9	21.2	28.8	51.9
Loan from the province of British Columbia to MTU Maintenance Canada.		8.1	3.7	11.8
	245.3	128.2	493.0	866.5

# 28. Other liabilities

(Current and non-current)

Other liabilities 2005				
	Current	Non-current Due in more than		
in € million	Due in less than one year	one year and less than five years	Due in more than five years	Total 12/31/2005
Advance payments from customer	317.3	113.7		431.0
Accounts due to related companies				
Non-consolidated subsidiaries	4.9			4.9
Associated companies, joint ventures and other investments	56.7			56.7
Taxes payable	4.9			4.9
Social security	10.8			10.8
Employees	43.1	7.1		50.2
Market price of derivative financial instruments				
Forward foreign exchange transactions	19.5	5.7		25.2
Interest rate swaps		7.7		7.7
Other liabilities	14.3	7.2	2.6	24.1
	471.5	141.4	2.6	615.5

Employee liabilities relate to vacation, flexitime credits as well as obligations arising from pre-retirement part-time work. The market value of  $\in$ -25.2 million for forward for-eign exchange contracts and the market value of  $\in$ -7.7 million in interest rate swaps were valued positively in the previous year's

US price, at  $\in$  111.9 million and  $\in$ 5.2 million, and are therefore included in "Other assets" (text item 20) for the previous year.

# **Other liabilities 2004**

	Current	Non-c	Non-current	
	Due in less	Due in more than	D	Tatal
in € million	Due in less than one year	one year and less than five years	Due in more than five years	Total 12/31/2004
Advance payments from customer	267.9	42.9		310.8
Accounts due to related companies				
Non-consolidated subsidiaries	5.7			5.7
Associated companies, joint ventures and other investments	56.6			56.6
Taxes payable	15.0			15.0
Social security	10.8			10.8
Employees	44.7	7.7		52.4
Other liabilities	10.1	5.4	2.2	17.7
	410.8	56.0	2.2	469.0

# 29. Income tax obligations

Income tax obligations 2005		
in € million	Due in more than one year	Total 12/31/2005
Deferred tax liabilities	250.8	250.8
	250.8	250.8

Income tax obligations 2004		
in € million	Due in more than one year	Total 12/31/2004
Deferred tax liabilities	367.7	367.7
	367.7	367.7

# Composition of deferred taxes

	Deferred tax assets		Deferred ta	ax liabilities			
in € million	2005	2004	2005	2004			
Intangible assets			211.9	220.1			
Property, plant, and equipment		0.1	134.4	152.7			
Financial assets	1.0	0.8					
Inventories	2.9	7.9	22.4	32.7			
Receivables and other assets		1.3	8.7	11.8			
Provisions	93.8	89.0	0.5	13.3			
Market values of derivatives							
<ul> <li>Forward foreign exchange transactions not recognized in the income statement</li> </ul>				37.0			
- Forward foreign exchange transactions	10.2			8.2			
Liabilities	19.4	21.5	1.8	13.7			
Losses carried forward	1.6	3.5					
Offsetting of assets against liabilities	-128.9	-121.8	-128.9	-121.8			
	0.0	2.3	250.8	367.7			

Balances are stated for tax claims and obligations with regard to the same fiscal authorities. Please see text item 12 for details on related current and deferred income tax obligations as well as tax reconciliation of expected to an actual tax expense.

# **IV. Other Disclosures**

# 30. Contingent liabilities and other financial obligations

# 30.1. Contingent liabilities

The company has contingent liabilities of €150.6 million (previous year: €138.4 million). The gross figure represents the total amount of liability, whereas the net amount is reduced by the provisions set aside to cover the liability.

Contingent liabilities 2005					
	12/31/2005	05 12/31/2005			
in € million	Provisions	Gross	Net		
I. Liability due to risk and revenue contract conditions					
GE	0.3	27.5	27.2		
IAE	1.9	39.7	37.8		
PWA	0.2	20.7	20.5		
	2.4	87.9	85.5		
II. Guarantees issued for non-consolidated subsidiaries	0.5	65.6	65.1		
	2.9	153.5	150.6		

Contingent liabilities 2004				
	12/31/2004	12/31/2004		
in € million	Provisions	Gross	Net	
I. Liability due to risk and revenue contract conditions				
GE	0.4	31.9	31.5	
IAE	1.6	34.2	32.6	
PWA	0.1	16.2	16.1	
	2.1	82.3	80.2	
II. Guarantees issued for				
non-consolidated subsidiaries	0.4	58.6	58.2	
	2.5	140.9	138.4	

### 30.2.2. Pledged securities

pledged securities amounting to €2.5 million to Nord/LB Norddeutsche Landesbank, Hannover.

### 30.2. Other financial obligations

# 30.2.1. Obligations arising from operating lease arrangements

Apart from liabilities, provisions and contingent liabilities, the company has additional other financial obligations, as a result of rental and lease contracts for buildings, machines, tools, office, and other equipment. The contracts have terms of one to 18 years and in certain cases contain extension and purchase options as well as price adjustment clauses. Within the framework of rental and lease agreements, payments of  $\in$  9.4 million (previous year:  $\in$  6.3 million) were expensed.

The sum of future minimum lease payments attributable to lease agreements which cannot be terminated and the operating lease arrangements are as follows (based on maturities):

# 30.2.3. Transfer by way of security/ mortgage

For lease obligations the company has

As part of the acquisition and in connection with the purchase price financing, substantially all the Group's assets are secured and all receivables were assigned. The real estate of the Group serves as security to the associated mortgages. The securities were released due to the repayment of this financing in March 2005. The cancellation of the land charge was entered in the land register in June 2005.

# 30.2.4. Order obligations

The other financial obligations resulting from the order obligation for investments and for maintenance contracts and general operating expenses are within a normal level.

Payment obligations from operating lease relationships					
in € million	12/31/2005	12/31/2004			
Nominal total of future minimum leasing and rental payments from operating leasing arrangements					
Due in less than one year	8.2	8.3			
Due in more than one and less than five years	16.0	19.6			
Due in more than five years	2.1	6.3			
	26.3	34.2			

Lower liabilities in comparison to the previous year are attributed to the divestment of ATENA Engineering GmbH.

#### 30.3. Default risk

Irrespective of existing security, the amount stated for financial assets specifies the maximum default risk for the case in which a customer, risk- and revenue partner, syndicate, etc. are not able to meet their contractual payment obligations. For all service arrangements underlying the original financial instruments, securities are required, credit rating information are obtained or historical data from the existing business relationship, and in particular payment patterns, are used to avoid payment defaults in order to minimize the default risk depending on the nature and type of the particular service provided.

If default risks are evident for the individual financial assets, these risks are recorded by way of impairments. In the case of derivative financial instruments, the Group is also exposed to a credit risk which arises as a result of contract partners not fulfilling contractual agreements. This credit risk is diminished by ensuring that business is conducted only with partners with a first-class rating. For this reason, the general credit risk resulting from the derivative financial instruments used is not considered to be significant. There are no indications of any concentration of default risks arising from business relations, individual debtors, or groups of debtors.

# 31. Notes to the consolidated Cashflow Statement

The statements detail how the liquid assets of the company have changed during the year under review. According to IAS 7 (Cashflow Statements), a distinction is made between cashflows from current operations, cashflows from investing, and cashflows from financing activities (see consolidated cashflow statement).

The cash and cash equivalents in the cashflow statement comprise all liquid assets stated in the balance sheet, i.e. cash-in-hand, cheques, credit balances held at banks and securities, if they are available within three months.

The cashflows from **investing and financing activities** are established directly on the basis of payment.

Cashflow from **operating activities** is inferred indirectly on the basis of the consolidated net profit. As part of the **indirect** calculation process, the changes to balance sheet items taken into consideration in connection with the current business activities are adjusted by currency translation effects and changes in the group of consolidated companies. Accordingly, the changes in the corresponding balance sheet items cannot be reconciled with the corresponding figures of the published consolidated balance sheet.

# 32. Relationships with related companies and persons

Special disclosures are to be provided with regard to relationships and transactions with related companies and persons. Related companies are shown in share ownership (text item 32.1.2.). The Board of Management, the Supervisory Board, as well as stockholders are considered under the provisions of IAS 24 (Related party disclosures).

In addition, the disclosure requirement extends to transactions with associated companies and joint ventures as well as transactions with persons who exercise significant influence on the financial and business policies of the Group, including close family members or intermediate companies. A significant influence on the financial and business policy is based on a shareholding of 20% or more, a seat on the managing board or Supervisory Board at a Group company or another key position in management. MTU Aero Engines Holding AG is impacted by the disclosure requirement of IAS 24 for the 2005 business year with regard to the business relationships of the subsidiaries, associated companies, joint ventures, and members of the Board of Management and Supervisory Board.

### 32.1. Related companies

Business transactions between companies within the Group were eliminated in the course of consolidation and are therefore no longer included in these appended disclosures.

### 32.1.1. Business with related companies

During the course of the business year, companies within the Group conducted business amongst themselves. The following business transactions were carried out with the non-consolidated related companies below:

# Accounts due from related companies

	Outstanding balances Receivables		Value of busines Revenues/income/sales		ess transactions Expenses/purchase	
in € million	12/31/2005	12/31/2004	2005	2004	2005	2004
Current accounts receivable						
Eurojet Turbo GmbH, Munich *)	13.0	19.2	200.2	202.9	-0.7	-0.1
MTU Turbomeca Rolls-Royce GmbH, Hallbergmoos <sup>*)</sup>	4.5	9.3	32.6	27.4	-0.8	-0.9
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde		4.9		20.7		-77.0
Ceramic Coating Center S.A.S., Paris, France			0.1		-1.8	-1.2
Turbo Union Ltd., Bristol, Great Britain $^{*)}$	8.4	16.9	131.7	137.0	0.0	-0.1
Airfoil Services Sdn. Bhd., Shah Alam, Malaysia	0.4	0.4	0.3	0.2	-1.5	-1.2
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China		4.5	6.3	9.8	-12.3	-1.8
EPI Europrop International GmbH, Munich <sup>*)</sup>	0.4	0.7	2.6	2.5	-5.7	-3.2
Gesellschaft zur Entsorgung von Sondermüll in Bayern GmbH, Munich					-0.1	-0.2
	26.7	55.9	373.8	400.5	-22.9	-85.7
*) Communication						

\*) Cooperation companies

# Accounts due to related companies

	Outstanding balances Liabilities		Value of busines Revenues/income/sales		s transactions Expenses/purchases	
in € million	12/31/2005	12/31/2004	2005	2004	2005	2004
Non-current liabilities						
Blade Lux Holding Two S.a.r.I.		69.7				
Forex Ltd., Great Britain		29.2				
Current liabilities						
Forex Ltd., Great Britain		63.3				
KKR European Fund L.P.	0.1	0.1				
KKR Millenium Fund L.P.	0.1	0.1				
MTU Aero Engines Beteiligungs- und Verwaltungs GmbH	0.1					
Kohlberg Kravis Robert & Co. L.P., USA					-0.4	-1.0
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China	1.8					
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde	3.2		12.3		-103.6	
IAE International Aero Engines AG, <sup>*)</sup> Zurich, Switzerland	51.7	56.6	257.2	224.6	-283.6	-225.3
MTU München Unterstützungskasse GmbH, Munich	4.8	5.7			-0.3	-0.4
MTU Maintenance do Brasil Ltda., Sao Paulo, Brazil	0.1				-0.6	-0.5
	61.9	224.7	269.5	224.6	-388.5	-227.2

\*) Cooperation companies

# Major shareholdings of MTU Aero Engines Holding AG

Name and registered office of the company	Capital stake in %	Equity in in € thousands	Results in € thousands
I. Shares in subsidiaries			
MTU Aero Engines Investment GmbH, Munich	100.00	731,241	0 2)
MTU Aero Engines GmbH, Munich	100.00	720,012	25,434 <sup>2)</sup>
MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde	100.00	103,960	-100 2)
MTU Maintenance Hannover GmbH, Langenhagen	100.00	105,840	-23,810 2)
MTU Aero Engines North America Inc., Rocky Hill, USA	100.00	-841 3)	-3,498 4)
MTU Maintenance Canada Ltd., Richmond, Canada	100.00	-4,507 <sup>3)</sup>	-3,871 <sup>4)</sup>
RSZ Beteiligungs- und Verwaltungs GmbH, Munich	100.00	13,432	6
ATENA ENGINEERING INC. i.L., Hartford, USA	100.00	48 1/3)	-45 1/6)
MTU Versicherungsvermittlungs- und Wirtschaftsdienst GmbH, Munich	100.00	26 <sup>5)</sup>	0 2/5)
MTU München Unterstützungskasse GmbH, Munich	100.00	4,787 <sup>5)</sup>	-854 <sup>5)</sup>
Vericor Power Systems LLC., Atlanta, USA	100.00	14,856 <sup>3)</sup>	1,071 <sup>4)</sup>
MTU Maintenance do Brasil Ltda Sao Paulo, Brazil	99.99	64 1/3)	-16 1/6)
II. Shares in associated companies			
Turbo Union Ltd., Bristol, Great Britain	39.98	166 <sup>1)</sup>	6 1)
EUROJET Turbo GmbH, Hallbergmoos	33.00	1,545 <sup>1/5)</sup>	465 1/5)
EPI Europrop International GmbH, Munich	28.00	252 1/5)	188 1/5)
MTU Turbomeca Rolls-Royce GmbH, Hallbergmoos	33.33	168 1/5)	130 1/5)
APA Aero Propulsion Alliance GmbH i.L., Munich	24.80	55 1/5)	3 1/5)
III. Equity participations in joint ventures			
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde	50.00	18,828	4,144
Airfoil Services Sdn. Bhd., Shah Alam, Malaysia	50.00	2,100 1/3)	14 1/6)
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China	50.00	34,780 <sup>3)</sup>	273 7)
Ceramic Coating Center S.A.S., Paris, France	50.00	-714 1)	-1,136 <sup>1)</sup>

Previous year's figures; current figures not available
 Profit transfer arising under German GAAP (HGB) from Profit and Loss Pooling.

3) Conversion to year end exchange rate.

4) Conversion to exchange rate per end of the month.

5) HGB-Value; therefore no IFRS Financial Statements available.6) Conversion to average yearly exchange rate for 2005

7) Conversion to 2005 average quarterly exchange rate for 2005

# 32.2. Related persons

No Group company has conducted any business which is subject to disclosure requirements with members of the Managing Board or the Supervisory Board of the company or with other members of management in key positions or with companies in whose Managing Board or Supervisory Boards these persons are represented. This is also applicable for close family members of this group of persons.

# 32.2.1. Compensation paid to the Board of Management and Supervisory Board

The Board of Management, which until the end of July consisted of three members, and the Supervisory Board received the following compensation, of which  $\in$  2.8 million was performance-related:

Compensation				
	Board of management		Supervisory Board	
in € million	2005	2004	2005	2004
Active board members				
Current payments	6.4	3.9	0.5	0.4
Payments upon the end of the working relationship		2.0		
Provisions allocated for active board members for the business year	2.6	0.4		
Matching Stock Program	0.2			
	9.2	6.3	0.5	0.4
Former board members <sup>*)</sup>				
Provisions formed for current pensions and vested rights to future pension payments for				
former Management Board members <sup>**)</sup>	2.4	2.2		
	2.4	2.2		

\*) Provisions are formed for all obligations

\*\*) No benefits are paid to former board members and their surviving dependents

32.2.2 Members of the Board of Management	
Udo Stark President and CEO of MTU Aero Engines Holding AG	Munich
Bernd Kessler President and CEO Commercial Maintenance of MTU Aero Engines Holding AG	Munich
<b>Dr. Michael Süß</b> Executive Vice President Technology (COO) of MTU Aero Engines Holding AG	Munich
<b>Reiner Winkler</b> Executive Vice President Finance, Human Resources and IT (CFO) of MTU Aero Engines Holding AG	Munich

32.2.3 Members of the Supervisory Board	
<b>Johannes P. Huth</b> (Chairman) Managing Director, Kohlberg Kravis Roberts & Co. Ltd.	London
Günter Sroka* (Deputy Chairman) Chairman of the Works Council of MTU Aero Engines GmbH, Munich	Dachau
Harald Flassbeck* Senior Agent of the IG Metall Administrative Center	Unterhaching
DrIng. Jürgen M. Geißinger (beginning October 4, 2005) President and CEO of INA-Holding Schaeffler KG	Herzogenaurach
Reinhard Gorenflos (until December 31, 2005) Managing Director, Kohlberg Kravis Roberts & Co. Ltd.	London
<b>Oliver Haarmann</b> (until October 1, 2005) Funds Manager, Kohlberg Kravis Roberts & Co. Ltd.	London
Babette Haas* Head of the Business Administration Division, IG Metall Management Board	Frankfurt
Josef Hillreiner* Chairman of the Works Council of MTU Aero Engines GmbH	Ried
Louis R. Hughes (beginning January 30, 2006) Chief Executive Officer of GBS Laboratories, LLC.,	Herndon, USA
Michael Keller* Director of Rotor/Stator & Production Service of MTU Aero Engines GmbH, Munich	Aindling
Prof. Dr. Walter Kröll Former President of Helmholtz-Gemeinschaft Deutscher Forschungszentren e.V.	Bonn
Josef Mailer* Optional member of the Works Council of MTU Aero Engines GmbH	Dachau
DrIng. Klaus Steffens Former CEO of MTU Aero Engines	Bernried
<b>Prof. Dr. Sigmar Wittig</b> Chairman of the Management Board of DLR Deutsches Zentrum für Luft- und Raumfahrt	Cologne
* Employees' representative.	

# 33. Fees paid to the auditor

Fees paid during the business year were as follows:

Fees paid to the auditor	
in € million	2005
Audit of financial statements	1.0
Other certification or evaluation services	0.5
	1.5

The "Audit" item includes all expenses paid to auditing company Deloitte & Touche GmbH, Wirtschaftsprüfungsgesellschaft, for auditing of financial statements. Other certification and evaluation services concern services relating to the initial public offering (IPO) as well as review of interim financial statements.

# 34. Notes to the German Corporate Governance Code

The Board of Management and the Supervisory Board of MTU Aero Engines Holding AG have issued the declaration prescribed by Section 161 of the German Stock Corporation Act (AktG) in the 2005 MTU Group Annual Report, and have also made it permanently available to shareholders on the web site at www.mtu.de.

# **V. Segment Information**

# 35. Obligation for segment reporting

The Group reports on two segments: business segments and geographical segments. These classifications are based on internal controls and reporting and take the various risk and earning structures of the business segments into account.

# 35.1. Definition of the market segments

As part of segment reporting, the activities of the company are defined in accordance with the rules of IAS 14 (segment reporting) as business segments (primary reporting format) and regions (secondary reporting format).

The activities of MTU Aero Engines Holding AG are split into the following two segments

- OEM business
- Commercial MRO business
- In the "OEM business segment", the company develops, manufactures, assembles, and delivers civil and military engines and components.
- In the "Commercial MRO business segment", the company maintains, repairs, and overhauls aircraft engines. Besides complete engine repairs, engine modules are completely overhauled and special repairs are carried out. In addition to aircraft engines, the "Commercial MRO business" Group companies also repair and overhaul industrial gas turbines.

Eliminations between the market segments OEM business and Commercial MRO business, as well as business processes of the holding companies which cannot be directly allocated to a market segment, are stated in the consolidation column of the Group's consolidated result of ordinary operations.

The  $\in$ 58.1 million consolidation in the financial results essentially eliminates profit and loss transfer amounts between Group companies that are classified under differing segments, whereas  $\in$ 663.5 million in consolidation of segment assets contain, alongside the losses from the disposal of financial assets of the holding companies, the receivables against related companies classified into differing segments. In the reconciliation of  $\in$  171.6 million in segment debts, liabilities due to related companies have been eliminated.

#### 35.2. Notes to the segment information

#### 35.2.1. Primary business segment

- The segment information is based on the same accounting and valuation methods as the consolidated financial statements. Receivables and liabilities, income and expenditure as well as results between the segments are eliminated as part of the reconciliation process. Internal sales are transacted on an arm's length basis.
- The investments are additions to property, plant and equipment, and intangible assets which will probably be used for more than one year. The investments are allocated to the registered offices of the company to which they belong.
- The segment assets and the segment liabilities of the segments also comprise assets and liabilities which have been used for generating current business activities. The assets are allocated to the registered offices of the company to which they belong. The segment assets and the segment liabilities have been reconciled with the assets and liabilities of the company.
- The pro rata results relating to joint ventures do not contain any "pro rata at equity results" of associated companies as these investments are stated at cost because they are not significant.

# 35.2.2. Secondary reporting segment (geographical segment)

• With regard to the segment information according to regions, external sales are based on the registered offices of the customers. In line with the method used for internal control and reporting, the following regions are defined: Germany, Europe, North America, South America, Africa, Asia, others and equity capitalized financial assets.

# 35.3. Estimates for valuation of recoverable amounts from the segments that incorporate goodwill

# Valuation comparison

in € million	OEM business	Commercial MRO business
Book value of the market segment	659.5	336.0
Cash value of future cashflows (recoverable amount)	1,322.9	575.3

The Group's business model is exceedingly long-range. The period between start of series production to phase-out of an engine program can often stretch over more than 40 years.

Engines are maintained throughout their entire lifetimes. For this reason, the cashflow forecasts used to determine use value are initially established over a period of 5 years. Based on the long-range ongoing business model, a perpetual annuity with an annual growth rate of 1.0%, starting from the last planning year, is included for the following time period in the cashflow forecast. These sustained planning assumptions are based on many years of experience in cooperation and risk- and revenue-sharing partnerships.

Variations in the cashflows and significant dollar-price fluctuations could influence the valuation of future cash values (recoverable amounts).

The planned free cashflows, which contain no proceeds or expenses from financing activities or income taxes, are discounted on the balance sheet date by a 12.4% weighted average cost of capital (WACC) rate.

- Sales are allocated on the basis of the country in which the customer is domiciled.
- The investments are additions to property, plant and equipment, and intangible assets which will probably be used for more than one year. The investments are allocated to the region where the registered offices of the companies are situated.
- The assets are allocated to the registered offices of the company to which they belong.

# 36. Information according to business segment

Primary reporting segment 2005				
in € million	OEM business	Commercial MRO business	Consolidation/ reconciliation	Group
Revenues with third parties	1,422.5	726.1	0.0	2,148.6
- Commercial	931.1	726.1		1,657.2
- Military	491.4			491.4
Revenues with other segments	12.3	6.0	-18.3	0.0
- Commercial	12.3	6.0	-18.3	0.0
- Military				
Total revenues	1,434.8	732.1	-18.3	2,148.6
- Commercial	943.4	732.1	-18.3	1,657.2
- Military	491.4	0.0	0.0	491.4
Cost of sales	-1,232.2	-652.3	19.7	-1,864.8
Gross profit	202.6	79.8	1.4	283.8
Result before financial result (EBIT)	94.4	37.1	-1.5	130.0
Depreciation and amortization	103.3	35.0		138.3
Result before financial result after depreciation and amortization (EBITDA)	197.7	72.1	-1.5	268.3
Adjusted result before financial result after depreciation and amortization (EBITDA adjusted)	162.4	72.1	-1.5	233.0
Financial result	-14.6	-0.8	-58.1	-73.5
Result from equity valuation		2.2		2.2
Internal allocation	-4.3	4.3		0.0
Earnings before tax (EBT)	75.5	42.8	-59.6	58.7
Investments in tangible and intangible assets	61.4	22.1		83.5
Segment assets	2,484.6	732.2	-663.5	2,553.3
Segment liabilities	1,801.1	395.5	-171.6	2,025.0
Employees, annual average	4,943	1,955		6,898
- Industrial/commercial staff	1,837	1,145		2,982
- Administrative staff	2,758	564		3,322
- Employees on temporary contracts	81	63		144
- Trainees	152	131		283
- Students on work experience projects	115	52		167

The "Commercial MRO business" market segment contains €2.4 million in amortization of intangible assets and depreciation of tangible assets for MTU Maintenance Canada Ltd., Canada, which influenced annual results for the period under review (see text item 6).

# 37. Information according to business segment

Primary reporting segment 2004

	OEM	Commercial MRO	Consolidation/	Group
in € million	business	business	reconciliation	oroup
Revenues with third parties	1,347.9	570.1	0.0	1,918.0
- Commercial	852.2	570.1		1,422.3
- Military	495.7			495.7
Revenues with other segments	27.7	5.8	-33.5	0.0
- Commercial	27.7	5.8	-33.5	0.0
- Military				
Total revenues	1,375.6	575.9	-33.5	1,918.0
- Commercial	879.9	575.9	-33.5	1,422.3
- Military	495.7	0.0	0.0	495.7
Cost of sales	-1,117.6	-543.5	33.5	-1,627.6
Gross profit	258.0	32.4	0.0	290.4
Result before financial result (EBIT)	84.9	-2.0	-1.8	81.1
Depreciation and amortization	99.1	33.9		133.0
Result before financial result after depreciation and amortization (EBITDA)	184.0	31.9	-1.8	214.1
Adjusted result before financial result after depreciation and amortization (EBITDA adjusted)	131.3	42.7	-1.8	172.2
Financial result	-39.5	-4.0	-29.3	-72.8
Result from equity valuation		-1.8		-1.8
Internal allocation	-4.8	4.8		0.0
Earnings before tax (EBT)	40.6	-3.0	-31.1	6.5
Investments in tangible and intangible assets	53.4	12.5		65.9
Segment assets	2,453.1	725.2	-459.2	2,719.1
Segment liabilities	1,877.5	365.4	259.2	2,502.1
Employees, annual average	5,686	1,996		7,682
- Industrial/commercial staff	2,005	1,160		3,165
- Administrative staff	3,326	586		3,912
- Employees on temporary contracts	103	77		180
- Trainees	151	135		286
- Students on work experience projects	101	38		139

# 38. Segment information according to region 2005 and 2004

Secondary reporting segment 2005			
in € million	Revenue	Investments	Asset
Germany	488.6	80.3	2,442.2
Europe	247.6		
North America	1,145.3	3.2	68.8
South America	51.0		
Africa	2.5		
Asia	206.4		
Other	7.2		
Financial assets balanced at equity			42.3
	2,148.6	83.5	2,553.3

Secondary reporting segment 2004			
in € million	Revenue	Investments	Asset
Germany	501.4	65.2	2,618.3
Europe	233.6		
North America	986.4	0.7	60.7
South America	32.6		
Africa	7.1		
Asia	148.3		
Other	8.6		
Financial assets balanced at equity			40.1
	1,918.0	65.9	2,719.1

# **Reconciliation of Group net profit** to net profit of MTU Aero Engines Holding AG

Unlike the consolidated financial statement which is based on the IASB's IFRS standards, the annual financial statements of MTU Aero Engines Holding AG are compiled according to the German Commercial Code (HGB). The IFRS regulations are also applied in the individual income statements where it is allowed and reasonable to do so. In numerous cases, the accounting and valuation principles in the annual financial statements of MTU Aero Engines Holding AG, and those of the German subsidiaries whose results according to the German Commercial Code (HGB) are paid to MTU Aero Engines Holding AG, vary from those of the consolidated financial statement.

The significant differences pertain to the amortization of goodwill, the valuation of inventories, receivables and liabilities, provisions, and the treatment of financial instruments.

# **Reconciliation of distributable net profit**

in € million	12/31/2005	12/31/2005
Group net profit (IFRS)		32.9
Income taxes		25.8
Group earnings before tax (EBT)		58.7
Elimination of results from foreign group companies		3.5
+/- Distinctions within commercial code (HGB)		
Cost of issue for IPO	-20.3	
Forex income	90.2	
Amortization of goodwill	-9.8	
Merger profit from previous year	27.9	
Other	10.0	98.0
Earnings before tax of MTU Aero Engines Holding AG (HGB)		160.2
Income taxes		-113.9
Net profit of MTU Aero Engines Holding AG (HGB)		46.3
Loss carried forward		-2.3
Allocation to revenue reserves		-3.9
Retained earnings of MTU Aero Engines Holding AG (HGB)		40.1

The annual financial statement of MTU Aero Engines Holding AG, which was granted an unqualified audit certificate by Deloitte und Touche GmbH, Wirtschaftsprüfungsgesellschaft, Munich, is to be published in the German Federal Gazette and recorded in the commercial register of the local court of Munich (HRB 157 206). This financial statement may be requested from MTU Aero Engines Holding AG, 80995 Munich, Germany.

# **Recommendation for disposal** of corporate profits

The annual net profit of MTU Aero Engines Holding AG amounts to  $\in$  46.3 million, as compiled in the annual financial statements in accordance with the German Commercial Code (HGB). After offsetting €2.3 million in losses carried forward from the previous year and allocating  $\in$  3.9 million to revenue reserves, a net profit of €40.1 million remains. At the General Meeting on May 12, 2006, the Board of Management and Supervisory Board will recommend distributing this net profit in a dividend of €0.73 per individual share certificate for the 55 million shares entitled to dividends.

The dividends will be paid out on May 15, 2006.

München, den 20. Februar 2006

Udo Stark

Bernd Kessler

Richard the Reices ardels

Dr. Michael Süß

**Reiner Winkler** 

# Independent Auditors' Report

We have audited the consolidated financial statements prepared by the MTU Aero Engines Holding AG, Munich, comprising income statement, the balance sheet, the statement of changes in equity, Cashflow Statement and the notes to the consolidated financial statements, together with the group management report for the business year from 1 January to 31 December 2005. The preparation of the consolidated financial statements and the group management report in accordance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a Abs. [paragraph] 1 HGB are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany]. Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements of MTU Aero Engines Holding AG, Munich, comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Munich, 27 February 2006

Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft

Dr. Plendl	Dr. Reitmayr
Wirtschaftsprüfer	Wirtschaftsprüfer
[German	[German
Public Auditor]	Public Auditor]

# Aggregated Balance Sheet of Group Companies 2005

2005					
in € million	MTU A E AG	Investment	MTU-M	MTU-H	
ASSETS					
Non-current assets					
- Intangible assets			854.4	38.0	
- Property, plant, and equipment			413.8	88.7	
- Financial assets	731.2	720.7	298.7		
- Other assets		165.0	1.5		
- Deferred taxes	0.4				
	731.6	885.7	1,568.4	126.7	
Current assets					
- Inventories			349.8	110.0	
- Receivables			227.1	149.3	
- Other assets	4.5		224.1	19.3	
- Cash and cash equivalents	159.2	173.3	143.4	2.7	
- Prepayments			2.8	1.9	
	163.7	173.3	947.2	283.2	
Balance sheet total	895.3	1,059.0	2,515.6	409.9	
EQUITY AND LIABILITIES Equity					
- Subscribed capital	55.0		80.0	15.3	
- Capital reserves	453.8	731.2	640.7	50.0	
- Accumulated reserves				73.1	
- Other equity	0.3		-14.6		
- Retained earnings/accumulated loss (-)	57.0		13.9	-32.6	
	566.1	731.2	720.0	105.8	
Non-current debt					
- Pension provisions	3.4		337.1	15.7	
- Other provisions			10.4	20.2	
- Financial liabilities	0.5	165.0	165.0	50.6	
- Other liabilities			136.0	7.4	
- Deferred liabilities			231.2	10.0	
	3.9	165.0	879.7	103.9	
Current debt					
- Pension provisions			15.0	0.2	
- Other provisions	43.9		149.5	5.1	
- Financial liabilities	111.5	162.8	192.8	10.5	
- Trade payables			206.3	59.3	
- Other liabilities	169.9		352.3	125.1	
	325.3	162.8	915.9	200.2	
Balance sheet total	895.3	1,059.0	2,515.6	409.9	

MTU-BB	MTU-Can	RSZ	Vericor	MTU-AENA	Total	Consolidation	Group
36.3	1.0		14.6		944.3	-2.6	941.7
34.4	3.9		0.9	4.3	546.0		546.0
6.3		13.4			1,770.3	-1,722.7	47.6
					166.5	-165.0	1.5
					0.4	-0.4	
77.0	4.9	13.4	15.5	4.3	3,427.5	-1,890.7	1,536.8
33.0	3.0		14.9	7.5	518.2		518.2
32.8	0.8		5.2	3.2	418.4		418.4
12.8	1.0			0.2	261.9	-203.1	58.8
3.5	5.5		1.7	0.8	490.1	-474.2	15.9
0.2	10.0		0.1	0.2	5.2	(77.0	5.2
82.3	10.3	40.4	21.9	11.9	1,693.8	-677.3	1,016.5
159.3	15.2	13.4	37.4	16.2	5,121.3	-2,568.0	2,553.3
10.2	18.5		12.1	0.8	191.9	-136.9	55.0
60.2		19.5		34.0	1,989.4	-1,535.6	453.8
35.0	-19.9	-6.1	0.7	-29.3	53.5	-53.5	
	-0.1		1.0	0.1	-13.3		-13.3
-1.4	-3.0		1.1	-6.4	28.6	4.2	32.8
104.0	-4.5	13.4	14.9	-0.8	2,250.1	-1,721.8	528.3
3.7	2.3		0.2	0.1	362.5		362.5
0.6				0.1	31.3		31.3
	14.2				395.3	-165.5	229.8
0.6					144.0		144.0
7.7			0.1		249.0	1.8	250.8
12.6	16.5		0.3	0.2	1,182.1	-163.7	1,018.4
0.1					15.3		15.3
6.3	1.5		0.8	1.4	208.5	-1.3	207.2
			11.0	12.9	501.5	-478.2	23.3
17.4	1.2		2.9	2.2	289.3		289.3
18.9	0.5		7.5	0.3	674.5	-203.0	471.5
42.7	3.2		22.2	16.8	1,689.1	-682.5	1,006.6
159.3	15.2	13.4	37.4	16.2	5,121.3	-2,568.0	2,553.3

# Comprehensive Income Statement for Group Companies 2005

2005				
in € million	MTU A E AG	Investment	MTU-M	MTU-H
Revenues	7.7		1,404.0	575.6
Cost of sales			-1,204.4	-519.8
Gross profit	7.7		199.6	55.8
Research and development costs			-42.9	-1.9
Selling costs			-43.9	-12.0
General administrative expenses	-9.5	-0.3	-26.1	-5.4
Other operating income and expenses	27.9		1.2	1.7
Result before financial result	26.1	-0.3	87.9	38.2
Financial result	28.8	37.6	-14.0	-3.2
Share of income/loss of joint ventures accounted for using the equity method				
Result from ordinary activities	54.9	37.3	73.9	35.0
Income taxes	3.6	0.1	-10.9	-13.5
Net profit/loss (-)	58.5	37.4	63.0	21.5
Transfer of profit/loss		-37.4	-37.5	-45.3
Profit/loss (-) carried forward	-1.5		-11.6	-8.8
Retained earnings/accumulated loss (-)	57.0		13.9	-32.6

MTU-BB	MTU-Can	Vericor	ATENA	MTU-AENA	Total	Consolidation	Group
144.0	24.6	23.0	18.3	23.5	2,220.7	-72.1	2,148.6
-128.9	-23.8	-14.4	-14.7	-23.9	-1,929.9	65.1	-1,864.8
15.1	0.8	8.6	3.6	-0.4	290.8	-7.0	283.8
		-0.9			-45.7		-45.7
-7.7	0.1	-2.4	-1.4	-0.1	-67.4		-67.4
-2.8	-2.8	-3.0	-1.4	-2.5	-53.8	8.4	-45.4
-1.8		0.2	0.1	0.1	29.4	-24.7	4.7
2.8	-1.9	2.5	0.9	-2.9	153.3	-23.3	130.0
3.0	0.1	-0.7		-0.6	51.0	-124.5	-73.5
						2.2	2.2
5.8	-1.8	1.8	0.9	-3.5	204.3	-145.6	58.7
-1.7	-2.1	-0.7	-0.4		-25.6	-0.2	-25.8
4.1	-3.9	1.1	0.5	-3.5	178.7	-145.8	32.9
-4.3					-124.5	124.5	
-1.2	0.9		-0.5	-2.9	-25.6	25.5	-0.1
-1.4	-3.0	1.1	0.0	-6.4	28.6	4.2	32.8



# 100,000 Flight Hours

An aircraft engine approaches retirement at about 100,000 flight hours. At that point the repair costs usually begin to outweigh the procurement costs for a new engine. Most engines are taken out of service, disassembled, and disposed of. Since modern engines are made of highly valuable materials, such as nickel, tungsten, or titanium, they are recycled almost 100%. These materials are characterized by low weight, high reliability,



The V2500 is one of the best-selling engines in its class.

heat resistance, and durability. That makes them the materials of choice for aviation. The parts are melted down to make new, more modern engines that burn less fuel and are quieter – engines made by MTU.

# Shareholdings of MTU Aero Engines

MTU Aero Engines has stakes in the following consortiums and program coordination and management companies:

### Eurojet Turbo GmbH

Eurojet Turbo GmbH has been set up by the four partner companies MTU, Rolls-Royce, Avio, and ITP and is responsible for the management of the Eurofighter engine EJ200. MTU's share is 33%.

#### **Europrop International GmbH**

Europrop International (EPI), formed by ITP, MTU Aero Engines, Rolls-Royce, and Snecma Moteurs, is responsible for the development, production, marketing and support of the TP400-D6 engine. MTU holds a 28% share in EPI.

# IAE International Aero Engines AG

IAE International Aero Engines is responsible for the management and marketing of the V2500 engine. MTU's stake amounts to 12.5%. Its partners in IAE are Pratt & Whitney, Rolls-Royce, and JAEC.

#### MTU Turbomeca Rolls-Royce GmbH

MTU Turbomeca Rolls-Royce GmbH coordinates the development, production and marketing of the MTR390 helicopter engine. MTU holds a 33.3% share in this program coordination and management company.

#### Turbo-Union Ltd.

Turbo-Union Ltd. is responsible for the management of the Tornado's RB199 engine. MTU's share is 40%; partners are Rolls-Royce and Avio.

# **Shareholdings and Joint Ventures**

# Joint Ventures of MTU Aero Engines

#### Airfoil Services Sdn. Bhd.

Airfoil Services Sdn. Bhd. (ASSB), a joint venture with Lufthansa, repairs low-pressure turbine blades and V2500 high-pressure compressor blades. ASSB is based in Shah Alam near Kuala Lumpur, Malaysia.

### Ceramic Coating Center SAS.

The Ceramic Coating Center (CCC) is a joint venture with Snecma Services. The company provides turbine blades with protective ceramic coatings. Its headquarter is located in the French city of Châtellerault near Paris.

# Pratt & Whitney Canada Customer Service Centre Europe GmbH

The Pratt & Whitney Canada Customer Service Centre (CSC) maintains small Pratt & Whitney engines and serves customers in Europe, Africa, and the Near and Middle East. The CSC, a joint venture of MTU Maintenance Berlin-Brandenburg and Pratt & Whitney Canada, is based in Ludwigsfelde near Berlin.

# **Financial and Technical Glossary**

### **Altitude Test Facility**

Altitude test facilities are used to test engines on the ground under simulated conditions of flight altitude. Every newly developed engine undergoes a series of tests on an altitude test facility before actual flight testing begins.

# **ASE** series

The ASE series is a family of gas turbines in the 0.5 to 15 MW power category initially produced by former AlliedSignal. When AlliedSignal and Honeywell merged, production moved to Honeywell and later to Vericor Power Systems, then a 50/50 joint venture of Honeywell and MTU Aero Engines. When Honeywell exited Vericor, all rights to the ASE series were transferred to MTU.

# Avio

The Italian engine manufacturer Avio has its origins in former FiatAvio, the aircraft engine division of the Italian Fiat Group.

### Cashflow

Cashflow refers to the internal financing potential of a company.

# CEO

CEO stands for Chief Executive Officer.

# CF34

The main applications for the CF34 engine are 50-, 70- or 100-seat business jets and regional jets. Maintenance for the CF34 is provided by MTU Maintenance Berlin-Brandenburg.

# CF6

Engines of General Electric's CF6 family power medium- and long-haul Airbus and Boeing aircraft. For the CF6, MTU manufactures parts of the high-pressure turbine and the compressor. For this engine, which has been in service for over 25 years, the maintenance and spare parts business is becoming increasingly important.

# CF6-50

Engine of the CF6 family.

### CF6-80

Engine of the CF6 family.

# CFM56

CFM56 engines power the twin-jet Airbus A320 family, the long-haul A340 jet, and the standard and new-generation Boeing 737. The CFM56 is the world's best-selling engine for commercial jetliners. MTU concentrates on maintenance for a number of CFM56 variants.

### CFO

CFO stands for Chief Financial Officer.

# **Clean Demonstrator**

Clean (component validator for environmentally friendly aero engine) is a European technology demonstrator program under the direction of MTU Aero Engines. Its special feature: The concept is based on geared fan technology and includes a heat exchanger. It affords substantial fuel savings as well as significant noise reductions.

# Combustor

In the combustor, the air coming from the compressor is mixed with fuel and burned. This creates extremely high pressures and very high temperatures of well over 2,000° C. All the hazardous substances which the engine emits are produced in the combustor. Therefore, an attempt is made today to lower the level of these hazardous substances – especially of nitrogen oxides – by changing the injection and mixing concepts in the combustor. Because of the high temperatures, the combustors are provided with special thermal protection.

#### Compressor

The compressor consists of several stages of bladed compressor disks that rotate at very high speeds between stationary guide vanes. Large volumes of air are ingested and compressed greatly before being passed into the combustor. To achieve the compression ratio of over 30:1 of current engines, two different types of compressors are used: the lowpressure and the high-pressure compressor. These compressors are driven at different speeds by the associated turbines via concentric shafts.

#### DECMU

The DECMU (digital engine control and monitoring unit) is an engine subsystem for the complete digital control and monitoring of the engine. Normally, there are two separate units for these two functions. In the DECMU, they are integrated into one single unit.

# EASA

EASA (European Aviation Safety Agency) is the European approval agency and has the same approval authority for all EU member states as the FAA has in the U.S.

### EBIT

Earnings before interest and taxes.

# EBITDA

Earnings before interest, taxes, depreciation, and amortization.

# EJ200

The EJ200 engine powers the Eurofighter and its export version, the Typhoon. MTU is responsible for the development and manufacture of the low-pressure and high-pressure compressors and the electronic control unit. The company also manufactures highpressure turbine parts, and carries out engine assembly and test runs.

# **Engine Pool Services**

The Engine Pool Services are MTU's response to the increasing demand for engine services beyond maintenance proper. The focus is on the provision of lease and spare engines as well as industrial gas turbines.

### **Equity Ratio**

The equity ratio is a parameter for the financing structure. It indicates the percentage of equity capital to total capital.

#### FAA

The Federal Aviation Administration (FAA) is the U.S. approval agency for all matters pertaining to aviation.

#### FAR33

FAR is the abbreviation for the FAA's Federal Aviation Regulations. Part 33 of the FAR specifies test standards for engines.

# **Free Cashflow**

Free cashflow is the total of operational cashflow and cashflow from investment activities. It provides funds for retiring debt, paying dividends, and increasing cash reserves.

# Free Float

Free float refers to the part of capital stock held by shareholders with a low stockholding.

# **Control and Monitoring Systems**

The control system comprises the individual devices used to monitor the engine and to control the fuel supply system, actuation of guide vanes and nozzles, bleed-air system and lubrication system, as well as the necessary sensors for engine speed, pressure, and temperature.

#### **Cooperative Model**

Under the Cooperative Model, the maintenance activities for aircraft engines operated by the German Armed Forces (Bundeswehr) are pooled under the umbrella of industry. The Bundeswehr is closely involved in all procedures, with airmen and MTU personnel working shoulder-to-shoulder.

#### **Corporate Governance**

Corporate governance refers to the rules of good, value-oriented corporate management. The principles of corporate governance are aimed at promoting trust in the company among investors, customers, employees, and the general public.

#### **D&O Insurance**

D&O insurance covers liability risks resulting from the execution of professional or official responsibilities in a company (= director and officer liability insurance).

# Intermediate-Pressure Turbine

In addition to the usual high-pressure and low-pressure turbines, three-shaft engines also feature an intermediate-pressure turbine. It drives the intermediate-pressure compressor.

# Interturbine Duct

The interturbine duct connects the highpressure turbine to the low-pressure turbine. This transition area is particularly critical. Therefore, the interturbine duct must meet very stringent requirements.

# ISIN

ISIN stands for International Securities Identification Number. It is a unique worldwide identification number for securities.

#### ITP

Industria de Turbo Propulsores (ITP) is Spain's only engine manufacturer. ITP is represented in a number of European engine programs, for example the EJ200, the TP400-D6, and the MTR390 Enhanced.

# J79

The J79 has been manufactured by MTU under license from General Electric since 1970. It was used initially on the Lockheed F-104 Starfighter and since 1973 has been powering the McDonnell Douglas F-4 Phantom II aircraft of the German Armed Forces (Bundeswehr). Today MTU's J79-related activities concentrate on maintenance.

# JAEC

Japanese Aero Engines Corporation (JAEC) is a joint venture in which Kawasaki, Mitsubishi, and Ishikawajima Harima have pooled their engine activities in conjunction with their participation in IAE, the international V2500 engine consortium.

#### Joint Venture

A contractual agreement joining two or more independent companies for the purpose of executing a particular joint business undertaking.

### JT 15D

The JT15D can be used both in the military and in the commercial sector. For years, the characteristics of the JT15D have made it the ideal engine for business jets. The JT15D is maintained by MTU Maintenance Berlin-Brandenburg.

### LM Series

The LM series refers to General Electric industrial gas turbines, which are derived from aircraft engines. Examples are the LM5000 based on the CF6-50 and the LM6000 based on the CF6-80.

# LM2500

The LM2500, an industrial gas turbine manufactured by General Electric, derives from the CF6-6 aircraft engine. It is maintained by MTU Maintenance Berlin-Brandenburg.

# **General Electric**

General Electric is a diversified technology, manufacturing and services company. One of its businesses is aircraft engines. In this business, General Electric is the world leader.

# GP7000

MTU has a share of 22.5% in the GP7000 engine co-developed by General Electric and Pratt & Whitney. This completely new family of engines will be used in long-haul service. It is intended to power the Airbus A380 and possibly other Airbus and Boeing aircraft as well.

# **High-Pressure Compressor**

See Compressor.

#### **High-Pressure Turbine**

See Turbine.

# IAE

IAE stands for IAE International Aero Engines AG, Zurich. IAE is the consortium for the V2500 engine. Partners in this consortium are Pratt & Whitney, Rolls-Royce, JAEC, and MTU Aero Engines.

# IFRS

IFRS is the abbreviation for international financial reporting standards, which are based on Anglo-American balance sheet principles.

#### Intermediate-Pressure Compressor

See Intermediate-Pressure Turbine.

#### Price-Earnings Ratio (PER)

The price-earnings ratio refers to the relationship between the price of a company's stock at the end of the accounting term and the net profit per share for this accounting term.

#### PT6A

The PT6A is an especially lightweight turboprop engine for business jets. Special versions of the engine power transport and military aircraft. The PT6A is maintained by MTU Maintenance Berlin-Brandenburg.

#### PW200

Pratt & Whitney Canada's PW200 is an engine for light and medium-weight helicopters. It is part of MTU Maintenance Berlin-Brandenburg's maintenance portfolio.

### PW2000

In cooperation with Pratt & Whitney, MTU has been developing and manufacturing the PW2000 since 1979. PW2000 engines are used in the commercial and military area on medium- and long-haul aircraft, such as the Boeing 757 and C-17. MTU's contribution to this engine includes the development of the low-pressure turbine and the turbine exhaust casing, as well as the production of the most important parts of the low-pressure turbine and highly-engineered turbine disks. MTU Maintenance Hannover offers complete maintenance for the engine.

# PW300

PW300 engines are used on mid-size business jets. MTU contributes the development and production of the complete three-stage low-pressure turbine, including the turbine exit case, and conducts test runs.

#### PW6000

The PW6000 is being developed in cooperation with Pratt & Whitney. In a first for the company, MTU is developing and delivering the entire low-pressure turbine subsystem and the high-pressure compressor for a commercial engine. The PW6000 is designed for use on short-haul aircraft and will power the Airbus A318. Final assembly of all PW6000 engines will be performed exclusively at MTU Maintenance Hannover.

#### Rating

Ratings are standardized credit evaluations of debt instruments and companies by independent, specialized rating agencies. They are used to assess the future ability of a company to fulfill its payment obligations completely and on time and result from the analysis of quantitative and qualitative factors.

# RB 199

The RB199 was developed and produced jointly with Rolls-Royce and FiatAvio (now: Avio) for use on the Tornado multi-role combat aircraft. MTU's contribution to this engine included the intermediate-pressure and high-pressure compressors, the external wheelcase, the thrust reverser, and the bypass casing. Now that production of this engine has been discontinued, MTU is concentrating on maintenance for this engine.

# LM6000

For General Electric's family of LM6000 industrial gas turbines, which is derived from the CF6-80 aircraft engine, MTU offers repair and maintenance services.

#### Low-Pressure Turbine

See Turbine.

#### MTR390 / MTR390 Enhanced

The MTR390, which was developed by MTU in cooperation with Turbomeca and Rolls-Royce, is the powerplant of the German-French support and anti-tank helicopter Tiger. MTU's workshare comprises the core engine with combustor and gas generator turbine, as well as a number of accessories. For the export customer Spain, an uprated version – the MTR390 Enhanced – is being developed.

#### OCCAR

OCCAR (Organisation Conjointe de Coopération en Matière d'Armement) is a European procurement agency headquartered in Bonn, which, among other things, is responsible for the procurement of the Tiger helicopter and the A400M military transport.

### Pratt & Whitney

The engine manufacturer Pratt & Whitney is a division of U.S. based United Technologies Corporation. Next to General Electric, it is the second big engine manufacturer in the country. Pratt & Whitney Canada is part of the Pratt & Whitney group.

### Subsystem

The overall engine is made up of a number of subsystems. They include the high-pressure and low-pressure compressors, combustor, high-pressure and low-pressure turbines, and the control system.

# TP400-D6

The TP400-D6, a military turboprop engine, is intended to power the A400M military transport. MTU is responsible for the intermediate shaft with intermediate-pressure compressor and turbine and parts of the control system. Furthermore, final assembly and testing of all TP400-D6 engines manufactured in Europe are being performed exclusively at MTU Maintenance Berlin-Brandenburg.

### Turbine

In the turbine, the energy contained in the gases emitted from the combustor at high pressures and high velocity is converted into mechanical energy. Like the compressor, the turbine is divided into two parts: the highpressure and low-pressure sections. The turbine is connected directly to the corresponding compressor via the respective shaft. The turbine has to withstand substantially higher stresses than the compressor, being exposed to high gas temperatures and additionally to extreme centrifugal forces that tear at the outer rim of the turbine disks with a force of several tons.

#### Turbomeca

Turbomeca is a subsidiary of the Snecma Group, which specializes in helicopter engines. It is a partner in the MTR390 program.

### V2500

The V2500, a two-spool turbofan engine for short- and medium-haul aircraft, is used on the Airbus A319, A320, and A321 as well as the Boeing/McDonnell Douglas MD90. MTU is responsible for the complete lowpressure turbine. The current annual production rate of this engine type is 250 to 300 units. The maintenance business is becoming increasingly important for the V2500.

# **Working Capital**

The working capital is the difference between current assets (not counting liquid assets and securities) and short-term liabilities (not counting bank loans). It is a parameter for monitoring changes in liquidity.

# **Risk and Revenue Sharing**

When an engine manufacturer – for example, MTU Aero Engines – participates in a program as a risk-and-revenue-sharing partner, it bears all risks of the overall program for its percentage share – not just for the parts of its workshare. In compensation, it also receives the same percentage share of profits from sales.

#### **Rolls-Royce**

Next to General Electric and Pratt & Whitney, the British company Rolls-Royce is the world's third large engine manufacturer.

# **Snecma Moteurs**

Snecma Moteurs – now part of the French SAFRAN Group – is the French engine manufacturer. In the commercial area, it cooperates closely with General Electric; in the military area, Snecma acts as an OEM, for example for the M88 engine.

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This Annual Report of MTU Aero Engines Holding AG is available in printed form in German and English. We would be happy to send you copies of the Annual Report. The report is also available on the Internet in German and English.

# Financial Calendar 2006

March 23, 2006	<b>Publication of the Consolidated Financial Statement 2005</b> Press conference to present the balance sheet Telephone conference with analysts and investors on the annual results for 2005
May 10, 2006	Intermediate Report as of March 31, 2006 Telephone conference with journalists Telephone conference with analysts and investors
May 12, 2006	Shareholders' Meeting
July 27, 2006	Intermediate Report as of June 30, 2006 Telephone conference with journalists Telephone conference with analysts and investors
September 28, 2006	2006 Conference of Analysts and Investors
November 14, 2006	Intermediate Report as of September 30, 2006 Telephone conference with journalists Telephone conference with analysts and investors



Overview of Engines		
Туре	Description	Application
Commercial Engines		
PW4000 Growth	Two-spool turbofan engine in the 340 - 440 kN thrust range.	Engine for the Boeing 777.
GP7000	Two-spool turbofan engine in the 315 - 380 kN thrust range.	Engine for the Airbus A380.
CF6	Two-spool turbofan engine in the 180 - 320 kN thrust range.	Engine for the Airbus A300, A310, and A330, the Boeing 747 and 767, the DC-10, and MD-11.
PW2000	Two-spool turbofan engine in the 170 - 190 kN thrust range.	Engine for the Boeing 757 and Boeing C-17.
V2500	Two-spool turbofan engine in the 100 - 150 kN thrust range.	Engine for the Airbus A319, A320, A321 and the Boeing MD-90.
PW6000	Two-spool turbofan engine in the 98 - 106 kN thrust range.	Engine for the Airbus A318.
JT8D-200	Two-spool turbofan engine in the 90 - 100 kN thrust range.	Engine for the Boeing MD-80 series.
PW300	Two-spool turbofan engine in the 18 - 30 kN thrust range.	Engine for medium-weight business and regional jets.
PW500	Two-spool turbofan engine in the 13 - 20 kN thrust range.	Engine for light and medium- weight business jets.

Military Engines		
EJ200	Two-spool turbofan engine with afterburner in the 90 kN thrust class.	Engine for the Eurofighter/ Typhoon 2000.
RB 199	Three-spool turbofan engine with afterburner and thrust reverser in the 70 – 80 kN thrust range.	Engine for the Panavia Tornado
J79	Single-shaft turbojet engine with after- burner in the 70 – 80 kN thrust range.	Engine for the F-4 Phantom.
Larzac04	Two-spool turbofan engine in the 14 kN thrust class.	Engine for the Alpha Jet.
TP400-D6	Three-spool engine with a power output of 8000 kW.	Engine for the Airbus A400M.
Тупе	Turboprop engine in the 3955 – 4224 kW power range.	Engine for the Breguet Atlantic, Transall C160, und Short Belfast.
T64	Turboshaft engine with free power turbine in the 3000 kW power class.	Engine for the Sikorsky CH-53G helicopter.
MTR390 / MTR390 Enhanced	Turboshaft engine with free power turbine in the 950 kW power class.	Engine for the helicopter Tiger.
RR250-C20	Turboshaft engine with free power turbine in the 310 – 340 kW power range.	Engine for the helicopters PAH1, Bo105, and others.



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