

# LOGBOOK ANNUAL REPORT 2012

# Selected consolidated financial information and key figures

#### Selected consolidated financial information and key figures at a glance

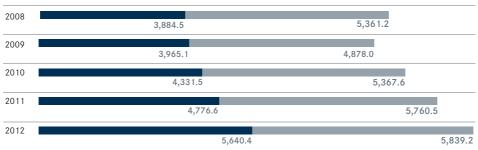
in € million (unless otherwise specified)	2012	2011	Change 2012-2011
Revenues and earnings			
Revenues	3,378.6	2,932.1	15.2 %
attributable to the commercial engine business <sup>1)</sup>	1,603.1	1,401.1	14.4%
attributable to the military engine business <sup>1)</sup>	503.3	445.5	13.0%
attributable to the commercial maintenance business <sup>1)</sup>	1,305.7	1,116.6	16.9%
Gross profit	555.3	547.9	1.4 %
Earnings before interest and tax (EBIT)	300.1	287.2	4.5 %
Earnings after tax	173.9	159.2	9.2%
Adjusted earnings			
Earnings before interest and tax (adjusted EBIT)	374.3	329.6	13.6%
EBIT margin in %	11.1	11.2	
Earnings after tax	233.4	197.7	18.1%
Balance sheet			
Total assets	4,261.9	3,736.9	14.0%
Equity	1,089.3	856.5	27.2%
Equity ratio in %	25.6	22.9	
Net financial debt	391.3	12.2	> 100%
Cash flow			
Cash flow from operating activities	229.8	287.9	-20.2 %
Cash flow from investing activities	-360.0	-126.7	< -100 %
Free cash flow	85.7	129.0	-33.6%
Cash flow from financing activities	93.0	-76.5	> 1009
Number of employees at year-end			
Commercial and military engine business (OEM)	5,160	5,092	1.39
Commercial maintenance business (MRO)	3,321	3,110	6.8%
Other group entities	60		
Total number of employees	8,541	8,202	4.19
Share indicators			
Earnings per share in €			
Undiluted earnings per share	3.43	3.26	5.2%
Diluted earnings per share	3.43	3.17	8.2%
Dividend per share in $\mathbf{\epsilon}^{2}$	1.35	1.20	12.5%
Dividend yield in %	2.0	2.4	
Total dividend <sup>2)</sup>	68.5	60.8	12.79
Outstanding common stock at Dec. 31 (million shares)	50.7	48.8	3.9%

<sup>1)</sup> Before consolidation.

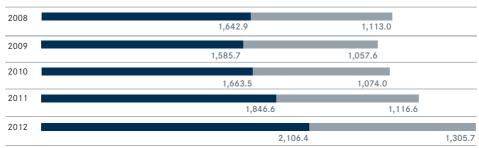
<sup>&</sup>lt;sup>2)</sup> Proposal to the Annual General Meeting for 2012 based on an expected volume of 50.7 million divided-entitled shares. 2011: Resolution by the Annual General Meeting.

# Key indicators reviewed over 5 years

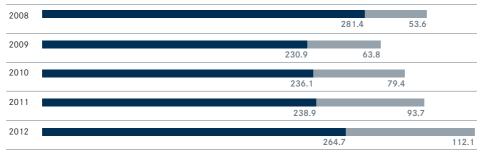
#### Order backlog and order value by segments in € million (before consolidation)



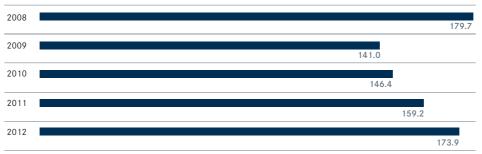
#### Revenues by segments in € million (before consolidation)



### EBIT adjusted by segment in $\ensuremath{\mathfrak{e}}$ million (before consolidation)



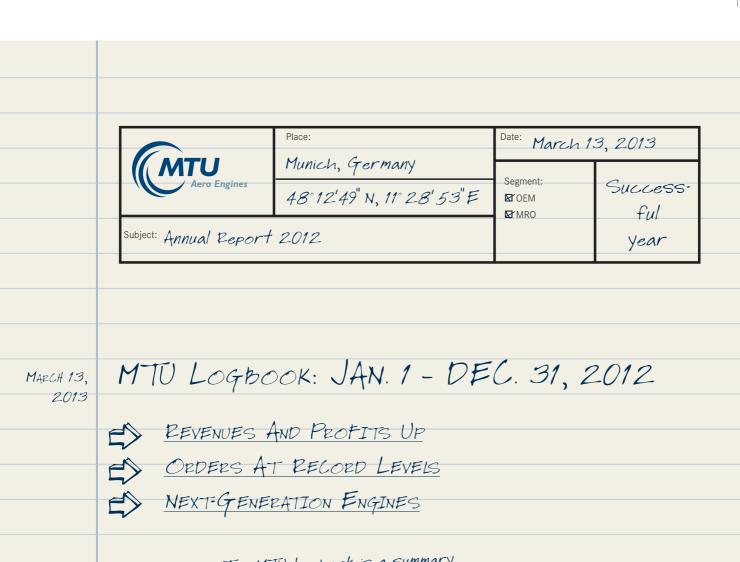
### Earnings after tax (EAT) in € million



The OEM segment (Original Equipment Manufacturing) covers new commercial engines, including spare parts, and the whole of the military business. The MRO segment (Maintenance, Repair and Overhaul) comprises all commercial maintenance activities.

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The MTU Logbook is a summary of the key events of 2012.

### Logbook entries:

June 29, 2012 MTU increases its share in the IAF V2500 program, p17

July 12, 2012 tarnborough International Airshow: MTU lands record orders

of around € 1.3 billion, p 43

July 16, 2012 MTU signs up AeroLogic as new GE90 customer, p 63

July 25, 2012 Half-year results: MTU raises its forecast for the year, p85

Sep 11, 2012 ILA 2012: MTU presents next-generation engines, p 107

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# To our shareholders

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### Letter to the shareholders

Dear shanholder,

You know MTU Aero Engines to be a high-performance company that is both ambitious and innovative. I am pleased to report that we again lived up to this reputation in 2012, having just completed the most successful financial year in the company's history. We not only achieved record revenues of almost  $\in$  3.4 billion, but our operating profit of  $\in$  374 million was higher than ever before and our EBIT margin reached 11.1%. We also succeeded in increasing our net income to  $\in$  233 million, a truly outstanding result. In the process, we achieved all the targets we had set ourselves for 2012, in some cases even going one better – despite having revised our forecasts upward in the middle of the year. This gratifying result has taken us one big step closer to realizing our goal of  $\in$  6 billion in revenues by 2020.

The geared turbofan engine – or GTF for short – has an important contribution to make when it comes to achieving these objectives, and MTU's activities in this respect are well on track. In the course of 2012, we were able to deliver the low-pressure turbine and our component of the high-pressure compressor that form part of the PW1500G certification engine for the CSeries aircraft. We also supplied the first components for the PW1100G test program for the Airbus A320neo. The PW1100G has since successfully completed its initial test run. MTU is also exceedingly well prepared for the start of volume production of the GTF program. And so we should be – since the eco-efficient GTF is gradually becoming one of the most important engines for the commercial aviation industry. Around 3,000 orders have already been placed for the GTF and every major airshow – most recently the Farnborough Airshow 2012 – has added to its nimbus.

Farnborough is a key event in the aviation industry's calendar and, in the wake of this year's airshow, we were able to report new orders totaling some € 1.3 billion. That is the highest order figure ever achieved by MTU at an airshow, and the GTF programs accounted for the lion's share of that amount. But the V2500 engine, which powers the Airbus A320 family, has been another top performer.

The V2500 retained its crown as a bestseller and a core product for MTU – not just in terms of new engine sales, but also MRO services, where it is our key revenue driver. In 2012, we substantially increased our share in this successful engine program, from 11% to 16%. As a result, MTU will be able to grow its revenues by around € 3-4 billion over the next 25 years. In 2012 alone, we benefited from additional revenues of around € 100 million, and that figure is set to rise to some € 250 million in 2013. Whereas high one-off costs meant that MTU's expanded share in the V2500 engine program did not yet translate into higher profits in 2012, in the coming years we expect our participation to generate much greater profits.

Maintenance of the V2500 is carried out at our workshops in Hannover and Zhuhai. We have increased our capacity at the latter by 50% (to 300 shop visits per year) so as to be well placed to meet growing demand in the international market. The new extension at Zhuhai was inaugurated in November. All of MTU's maintenance facilities enjoyed high utilization rates in 2012, and we expect that to remain so, given that numerous customers for MRO services renewed – or expanded the scope of – their contracts with MTU in the course of 2012. The financial year 2012 also showed how prescient our decision was to offer maintenance for the GE90, the largest aircraft engine in the world. German express freight airline AeroLogic was another important GE90 customer to sign up with MTU, bringing with it a total volume of more than € 160 million. AeroLogic concluded an exclusive contract with MTU Maintenance to service its fleet of GE90 engines.

The financial year 2012 saw big demand for MRO services in the military sector, too, on top of which we reached a number of program milestones in this area. We began deliveries of series-production TP400-D6 engines for the Airbus A400M military transporter. Final assembly of all of the company's series-production engines is carried out at MTU in Munich, while testing is performed at MTU Maintenance Berlin-Brandenburg. Another key engine is the GE38 for helicopters. MTU provides the power turbine for this engine and also carries out testing of this component. Highly successful certification test runs for the GE38 power turbine took place in Munich in 2012.

We also made headway with new business for widebody engines, delivering 150 turbine center frames for the GEnx engine, which is used in both the Boeing 787 Dreamliner and 747-8.

If this overview of the most important events in our fields of enterprise demonstrates one thing, it is this: all areas of the company contributed toward our economic success. That is reflected, too, in the revenue figures of the individual lines of business. Commercial engine business revenues rose by 14% to  $\in$  1.6 billion, military business increased by 13% to  $\in$  503 million, and commercial maintenance business grew by 17% to reach  $\in$  1.3 billion.

But we have no intention of resting on our laurels. On the contrary, our success spurs us on even more to achieve our ambitious growth targets by 2020. In order to reach that goal, it is essential for us to consolidate and expand on our position as a technology leader. At € 241 million or 7% of total revenues, our capital expenditure on research and development was again substantial. The focus of our R&D activities lies firmly on programs with a promising future, such as the geared turbofan and the GE38.

The financial year 2012 was in all respects a successful one for MTU. But success of this kind is possible only if everyone plays their part. I am proud of our outstanding team effort and would like to take this opportunity to express my sincere thanks to everyone for their individual contributions: to our highly motivated and highly qualified employees for their dedication, to all our customers and business partners and, last but by no means least, to you, our shareholders, for the trust you have placed in us. It goes without saying that you should profit from the company's success with an attractive dividend, which is why we have decided to raise our dividend by 13%. The Supervisory Board and the Board of Management will propose a dividend of € 1.35 per share to the Annual General Meeting.

I hope you will remain well-disposed to MTU and continue to support us as we strive to achieve our goals for 2020. Although we have set our sights high, we have already achieved a great deal. MTU is a highly profitable company with an excellent range of products and services as well as a workforce we can be justly proud of. In the years ahead we will keep up our program of systematic investment in the future of the company, further enhance the eco-efficiency of our engines, and continue to achieve profitable growth. This combination of sustainable and profitable growth is the key to long-term success and creates lasting value for all of us – the company, its partners, customers and shareholders. I look forward to continuing this exciting growth phase – with you at our side.

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# The Board of Management



Chief Executive Officer

### EGON BEHLE, BORN 1955 CHIEF EXECUTIVE OFFICER

Appointed term: to December 31, 2013

Egon Behle took over the post of Chief Executive Officer at MTU Aero Engines in January, 2008. As well as managing the corporate departments, he is responsible for the commercial and military programs.

An aerospace engineering graduate, he joined MTU after serving as the CEO of ZF Lenksysteme GmbH. Prior to that, he headed several business units at ZF Friedrichshafen AG and was the sole managing director of Fortuna Spezialmaschinen GmbH. During his career he has also worked for Renk AG, Dornier System GmbH and Robert Bosch GmbH.



REINER WINKLER, BORN 1961
MEMBER OF THE BOARD OF MANAGEMENT,
CHIEF FINANCIAL OFFICER
(DIRECTOR OF LABOR RELATIONS)

Appointed term: to September 30, 2014

Reiner Winkler has been a member of the Board of Management of MTU Aero Engines since May 2005, with responsibility for finance, human resources and IT. From 2001 to 2005, he fulfilled a similar role at MTU as executive vice president.

Before joining the company, Winkler, who holds a degree in business administration, was managing director finance and controlling at TEMIC Telefunken microelectronic GmbH, and also held management posts with Daimler-Benz AG and Siemens AG.

### DR. STEFAN WEINGARTNER, BORN 1961 MEMBER OF THE BOARD OF MANAGEMENT, PRESIDENT COMMERCIAL MAINTENANCE

Appointed term: to October 31, 2015

Since November 2007, Dr. Stefan Weingartner has been the member of the Board of Management responsible for the company's commercial maintenance operations.

Prior to that date, he headed MTU's military engine programs. A holder of a doctorate in engineering, a degree in physics and an MBA, he was previously managing director of MTU Turbomeca Rolls-Royce GmbH, president and managing director of EADS Japan Co. Ltd., and managing director of DaimlerChrysler Japan Holding.



Dr. Stefan Weingartner, President Commercial Maintenance

### DR. RAINER MARTENS, BORN 1961 MEMBER OF THE BOARD OF MANAGEMENT, CHIEF OPERATING OFFICER

Appointed term: to April 14, 2014

Dr. Rainer Martens has been a member of the MTU Board of Management since April 2006, and bears responsibility for engineering and production.

A holder of a doctorate in mechanical engineering, he has occupied various key positions in the engine and aircraft production industry - at companies such as Airbus, MTU Aero Engines and CIM-Fabrik Hannover gGmbH - over a period spanning more than 20 years.



Dr. Rainer Martens, Chief Operating Officer

### The MTU share

The MTU share price developed positively in 2012, in line with the company's successful operating results. In December, it reached € 69.85, its highest level since the company went public in 2005. Viewed over the year as a whole, the share price rose by 39%, while the MDAX increased by 34% in the same period. In 2012, MTU's shareholders again stand to benefit from the company's earnings-oriented dividend policy, with the Board of Management and Supervisory Board proposing a dividend of € 1.35 per share to the Annual General Meeting.

# REBOUND IN SHARE PRICES DESPITE SOVEREIGN DEBT CRISIS AND ECONOMIC CONCERNS

2012 was a good year for the stock market. Over the year as a whole, prices rose across the board; only in the second quarter did the persistent sovereign debt crisis in the euro zone and the weakening economy in many industrialized economies serve to dampen the mood. In the second half of the year, markets calmed on the back of the progress made with the European Stability Mechanism (ESM) and the European Central Bank's pledge to maintain its low-interest-rate policy and, where necessary, to intervene more strongly in bond markets. Another positive factor was tentative signals that the economic slowdown in key markets such as the U.S.A. and China would be more moderate than expected.

Against this backdrop, three trends were noticeable on the German stock markets. After a broad-based upturn early in the year, markets suffered setbacks from April onward. In early June, the German DAX index fell to 5,969 points, its lowest level for the year. The DAX picked up again in the second half of the year, reaching its high for 2012 in late December at 7,672 points. The DAX closed out the year on 7,612 points. This represents an increase of 29% compared with 2011.

The MDAX German mid-cap index, on which the MTU share is listed, began the year at 9,115 points, its lowest level in 2012. From here, the MDAX followed a distinct upward trend throughout the first four months of the year. Spring witnessed an adjustment, which was less severe, however, than the one experienced by the DAX. The MDAX subsequently soared to new heights, reaching its highest level for the year on December 19 with 12,086 points. The MDAX saw out the year on 11,914 points, 34% up on 2011, when it had closed the year on 8,898 points.

Aviation industry stocks tracked the general market trend in 2012. The Dow Jones Aerospace & Defense Index, which, alongside MTU, includes companies such as Rolls-Royce, EADS and BAE Systems, added 23% in the course of the year – not least because of the good performance of MTU shares.

#### MTU SHARE PRICE REACHES ALL-TIME HIGH

In 2012, the MTU share outperformed the market as a whole as well as the MDAX and Dow Jones Aerospace & Defense indices. The end-of-year closing price of  $\in$  68.80 for 2012 was 39% above that of 2011. This increase was attributable not only to good operating results – which enabled the company to moderately raise its full-year forecasts when it presented its figures for the first six months – but also to the positive impulses generated by MTU's reaching key milestones on the path toward its target of  $\in$  6 billion in revenues in 2020. Such milestones included the market success of the geared turbofan programs, obtaining new contracts for GE90 maintenance, an increase in the company's share in the V2500 program and the expansion of capacity at MTU Maintenance Zhuhai.

From its low point for the year of  $\in$  49.00, reached on January 4, the MTU share price rose steadily through to May 2012. In May and June, MTU shares proved for the most part impervious to the downturn on the stock markets triggered by the escalation of the sovereign debt crisis. In the second half of the year, the company's shares began rising again, reaching an all-time high of  $\in$  69.85 on December 19. They maintained this high level (above  $\in$  68) throughout the month, closing out 2012 at  $\in$  68.80 on December 30.

MTU share performance in 2012 (indices at Dec. 31, 2011=100)



Over the year, the MTU share

39%

		2012	2011
Highest quoted price <sup>1)</sup>	€	69.85	55.63
Lowest quoted price <sup>1)</sup>	€	49.00	42.07
Beginning-of-year share price <sup>1)</sup>	€	50.00	50.38
End-of-year share price <sup>1)</sup>	€	68.80	49.44
Annual performance <sup>2)</sup>	%	+39	-2
Market capitalization at year end	€ million	3,578	2,571
Average daily trading volume	in € million in '000 shares	10 170	13 255
Earnings per share	€	3.43	3.26
Dividend per share	€	1.353)	1.20
Dividend payout ratio <sup>4)</sup>	%	56.9	60.5
Dividend yield <sup>5)</sup>	%	2.0	2.4

<sup>1)</sup> Xetra closing price.

#### 5TH PLACE IN THE MDAX RANKING FOR MTU

MTU's market capitalization stood at € 3,578 million at the end of 2012. The MTU share improved its position in the German Stock Exchange's MDAX rankings from 7th to 5th place. The average number of MTU shares traded in Xetra trading and on the German stock exchanges was lower than in the previous year, falling from 255,000 to 170,000 per day. The average daily value of shares traded amounted to around € 10 million (2011: €13 million). In terms of trading volume, the MTU share improved from 14th place in 2011 to 13th place in 2012 among the companies that comprise the MDAX.

#### **BROAD SHAREHOLDER BASE**

At December 31, 2012, MTU held 2.4% of its stock capital in the form of treasury shares. Consequently, the free float (as defined by the German Stock Exchange) accounted for 97.6% of MTU shareholdings at year end. Institutional investors held about 91% of the shares, while some 7% were held by retail investors. MTU has a broadly diversified shareholder base: 83% of its institutional investors are based outside Germany – mainly in the U.S.A., Great Britain, Canada, France, Switzerland and other western European countries. At December 31, 2012, the stock market authorities were in possession of notifications from the following investors, each of whom holds more than 3% of the company's voting rights: The Capital Group Companies, U.S.A. (13.06%), The Goldman Sachs Group, U.S.A. (3.78%), Fidelity UK (3.04%), Gryphon, Canada (3.02%) and Threadneedle, U.K. (3.01%).

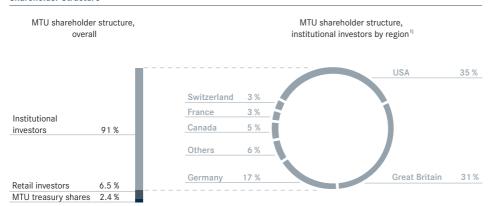
 $<sup>^{\</sup>rm 2)}$  Based on Xetra year-end closing price (Dec. 30).

<sup>3)</sup> Proposal.

<sup>&</sup>lt;sup>4)</sup> Dividend payout as a percentage of net profit available for distribution.

<sup>&</sup>lt;sup>5)</sup> Net dividend yield based on Xetra year-end closing price (Dec. 30).

#### **Shareholder Structure**



 $<sup>^{1)}\</sup>mbox{Approximation}$  based on top 50 shareholders (= about 70 % of share capital). As of Dec. 31, 2012.

#### HIGH PROFILE AMONG ANALYSTS

The high degree of interest in the MTU share shown by analysts underscores its status as an attractive investment proposition. Currently, 23 analysts report on MTU. At year-end 2012, 11 financial institutions maintained a 'buy' recommendation for MTU shares, while 11 rated them 'hold.' Only one analyst recommended selling (2011: 18 'buy', 5 'hold', 2 'sell'). The average upside target was € 68.00.

The following financial institutions report regularly on MTU

Bankhaus Lampe	Deutsche Bank	Metzler Equity Research
Bank of America Merrill Lynch	DZ Bank	Morgan Stanley
Berenberg Bank	Equinet Bank AG	Natixis
Barclays	Exane BNP Paribas	Oddo Securities
Cheuvreux	HSBC Trinkaus & Burkhardt	Redburn Research
Citigroup Global Markets	Independent Research GmbH	Société Générale
Commerzbank	Kepler Equities	UBS
Credit Suisse	Landesbank Baden-Württemberg	

Numerous financial institutions maintained a 'buy' recommendation for MTU shares.

#### ATTRACTIVE DIVIDEND PROGRESSION

Corporate Governance

MTU increases its dividend by

At the Annual General Meeting on May 3, 2013, the Board of Management and the Supervisory Board intend to propose a dividend payment of  $\in$  1.35 per share for the financial year 2012. The company's positive operating performance has enabled MTU to increase the dividend by  $\in$  0.15 per share compared with the previous year (2011:  $\in$  1.20), thus confirming the company's earnings-oriented dividend policy. The dividend is expected to be paid out on May 6, 2013. Based on the share price of  $\in$  68.80 prevailing at December 30, 2012, this is equivalent to a dividend yield of 2.0 %. The dividend payout ratio calculated as a percentage of MTU's net profit available for distribution is 56.9 %.

#### INVESTOR RELATIONS WORK PAYS OFF

In 2012, MTU organized 14 road shows, mainly in Europe, the U.S.A. and Asia, and participated in eight international investor conferences. In some 300 face-to-face meetings, management and the Investor Relations team were able to present analysts and investors with a convincing portrayal of the soundness of MTU's business model and the company's potential for growth. At its annual Investor and Analyst Day on November 27, which revolved around MTU's current growth strategy and its implementation, the company welcomed a total of 45 analysts and investors to Munich.

The MTU Annual General Meeting, which was held in Munich on May 3, 2012, was a key platform for dialog with shareholders. It was attended by shareholders representing 60% of the share capital with voting rights (previous AGM: 52%).

That MTU's investor relations activities are paying off is borne out by various awards. In the "Europe's Best Investor Relations" ranking published in the U.S. magazine Institutional Investor, the sell-side analysts put MTU in second place in the aerospace & defense sector. In the annual IR ranking organized by German magazine WirtschaftsWoche and the German Investor Relations Association, MTU took fourth place among the MDAX-listed companies. The MTU Annual Report ranked fifth in manager magazin's "Best Annual Reports" category for MDAX companies.

more information available online under Investor Relations More detailed information can be found under Investor Relations on the MTU website (www.mtu.de). The Investor Relations office in Munich is happy to answer any other questions over the phone on +49 89 1489-5714.

#### MTU share data

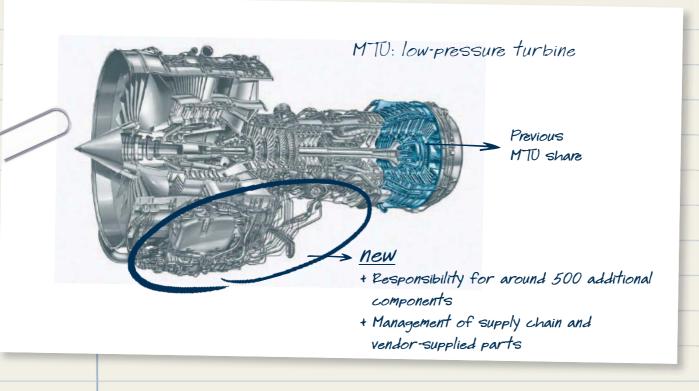
Number of shares	52 million shares of no-par stock
Type of share	Registered shares
Equity capital	€ 52 million
Voting rights	One vote per share
German Securities Identification Number WKN	AOD9PT
ISIN	DE000A0D9PT0
Stock exchange symbol	MTX
Trading segment	Prime Standard
Stock-market segment	MDAX
Financial year	Identical with calendar year
Accounting rules	IFRS
Designated sponsor	Goldman Sachs
Official notices	Electronic version of the Federal Gazette (Bundesanzeiger)

	Place: Glastonbury, CT 06033, U.S.A.	Date: June 29, 2012		
/ Aero Engines		MTU share price:		
	41° 41′ 13" N, 72° 32′ 41" W	€ 57.94	Hi-loar	
Responsible:		Segment:	Higher share!	
Egon Behle, Chie	ef Executive Officer	⊠r oem —	37 10 11 3 1	
Topic: IAF agreement	Sealed	□ MRO		

2012

# JUNE 29, MTU INCREASES ITS SHARE IN THE IAE V2500 Program

MTU's share in the V2500 program for the Airbus A320 rises from 11% to 16%.





The V2500 is MTU's most important commercial engine program. by increasing its share in this program, MTU expects to generate additional sales worth three to four billion euros over the next 25 years.



Market leader for V2500 MRO services in Asia: MTU Maintenance Zhuhai

"Our increased share in the Y2500 program is an important milestone on the way to reaching our revenue target of € 6 billion by 2020. The Y2500 program will continue to be a mainstay of the global engine market for decades to come."

Egon Behle, Chief Executive Officer

### V2500

MTU is developing and manufacturing the V2500 in conjunction with Pratt & Whitney and Japanese Aero Engines Corporation. The engine is marketed by the joint venture International Aero Engines AG (IAE).

The V2500 is a two-shaft turbofan engine for short- and medium-haul aircraft, and is installed in the Airbus A319, A320 and A321 as well as in the Boeing/McDonnell Douglas MD-90. The V2500 Select-One<sup>TM</sup> is a newly developed variant that lowers the engine's fuel consumption by one percent and improves time on wing by 20%. That makes the V2500 a leader in terms of eco-compatibility.

# NEXT-GENERATION ENGINES FOR SHORT AND MEDIUM-HAUL AIRCRAFT

- Establishment of a joint venture
- ► Partners: Pratt & Whitney, Polls-Poyce,

  Japanese Aero Engines Corporation, MTU Aero Engines
- tocus: geared turbofan technology; studies for next-generation engine systems
- Fstimated market potential over the next 20 years: ~ 20,000 new aircraft / ~ 45,000 engines

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# Corporate Governance

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# Corporate Governance Report

| Corporate Governance

Responsible corporate governance ranks high at MTU, which is why the company complies with all the recommendations and suggestions of the German Corporate Governance Code. The report delivered pursuant to Section 3.10 of the Code qualifies as the corporate governance statement required under Section 289a of the German Commercial Code (HGB).

#### RESPONSIBLE CORPORATE MANAGEMENT

Good corporate governance is an essential part of MTU's management practice.

The term "corporate governance" stands for the practice of administering and controlling a company in accordance with the principles of responsibility and long-term added value. By its own understanding, MTU Aero Engines Holding AG practices good corporate governance in every area of the company. That comprises mutual trust and efficient collaboration between the Board of Management and the Supervisory Board, respect for the shareholders' interests, and open and transparent communication with all stakeholders. As a company with global operations, MTU acts in compliance with the relevant national and international standards. In Germany, where the company has its headquarters, these standards are laid down principally in the Stock Corporation Act (AktG), in the Co-Determination Act (MitbG) and in the German Corporate Governance Code (the Code). In the financial year just passed, the Board of Management and Supervisory Board closely studied the Code, the latest version of which was published on May 15, 2012.

Pursuant to Section 289a of the German Commercial Code (HGB), the Board of Management and Supervisory Board of MTU Aero Engines Holding AG hereby make the following declaration relating to corporate management, which is followed by a report in accordance with Section 3.10 of the Code.

DECLARATION OF CONFORMITY WITH THE GERMAN CORPORATE GOVERNANCE CODE BY THE BOARD OF MANAGEMENT AND SUPERVISORY BOARD OF MTU AERO ENGINES HOL-DING AG, PURSUANT TO SECTION 161 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

The Board of Management and the Supervisory Board of MTU Aero Engines Holding AG declare that the recommendations of the Government Commission on the German Corporate Governance Code, as published in the amended version of May 15, 2012 by the Federal Ministry of Justice in the official section of the Federal Gazette, have been and are being complied with in its entirety. The Board of Management and the Supervisory Board of MTU Aero Engines Holding AG also intend to follow these recommendations in the future.

The earlier deviation from item 5.4.6 para. 2 of the Code in the version of May 26, 2010 has fallen away since the recommendation for performance-related compensation components for the Supervisory Board is no longer contained in the new version of the Code.

Munich, December 2012

For the Board of Management

Egon Behle Chairman

For the Supervisory Board

Klaus Eberhardt Chairman

#### THE PRACTICE OF CORPORATE MANAGEMENT

MTU has always demonstrated a sense of responsibility in everything it does, applying these principles in the same measure to the environment and society as it does to its products, processes, employees, customers and partners. MTU is committed to sustainable development, and its contribution in this area goes above and beyond the minimum legal requirements. The focus of this social commitment lies on environmental protection, human resources policy and community outreach projects in the neighborhood of MTU sites. These commitments are publicly documented on the MTU website at www.mtu.de under The company > Sustainability.

The company has formulated a code of conduct, which constitutes a binding standard to be observed by all employees. This code of conduct can be downloaded from the company's website at www.mtu.de under The company > Sustainability > Code of Conduct.

MTU attaches great importance to maintaining an open, ongoing dialog with its target groups. The company communicates with these groups via many channels, including the intranet and internet, company brochures, employee and customer magazines, as well as in direct form at events. The goal of this communication is to generate broad public acceptance.

MTU insists on the finest quality for its products and services. Compliance with quality standards is verified by official organizations and through internal and external audits. The quality standards are published on the MTU website at www.mtu.de under The company > Quality.

#### TRUST-BASED COOPERATION BETWEEN GOVERNING BODIES

MTU is stock corporation organized under German law. Its governing bodies are the Board of Management, the Supervisory Board and the Annual General Meeting. The close cooperation between the governing bodies is based on trust, and they share information with each other in a reliable and regular manner. The Annual General Meeting, in particular, offers shareholders the opportunity to present questions to MTU executives and to exercise their voting rights.

#### WORKING PROCEDURES OF THE BOARD OF MANAGEMENT

As the executive body of MTU, the Board of Management's goal is to create sustainable added value, on its own responsibility and in the company's interest, taking into account the interests of its shareholders, employees and other groups connected with the company. The Board of Management works as a team, with its members bearing joint responsibility. The members of the Board of Management regularly discuss important measures and events within their respective remits. Their qualifications and professional experience are complementary.

The Supervisory Board is briefed by the Board of Management in a regular, timely and comprehensive manner on the situation of the company, in particular on strategy, the status of planning, the achievement of targets, the company's risk situation and its risk management activities. The Board of Management coordinates decisions of a strategic nature with the Supervisory Board, ensures that such decisions are implemented, and discusses the progress made. Once a month, the Supervisory Board receives written reports on the company's earnings, financial situation and net asset position. Any deviations from the planned operational performance are explained in detail to the Supervisory Board. Furthermore, the chair of the Supervisory Board is briefed regularly and in person on the company's current situation, significant business transactions and important pending decisions.

The Board of Management also receives regular reports on compliance issues, i.e. on the measures taken to comply with laws and regulations and with the company's own guidelines.

Important Board of Management decisions, in particular those concerning the budget, require the approval of the Supervisory Board. The Supervisory Board provides information on these matters in its report on page 38. The Board of Management's rules of procedure, along with the list of transactions by MTU Aero Engines Holding AG requiring Supervisory Board approval, can be viewed on the company website at www.mtu.de under Investor Relations > Corporate Governance.

- more information available online under The company > Sustainability
- ® more information available online under The company > Code of Conduct
- ® more information available online under The company > Quality

The Board of Management coordinates strategic decisions with the Supervisory Board.

more information available online under Corporate Governance

To our shareholders

#### WORKING PROCEDURES OF THE SUPERVISORY BOARD

In line with statutory requirements, the Supervisory Board comprises six shareholder representatives and six employee representatives. It appoints the Board of Management, oversees the latter's work and provides advisory support. Decisions of consequence for the company require the approval of the Supervisory Board. All Supervisory Board members are qualified for these tasks and properly perform their mandated duties. In compliance with the recommendation of the German Corporate Governance Code, no more than two former members of the company's Board of Management hold seats on the Supervisory Board of MTU Aero Engines Holding AG. The members in question are Udo Stark and Prof. Dr.-Ing. Klaus Steffens. The Supervisory Board is entrusted with gaging the independence of its own members. The majority of the members of the Supervisory Board may be regarded as independent, thus ensuring that the Board of Management receives independent advice and monitoring.

• further information on page 40

The Supervisory Board's rules of procedure make provision for its members to form committees. MTU's Supervisory Board has four committees, details of which can be found on page 40.

The Supervisory Board's rules of procedure contain binding provisions for dealing with conflicts of interest. Such conflicts are to be disclosed and, where appropriate, may result in termination of the member's mandate. In addition, the Supervisory Board must explicitly state such potential conflicts of interest in the nomination proposals it makes to the Annual General Meeting. In 2012, no consulting agreements, contracts for services or similar contractual agreements existed between the members of the Supervisory Board and MTU Aero Engines Holding AG or any of its subsidiaries. Thus no conflicts of interest requiring disclosure arose.

In the financial year 2012, directors' and officers' liability insurance was in effect for the MTU Board of Management and Supervisory Board members. The cover includes a deductible amounting to 10% of the loss incurred, up to a maximum of 1.5 times the board member's annual fixed compensation.

• further information on page 25 ff.

Compensation for the members of the Board of Management and Supervisory Board is established in accordance with clear, transparent criteria, which are described in the management compensation report on page 25 et seq.

#### DIVERSITY

As the diversity of MTU's workforce is a decisive factor in the company's success, it is a topic to which MTU attaches great importance. In particular, MTU focuses strongly on ensuring the appropriate representation of people with international backgrounds and of women within the company and its corporate bodies.

Diversity also has an important role to play in the Supervisory Board, which has set itself the following goals as regards its future composition. As a company with global operations, MTU has a keen interest in ensuring that the members of its corporate bodies have an international background, which is why at least one member of the Supervisory Board should meet this criterion. The MTU Supervisory Board already includes members who trained in other countries or have spent substantial portions of their careers abroad, and the company intends to ensure that the members of the Supervisory Board continue to contribute their international experience going forward.

Over the next two periods of office, the number of women serving on the Supervisory Board is to be increased to at least two, one being an employee representative and the other a shareholder representative. At present, the Supervisory Board of MTU has one woman member. It is the Supervisory Board's opinion that two or more women representatives would adequately meet the requirement for fair representation, this number being based on the relative proportion of women working for the company.

MTU intends to raise the proportion of women in management positions across all levels of the hierarchy to 15% by the end of 2015. In order to achieve this target, the company continued implementing its measures for promoting women in 2012. When filling vacancies for specialists and managers, for instance, the company focuses on ensuring the adequate representation of women. Female high potentials receive support through dedicated coaching and mentoring programs. Above and beyond this, MTU has flexible structures in place to ensure a healthy work-life balance, among them quasi full-time working models for managers and teleworking. At the same time, MTU is raising the awareness of its entire workforce for the issue of gender balance through seminars aimed at managers and employees alike. The company's own communication media are also being deployed for this purpose. On the back of these measures, MTU intends to increase successively the percentage of women in management positions within the company, and ultimately achieve its ambitious goal.

The Supervisory Board considers diversity an important goal for the composition of the Board of Management, too. In terms of its members' education, training and professional experience, the Board of Management is already international, and is set to remain so in future. The Supervisory Board will also pay attention to the goal of adequate representation of women when searching for suitably qualified candidates to fill vacant positions on the Board of Management.

Since MTU's articles of association already contain an age-limit provision for Supervisory Board members, no further action on this issue is required of the Supervisory Board. Members of the Supervisory Board must relinquish their seats after the Annual General Meeting that follows their 70th birthday.

The Supervisory Board takes the above-mentioned goals into account when submitting nomination proposals to the Annual General Meeting. The same applies to the Nomination Committee, which is responsible for preparing the vote of the Supervisory Board. Since the main criterion for any nomination proposal is still the company's interest, the Supervisory Board shall propose the candidates that best meet the requirements.

#### FINANCIAL REPORTING

MTU prepares its consolidated financial statements and its interim reports in accordance with the International Financial Reporting Standards (IFRSs) on the responsibility of the Board of Management. The separate, annual financial statements are compiled in accordance with the provisions of the German Commercial Code (HGB). An internal system of controls coupled with the application of uniform principles of accounting ensures that the earnings, financial situation, net asset position and cash flows of all group companies are accurately presented. In addition, MTU has a differentiated system in place to identify and monitor business and financial risks.

#### RISK MANAGEMENT AND CONTROL SYSTEM

The Board of Management is responsible for ensuring that an appropriate risk management and control system is in place. This system is described on page 90 et seq. The Board of Management reports to the Supervisory Board in a regular and timely manner on existing risks and any pertinent new developments.

The Audit Committee of the Supervisory Board deliberates on risk management. In accordance with Section 107 (3) of the German Stock Corporation Act (AktG), as amended by the German Accounting Law Modernization Act (BilMoG), the Audit Committee is explicitly responsible for monitoring the effectiveness of the risk management system, the internal control and auditing systems, the financial reporting process and the audit of the financial statements, and, in particular, for assessing the auditors' independence.

By the end of 2015, MTU aims to increase the percentage of management positions occupied by women to

15%

• further information on page 90 ff.

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#### **COMPLIANCE**

The corporate culture at MTU is based on trust and mutual respect.

MTU has set up a

Compliance Board.

The corporate culture at MTU sets great store by the values of trust and mutual respect. Nevertheless, the risk can never be entirely ruled out that unauthorized behavior of isolated individuals might lead to contravention of the law. MTU does everything in its power to minimize this risk as far as possible, and is committed to uncovering and pursuing all acts of misconduct, as in the case of corruption.

The observance of legal and ethical rules and principles plays a central role in this respect. These and other aspects of compliance, such as the responsible handling of insider information, are documented in a code of conduct drawn up and introduced jointly by the MTU Board of Management and the Group Works Council. This code of conduct embodies MTU's corporate culture and reflects its strict resolve to comply with the stipulations of the relevant laws and internal regulations. It is a company-wide guide to ethical business relations.

Compliance is an important aspect of all management functions at MTU. For example, all managers verify that each and every member of their staff has read and understood the code of conduct and is abiding by its rules. Reinforcement is provided by internal training courses.

MTU has set up a Compliance Board, which reports directly to the Board of Management. This board meets once a quarter. Its duties include identifying and evaluating legal and reputational risks. Where necessary, it recommends additional compliance rules to the Board of Management. Above and beyond this, the Compliance Board coordinates the measures taken in specific cases of non-compliance. In agreement with the Works Council, the company has set up an internal compliance office that staff, customers and suppliers may contact if they suspect unethical conduct.

Since 2012, status reports on the activities of the Compliance Board have been presented at meetings of the Supervisory Board's Audit Committee. The Audit Committee then informs the plenary meetings of the Supervisory Board via a summary of its own meetings.

The Supervisory Board's Audit Committee oversees the Board of Management's compliance activities. This includes proposing new rules for incorporation in the compliance guidelines and monitoring the measures and training programs implemented by the Compliance Board.

#### A FULL INFORMATION SERVICE

In keeping with the principles of good corporate governance, MTU issues a regular flow of comprehensive, timely information on the company's activities and any major developments in its business situation to shareholders, shareholder associations, financial analysts, the media and other interested parties. MTU strives to ensure that all stakeholders are kept informed in equal measure. The company publishes a full range of information on its website at www.mtu.de. It publishes quarterly reports on its business activities, and any new developments likely to have a significant impact on the MTU share price are disclosed in the form of ad hoc releases in accordance with statutory requirements.

Information is also posted on the MTU website whenever members of the Board of Management or Supervisory Board or related persons have purchased or sold MTU shares or share-based derivatives. Section 15a of the German Securities Trading Act (WpHG) stipulates that this group of persons must disclose such transactions if and when their value reaches or exceeds € 5,000 within a single calendar year.

more information
available online

# Management Compensation Report

This report describes the principles of the compensation system for members of the MTU Board of Management and Supervisory Board, including its components and the corresponding amount of benefits awarded. Board of Management compensation is linked to a style of corporate management that has a sustainable and long-term orientation. Supervisory Board compensation is established relative to the size of the company and the individual duties and responsibilities of the respective members.

#### RESPONSIBLE CORPORATE MANAGEMENT

The management compensation report explains the principles applied when establishing the compensation to be awarded to members of the Board of Management and Supervisory Board of MTU Aero Engines Holding AG, and states the amount and composition of that compensation. The management compensation report follows the provisions of Section 314(1), no. 6 of the German Commercial Code (HGB), German Accounting Standard DRS 17, the draft German Accounting Standard E-DRS 22 'Reporting on the compensation paid to board members', and the recommendations of the German Corporate Governance Code. In so doing, the report also takes account of the requirements of the International Financial Reporting Standards (IFRSs) regarding key management personnel compensation (as formulated in 'IAS 24 Related Party Transactions').

At the proposal of its chair, the Supervisory Board decides on a system of compensation for the members of the Board of Management, including the main components of their contracts, and reviews this system at regular intervals.

The present compensation system, which was developed with the support of independent external consultants and became effective in 2010, focuses on linking Board of Management compensation to a style of corporate management and development that has a sustainable and long-term orientation. This entails not only an appropriate mix of fixed and variable compensation components but also the inclusion of long-term components in the variable compensation. Large parts of the variable compensation can now be deferred, or not paid out at all. The intention of these changes is to align the interests of the members of the Board of Management more closely with those of the company by increasing their participation in the company in the long term.

In accordance with the disclosure requirements of IAS 24.17, the members of the Board of Management were awarded total compensation of  $\in$  7,505,839 (2011:  $\in$  6,452,608) for their services as board members during the financial year 2012. This amount includes post-employment benefits and other components as listed below. Members of the Board of Management did not receive any compensation for their activities on the boards of MTU group companies, nor were they granted any loan facilities by the company.

The Supervisory Board decides on a system of compensation for the members of the Board of Management and reviews this at regular intervals.

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The above total compensation amount (including post-employment benefits) consists of the following components, as defined in IAS 24.17:

	2012		2011		
	in €¹)	in %	in €¹)	in %	
Short-term employee benefits		_			
Non-performance-related components	2,357,895		2,223,152		
Performance-related components without long-term incentive effect <sup>2</sup>	1,210,554		1,311,342		
Performance-related components with long-term incentive effect <sup>3)4)</sup>	1,704,745		891,050		
Total short-term employee benefits	5,273,194	70.3	4,425,544	68.6	
Post-employment benefits					
Service cost / past service cost	791,205		791,398		
Total post-employment benefits	791,205	10.5	791,398	12.3	
Share-based compensation					
Performance-related components with long-term incentive effect <sup>5)</sup>	1,441,440		1,235,666		
Total share-based compensation	1,441,440	19.2	1,235,666	19.1	
Total compensation	7,505,839	100.0	6,452,608	100.0	

<sup>&</sup>lt;sup>1)</sup> Benefits paid to members of the Board of Management for active board service in the stated years.

### PRINCIPLES OF THE COMPENSATION SYSTEM FOR MEMBERS OF THE BOARD OF **MANAGEMENT**

At the proposal of its chair, the Supervisory Board determines both the total compensation to be awarded to members of the Board of Management (so-called target direct compensation) and the composition of this compensation. The target direct compensation is made up of non-performance-related components (40% of the total) and performance-related components (60%). The latter comprise the Annual Performance Bonus and a share-based component, each of which makes up approximately 30% of the target direct compensation.

#### NON-PERFORMANCE-RELATED COMPONENTS

The non-performance-related components consist of the basic salary and other benefits that are paid on a monthly basis. 'Other benefits' comprise taxable reimbursements of expenses and the non-cash benefit deriving from payments in kind such as insurance premiums or the use of a company car for business and private purposes, including any taxes on such benefits paid by the company.

#### PERFORMANCE-RELATED COMPONENTS

### PERFORMANCE-RELATED COMPONENTS WITHOUT LONG-TERM INCENTIVE EFFECT

Half of the Annual Performance Bonus (APB) is granted as a short-term compensation component.

The actual amount depends on the results achieved in respect of two company performance targets and on the board member's individual performance. The company performance targets are based on the key performance indicators at group level - 'adjusted EBIT' and 'free cash flow' - which are given equal weighting. The targets to be achieved to ensure payment of 100% of the

<sup>&</sup>lt;sup>2)</sup> Performance-related APB for the financial year 2012, payable in the financial year 2013.

<sup>&</sup>lt;sup>3)</sup> First deferred portion of 2010 APB, payable in the financial year 2013.

<sup>&</sup>lt;sup>4)</sup> Second deferred portion of 2011 APB, payable in the financial year 2013.

<sup>5)</sup> Fair value at grant date.

APB are set annually in advance by the Supervisory Board, taking the annual planning figures into account. In addition, an entry threshold is set for each performance target at a figure 30% below the planned level; this corresponds to a goal achievement level of 50%. Members of the Board of Management who do not reach this entry threshold are not entitled to a short-term compensation component. Similarly, the maximum goal achievement level of 180% is fixed at a figure 15% above the planned value for each of the two performance targets. Between the entry threshold, the 100-% goal achievement level, and the maximum value, the degree of goal achievement is interpolated using a straight-line method. The Supervisory Board takes the individual Board of Management member's performance into account by decreasing or increasing the goal achievement figures by up to 20% (termed the 'discretionary factor'), depending on its assessment of the individual performance of that member.

The method used to adapt and disburse compensation components that have been withheld remains unchanged until final payment, even in cases where a member of the Board of Management leaves the company prior to the payment date.

#### PERFORMANCE-RELATED COMPONENTS WITH LONG-TERM INCENTIVE EFFECT

Performance-related compensation with long-term incentive effect comprises the deferred APB and a share-based component.

#### Deferred Annual Performance Bonus (APB)

The remaining 50% of the APB is deferred and paid out in two equal portions in the following two financial years.

The deferred components of APB 2010 were agreed for the first time with effect from January 1, 2010 (for Egon Behle with effect from July 1, 2010). The ultimate amount to be paid depends on the goal achievement level attained in respect of the two key performance indicators at group level and on the discretionary factor applied in the financial years 2011 and 2012. The deferred components of APB 2011 were agreed for all members of the Board of Management with effect from January 1, 2011. The ultimate amount to be paid depends on the goal achievement level attained in respect of the two key performance indicators at group level and on the discretionary factor applied in the financial years 2012 and 2013.

#### Shared-based component

The long-term compensation awarded to members of the MTU Board of Management also comprises a share-based component granted in annual tranches by the Supervisory Board. The share-based component consists of the Performance Share Plan (PSP), which is linked to the development of the MTA share relative to the MDAX index, and the Share Matching Plan (SMP), in which the members of the Board of Management can opt to invest their payment from the PSP at the end of the assessment period for each tranche.

#### Performance Share Plan (PSP)

On the dates fixed for these tranches, the provisional number of performance shares is calculated on the basis of the average price of the MTU Aero Engines Holding AG share over the last 30 trading days prior to commencement of the assessment period in accordance with each Board of Management member's long-term target compensation. At the end of the four-year assessment period, these performance shares entitle the recipients to a payment either in cash or in shares, as the Supervisory Board sees fit. Since 2011, the tranches of shares have been granted to all members of the Board of Management on the same date, namely with effect from January 1 of the financial year. In 2010, by contrast, Egon Behle was granted his tranche of shares with effect from July 1.

The actual number of performance shares is determined after expiry of the four-year assessment period for each tranche of granted shares. This amount reflects the performance of the MTU share compared with the other shares in the MDAX index, based on total shareholder return (TSR). The TSR is calculated as the total return on the stock including all changes in the share price and all dividends paid during the assessment period. The TSR ranking of the MTU share relative to that

At the end of the assessment period, performance shares entitle the recipients to a payment either in cash or in shares.

of all other MDAX-listed shares at the end of the assessment period is the main factor determining the number of shares allocated. Depending on this ranking, the level of goal achievement may be between 0% and 150%, with 100% being the value for an average ranking.

The amount disbursed equals the actual number of performance shares multiplied by the average MTU Aero Engines Holding AG share price over the last 30 trading days prior to the end of the assessment period. The maximum payment for each tranche of granted shares is limited to 300% of the individual board member's long-term target compensation. The Supervisory Board has the right to impose further limits if any extraordinary events should occur.

#### Share Matching Plan (SMP)

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The members of the Board of Management are entitled to use the benefits payable under each tranche of the Performance Share Plan (PSP) to purchase MTU Aero Engines Holding AG shares. At the end of the three-year vesting period, these shares are matched on the basis of the Share Matching Plan (SMP), with each Board of Management member being awarded one additional free share for every three MTU shares acquired in this way. The total value of the free shares allocated at the end of the vesting period is limited to three times the purchase price of the shares originally acquired through the PSP.

#### INDIVIDUAL COMPENSATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT

The members of the Board of Management were awarded the following total compensation - as defined in Section 314(1) no. 6a of the German Commercial Code (HGB) - for their activities on the board in the financial years 2012 and 2011:

Members of the Board of Management	Egon	Behle	le Dr. Rainer Ma		Martens Dr. Stefan Weingartner		Reiner Winkler		Total compensation	
in€	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Non-performance-related components										
Basic salary	795,000	750,000	477,000	450,000	477,000	450,000	530,000	500,000	2,279,000	2,150,000
Other benefits <sup>1)</sup>	22,774	22,551	13,426	11,859	25,670	22,750	17,025	15,988	78,895	73,148
Performance-related components										
Without long-term incentive effect (non-deferred) <sup>2)</sup>	422,286	457,445	253,372	274,467	253,372	274,467	281,524	304,963	1,210,554	1,311,342
With long-term incentive effect (deferred)										
Deferred APB 2010 <sup>2)</sup>	163,945	188,250	196,734	225,900	196,734	225,900	218,593	251,000	776,005	891,050
Deferred APB 2011 <sup>2)</sup>	323,979		194,387		194,387		215,986		928,740	
Share-based compensation	502,817	431,051	301,706	258,630	301,706	258,630	335,211	287,355	144,440	1,235,666
Total compensation	2,230,801	1,849,297	1,436,625	1,220,856	1,448,869	1,231,747	1,598,339	1,359,306	6,714,633	5,661,206

¹¹ Other benefits include charges to taxable income covering personal use of company vehicles amounting to € 71,337.12 € (2011: € 66,918.96) and premiums for accident insurance policies taken out on behalf of members of the Board of Management amounting to €7,557.47 (2011: €6,229.88).

#### PERFORMANCE-RELATED COMPONENTS

#### Annual Performance Bonus (APB):

The company's performance targets were exceeded in the financial years 2012 and 2011:

<sup>&</sup>lt;sup>2)</sup> Paid immediately after adoption of annual financial statements.

n € million	2012	201
Adjusted EBIT		
Target	345.0	300.
Actual	374.3	328.
ree cash flow		
Target	80.0	113.
Actual	85.7	129.0

Deferred portions of the APB awarded in respect of 2010 and 2011 formed part of the performance-related compensation payable in 2012. Hence the total compensation amount paid in 2012 for the first time includes all contractually agreed long-term components, with the exception of the share-based component.

#### Performance Share Plan (PSP)

The following table shows the number of performance shares granted in each PSP tranche:

number of shares or value in € Average Granted performance Xetra share price¹¹		d performance	shares	Performance exercisable	Time to end of vesting period for performance shares		
Financial year 2012	€	Number at Jan. 1, 2012 shares	Acquired in 2012 shares	Number at Dec. 31, 2012 shares	Number at Dec. 31, 2012 shares	Fair value at Dec. 31, 2012 €	Time at Dec. 31, 2012 months
Egon Behle							
Performance shares tranche 1b issued July 1, 2010	46.64	6,031		6,031	6,031	55.55	18
Performance shares tranche 2 issued Jan. 1, 2011	47.03	11,960		11,960	11,960	60.80	24
Performance shares tranche 3 issued Jan. 1, 2012	47.47		12,561	12,561	12,561	53.51	36
Personal total / average	47.13	17,991	12,561	30,552	30,552	56.77	28
Dr. Rainer Martens							
Performance shares tranche 1a issued Jan. 1, 2010	36.63	9,214		9,214	9,214	64.15	12
Performance shares tranche 2 issued Jan. 1, 2011	47.03	7,176		7,176	7,176	60.80	24
Performance shares tranche 3 issued Jan. 1, 2012	47.47		7,537	7,537	7,537	53.51	36
Personal total / average	43.16	16,390	7,537	23,927	23,927	59.79	23
Dr. Stefan Weingartner							
Performance shares tranche 1a issued Jan. 1, 2010	36.63	9,214		9,214	9,214	64.15	12
Performance shares tranche 2 issued Jan. 1, 2011	47.03	7,176		7,176	7,176	60.80	24
Performance shares tranche 3 issued Jan. 1, 2012	47.47		7,537	7,537	7,537	53.51	36
Personal total / average	43.16	16,390	7,537	23,927	23,927	59.79	23
Reiner Winkler							
Performance shares tranche 1a issued Jan. 1, 2010	36.63	10,238		10,238	10,238	64.15	12
Performance shares tranche 2 issued Jan. 1, 2011	47.03	7,973		7,973	7,973	60.80	24
Performance shares tranche 3 issued Jan. 1, 2012	47.47		8,374	8,374	8,374	53.51	36
Personal total / average	43.16	18,211	8,374	26,585	26,585	59.79	23
Cumulative total / average	44.32	68,982	36,009	104,991	104,991	58.91	24

Note: In the financial years 2010, 2011 and 2012, no performance shares were exercised or forfeited, nor did any lapse.

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Average Xetra share price over the 30 days preceding the grant date.

number of shares or value in €	Average Xetra share price <sup>1)</sup>	Grante	d performance	shares	Performance shares not yet exercisable at year-end		Time to end of vesting period for performance shares	
		Number at Jan. 1, 2011	Acquired in 2011	Number at Dec. 31, 2011	Number at Dec. 31, 2011	Fair value at Dec. 31, 2011	Time at Dec. 31, 2011	
Financial year 2011	€	shares	shares	shares	shares	€	months	
Egon Behle								
Performance shares tranche 1b issued July 1, 2010	46.64	6,031		6,031	6,031	38.60	30	
Performance shares tranche 2 issued Jan. 1, 2011	47.03		11,960	11,960	11,960	39.84	36	
Personal total / average	46.90	6,031	11,960	17,991	17,991	39.42	34	
Dr. Rainer Martens								
Performance shares tranche 1a issued Jan. 1, 2010	36.63	9,214		9,214	9,214	42.33	24	
Performance shares tranche 2 issued Jan. 1, 2011	47.03		7,176	7,176	7,176	39.84	36	
Personal total / average	41.18	9,214	7,176	16,390	16,390	41.24	29	
Dr. Stefan Weingartner								
Performance shares tranche 1a issued Jan. 1, 2010	36.63	9,214		9,214	9,214	42.33	24	
Performance shares tranche 2 issued Jan. 1, 2011	47.03		7,176	7,176	7,176	39.84	36	
Personal total / average	41.18	9,214	7,176	16,390	16,390	41.24	29	
Reiner Winkler								
Performance shares tranche 1a issued Jan. 1, 2010	36.63	10,238		10,238	10,238	42.33	24	
Performance shares tranche 2 issued Jan. 1, 2011	47.03		7,973	7,973	7,973	39.84	36	
Personal total / average	41.18	10,238	7,973	18,211	18,211	41.24	29	
Cumulative total / average	42.68	34,697	34,285	68,982	68,982	40.76	30	

Note: In the financial years 2010 and 2011, no performance shares were exercised or forfeited, nor did any lapse.

The calculations are carried out by an independent expert in accordance with the recommendations of IFRS 2. At January 1, 2012, the fair value per performance share of the PSP tranche granted for the financial year 2012 amounted to  $\in$  34.26 (PSP tranche for the financial year 2011: € 31.26 at January 1, 2011; PSP tranche for the financial year 2010: € 22.96 at January 1, 2010 and € 27.13 at July 1, 2010), taking into account a fluctuation rate of 4%.

The methods used to calculate these figures are documented in the fairness opinions established at the respective grant dates.

 $<sup>^{\</sup>scriptsize 1)}$  Average Xetra share price over the 30 days preceding the grant date.

The total carrying amount of the liabilities arising from share-based payments under the PSP developed as follows:

in €	At Dec. 31, 2012	At Dec. 31
Performance Share Plan – tranche 1	1,588,453	693,946
Performance Share Plan - tranche 2	1,042,263	341,454
Performance Share Plan - tranche 3	481,737	
Total carrying amount	3,112,453	1,035,400

#### Share Matching Plan (SMP)

The number of future matching shares depends on the cash amount paid out under the PSP. In order to determine the fair value, a combined Monte Carlo simulation and Black-Scholes pricing model was used. The expected cash settlement was determined on the basis of the exact same assumptions used to measure the value of the PSP. The cash settlement serves as a basis for measuring the value of the Share Matching Plan in accordance with the Black-Scholes pricing model. The fair value of the forward options at the grant date was calculated on the basis of the following as-sumptions:

Model parameters	Tranche 3 financial year 2012	Tranche 2 financial year 2011	Tranche 1b financial year 2010	Tranche 1a financial year 2010
Option period	88 months	88 months	88 months	88 months
Vesting period	52 months	52 months	52 months	52 months
Measurement date	Jan. 1, 2012	Jan. 1, 2011	July. 1, 2010	Jan. 1, 2010
Average share price at acquisition date	47.47	47.03	46.64	36.63
Dividend yield	2.23%	1.84%	2.07%	2.44%
Fluctuation	4.00%	4.00%	4.00%	4.00%
Expected volatility	35.18%	51.40%	52.82%	52.08%
Risk-free interest rate	0.70%	1.76%	1.37%	2.30%

The expected volatility was determined on the basis of the closing prices for every week of the three-year period preceding the respective measurement date.

The following share-based SMP compensation agreements were in place during the current  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ reporting period and earlier reporting periods:

(number of shares or value in $\in$ )	Fair value at grant date	Granted performance shares			Performance shares not yet exercisable at year-end	Time to end of vesting period for performance shares
	€	Number at Jan. 1, 2012 shares	Acquired in 2012 shares	Number at Dec. 31, 2012 shares	Number at Dec. 31, 2012 shares	Time at Dec. 31, 2012 months
Egon Behle						
Performance shares tranche 1b issued July 1, 2010	4.233	6,031		6,031	6,031	22
Performance shares tranche 2 issued Jan. 1, 2011	4.779	11,960		11,960	11,960	28
Performance shares tranche 3 issued Jan. 1, 2012	5.771		12,561	12,561	12,561	40
Personal total / average	5.079	17,991	12,561	30,552	30,552	32
Dr. Rainer Martens						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	9,214		9,214	9,214	16
Performance shares tranche 2 issued Jan. 1, 2011	4.779	7,176		7,176	7,176	28
Performance shares tranche 3 issued Jan. 1, 2012	5.771		7,537	7,537	7,537	40
Personal total / average	4.684	16,390	7,537	23,927	23,927	27
Dr. Stefan Weingartner						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	9,214		9,214	9,214	16
Performance shares tranche 2 issued Jan. 1, 2011	4.779	7,176		7,176	7,176	28
Performance shares tranche 3 issued Jan. 1, 2012	5.771		7,537	7,537	7,537	40
Personal total / average	4.684	16,390	7,537	23,927	23,927	27
Reiner Winkler						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	10,238		10,238	10,238	16
Performance shares tranche 2 issued Jan. 1, 2011	4.779	7,973		7,973	7,973	28
Performance shares tranche 3 issued Jan. 1, 2012	5.771		8,374	8,374	8,374	40
Personal total / average	4.684	18,211	8,374	26,585	26,585	27
Cumulative total / average	4.799	68,982	36,009	104,991	104,991	28

Note: In the financial years 2011 and 2012, no performance shares were exercised or forfeited, nor did any lapse.

(number of shares or value in €)	Fair value at grant date	Granted performance shares			Performance shares not yet exercisable at year-end	Time to end of vesting period for performance shares
	€	Number at Jan. 1, 2011 shares	Acquired in 2011 shares	Number at Dec. 31, 2011 shares	Number at Dec. 31, 2011 shares	Time at Dec. 31, 2011 months
Egon Behle						
Performance shares tranche 1b issued July 1, 2010	4.233	6,031		6,031	6,031	34
Performance shares tranche 2 issued Jan. 1, 2011	4.779		11,960	11,960	11,960	40
Personal total / average	4.596	6,031	11,960	17,991	17,991	38
Dr. Rainer Martens						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	9,214		9,214	9,214	28
Performance shares tranche 2 issued Jan. 1, 2011	4.779		7,176	7,176	7,176	40
Personal total / average	4.185	9,214	7,176	16,390	16,390	33
Dr. Stefan Weingartner						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	9,214		9,214	9,214	28
Performance shares tranche 2 issued Jan. 1, 2011	4.779		7,176	7,176	7,176	40
Personal total / average	4.185	9,214	7,176	16,390	16,390	33
Reiner Winkler						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	10,238		10,238	10,238	28
Performance shares tranche 2 issued Jan. 1, 2011	4.779		7,973	7,973	7,973	40
Personal total / average	4.185	10,238	7,973	18,211	18,211	33
Cumulative total / average	4.292	34,697	34,285	68,982	68,982	34

Note: In the financial years 2011 and 2012, no performance shares were exercised or forfeited, nor did any lapse,

### TOTAL EXPENSE INCURRED FOR SHARE-BASED COMPENSATION

The total expense incurred for share-based compensation can be broken down as follows for the individual members of the Board of Management:

Members of the Board of	Fir	ancial year 20	12	Financial year 2011			
Management in €	Cash settlement	Equity instruments	Total	Cash settlement	Equity instruments	Tota	
Egon Behle	534,596	35,810	570,406	183,278	39,791	223,069	
Dr. Rainer Martens	495,792	25,866	521,658	191,945	36,538	228,483	
Dr. Stefan Weingartner	495,792	25,866	521,658	191,945	36,538	228,483	
Reiner Winkler	550,873	28,740	579,613	213,274	38,297	251,571	
Total expense	2,077,053	116,282	2,193,335	780,442	151,164	931,606	

# RULES WHEN TERMINATING THE CONTRACTS OF MEMBERS OF THE BOARD OF MANAGEMENT

The members of the Board of Management are insured under a defined-benefit plan in which the benefits promised are based on the contributions made. The benefits payable to members of the Board of Management under this plan correspond to those of their peers in comparable companies.

#### RETIREMENT AND SURVIVORS' PENSIONS

The previous system was replaced on January 1, 2010. Since that date, the members of the Board of Management have been earning company pension entitlements in accordance with the new plan: 'MTU Pension Capital – Pension Regulations for Members of the Board of Management of MTU Aero Engines Holding AG.' The goal of the plan is to provide a pension amounting to 60% of each member's basic salary after 15 years of service (on the Board of Management). At the time of the changeover, the vested benefits that each member of the Board of Management had earned up until December 31, 2009, were transferred to the new plan in the form of initial units. This entitlement represents the benefit payable at age 60 under the old plan, adapted to reflect the ratio between the actual number of years of service with the company and the number of years from start of service with the company until age 60. The initial units transferred to the new plan correspond to the current cash value of the pension converted into a lump sum.

The contribution period is capped at 15 years of service on the Board of Management, or at age 60, whichever comes sooner.

Once this amount had been determined, a pension account was opened for each member of the Board of Management to which further capital units are credited annually. The amount of the annual capital units is calculated on the basis of an individually defined contribution and an age-dependent factor, with the latter taking into account an interest rate of 6% p.a. until age 60. The contribution period is capped at 15 years of service on the Board of Management, or at age 60, whichever comes sooner. As of the age of 61, the pension account earns interest at an annual rate of 4% until such time as the pension is drawn (= bonus amount). The accrued capital units plus the units initially transferred to the account plus any bonus amounts credited to the account together make up the pension capital available to finance retirement benefits. If a member of the Board of Management dies before reaching age 60, 50% of the benefits that he/she could still have earned until that age are added to the accrued balance on the pension account – taking into account the permissible contribution period.

The pension capital may be drawn either in a single lump sum, in installments or as a lifelong pension increased at an annual rate of 1%. In any insured event, the pension account is topped up to the level of benefits the insured party would have reached under the previous plan (guaranteed capital). Pension benefits do not become payable until such time as an insured event occurs (i.e. on reaching pensionable age, or in the event of disability or death), even if the insured party leaves the Board of Management. The pension entitlement cannot be forfeited once the initial contribution has been paid.

Dr. Rainer Martens, Dr. Stefan Weingartner and Reiner Winkler had already been promised under the previous pension plan that their years of service with former group companies would count toward their pensions. Details of the above-mentioned obligations and benefits are shown in the following table:

Members of the Board of Management in €	Initial transfer amount <sup>1)</sup>	Guaranteed capital <sup>2)</sup>	Annual annuity <sup>3)</sup>	End of contribution period	Retirement benefit <sup>4)</sup>
Egon Behle	1,097,500	4,196,500	400,000	Sep. 1, 2015	275,000
Dr. Rainer Martens	1,366,176	2,317,650	220,000	Apr. 1, 2021	286,200
Dr. Stefan Weingartner	1,188,427	1,931,375	200,000	July 1, 2021	286,200
Reiner Winkler	1,625,140	2,510,788	280,000	Sep. 1, 2016	318,000

<sup>&</sup>lt;sup>1)</sup> Credit for past service up to December 31, 2009 (date of changeover to new system).

The differences in the annual contributions to the MTU pension accounts result from the remaining periods of service on the Board of Management until the end of the respective contribution period, from the respective age-dependent factors and from the different salary amounts eligible for pension contributions.

The following table shows the service cost for the financial years 2012 and 2011 and the corresponding pension provisions (defined benefit obligation (DBO)) for the members of the Board of Management as of December 31, 2012, and December 31, 2011, respectively:

Members of the Board of Management	Financial year	Service cost	Balance of pension account
in€		Service cost	Amount of recognized pension provisions at Dec. 31
Egon Behle	2012	418,400	2,576,767
	2011	432,800	1,945,2101
Dr. Rainer Martens	2012	139,436	3,231,297
	2011	134,117	2,641,7021
Dr. Stefan Weingartner	2012	115,911	2,722,968
	2011	111,404	2,225,8971
Reiner Winkler	2012	117,458	3,204,764
	2011	113,077	2,604,0201
Total	2012	791,205	11,735,796
Total	2011	791,398	9,416,8291

<sup>&</sup>lt;sup>1)</sup> Figures for the previous year have been adjusted for the purpose of comparison (resulting from early application of IAS19, beginning in the financial year 2012)

<sup>&</sup>lt;sup>2)</sup> Capital payment equal to the adjusted value of the benefit entitlement at Dec. 31, 2009, when the new pension arrangements came into force (Jan. 1, 2010).

 $<sup>^{3)}</sup>$  The annual contribution is credited to the board member's pension account together with interest at 6 % p.a.

 $<sup>^{\</sup>mbox{\tiny 4)}}$  Increased by 2 % p.a. up to pensionable age.

#### **DISABILITY PENSIONS**

Under the new pension rules of January 1, 2010, if a member of the Board of Management is disabled before reaching the age of 60, 50% of the benefits to which that person would normally have been entitled up to the maximum age limit are added to the balance on the pension account at the time of disablement. The amount credited is based on the contributions paid in the last year of employment. This arrangement also applies if the insured party dies before reaching the age of 60.

## SEVERANCE PAYMENTS ON PREMATURE TERMINATION OF CONTRACT FOR MEMBERS OF THE BOARD OF MANAGEMENT

The members of the Board of Management are entitled to receive severance payments if MTU prematurely terminates their appointment. In the case of ordinary termination, a severance package is payable that corresponds to the board member's basic salary, 50% of the APB and 50% of the share-based performance-related compensation components for the time from the end of the notice period until the date on which the contract would normally have expired. The amount of the severance package may not exceed two full years of payments of these compensation components. If the employment contract is terminated for good cause, no severance package is payable.

# SEVERANCE PAYMENTS ON PREMATURE TERMINATION OF CONTRACT FOR MEMBERS OF THE BOARD OF MANAGEMENT IN THE EVENT OF A CHANGE OF CONTROL OR SUBSTANTIAL CHANGES IN THE OWNERSHIP OF MTU AERO ENGINES HOLDING AG

If another company acquires a controlling interest in MTU as defined by the German Securities Acquisition and Takeover Act (WpÜG) or if the ownership structure of MTU changes substantially as a result of a merger or comparable transaction or amalgamation, the members of the Board of Management are entitled to receive severance payments. These severance payments are paid on the condition that the Supervisory Board relieves them of their duties within one year of such a change of control or if their employment contracts are not renewed as a result of the change of control. In these cases, the amount payable corresponds to the Board member's basic salary for the period between leaving the Board of Management and the date on which their contract would otherwise have expired.

In addition, the Supervisory Board is entitled to commute the agreed APB for the year in which the change of control occurs, together with any deferred components of the APB from the two previous years, and to pay out a capital sum equivalent to at least 100% of the target amount.

Further, the share-based performance-related compensation components (PSP/SMP) are automatically terminated. By way of compensation, the member of the Board of Management in question receives a pro rata payment that is calculated as if the component had been continued. The only difference is that the level of goal achievement is determined on the date of change of control and the final amount disbursed is multiplied by the average MTU share price (Xetra) over the last 30 trading days prior to the change of control.

The sum total of all severance payments made in connection with a change of control may not exceed three years' total compensation in each case.

## PROVISIONS ESTABLISHED TO COVER CURRENT AND FUTURE PENSION OBLIGATIONS TO FORMER MEMBERS OF THE BOARD OF MANAGEMENT

The pension obligations to former members of the Board of Management amounted to  $\in$  6,087,723 (2011:  $\in$  4,592,627).

#### SUPERVISORY BOARD COMPENSATION

The rules governing Supervisory Board compensation are laid down in the articles of association of MTU Aero Engines Holding AG. Such compensation is established relative to the size of the company and as a function of the duties and responsibilities of the respective members.

Compensation of the Supervisory Board is established relative to the size of the company

Pursuant to Article 12 of the articles of association of MTU Aero Engines Holding AG, members of the Supervisory Board receive a fixed annual payment of  $\in$  30,000, payable at the end of the financial year; this sum is tripled in the case of the chair of the Supervisory Board, and multiplied by one-and-a-half in the case of the deputy chair. The chairs of the Audit Committee and Personnel Committee each receive an additional  $\in$  10,000 in fixed compensation, while the ordinary committee members each receive an additional  $\in$  5,000. Further, members of the Supervisory Board receive an attendance fee of  $\in$  3,000 for each meeting of the Supervisory Board and its committees, subject to an upper limit of  $\in$  3,000 per day. Expenses incurred in connection with the exercise of their office are reimbursed, as is the value-added tax payable on the fees.

The members of the Supervisory Board do not receive any share-based compensation.

The following compensation was awarded to the individual members of the Supervisory Board of MTU Aero Engines Holding AG for the financial years 2012 and 2011 respectively:

in€	Compensation 2012 <sup>1)</sup>	Compensation 2011 <sup>1)</sup>
Klaus Eberhardt (Supervisory Board and Personnel Committee chairman) <sup>3)</sup>	135,000.00	129,000.00
Josef Hillreiner (Supervisory Board deputy chairman) <sup>2) 3) 4)</sup>	82,000.00	82,000.00
Dr. Joachim Rauhut (Audit Committee chairman)	64,000.00	64,000.00
Babette Fröhlich <sup>3) 4)</sup>	62,000.00	59,000.00
DrIng. Jürgen M. Geißinger²)	53,000.00	50,000.00
Michael Leppek <sup>2) 4)</sup>	53,000.00	50,000.00
Prof. DrIng. Klaus Steffens	45,000.00	45,000.00
Udo Stark	45,000.00	45,000.00
Thomas Dautl	48,000.00	45,000.00
Rudolf Domberger 4)	42,000.00	45,000.00
Michael Behé <sup>4)</sup>	48,000.00	45,000.00
Dr. Wilhelm Bender	48,000.00	45,000.00
Total	725,000.00	704,000.00

<sup>1)</sup> Figures do not include VAT.

<sup>2)</sup> Member of the Personnel Committee.

<sup>3)</sup> Member of the Audit Committee.

<sup>&</sup>lt;sup>4)</sup> These employees have declared that they will donate their Supervisory Board compensation to the Hans Böckler Foundation, in accordance with the guidelines of the Confederation of German Trade Unions (DGB).

## Report of the Supervisory Board



Klaus Eberhardt, Chairman of the Supervisory Board

#### **ACTIVITIES OF THE SUPERVISORY BOARD**

In this report, the Supervisory Board provides information in accordance with Section 171 (2) of the German Stock Corporation Act (AktG) on its activities in the financial year 2012 and on the results of its review of the annual financial statements and consolidated financial statements. In 2012, the Supervisory Board carried out with due care the control and consultation duties with which it is entrusted by law and under the terms of the company's articles of association and its own rules of procedure.

The Supervisory Board regularly advised the Board of Management on the running of the company, continually supported and monitored all executive business activities, and assured itself that the Board of Management's dealings were proper and lawful. The Supervisory Board was informed and consulted in a direct and timely manner on all decisions of consequence for the company. The members of the Supervisory Board were briefed by the Board of Management in a regular, timely and comprehensive manner on the situation of the company, and received written reports every month on the company's earnings, financial situation, and net asset position as well as on important business transactions. The Supervisory Board was also informed in detail of any new plans.

The Supervisory Board met with the Board of Management to discuss strategy issues and all major projects. After careful deliberation and examination, the Supervisory Board endorsed the strategic orientation of the company. Resolutions were passed concerning all transactions requiring the approval of the Supervisory Board in accordance with law, the company's articles of association or the Board of Management's rules of procedure, after these matters had been reviewed and discussed with the Board of Management.

As in previous years, the Supervisory Board devoted special attention to MTU's system of internal controls in 2012, above all the company's risk management system, its auditing practices, and the conformity of its corporate governance system with the relevant legal provisions. The Supervisory Board examined these aspects with reference to the documents submitted to it and in dialog with the Board of Management, and came to the conclusion that the company has effective systems in

place to deal with such issues, in particular an effective internal control and risk management system relating to the accounting process.

The Audit Committee has a special responsibility for monitoring compliance matters, complementing the Supervisory Board's activities in this area. The internal auditors regularly present their findings to the Audit Committee and report to it on basic issues and the latest developments in the field of compliance.

#### MEETINGS OF THE SUPERVISORY BOARD

The Supervisory Board convened five ordinary meetings and one extraordinary meeting during the financial year 2012. The average attendance rate at Supervisory Board meetings was 92%, and no member had an individual attendance rate below 50%. Between official meetings, the chairman of the Supervisory Board was regularly briefed on the company's current situation, significant business transactions and important pending decisions. This entailed regular meetings with the Board of Management, consulting with the latter on strategy, the status of planning, the progress of business, the company's risk situation and system of risk management, and compliance issues.

At its meetings with the Board of Management, the Supervisory Board discussed the business performance of MTU and all its affiliated companies. Both the situation on the commercial and military engine markets, and MTU's market position compared with its competitors were analyzed in depth. The company's earnings, including its risk situation and risk management activities, were also discussed in detail.

One important topic discussed during the meetings of the Supervisory Board in the financial year 2012 was the increase in MTU's share in the V2500 engine program for the Airbus A320 family and its enhanced role in the IAE consortium, which markets the V2500. In addition to that, the Supervisory Board dealt with MTU's participation in a future joint venture for the next generation of short- and medium-haul aircraft. The Supervisory Board discussed the GE90 program, which is of strategic importance for the company's commercial MRO business, including the launch of this program as well as the shop visits planned and carried out. Another topic was the establishment of a joint venture with Sagem, a French company, to develop security-critical software and hardware for both military and commercial aviation applications. The Supervisory Board took a close look at MTU's engine portfolio and the status of its commercial development programs, focusing particularly on cost targets and specifications. Further points of discussion were the progress of the TP400-D6 engine program for the Airbus A400M military transporter and the company's potential participation in a program to provide financial support to customers of the PW1100G engine for the Airbus A320neo. The Supervisory Board also deliberated on plans to merge MTU Aero Engines GmbH with MTU Aero Engines Holding AG.

Other issues closely examined by the Supervisory Board were the operational business plans and the budget for 2013, the annual performance bonuses for the Board of Management for 2011, and the German Corporate Governance Code.

#### **CORPORATE GOVERNANCE**

The Supervisory Board is convinced that the success of the company is based on good corporate governance. For this reason, the Supervisory Board once again closely studied the application and implementation of the German Corporate Governance Code in 2012, taking it as a yardstick to measure the efficiency of its own activities. It discussed its own composition with reference to the topic of diversity, especially the fair representation of women. The objective is to raise the number of women holding seats on the Supervisory Board to two or more within the next two periods of office and, as in the past, to ensure the "international" background of its members. The Supervisory Board is interested in enhancing diversity within the Board of Management, too. When searching for suitably qualified candidates to fill vacant positions there, it will pay particular attention to the goal of fair representation of women.

In addition, the Supervisory Board explicitly stated that, in the nomination proposals it makes to the Annual General Meeting, it will take into account the principles concerning the avoidance of conflicts of interest. In submitting nomination proposals, the Supervisory Board will disclose each candidate's personal ties to – and business relations with – the company, its governing bodies and/or major shareholders.

The Supervisory Board has a sufficient number of independent members. Its members take part in training measures on their own responsibility, and also receive specialized training from MTU. Cooperation between the Supervisory Board and the Board of Management, and among the members of the Supervisory Board, was judged to be of a very high quality in the financial year 2012. No conflicts of interest arose between MTU and any member of its Board of Management or Supervisory Board. The Supervisory Board assured itself that the company had complied with the recommendations laid down in the German Corporate Governance Code, as stated in its declaration of conformity.

In a joint declaration with the Board of Management dated December 13, 2012, pursuant to the requirements of Section 161 of the German Stock Corporation Act (AktG), the Supervisory Board states that MTU Aero Engines Holding AG complies with all the recommendations of the German Corporate Governance Code. The company's declaration is reproduced on page 20 of this Annual Report together with a more detailed description of the company's corporate governance system; the declaration has also been posted on the company's website.

#### **COMMITTEE MEETINGS**

By convention, the Supervisory Board has three committees equally representing the employees and the shareholders of the company: the Audit Committee, the Personnel Committee and the Mediation Committee – the latter formed to comply with Section 27 (3) of the German Co-Determination Act (MitbG). Each of these committees presents regular reports on its activities at the plenary meetings of the Supervisory Board.

A Nomination Committee, which meets on an ad hoc basis, was set up in 2007 pursuant to the recommendations of the German Corporate Governance Code. This committee convened one meeting in the financial year 2012. The task of the Nomination Committee is to find suitable candidates for election to the Supervisory Board. The members of this committee are Klaus Eberhardt and Dr. Jürgen M. Geißinger.

The Personnel Committee consists of Klaus Eberhardt, Dr. Jürgen M. Geißinger and the two employee representatives Josef Hillreiner and Michael Leppek. The Personnel Committee met three times in the course of 2012 to discuss matters including the results of the Supervisory Board's efficiency audit, compensation for the members of the Supervisory Board, and the annual performance bonuses for the Board of Management for 2011. The Mediation Committee, whose members are identical with those of the Personnel Committee, was not called upon to convene any meetings in 2012.

The members of the Audit Committee are Prof. Dr. Joachim Rauhut, Klaus Eberhardt, Babette Fröhlich and Josef Hillreiner. The Audit Committee convened five times in the course of 2012 and passed one resolution through the submission of written votes. The committee was primarily concerned with reviewing the annual financial statements and management report, the consolidated financial statements and group management report of MTU Aero Engines Holding AG as well as the company's financial situation and quarterly reports.

Other subjects discussed by the Audit Committee included the independence of the auditor, the additional services provided by the latter, and the granting of the audit mandate. The Audit Committee specified the key areas for audit in the 2012 financial statements, reviewed and approved the fees to be paid for the services of the accounting firm Deloitte & Touche, and awarded the corresponding contract. In addition, the committee obtained the auditor's statement of independence pursuant to Section 7.2.1 of the German Corporate Governance Code and also monitored the auditor's independence.

To aid the committee members in their tasks, they and all other members of the Supervisory Board were supplied with copies of the reports prepared by Deloitte & Touche concerning the auditing of the annual financial statements and consolidated financial statements as well as the management report and the group management report. These documents were thoroughly reviewed in the presence of the auditor. As a result, the committee recommended that the Supervisory Board should adopt the annual and consolidated financial statements, approve the management reports and consent to the Board of Management's profit distribution proposal.

In accordance with the legal requirements, the Audit Committee monitored the accounting process and the related internal control, risk management, and internal auditing systems, which it judged to be effective. Further, the committee discussed the provision of financial support for the promotion of certain engines. It also examined the company's compliance and corporate audit activities and found them, too, to be effective.

## ADOPTION OF THE ANNUAL FINANCIAL STATEMENTS, THE APPROVED CONSOLIDATED FINANCIAL STATEMENTS, AND THE MANAGEMENT REPORT

MTU Aero Engines Holding AG's annual financial statements, consolidated financial statements, management report and group management report for the financial year 2012 were audited and fully certified by the accounting firm Deloitte & Touche, Munich, whose appointment had been confirmed by the Annual General Meeting. The audit reports and documents to be reviewed were submitted in a timely manner to all members of the Supervisory Board. The Supervisory Board thoroughly reviewed the annual financial statements, consolidated financial statements, management report and group management report of MTU Aero Engines Holding AG for 2012 and the Board of Management's profit distribution proposal on the basis of the preliminary audit by the accounting firm Deloitte & Touche, on which the chair of the Audit Committee had presented a full report to the Supervisory Board.

The auditor attended the meetings of the Audit Committee of MTU Aero Engines Holding AG on March 4, 2013, and the balance sheet meeting of the Supervisory Board on March 13, 2013, and presented the main findings of the audit. The Supervisory Board reviewed the annual financial statements, consolidated financial statements, management report, group management report and the Board of Management's profit distribution proposal, and raised no objections. The company's annual financial statements and consolidated financial statements for the financial year 2012 as submitted by the Board of Management were approved at the Supervisory Board meeting on March 13, 2013. The annual financial statements are thereby adopted. The Supervisory Board agreed to the Board of Management's profit distribution proposal after giving due consideration to the interests of the company and its shareholders.

#### NO BOARDROOM CHANGES

There were no changes in the composition of the Supervisory Board in the financial year 2012.

The Supervisory Board wishes to thank the Board of Management as well as all MTU employees for their successful work and the great commitment shown in 2012. It also thanks the Works Council for its close cooperation and all MTU's shareholders for the trust they place in the company.

Munich, March 13, 2013

Klaus Eberhardt

Chairman of the Supervisory Board

## The Supervisory Board

Members of the Supervisory Board and their additional supervisory board mandates and/or mandates on comparable supervisory entities of foreign or domestic commercial companies

#### Klaus Eberhardt

Chairman of the Supervisory Board Former CEO of Rheinmetall AG, Düsseldorf

Dürr AG, as of April 27, 2012
Familienstiftungen
Dietrich und Eckart Wälzholz
Hirschmann Automotive
GmbH, to December 31, 2012
KSPG AG (formerly
Kolbenschmidt Pierburg AG)
MTU Aero Engines GmbH
RMMV Rheinmetall MAN Military
Vehicles GmbH, to December 31, 2012

#### Josef Hillreiner

Deputy Chairman of the Supervisory Board Chairman of the Group Works Council of MTU Aero Engines GmbH, Munich Chairman of the Works Council of MTU Aero Engines GmbH, Munich

MTU Aero Engines GmbH

#### Michael Behé

Chairman of the Works Council of MTU Maintenance Hannover GmbH, Hannover

Member of the Group Works Council of MTU Aero Engines GmbH, Munich

MTU Maintenance Hannover GmbH

#### Prof. Dr. Wilhelm Bender

CEO of Fraport AG 1993-2009, Frankfurt/Main

Bombardier Transportation GmbH Bombardier Transportation (Bahntechnologie) Holding Germany GmbH Eintracht Frankfurt Fußball AG Lufthansa Cargo AG MTU Aero Engines GmbH
The New Germany Fund Inc. (U.S.A.)

#### **Thomas Dautl**

Director Manufacturing Engineering, MTU Aero Engines GmbH, Munich

MTU Aero Engines GmbH

#### **Rudolf Domberger**

Full-time member of the Works Council of MTU Aero Engines GmbH, Munich

#### **Babette Fröhlich**

Coordination of NECs tasks and planning, IG Metall, Frankfurt/Main

Volkswagen AG

#### Dr.-Ing. Jürgen M. Geißinger

CEO of Schaeffler AG, Herzogenaurach

Continental AG MTU Aero Engines GmbH Sandvik AG (Sweden), as of May 2, 2012

#### Michael Leppek

Second Authorized Representative, IG Metall, Munich

MTU Aero Engines GmbH Nokia Siemens Management GmbH

#### Dr. Joachim Rauhut

CFO of Wacker Chemie AG, Munich

B. Braun Melsungen AG
J. Heinrich Kramer Holding GmbH
MTU Aero Engines GmbH
Pensionskasse Wacker Chemie VVaG
Siltronic AG

#### **Udo Stark**

Former Chief Executive Officer of MTU Aero Engines Holding AG, Munich

Austria Pet Food GmbH (Austria), as of April 1, 2012 Bilfinger SE MTU Aero Engines GmbH

#### Prof. Dr.-Ing. Klaus Steffens

Former President and CEO of MTU Aero Engines GmbH, Munich

CompuGroup Medical AG MTU Aero Engines GmbH Poppe & Potthoff GmbH Tyczka Energie GmbH & Co. KGaA

#### SUPERVISORY BOARD COMMITTEES

#### **Personnel Committee**

Klaus Eberhardt, Chairman Dr.-Ing. Jürgen M. Geißinger Josef Hillreiner Michael Leppek

#### **Audit Committee**

Dr. Joachim Rauhut, Chairman Klaus Eberhardt Babette Fröhlich Josef Hillreiner

#### **Mediation Committee**

Klaus Eberhardt, Chairman Dr.-Ing. Jürgen M. Geißinger Josef Hillreiner Michael Leppek

#### **Nomination Committee**

Klaus Eberhardt Dr.-Ing. Jürgen M. Geißinger

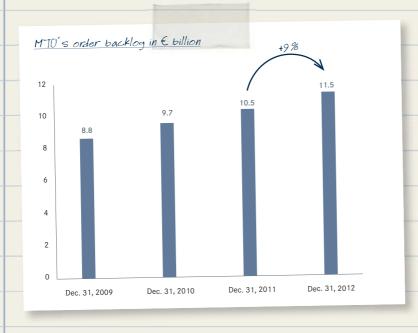


JULY 12, 2012

# FARNBOROUGH INTERNATIONAL AIRSHOW: MTU LANDS RECORD ORDERS OF AROUND € 1.3 BILLION

The tarnborough International Airshow, one of the largest events of its kind in the world, was a resounding success for MTU: the company garnered orders worth around  $\in$  1.3 billion - more than ever before at an air show. The orders covered not only new engines, but also MEO services; the engines of the geared turbofan family were the biggest sellers.

2012: VERY HIGH ORDER BACKLOG LEVEL



plus 9%

Growth in MTU's order backlog from 2011 to 2012 (in € billion)

## FARNBOROUGH HIGHLIGHTS

### PW1100G-JM ENGINE FOR THE AJEBUS A320NEO/A321NEO

Indian airline IndiGo ordered 300 PurePower PW1100G-JM engines. Leasing company CIT, Cebu Pacific Air, the largest airline in the Philippines, and U.S. carrier Jetblue Airways all opted for the same engine type. Norwegian Air Shuttle signed a memorandum of understanding for the PW1100G-JM.

## PW1524G ENGINE FOR THE BOMBARDIER (SERIES

One customer ordered 30 PW1524G engines, while air baltic signed a memorandum of understanding for this engine type.

### PW1200G ENGINE FOR THE MITSUBISHI REGIONAL JET

U.S. regional carrier SkyWest placed an order for 200 PW1200G geared turbofan engines.

### V2500 ENGINES FOR THE CURRENT AIRBUS A320 FAMILY

- The V2500 won over Jetstar, a subsidiary of Qantas, and the Asian leasing companies ICBC and BOC Aviation.
- MTU concluded agreements with Monarch Airlines and Mexican airline Volaris for the provision of MRO services for the V2500 engine.

### GENX ENGINE FOR THE BOFING 787 AND 747-8

MTU also benefited from an order for Boeing 787 jets:

Air Berlin has opted to equip 15 of these new aircraft with the GEnx engine.



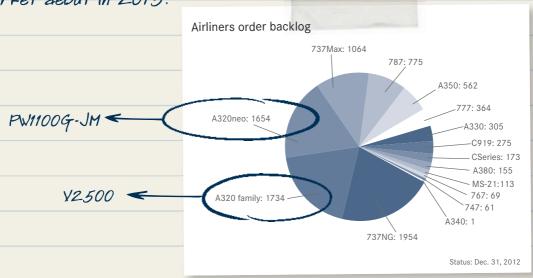
The geared turbofan is quieter, eco-friendlier and more economical than conventional jet engines.

## THE GEARD TURBOFAN -A BESTSELLER:

To date, around 3,000

orders have been placed for

this engine, which will make its market debut in 2015.



44 To our shareholders

Corporate Governance

| Group management report | Consolidated Financial Statement | Additional information

## **Group Management Report**

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## 1. The enterprise MTU

Corporate Governance

MTU Aero Engines is Germany's leading engine manufacturer and the biggest independent provider of maintenance services for commercial aero engines in the world. At the end of 2012, the Munichbased company employed more than 8,500 people at its sites around the world, an increase of 4% on the previous year. MTU continues to strengthen its market position through a sustainable growth strategy and an intensive program of R&D investments.

#### 1.1. BUSINESS ACTIVITIES AND MARKETS

MTU Aero Engines Holding AG, Munich, together with its consolidated group of companies, is Germany's leading engine manufacturer and one of the biggest international players in the industry. In the text below, the designations 'MTU,' 'the group,' 'the enterprise' or 'the company' are also used when referring to MTU Aero Engines.

MTU's portfolio covers the entire life cycle of commercial and military aircraft engines, and aero-derivative industrial gas turbines. The company's range of activities extends from development, manufacturing and marketing through to maintenance.

MTU is a key partner in all important technology programs.

The company is a technological leader in low-pressure turbines, high-pressure compressors, repair techniques and manufacturing processes. MTU is a key partner in all national and international technology programs of note, and cooperates with the top names in the industry -General Electric, Pratt & Whitney and Rolls-Royce.

MTU is the world's largest independent provider of MRO services for commercial aero engines. In the military sector, it has been the leading company in the national market and lead industrial partner to the German armed forces for many decades.

MTU operates in two segments: OEM business (Original Equipment Manufacturing) and MRO business (Maintenance, Repair and Overhaul). The OEM segment covers new commercial engines, including spare parts, and the whole of the military sector. The MRO segment comprises all commercial maintenance activities.

#### 1.2. GROUP STRUCTURE, LOCATIONS AND ORGANIZATION

MTU Aero Engines Holding AG, Munich, is the parent company of the MTU group. Its functions are largely those of a holding company, with the main focus being on corporate strategy, risk management and corporate finance. The holding company is also responsible for corporate communications and investor relations, keeping contact with the business environment, capital markets and shareholders.

Through its affiliates, associated companies, joint ventures and equity investments, MTU has a strong presence in all key markets and regions worldwide. More information on equity investments is provided in Note 2. to the consolidated financial statements (Group reporting entity).

#### MTU Aero Engines worldwide



MTU Maintenance Canada MTU Aero Engines North America IAE International Aero Engines<sup>1)</sup> Vericor Power Systems MTU Maintenance Dallas MTU Maintenance IGT Service do Brasil

MTU Aero Engines MTU Maintenance Hannover MTU Maintenance Berlin-Brandenburg MTU Aero Engines Polska Eurojet Turbo<sup>1)</sup> EPI Europrop International<sup>1)</sup>

MTR/MTRI<sup>1)</sup> Turbo-Union<sup>1)</sup> AES Aerospace Embedded Solutions<sup>1)</sup>

Ceramic Coating Center<sup>1)</sup>

Pratt & Whitney Canada Customer Service Centre Europe<sup>1)</sup>

1) Major joint ventures.

MTU Maintenance Zhuhai Airfoil Services1)

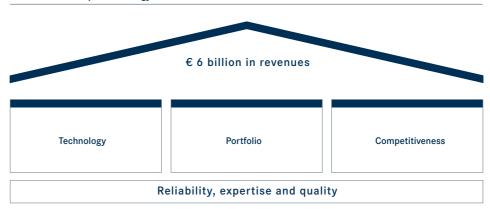
Middle East Propulsion Company<sup>1)</sup> MTU Maintenance Service Center Ayutthaya

#### 1.3. CORPORATE STRATEGY AND CONTROL

#### **CORPORATE STRATEGY**

MTU's target has been clearly defined, namely to achieve € 6 billion in revenues by 2020 with an EBIT margin of at least 12%. In order to achieve that target, the group must grow faster than the market.

#### Pillars of MTU's corporate strategy



MTU has aligned the activities of all its business areas with its growth targets, through partnerships with the world's major engine makers, investments in the technologies of tomorrow, shares in promising engine programs, a balanced program portfolio, stable and enduring customer relationships, a motivated workforce and a strong position in international growth markets.

MTU intends to improve its competitiveness and achieve its growth targets by acquiring stakes in the engine programs that offer the best opportunities for future business success, in both the OEM and MRO segments. In order to safeguard its economic competitiveness, MTU repeatedly examines its processes in all areas of the company, and implements measures aimed at improving their efficiency. The company also continuously monitors opportunities for new acquisitions and for deploying its expertise in related lines of business.

#### CORPORATE GOVERNANCE

The MTU group's internal control system mirrors the company's business strategy. The main instruments employed to ensure compliance with the integrated control system are:

- regular Board of Management meetings held at two-weekly intervals
- monthly reports
- central committees dealing with program management and coordination, investments, and technology, and group-wide committees on quality issues, health and safety, and environmental protection
- risk and opportunity management

EBIT, revenue and free cash flow are value-driven performance indicators that delimit the range within which MTU operates in terms of profitability, growth and liquidity.

For MTU, growth and profitability are measured using the performance indicators revenue and EBIT. The purpose of achieving higher revenues is to improve the company's market position, especially in the commercial engine and commercial maintenance businesses.

Adjusted EBIT is another key performance indicator. For a definition of adjusted EBIT, please refer to 'Reconciliation of adjusted performance indicators' in Section 3.1. (Operating results). Another indicator monitored by the company is the adjusted EBIT margin, which expresses the relationship between adjusted EBIT and revenues.

EBIT, revenues and free cash flow are MTU's key performance indicators.

Performance indicators: revenues a	nd adjusted EBIT	г			
in € million	2012	2011	2010	2009	2008
Revenues	3,378.6	2,932.1	2,707.4	2,610.8	2,724.3
Adjusted EBIT	374.3	329.6	316.9	292.5	331.5
Adjusted EBIT margin (in %)	11.1	11.2	11.7	11.2	12.2

In each of the past five years, MTU has consistently generated an adjusted EBIT margin in excess of 11%.

The purpose of optimizing cash flow is to help the group maintain its financial assets going forward. MTU determines free cash flow by combining cash flow from operating activities and cash flow from investing activities, and deducting the components that lie outside the control of operations management. In the financial year 2012, these components comprised non-recurring cash outflows amounting to € 231.9 million for the company's increased stake in the IAE V2500 engine program and for the acquisition of 12.9% of the shares of IAE International Aero Engines AG, Switzerland. An amount was also deducted for investments in and disinvestments of financial assets that are not measured at fair value through profit or loss because they can be sold at any time and are held as a liquidity reserve.

in € million	2012	2011	2010	2009	2008
Cash flow from operating activities	229.8	287.9	251.3	252.7	405.8
Cash flow from investing activities	-360.0	-126.7	-173.2	-132.5	-282.2
Cash flow from investing activities in IAE V2500 stake increase	231.9				
Cash flow from investing activities					
in financial assets	-16.0	-32.2	66.7		
Free cash flow	85.7	129.0	144.8	120.2	123.6

#### 1.4. RESEARCH AND DEVELOPMENT

#### **ECONOMIC ENVIRONMENT AND GOALS**

Growing mobility demands, limited raw materials and a rising awareness of the environment all call for innovative solutions - especially when it comes to aircraft engines. MTU has established technological leadership in its core competencies of low-pressure turbines, high-pressure compressors, and high-tech manufacturing processes and repair techniques. This provides a solid basis for making further improvements to existing engines, and for designing and implementing entirely new ones.

MTU's medium- to long-term goals in the development of new commercial engines fully comply with the voluntary commitment made by the European aviation industry and research community, who formulated ambitious targets for air traffic in 2050 in their Strategic Research and Innovation Agenda (SRIA):

MTU has reaffirmed its technological leadership in its core competencies.

	ACARE 2020	FLIGHTPATH 2050
CO <sub>2</sub> -emissions	-50%	-75%
NO <sub>x</sub> -emissions	-80 %	-90%
Noise	-50%	-65%

<sup>1)</sup> Changes compared with base year 2000

MTU components have achieved efficiency ratios of over

MTU's main focus of activity is increasing the efficiency of aircraft engines so as to make better use of existing resources, reduce toxic emissions, and limit the amount of fuel required by the alternative fuel systems under development.

Engines built using MTU components have low fuel consumption, mainly thanks to their improved propulsion efficiency and thermal efficiency, which are achieved through higher bypass ratios, higher overall pressure ratios and enhanced component efficiency. Key components in this respect are MTU's low-pressure turbine and high-pressure compressor modules, which feature high pressure ratios and performance, low weight and high efficiency ratios. Developing these technologies is an ongoing task for MTU, and the company is aiming to achieve – or has already achieved – efficiency ratios of over 90 % for its high-pressure compressors and over 93 % for its low-pressure turbines.

The GP7000 engine deployed in the Airbus A380 represents the latest culmination in this development. The combination of cutting-edge aircraft and turbofan technologies has made it possible to reduce fuel consumption to 2.9 liters per 100 passenger-kilometers. MTU's responsibilities in the GP7000 program include the low-pressure turbine that is a key component of this engine.

In order to tackle the challenges of the future, MTU launched its Claire (Clean Air Engine) technology program. The goal of the Claire program is to systematically reduce CO<sub>2</sub>, NO<sub>x</sub> and noise emissions.

Basis Claire 1 Claire 2 Claire 3  $\Delta CO_2$ in % **Emissions Emissions Emissions** reduced by reduced by reduced by up to 15 % up to 20 % up to 30 % Geared turbofan IRA propfan 2000 2015 2025 2035

MTU's Claire (Clean Air Engine) technology program

The first engine concept to be developed under the Claire program is the geared turbofan, which features a reduction gear unit. The geared turbofan<sup>TM</sup> reduces fuel consumption and  $CO_2$  emissions by 15% each and halves perceived noise levels.

The main focus of the second phase of the Claire program will be to achieve even greater improvements in the engine's thrust-generation efficiency, for instance by enhancing the performance of selected engine components or deploying a shrouded, counter-rotating fan.

In the third phase of the program, the efficiency of the core engine will be increased even further, for instance through the use of a heat exchanger.

<sup>1)</sup> Counter-Rotating Integrated Shrouded Propfan

<sup>2)</sup> Intercooled Recuperative Aero Engine

#### TECHNOLOGIES FOR KEY ENGINES OF THE FUTURE

#### COMMERCIAL ENGINE PROGRAMS

In cooperation with Pratt & Whitney, MTU is working on the geared turbofan™ (GTF). Unlike conventional turbofans, in which the fan and low-pressure turbine run at the same speed on a single shaft, the GTF places a reduction gear between the two components to decouple them. This means that the large fan can be run more slowly and the low-pressure turbine faster. That improves the efficiency ratios of both the fan and the low-pressure turbine, while lowering fuel consumption and CO<sub>2</sub> emissions by 15% each. In addition, it halves the perceived noise levels and makes the engine lighter, as fewer stages are required. MTU's contribution to the geared turbofan comprises the high-speed low-pressure turbine and the front half of the high-pressure compressor.

Airbus is offering the GTF as an option for the A320neo (which seats 150 to 200 passengers), while Bombardier has selected it as the sole powerplant for its CSeries 100- to 145-seater regional jet. GTF launch customer Mitsubishi is using the engine to equip its MRJ regional jet, which seats between 70 and 90 passengers. Russian aircraft maker Irkut also intends to equip its 150-seater MS-21 with engines from the PW1000G family.

MTU holds a 15% share in the PW1217G program for the MRJ. In 2011, it secured an 18% share in the PW1133G-JM program for the A320neo. In this program, MTU also makes the engine's brush seals and is responsible for part of the testing and final assembly. MTU holds a 17% share in the PW1524G program for the Bombardier CSeries.

In the financial year 2012, the GTF programs notched up numerous milestones. In April, the PW1217G completed its first successful flight on Pratt & Whitney's flying testbed. In October, the PW1524G successfully completed its test program and, in 2013, will take to the air for the first time on board the CSeries. The first PW1133G-JM engine was completed in October 2012 as well, and successfully completed its initial test run. The latter marked the start of testing on the test rigs at Pratt & Whitney and MTU.

An important future program for widebody aircraft is the GEnx, which powers the Boeing 787 Dreamliner and 747-8, and where MTU is responsible for the development, manufacture and assembly of the turbine center frame. With over 1,400 orders to date, the GEnx for the Boeing 787 has got off to very good start in the market. In May 2012, the first Boeing 747-8 with a turbine center frame from MTU was delivered to the end customer.

#### MILITARY ENGINE PROGRAMS

Development activities in the military sector continued to focus on the TP400-D6 for the Airbus A400M military transporter. This three-shaft engine is the most powerful turboprop engine in the Western world. MTU is contributing the entire intermediate-pressure section, comprising compressor, turbine and spool. It is also developing the engine and propeller control system in cooperation with French partner Snecma. Key milestones were reached in the TP400-D6 program when the engine received EASA type certification in May 2011 and the first production engine was delivered to Airbus in April 2012.

MTU's participation in General Electric's GE38 helicopter engine program marks the first time that the company has taken on full development responsibility within a U.S. military engine program. The GE38's first application will be in the Sikorsky Aircraft Corporation's CH-53K heavy-lift transport helicopter. MTU is responsible for the power turbine and has obtained licenses for maintenance, final assembly and testing of the GE38 engines destined to power the European Future Transport Helicopter (FTH). The development program has been proceeding according to plan.

The GTF programs notched up numerous milestones in 2012.

#### TECHNOLOGIES FOR MANUFACTURING AND MAINTENANCE

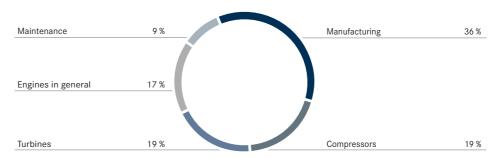
The last few years have seen MTU carve out a leading position in the manufacture of blisk rotors for compressors. Development of the precision electrochemical milling process (PECM) has enabled the company to manufacture blisk rotors from nickel-based materials more economically – overcoming the enormous challenges involved in machining these these materials. The components are deployed in the rear compressor stages of engines.

Demand for blisk rotors is set to rise substantially as the geared turbofan goes into production, which is why MTU has built a new center of excellence for blisk manufacturing in Munich. Production at this center commenced in late 2012. The center is expected to reach its planned output capacity of 3,000 blisks per year by 2016.

#### PROTECTING TECHNOLOGY ASSETS (INTELLECTUAL CAPITAL)

At December 31, 2012, MTU's portfolio of intellectual property comprised 3,172 patents and other industrial property rights. This portfolio covered the following fields of technology:

Distribution of MTU's intellectual property portfolio over its various fields of technology



#### COOPERATION IN SCIENCE AND RESEARCH

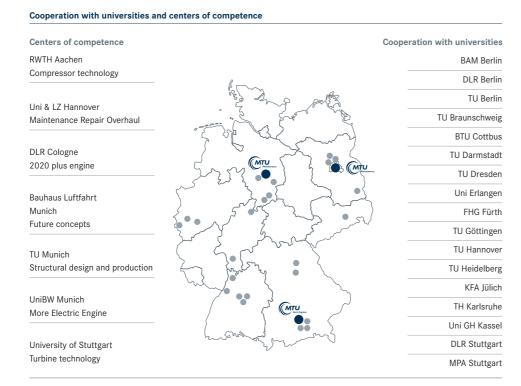
For decades, cooperation arrangements with universities and research institutions have formed a key component of MTU's research and development activities. For instance, specimen engines are made available to universities and colleges, and MTU experts hold lectures or act as mentors for students working on experimental projects or writing theses and dissertations for diplomas and doctorates; students are also given active support whilst carrying out their assignments and preparing their final thesis presentations. In addition, MTU honors outstanding achievements by awarding the annual Heilmann prize to a young scientist who merits recognition for achievements in engine technology.

Strategic alliances have been established with research partners in order to strengthen ties between universities and industry and safeguard MTU's innovative capabilities. In recent years, these partnerships with leading German universities and research institutions have been strengthened, and six centers of competence have been set up with the aim of optimizing collaboration. Each of these centers focuses on a specific area of research. In conjunction with the Bavarian government, EADS and Liebherr-Aerospace, MTU created 'Bauhaus Luftfahrt' – a one-of-a-kind institution in Europe. Based in Munich, this non-profit organization is a visionary think tank that pursues novel, unconventional, cross-company and interdisciplinary research. It brings industry and science together under one roof, focusing primarily on exploring the socioeconomic, political and ecological perspectives of aviation, designing visionary aircraft, unearthing promising technologies for the future, and devising knowledge management strategies.

MTU's portfolio comprises

3,172

patents and other intellectual property rights.



#### CAPITAL EXPENDITURE ON RESEARCH AND DEVELOPMENT

	Change 2012	2-2011					
in € million	in € million	in %	2012	2011	2010	2009	2008
Commercial engine business	-0.5	-0.3	146.9	147.4	126.1	100.1	90.1
Commercial maintenance business	-3.1	-36.9	5.3	8.4	11.1	13.6	7.3
Military engine business	-16.9	-15.9	89.2	106.1	101.5	116.5	84.2
Research and development expenditure							
prior to capitalization	-20.5	-7.8	241.4	261.9	238.7	230.2	181.6
R&D as a percentage of revenues			7.1	8.9	8.8	8.8	6.7

Research and development expenditure in 2012 amounted to € 241.4 million, a decrease of € 20.5 million compared with 2011. At 7.1%, R&D expenditure as a percentage of revenues was lower than in the previous year (2011: 8.9%).

Externally funded development expenditure primarily relates to the military engine business. It is accounted for as construction contracts in accordance with IAS 11 and recognized as construction contract receivables (or construction contract payables) due to the fact that the work is conducted under contract to national and international consortia on a customer-specific basis. This expenditure amounted to  $\in$  80.7 million in 2012 (2011:  $\in$  96.1 million).

Company-funded expenditure originates from the group's own resources. Such expenditure is examined to determine whether it meets the criteria for capitalization as a self-created intangible asset. In addition to meeting the general requirements for recognition and initial measurement as an intangible asset, the asset's technical and commercial feasibility must be established and it must be possible to reliably measure the attributable costs. Capitalized development expenditure is amortized over the expected production output expressed as a number of units. Company-funded expenditure is disclosed in Note 8. to the consolidated financial statements (Research and development expenses).

The amount of € 46.9 million (2011: € 30.8 million) posted in the OEM segment (commercial and military engine business) as R&D expenditure meeting the recognition criteria for intangible assets relates to the GE38 engine program for the CH-53K transport helicopter and the PW1100G engine program for the Airbus A320neo. The MRO segment (commercial maintenance business) developed special repair techniques that are designed to increase the efficiency of engine maintenance, and the amount of € 0.8 million (2011: € 3.4 million) was capitalized in connection with these in 2012.

Additional information

#### 1.5. CORPORATE RESPONSIBILITY

#### SOCIAL RESPONSIBILITY

When it comes to its responsibility toward the environment and society, MTU takes a proactive approach. This is anchored in the MTU Principles as one of the five pillars under the heading "Environment and Society." The company supports local and regional associations, organizations and institutions as a promoter, sponsor and network participant. The work focuses on the fields of education as well as science and research.

Promoting research and teaching is a key component of MTU's commitment to society. The partnerships MTU maintains with numerous German universities are advantageous to both sides: the universities receive economic and practical support for their research activities, while MTU safeguards its access to the latest research results and remains attractive to potential newcomers. At the University of Stuttgart's Institute of Aircraft Propulsion Systems, MTU endowed a chair in structural mechanics in aircraft engines with up to  $\in$  2.9 million over a maximum period of 20 years. The objective is to fund research into next-generation technologies for eco-efficient aircraft engines, and to provide students with a solid grounding in the engineering, design and approval of aircraft engines, in calculating their service life, and ensuring their safety and reliability.

MTU is pursuing various initiatives aimed at arousing young people's interest in the topics of science and technology. Once a year on the nationwide Girls' Day, the company throws open its factory buildings to female school students with an interest in technology. What is more, several of the company's sites take part in the Training Night, informing the attendees about opportunities for training or embarking on a career at MTU. For many years now, MTU has taken part in the "Lange Nacht der Münchner Museen" (The Long Night of the Munich Museums), enabling visitors to experience the development of aviation engine technology through guided tours of the company's own museum. The company's in-house museum is also open to the public on other days of the year.

MTU takes a proactive approach to its environmental and social responsibilities.

A further example of MTU's active social commitment is its partnerships with schools in the neighborhood of its sites throughout Germany. MTU participates in special events organized by its partner schools, such as "nature and technology days," and offers the young students opportunities to conduct research projects or to gain work experience.

For MTU, corporate responsibility involves not only complying with all applicable laws and regulations, but also supporting initiatives that go a step further. Within the organization, MTU has formulated binding principles that apply to all its employees worldwide. These principles are set down in the Code of Conduct and form a benchmark for employee behavior on a day-to-day basis. In addition, MTU is a signatory to the Standards of the Aerospace and Defence Industries Association of Europe (ASD), which are designed to combat corruption and bribery and to promote fair competition among equal parties. At national level, this initiative is supported by the German Aerospace Industries Association (BDLI).

At each of its three locations in Germany, MTU is a major regional employer. As a responsible employer and contractor, the company is a member of the UN Global Compact and is committed to the latter's ten principles, which are designed to protect human rights, promote equitable working conditions, protect the environment and combat corruption. What is more, MTU is committed to achieving ever better implementation of these principles within the company. It prepares a public report on the results of its efforts in this area once a year.

MTU also supports social and charitable institutions at its locations. Numerous employees do volunteer work in their private time, and MTU expressly approves their personal initiative and the role model function they embody. The trainees at the Ludwigsfelde location, for instance, have been taking part for many years now in the cystic fibrosis charity run in Potsdam, and receive financial support from MTU for doing so.

For further information on how the company views its social responsibility and the key areas on which its CSR activities are focused can be found on the MTU website. The company's UN Global Compact Progress Report can be viewed here: www.mtu.de/en/company/sustainability.

MTU is a major regional employer at its locations in Germany.

Change 2012-2011				
	Headcount	in %	Dec. 31, 2012	Dec. 31, 2011
Locations in Germany	201	2.9	7,248	7,047
International locations	138	11.9	1,293	1,155
Total workforce	339	4.1	8,541	8,202

At December 31, 2012, MTU had 8,541 employees, after increasing its workforce by 4.1% in the course of the year. The employee turnover rate at MTU's German locations was 3.6% in the financial year 2012 (2011: 3.2%)

The following diagram shows the age structure of the workforce at the group entities in Germany:

#### Age structure in % (German locations only)



#### **VOCATIONAL TRAINING 2012**

MTU again invested heavily in future talent in 2012, with an apprenticeship quota of 4.5 %. At year-end 2012, 328 apprentices were employed at the company's locations in Germany. The share of women amounted to 14%.

Vocational training at MTU is not restricted to the purely professional aspects of education. Importance is also attached to the methodological and social skills that serve to develop the apprentices' personalities in line with the MTU corporate culture.

In 2012, the group-wide "Enhancing the No-Blame Culture" project was integrated in the training curricula at all locations throughout Germany. This involves teaching the apprentices in workshops to adopt an open and professional approach to errors. The goal is to leverage the apprentices' awareness and understanding of errors so as to prevent such errors from occurring in productive operations.

As part of MTU's health management program, the apprentices dealt with the following key topics in 2012: exercise, nutrition, skin protection and abstaining from smoking. The idea behind this awareness campaign is to promote healthy behavior right from the very start of the trainees' professional careers.

#### **EMPLOYEE SATISFACTION SURVEY 2012**

Every two years, MTU carries out an employee satisfaction survey at its three German locations in order to get an up-to-date picture of the mood there. The survey covers corporate topics such as employee commitment, leadership, information and communication, efficiency and continuous improvement. The survey is a key tool for honing the corporate culture and enabling the employees to shape their own working environments.

MTU achieved a participation rate of 76% for the employee satisfaction survey 2012. In individual areas, improved results were achieved relative to 2010. The results show that rank-and-file employees and managers alike have great confidence in the company's management, identify closely with the corporate goals and the MTU Principles, and are convinced that MTU is a good employer. Most employees expect the company to continue developing in a positive manner in future. Despite the positive trend in the field of leadership, those surveyed still see scope for action when it comes to feedback culture and the structuring of decision-making processes. Human Resources and Organizational Development at MTU will deal with these findings in a follow-up process.

#### STAFF TRAINING AND DEVELOPMENT

Networking between prospective managers is one factor contributing toward effective cooperation between the MTU locations. That is why the "Building on Talent" program, which has been highly successful at the company's German locations since 2005, will now be rolled out as an international development program. The participants in the program are budding managers at the company's international locations. For MTU, the program is an optimal platform for anchoring a shared understanding of leadership across all MTU locations and for encouraging the exchange of ideas and establishment of contacts across different cultures and regions.

MTU lives up to its commitment to the principle of continual improvement by means of group-wide change processes. In this context, MTU can call on experts who, acting as in-house teachers, train groups of employees on the basis of the "Train the Trainer" program.

MTU's process for recognizing and promoting high potentials is just as firmly established within the company as its programs for training and developing managers and employees. The company systematically reviews its personnel development and training measures to ensure they are both efficient and effective. A KPI report delivered last year confirmed the high quality of this process for identifying high potentials. In 2012, for example, 60% of vacant positions were filled with internal candidates identified as high potentials.

Employees identify closely with MTU's corporate goals.

#### COMPENSATION AND EMPLOYEE PROFIT-SHARING

The compensation scheme at MTU is based on KPIs that serve as a benchmark for the variable salary component of employees at all levels of the company, right up to the Board of Management.

A new compensation scheme for senior managers was introduced in 2011. Their compensation is now tied to the sustainable and long-term management and growth of the company, and comprises fixed, variable, and short- and long-term components. Some of the variable components are based on an assessment period of several years, and payment of parts of the variable compensation is deferred. The intention is to align the interests of senior management even more closely with those of the company.

Already in its fifth year, the MAP employee stock option program was again very popular with the workforce. After a two-year vesting period, MTU provides an incentive by matching the amount invested. The take-up rate among employees was around 15% in 2012, roughly equivalent to the previous year's level. The total proceeds from the exercise of these stock options amounted to € 5.9 million in 2012.

#### WORK-LIFE BALANCE

MTU enhances the work-life balance of its employees with a range of offers and services. It provides its employees with a wide range of working-time models, teleworking options, a working time corridor from 5:15 a.m. to 8:00 p.m. as well as flexibility in taking time off. Parental leave and child/elderly care sabbaticals are arrangements that enable staff to spend more time with their families when this need is uppermost in their lives. What is more, external family-service providers offer employees a comprehensive package of additional services, including debt counseling, help in finding child minders, and advice when next of kin require long-term nursing care. MTU also provides funding for the in-house daycare center of ,TurBienchen,' a non-profit association run by a parents' initiative. 2012 saw the launch at the company's headquarters of a holiday care program for children aged three to 12.

#### **HEALTH MANAGEMENT**

A company's ability to perform hinges upon the health of its workforce. It goes without saying that MTU complies with all statutory health and work safety regulations. Above and beyond that, the company adapts to the changing work and leisure-time patterns of its employees and tries to avoid physical and mental health risks through a sustainable health management regime. Further goals of health management are to improve working conditions, e.g. through the Extended Risk Assessment project and by encouraging all employees to make active use of MTU's offerings in respect of promoting health and preventing illness.

#### AWARDS FOR MTU'S ATTRACTIVENESS AS AN EMPLOYER

In its ranking of Germany's top employers, the CRF Institute, a social research entity, assesses companies across the country in terms of what they offer their employees in the categories of corporate culture, training and development, career perspectives, primary benefits, fringe benefits, and work-life balance. In recent years, MTU has consistently improved its ranking, and is now counted among the top 20% of the companies surveyed in terms of primary and fringe benefits.

This result underscores MTU's aspiration to set the benchmark for other companies. Of equal importance is that potential applicants perceive MTU as an attractive employer. In 2012, MTU was ranked 19th most popular employer among engineers in the well-known Universum Young Professionals Study of Wirtschaftswoche magazine, which was several places higher than the previous year. MTU's efforts to interest women in technology have met with considerable success as well: women engineers voted the company into 21st place in 2012 after a ranking of 44th the year before.

MTU has consistently improved its ranking in best-employer surveys.

#### THE SOCIAL MEDIA - ONE WAY OF KEEPING CLOSE CONTACT WITH APPLICANTS

MTU's personnel marketing mix - comprising events, development programs, print articles and the careers website - was expanded to include a presence in the social media. As a high-tech company, MTU showcases its expertise on communication platforms such as Facebook or YouTube, familiarizing the target audience with the company as an employer. In addition to its own Facebook fan page covering career topics, MTU has another page on the medium targeting school students, where MTU trainers and apprentices are responsible for design and content.

#### **ENSURING THE COMPANY'S FUTURE SUCCESS THROUGH DIVERSITY**

Workforce diversity is key to ensuring any company's future success, which is why MTU aspires to identify the potential of its employees and utilize it as best possible.

This aspiration finds expression in the "Charter of Diversity," which the company signed in 2010 and which embodies its commitment to supporting diversity in the working environment. Diversity is also reflected in the MTU Principles, where the company has set itself the goal of enhancing its ability to innovate by drawing on different cultures and age groups and on broad-based expertise.

Above and beyond this, MTU has resolved to achieve a substantial increase in the percentage of women employees in the company - both at employee and management level as well in the area of young talent.

The focus is not only on potential new employees, but also on those women already in the company's workforce. MTU supports career-minded women, for instance, by encouraging them to participate in the Munich-based cross-mentoring program, in which fledgling women managers with high potential receive support from a manager-mentors from outside the company for a period of one year. What is more, MTU has signed the "Munich Memorandum for Women in Management," which enables young women employees to receive personalized career counseling.

Further information on HR activities at MTU can be found in the separate Human Resources Report 2011/2012, which is available as a download on the Career page of the MTU website.

#### **ENVIRONMENT**

People's mobility is on the increase while exploitable energy resources are on the decline. And the debate on global climate change is eliciting a political response at EU level. In order to balance the various conflicting demands without causing long-term damage to the environment, the switch to an ecologically and economically sustainable aviation system is imperative. Environmental protection and resource conservation are becoming key issues not just in Germany, but also around the world. For MTU, protecting the environment is not simply an obligation, but part and parcel of the responsibility it shoulders on behalf of its employees, customers, partners, neighbors and society.

#### **EMISSIONS-NEUTRAL FLYING WITH ALTERNATIVE FUELS**

New engines cannot on their own make future aviation sustainable. All those involved in aviation, including aircraft and engine manufacturers, air-traffic managers and airlines, are called upon to cooperate in order to achieve this goal. That is why MTU is playing an active part in numerous initiatives. The German Aerospace Industries Association (BDLI), for example, has drawn up a roadmap for the period until 2050, which defines all the necessary technologies - including alternative fuel supplies - and assigns responsibilities. University institutes are already working on some of the topics in the roadmap, e.g. eco-efficient flight, with the support of MTU and funding from the German Federal Ministry of Economics and Technology. Along with 20 other aviation companies, bioenergy producers, universities and research institutes, MTU launched the

The company's commitment to diversity is embedded in the MTU Principles.

Aviation Initiative for Renewable Energy in Germany (aireg e.V.) to coordinate the introduction of alternative aviation fuels. Alongside this, MTU is participating in research projects that focus on alternative fuels and new engine types, such as FAIR (Future Alrcraft Research). As part of this program, MTU supported Lufthansa in its successful attempt to use an equal mix of biofuel and conventional kerosene in regular operations over an extended period. MTU is also examining the potential for hybrid aircraft engines.

#### ELIMINATING ENVIRONMENTALLY HARMFUL PRODUCTION PROCESSES AND MATERIALS

Doing away with environmentally harmful materials, and production and repair processes can make a significant contribution toward reducing the environmental impact of future products.

In all its processes and systems, MTU applies stringent environmental criteria that meet statutory requirements as an absolute minimum. These criteria form the basis for internal standards that are binding for all group locations. Compliance with these standards is regularly checked and certified by internal and external audits in accordance with DIN EN ISO 14001 – and, at the German locations in Munich and Hannover, also in accordance with the European Parliament and Council's EMAS (Eco-Management and Audit Scheme) Regulation. The company's environmental management system was successfully reviewed, as was its work safety management system, which complies with OHSAS 18001. The Board of Management regularly assesses the progress made in meeting environmental and work safety targets.

#### SAVING MATERIALS

The conservation of resources by reducing the consumption of raw materials and recycling materials in the original loop is standard practice at MTU. New methods and processes enable around 70% of all engine blades to be reused two, three or even four times, thus limiting the use of new materials.

#### SAVING ENERGY AND CUTTING CO, EMISSIONS

MTU's commitment is not limited to optimizing its products; it also places the highest demands on its production and maintenance processes in terms of efficiency. Energy management at its various locations is a tool in this, and in Munich this is set down in the Clean Air – Industrial Site (CLAIR-IS) program. The focus is firmly on operational safety, cost efficiency and the environment.

The goal of CLAIR-IS is to achieve an over 25% reduction in annual  $CO_2$  emissions at the Munich site by 2020 (taking 1990 as a baseline), despite a substantial increase in production. The measures taken to achieve this include, for example, making greater use of well water as a coolant in production processes, upgrading the compressed-air and heating network and deploying building automation systems, introducing a centralized machine shutdown function, and utilizing fuels from renewable sources in the company's cogeneration plant.

Using groundwater as a coolant saves around 3,000 metric tons of  $CO_2$  annually, while expansion of the building automation systems cut  $CO_2$  emissions by some 71,000 metric tons in the period 2001 to 2010. Shutting down machines during plant vacation periods saves around 1,000 metric tons of  $CO_2$  per year. Such measures additionally serve to save energy, and the intention is to reduce energy consumption by 17% in the period from 2010 to 2020.

The cogeneration plant at the Munich site, which produces both electricity and heating, also contributes toward lowering  $CO_2$  emissions. The plant is powered using vegetable oil that has been specially certified for such applications. That reduces the amount of fossil fuels needed to produce heat.

Stringent environmental criteria are applied to all processes and systems.

### 2. Economic environment

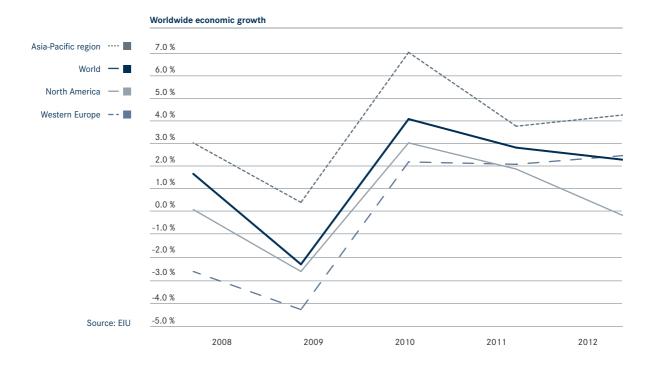
Corporate Governance

Global economic growth rates continued to decline in 2012. The highest growth rates were recorded in the Asia-Pacific region, whereas the North American economy remained stable and growth rates shrank in western Europe. These three regions are the key markets for the aviation industry. Global passenger traffic increased in 2012 by 5.3%.

#### 2.1. GENERAL ECONOMIC CLIMATE

The global economy grew by 2.1% in 2012, compared with 2.6% in 2011. The euro-zone sovereign debt crisis and high unemployment in the United States both contributed toward the mood of uncertainty.

After growing by 1.5% in 2011, the euro-zone economy shrank by 0.5% in 2012. The U.S. economy remained stable, posting growth of 2.3% after 1.8% in 2011. The Asia-Pacific region grew by 4.0% compared with 3.7% in 2011, retaining its crown as the world's premier growth region.

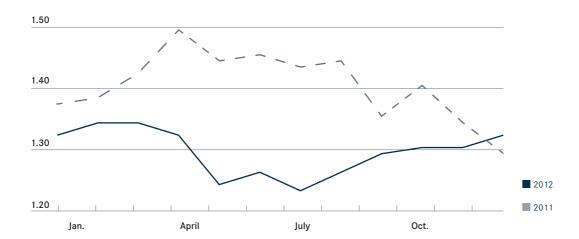


As an export-oriented company, MTU has a strong interest in the euro / U.S. dollar exchange rate.

As an export-oriented aviation company, MTU has a strong interest in the euro / U.S. dollar exchange rate. As in previous years, that rate was again highly volatile in 2012. At U.S. \$ 1.2848 per euro, the annual average exchange rate was substantially lower than the comparable figure of U.S. \$ 1.3920 in 2011. The highest rate (U.S. \$ 1.3454) was reached on February 28, 2012; the lowest (U.S. \$ 1.2089) on July 24, 2012. The closing rate for the year on December 31, 2012, was 1.3194 U.S. dollars to the euro, marginally higher that the 2011 closing rate of 1.2939.

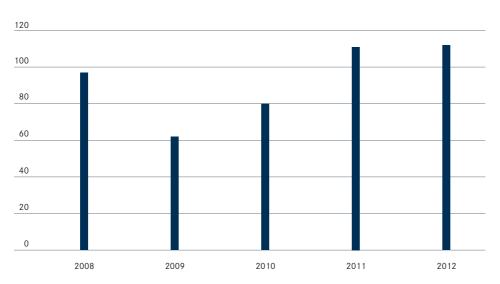
#### U.S. dollar exchange rate movements 2012 and 2011





In 2012, oil prices remained at the same level as in the previous year. The annual average for Brent crude was U.S. \$ 112 a barrel (source: EIA). As their kerosene bill remains the biggest cost factor for airlines, old, inefficient aircraft types are either being grounded or phased out, a trend that is boosting sales of new, more efficient models.

#### Annual average Brent oil price in U.S. dollar/barrel

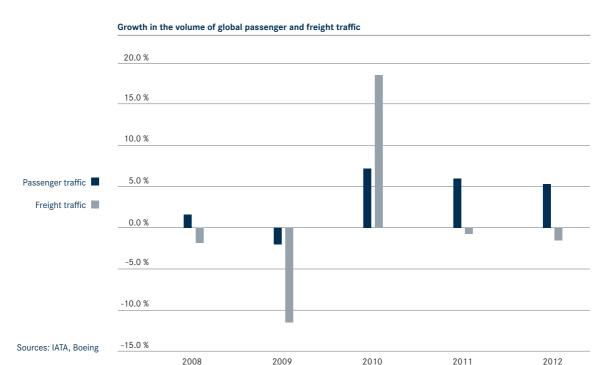


Source: US Energy Information Administration

#### 2.2. INDUSTRY-SPECIFIC DEVELOPMENTS IN THE AVIATION SECTOR

Global passenger traffic rose by 5.3% in 2012, the biggest increases being recorded in the Middle East (15.4%) and Latin America (8.4%) (source: IATA). According to IATA, the aviation industry increased its total revenues by 6.9% to U.S. \$ 637 billion (2011: U.S. \$ 596 billion) and posted profits of U.S. \$ 6.7 billion.

The number of aircraft on the market and the flying hours they notch up are the most important drivers of spare parts business. In 2012, the number of hours flown by jet-propelled passenger aircraft (Boeing, Airbus, Embraer and Bombardier) rose by 3%.



Airbus and Boeing together manufactured 1,187 aircraft in 2012, which is a plus of 17% over 2011. The order backlog for aircraft seating 100 or more passengers increased from 8,600 in 2011 to 9,600 (source: Ascend Online).

The number of business jets delivered was virtually unchanged in 2012, thus halting the downward trend of recent years.

#### 2.3. OVERALL ASSESSMENT OF THE BUSINESS SITUATION

The figure of 2.1% recorded for global economic growth in 2012 reflects the sovereign debt crisis in the euro zone and the problems facing the U.S. economy. For the second year running, growth rates fell in industrialized countries. The economy remained buoyant in emerging markets, especially China.

The order backlog for new aircraft rose substantially.

Both Airbus and Boeing notched up new delivery records in 2012, while the order backlog for both short- and medium-haul aircraft and widebody aircraft rose substantially.

		I a .	
	Place: Schkeuditz,	Date: July 16,	, 2012
Aero Engines	Germany	MTU share price:	
	51° 24′ 16" N, 12° 12′ 39" F	€ 62.80	MRO services
Responsible: Dr. Stefan We President Com	singartner, nmercial Maintenance	Segment:	for AeroLogic
Subject: New GE90 cus	tomer	<b>⊠</b> MRO	7.0.0 <b>209</b> 10

### July 16, 2012

## MTU SIGNS UP AFROLOGIC AS NEW GE90 CUSTOMER

- MTU has signed an exclusive agreement with German express cargo operator AeroLogic to provide MEO services for the company's GE90-11016 engines.
- The contract is valued at over € 160 million.
- MTU's other GE90 customers include: Air New Zealand, Southern Air, V Australia

World's biggest aircraft engine!



# GE90: Gigantic in every respect

General Electric's successful GE90 is one of the engine options for various models of Boeing's twinjet long-haul 777 aircraft (commonly referred to as the "Triple Seven") and the exclusive engine for the 777-200R (Long Rangs), the -300ER (Extended Range) and the -200 Freighter. The engine family covers a thrust range from 76,000 to 115,000 pounds. The first variant, a GE90-77B, entered into service in 1995 aboard a 777-200. The two Growth versions, for which MTU Maintenance provides MRO services, are the latest additions to the family.

The GE90 Growth is the world's largest and most powerful engine. Its fan diameter, at 3.25 meters, is approximately equal to the diameter of the fuselage of a Boeing 737 (3.76 meters). During tests of GE90 outdoor test facility near Peebles, Ohio, a GE90.1158 reached a sustained record of 550 kN, or 127,900 bls, of thrust. In terms of technology, too, the turbofan, which has a bypass ratio of 9:1, is a true heavy-weight—a term not to be taken literally, because in fact its aerodynamically optimized fan blades are manufactured from composite materials and reinforced with titalium leading edges, which makes them lighter and more efficient and extends their



## GE90 GEOWTH AN EYER MORE ATTRACTIVE MARKET

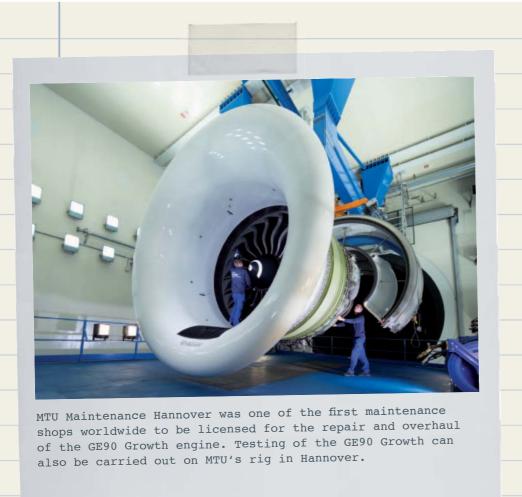
The GF90 Growth is the engine used exclusively in the Boeing 777-200LE and 777-300FE.

### It is a growing market:

- some 460 aircraft have already been equipped with the GE90 Growth
- orders have been placed for over 330 more

Value of the GE90 Growth MEO market in 2022:

over U.S. \$ 3.3 billion!



### 3. Financial situation

Corporate Governance

Group revenues generated by MTU Aero Engines in the financial year 2012 increased by 15.2% to € 3.4 billion. Revenues in the commercial and military engine business grew by 14.1% and in the commercial maintenance business by 16.9%. Adjusted EBIT increased in 2012 by 13.6% to € 374.3 million, thus exceeding even MTU's revised earnings forecast.

> The following explanatory comments and analyses are derived from the audited MTU consolidated financial statements for the financial years ending December 31, 2012, and 2011. The consolidated financial statements are drawn up in accordance with the International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB), to the extent that these have been adopted by the European Union.

In accordance with IFRS requirements, new or revised/amended standards and interpretations were applied for the first time in the financial statements for 2012. Their application did not give rise to any changes with a significant impact on the group's financial situation, net assets or operating results, other than the effects of the amendments to IAS 19. Above and beyond this, no changes in the financial reporting principles or in management judgments with respect to the application of the accounting standards had an effect on the group's business performance in the reporting period.

#### **EFFECTS OF AMENDMENTS TO IAS 19**

In June 2011, the IASB published amendments to IAS 19. The most important amendment to IAS 19 is that fluctuations in pension obligations as well as in any plan assets must be recognized in other comprehensive income. The previous option of choosing between immediate recognition through profit or loss in other comprehensive income or deferred recognition in line with the "corridor method" is now no longer available.

In the course of 2012, MTU resolved to apply IAS 19 in the same financial year and to adapt the comparative figures for 2011 accordingly. For more details of this change, please see Note 1.1. to the consolidated financial statements (Accounting principles).

#### INFORMATION ON EXCHANGE RATES

The exchange rates used for converting the company's key foreign currencies into euros are the following official rates set by the European Central Bank.

Currency	ISO code	Rate on rep	oorting date	Average rate	
		Dec. 31, 2012 1 euro =	Dec. 31, 2011 1 euro =	2012 1 euro =	2011 1 euro =
United States dollar	USD	1.3194	1.2939	1.2848	1.3920
Canadian dollar	CAD	1.3137	1.3215	1.2842	1.3761
Chinese yuan renminbi	CNY	8.2207	8.1588	8.1052	8.9960
Poish zloty	PLN	4.0740	4.4580	4.1847	4.1206

As of 2012, MTU has applied the amended IAS 19 in respect of pension obligations.

#### EFFECTS OF INCREASED STAKE IN THE IAE V2500 ENGINE PROGRAM

On June 29, 2012, MTU increased its overall stake in the IAE V2500 engine program by five percentage points to 16%. To this end, the company signed an agreement on April 12, 2012 and a supplementary agreement on June 29, 2012 with the following companies: United Technologies Corporation, East Hartford (CT) U.S.A.; Rolls-Royce plc, London, U.K., and Pratt & Whitney Aero Engines International GmbH (PWAEI), Lucerne, Switzerland.

PWAEI acquired Rolls-Royce's previous shareholding in the IAE V2500 engine program and sold on five percentage points of that share to MTU. As a result, MTU became entitled to five additional percentage points in the risk- and revenue-sharing partnership for the V2500 engine program (collaboration right). The company's share in the MRO business for this engine also increased.

Under the same agreement, MTU acquired 12.9% of the shares of in International Aero Engines AG, Zurich, Switzerland for  $\le 10.3$  million.

Further details can be found in Note 2. to the consolidated financial statements (Group reporting entity – Effects of increased stake in the IAE V2500 engine program).

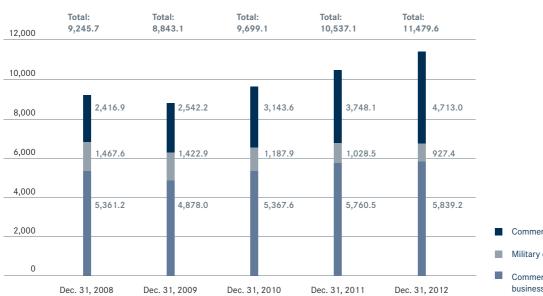
#### 3.1. OPERATING RESULTS

#### GROUP

#### ORDER BACKLOG

MTU's order backlog consists of firm customer orders that commit the group to delivering products or providing services, plus the contractual value of service agreements. At December 31, 2012, the order backlog amounted to € 11.5 billion (2011: € 10.5 billion).

#### Order backlog (before consolidation) in € million



In purely arithmetical terms, the order backlog of  $\in$  11.5 billion represents a workload of more than three years.

In 2012, MTU increased its stake in the IAE V2500 program to

16%

Commercial engine business

Military engine business

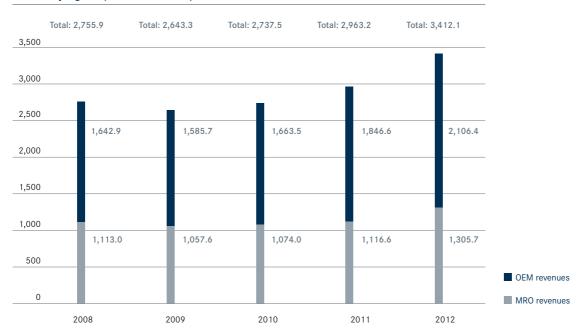
Commercial maintenance

	Change 2012	2-2011	2012	2011
	in € million	in %	in € million	in € million
Revenues	446.5	15.2	3,378.6	2,932.1
Cost of sales	-439.1	-18.4	-2,823.3	-2,384.2
Gross profit	7.4	1.4	555.3	547.9
- Costs by function	5.5	2.1	-255.2	-260.7
+ Depreciation/amortization effects of purchase price allocation, V2500 stake increase, and impairment loss	41.3	97.4	83.7	42.4
- IAE stake increase	-9.5		-9.5	
Adjusted earnings before interest and tax (adjusted EBIT)	44.7	13.6	374.3	329.6
- Depreciation/amortization effects of purchase price allocation and V2500 stake increase	-6.6	-15.6	-49.0	-42.4
+ IAE stake increase	9.5		9.5	
+ Impairment loss (IAS 36)	-34.7		-34.7	
Earnings before interest and tax (EBIT)	12.9	4.5	300.1	287.2
Financial result	26.6	48.5	-28.3	-54.9
Earnings before tax (EBT)	39.5	17.0	271.8	232.3
Income taxes	-24.8	-33.9	-97.9	-73.1
Earnings after tax (EAT)	14.7	9.2	173.9	159.2
Undiluted earnings per share in €	0.17	5.2	3.43	3.26
Diluted earnings per share in €	0.26	8.2	3.43	3.17

#### REVENUES

Group revenues increased in the financial year 2012 by € 446.5 million (15.2%) to € 3,378.6 million. Compared with the previous year, revenues in the OEM segment (commercial and military engine business), before consolidation, rose by  $\in$  259.8 million (14.1%) to  $\in$  2,106.4 million, while the corresponding revenues in the MRO segment (commercial maintenance business) grew by € 189.1 million (16.9%) to € 1,305.7 million.

#### Revenues by segment (before consolidation) in € million



#### COST OF SALES AND GROSS PROFIT

The cost of sales increased by € 439.1 million (18.4%) to € 2,823.3 million. Gross profit improved by € 7.4 million (1.4%) to € 555.3 million. The gross profit margin amounted to 16.4% (2011: 18.7%).

Write-downs in connection with two engine programs had an impact on gross profit in 2012:

Owing to the cost/earnings situation, the economic outlook for MTU's interest in GE's F414 military engine program for the F/A-18 (Super Hornet) deteriorated substantially, leading to a write-down of € 19.0 million in the value of the program asset and a negative impact on adjusted EBIT.

The high price of kerosene is making it increasingly uneconomical to continue flying older aircraft types such as the MD-80. The Board of Management moreover considers it unlikely that deployment of the JT8D-200 engine with which this aircraft is equipped will be extended. The carrying amount of these program assets, which were capitalized as part of the purchase price allocation as of January 1, 2004, thus no longer reflects the realizable value. The resulting write-down of € 34.7 million in respect of these program assets has no impact on adjusted EBIT as it forms part of the PPA valuation allowance.

#### RECONCILIATION OF ADJUSTED PERFORMANCE INDICATORS

The main reason for reconciliation is to eliminate the effect of non-recurring items that are superimposed on the results of operating activities and obscure the true comparability of EBIT and other performance indicators for the group and the individual operating segments with the figures for previous years. Starting out from the unadjusted earnings figures, the respective adjusted values are obtained by adding (expenses) or subtracting (income) the nonrecurring items.

Examples of adjusted performance indicators include adjusted EBIT and the adjusted EBIT margin. The International Financial Reporting Standards (IFRSs) do not stipulate any requirements concerning such indicators. Adjusted performance indicators are to be viewed as supplementary to the performance indicators reported in accordance with the IFRSs. The adjustments made concern the effects of the purchase price allocation and the increase of the company's stake in the IAE V2500 engine program.

MTU uses adjusted earnings figures as its key performance indicators.

MTU in its present form was created with effect from January 1, 2004, when Kohlberg Kravis Roberts & Co. Ltd. (KKR) acquired 100% of the company's shares from the then DaimlerChrysler AG. In the context of the acquisition, assets, liabilities and contingent liabilities were identified in accordance with IFRS 3 and measured at fair value. Since then, the identified intangible assets, in particular, have led to considerable scheduled amortization expenses. In the following text they are referred to collectively as 'effects of the purchase price allocation' and, in order to facilitate comparison, corresponding adjustments have been applied to eliminate them from the indicators presented below.

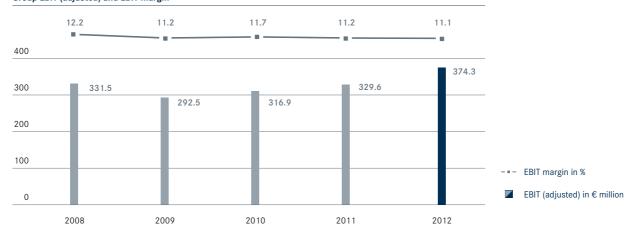
The intangible asset created in connection with the increase in MTU's stake in the V2500 engine program will be amortized over 25 years and adjusted in EBIT in the same way as the one-off effects stemming from the remeasurement of the former IAE shareholding.

		2012			2011	
in € million	Financial year	Non- recurring items	Financial year w/o non- recurring items	Financial year	Non- recurring items	Financial year w/o non- recurring items
Revenues	3,378.6		3,378.6	2,932.1		2,932.1
Cost of sales	-2,823.3	72.7	-2,750.6	-2,384.2	37.7	-2,346.5
Gross profit	555.3	72.7	628.0	547.9	37.7	585.6
Research and development expenses	-113.0	5.4	-107.6	-131.6	2.7	-128.9
Selling expenses	-88.5	1.8	-86.7	-80.3	1.1	-79.2
General administrative expenses	-72.5	3.8	-68.7	-57.0	0.9	-56.1
Other operating income and expenses	5.7		5.7	5.6		5.6
Profit/loss of companies accounted for using the equity method	1.0		1.0			
Profit/loss of companies accounted for at cost	12.1	-9.5	2.6	2.6		2.6
Earnings before interest and tax (EBIT)	300.1	74.2	374.3	287.2	42.4	329.6
Financial result	-28.3	0.3	-28.0	-54.9	18.6	-36.3
Earnings before tax (EBT)	271.8	74.5	346.3	232.3	61.0	293.3
Income taxes	-97.9	-15.0	-112.9	-73.1	-22.5	-95.6
Earnings after tax (EAT)	173.9	59.5	233.4	159.2	38.5	197.7
ЕВІТ	300.1	74.2	374.3	287.2	42.4	329.6
Depreciation/amortization of:						
Intangible assets						
- Effects of purchase price allocation / V2500 stake increase	47.3	-47.3		40.1	-40.1	
- Impairment loss according to IAS 36	34.7	-34.7				
Property, plant and equipment						
- Effects of purchase price allocation	1.7	-1.7		2.3	-2.3	
IAE stake increase	-9.5	9.5				
Adjusted EBIT	374.3	0.0	374.3	329.6	0.0	329.6

#### **EARNINGS BEFORE INTEREST AND TAX (EBIT)**

In 2012, EBIT rose by 4.5% to 300.1 million (2011:  $\le$  287.2 million), while the EBIT margin decreased to 8.9% (2011: 9.8%). Adjusted earnings before interest and tax (adjusted EBIT) increased by 13.6% to  $\le$  374.3 million (2011:  $\le$  329.6 million). The adjusted EBIT margin amounted to 11.1% (2011: 11.2%).

#### Group EBIT (adjusted) and EBIT margin



#### FINANCIAL RESULT

MTU's financial result improved by € 26.6 million in 2012 to a net expense of € -28.3 million (2011: € -54.9 million). This figure includes an improvement of € 8.9 million in the interest result compared with 2011, mainly due to the convertible bond that matured on February 1, 2012. The financial result on other items also improved in the financial year 2012, with the net expense decreasing by € 17.7 million to € -24.5 million (2011: € -42.2 million). The main factors responsible for this change were fair value gains on derivatives amounting to € 17.9 million (2011: fair value losses amounting to € 7.1 million), which helped to counterbalance the interest portion included in the measurement of receivables, other provisions, plan assets, liabilities and advance payments from customers amounting to € 11.6 million (2011: € 2.4 million).

### **EARNINGS BEFORE TAX (EBT)**

The company's good operating performance had a positive impact on earnings before tax, which grew by  $\in$  39.5 million to  $\in$  271.8 million (2011:  $\in$  232.3 million).

# INCOME TAXES

Income taxes amounted to  $\le$  97.9 million in the financial year 2012 (2011:  $\le$  73.1 million). The effective group tax rate, relative to earnings before tax, stood at 36.0% (2011: 31.5%). A table showing the reconciliation of the expected tax expense with the actual tax expense can be found in Note 15. to the consolidated financial statements (Income taxes).

#### EARNINGS AFTER TAX (EAT)

Earnings after tax increased by € 14.7 million (9.2%) to € 173.9 million (2011: €159.2 million) and adjusted earnings after tax by € 35.7 million (18.1%) to € 233.4 million (2011: € 197.7 million).

#### CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

In the consolidated statement of comprehensive income, earnings after tax in the amount of € 173.9 million (2011: € 159.2 million) are reconciled with the total comprehensive income for the period of € 189.2 million (2011: € 143.9 million).

The income and expenses (including attributable deferred taxes) recognized directly in other comprehensive income in 2012 mainly relate to gains on the fair value of financial instruments designated as cash flow hedges amounting to  $\in$  48.4 million (2011: fair value losses amounting to  $\in$  12.9 million) and translation differences arising from the financial statements of international

Adjusted earnings after tax increased by 18% to €

companies amounting to € 12.9 million (2011: € 1.2 million). A further item is the net gain of € 0.1 million (2011: not applicable) on financial assets not measured at fair value through profit or loss. An increase of € 46.1 million (2011: € 3.6 million) in actuarial losses on pension obligations had a negative effect.

#### **EARNINGS PER SHARE**

Undiluted earnings per share amounted to € 3.43 (2011: € 3.26). Earnings per share in the financial year 2012 were no longer diluted (2011: € 3.17) by the conversion rights attached to the convertible bond that was issued on February 1, 2007 and matured on February 1, 2012. The potential dilutive effects of the Share Matching Plan offered for the first time in the financial year 2010 are negligible.

#### NET PROFIT AVAILABLE FOR DISTRIBUTION AND DIVIDEND

After an allocation of € 51.0 million to revenue reserves by resolution of the Supervisory Board and Board of Management, the net profit available for distribution to MTU shareholders for the financial year 2012 amounts to € 69.3 million. On condition that the Annual General Meeting approves the proposed dividend, the total amount distributed will be € 68,498,771 for the 50,739,830 shares entitled to receive a dividend.

Dividend					
in€	20131)	2012	2011	2010	2009
Dividend paid per share	1.35	1.20	1.10	0.93	0.93

<sup>&</sup>lt;sup>1)</sup> As proposed by the Board of Management and the Supervisory Board to the Annual General Meeting.

MTU recommends a dividend per

In view of the group's continuing good business performance, the Board of Management and Supervisory Board of MTU Aero Engines Holding AG, Munich, will propose to the Annual General Meeting on May 3, 2013, that a dividend of € 1.35 per share (2011: € 1.20) should be paid out to shareholders. The net dividend yield for 2012, based on the share price of € 68.80 at December 31, 2012, thus amounts to 2.0%. The dividend is expected to be paid on May 6, 2013 - on condition that the proposal is approved by the Annual General Meeting. A table showing the reconciliation of group earnings after tax as defined in the IFRSs with the net profit available for distribution by MTU Aero Engines Holding AG is provided in the Notes to the consolidated financial statements.

#### **OEM SEGMENT**

#### ORDER BACKLOG

The order backlog for the OEM segment (commercial and military engine business) is reported on the basis of list prices. Given that orders for spare parts for commercial engines are generally completed within a short time of their receipt, the order backlog does not contain a substantial volume of such orders. The order backlog in the OEM segment stood at € 5,640.4 million on December 31, 2012, compared with € 4,776.6 million in the previous year.

	Change 2012	-2011		
n million	in million	in %	Dec. 31, 2012	Dec. 31, 2011
Commercial engines in U.S. \$	1,368.6	28.2	6,218.3	4,849.7
Commercial engines in €	964.9	25.7	4,713.0	3,748.1
Military engines in €	-101.1	-9.8	927.4	1,028.5
Total order backlog in €	863.8	18.1	5,640.4	4,776.6

#### **COMMERCIAL ENGINE BUSINESS**

The invoiced value of MTU's order book for commercial engines, expressed in U.S. dollars, stood at U.S. \$ 6,218.3 million on December 31, 2012, and thus U.S. \$ 1,368.6 million (28.2%) higher than the previous year's figure of U.S. \$ 4,849.7 million.

The high order intake – particularly at the Farnborough Airshow – was accounted for not only by the GEnx and V2500 engines, but also the GTF engines for the Bombardier CSeries, Mitsubishi MRJ and Airbus A320neo and above all the additional components resulting from the increased stake in the IAE V2500 program, handled by MTU Aero Engines Polska Sp. z o.o., Rzeszów, Poland.

The order backlog translated into euros at the 2012 year-end closing rate increased by € 964.9 million (25.7%) to € 4,713.0 million (2011: € 3,748.1 million).

The order backlog corresponds to almost three years' production capacity.

#### MILITARY ENGINE BUSINESS

In the case of military programs, the customer typically places an order for a fixed number of engines at the time the production agreement is concluded. The full value of the contract flows into the order backlog when the contract is signed. This order backlog reduces over a prolonged period of time, in line with deliveries.

The backlog of orders for military engines, which are priced in euros, totaled € 927.4 million at the end of 2012. This is € 101.1 million (9.8%) below the previous year's amount of € 1,028.5 million.

The order backlog corresponds to around two years' production capacity.

#### **REVENUES**

The company generated revenues of  $\le$  2,016.4 million in the OEM segment,  $\le$  259.8 million (14.1%) higher than in 2011.

In 2012, revenues in the commercial engine business (before consolidation) increased by  $\in$  202.0 million (14.4%) to  $\in$  1,603.1 million. Deliveries of GP7000, GEnx and V2500 engines played a prominent role in this increase. Adjusted for the effect of the U.S. dollar exchange rate, revenues grew by 5.6%.

Revenues in the military engine business (before consolidation) increased by  $\leqslant$  57.8 million (13.0%) from  $\leqslant$  445.5 million in 2011 to  $\leqslant$  503.3 million in 2012. The ongoing entry into service of the Eurofighter assures a steady flow of revenue from the EJ200 engine; revenues from the other military programs have stabilized.

MTU increased its revenues in the OEM segment by

	Change 2012-2011				
in € million	in € million	in %	2012	2011	
Revenues	259.8	14.1	2,106.4	1,846.6	
Cost of sales	-280.6	-19.3	-1,737.8	-1,457.2	
Gross profit	-20.8	-5.3	368.6	389.4	
Gross margin in %			17.5	21.1	
Adjusted EBIT	25.8	10.8	264.7	238.9	
Adjusted EBIT margin in %			12.6	12.9	

#### ADJUSTED EBIT

Adjusted earnings before interest and tax (adjusted EBIT) in the OEM segment rose to € 264.7 million (2011: € 238.9 million). The adjusted EBIT margin decreased slightly from 12.9% to 12.6%.

#### CAPITAL EXPENDITURE

Capital expenditure on intangible assets and property, plant and equipment increased substantially to € 660.2 million (2011: € 168.1 million), mainly in connection with MTU's increased stake in the IAE consortium and the V2500 engine program. Capital expenditure on intangible assets amounted to € 592.8 million (2011: € 84.4 million) and, apart from the additional investment in the IAE V2500 engine program, mainly comprised capitalized development costs for the PW1100G and GE38 engine programs. Capital expenditure on property, plant and equipment amounted to € 67.4 million (2011: € 83.7 million) and principally related to special tools and equipment and to completion of the building and technical installations for the blisk manufacturing facility in Munich.

#### **EMPLOYEES**

The average number of employees increased by 78 to 5,122 (2011: 5,044), mainly due to the continuing expansion of the company's site in Poland.

#### **MRO SEGMENT**

#### ORDER BACKLOG AND VALUE OF CONTRACTS

The order backlog in the MRO segment (commercial maintenance business) consists not only of orders for work on engines that have been delivered to the maintenance shop and for which failure analysis has been completed but also the contractual value of future orders under long-term service agreements.

usiness (MRO)			
Change 2012	-2011		
in million	in %	Dec. 31, 2012	Dec. 31, 2011
250.7	3.4	7,704.2	7,453.5
78.7	1.4	5,839.2	5,760.5
	Change 2012 in million 250.7	Change 2012-2011 in million in % 250.7 3.4	Change 2012-2011 in million in % Dec. 31, 2012  250.7 3.4 7,704.2

The majority of contracts in the MRO segment are priced in U.S. dollars. The order backlog for the commercial maintenance business in 2012 amounted to U.S. \$ 7,704.2 million, which is U.S. \$ 250.7 million or 3.4% higher than 2011's figure of U.S. \$ 7,453.5 million.

The order backlog translated into euros at the 2012 year-end closing rate increased by € 78.7 million (1.4%) to € 5,839.2 million (2011: € 5,760.5 million).

The order backlog corresponds to more than four years' production capacity.

The order backlog corresponds to more than four year's production capacity.

#### **REVENUES**

MTU's revenues in the commercial maintenance business (before consolidation) in the financial year 2012 increased by € 189.1 million to € 1,305.7 million (2011: € 1,116.6 million).

	Change 20			
in € million	in € million	in %	2012	2011
Revenues	189.1	16.9	1,305.7	1,116.6
Cost of sales	-166.7	-17.3	-1,129.6	-962.9
Gross profit	22.4	14.6	176.1	153.7
Gross margin in %			13.5	13.8
Adjusted EBIT	18.4	19.6	112.1	93.7
Adjusted EBIT margin in %			8.6	8.4

#### ADJUSTED EBIT

Adjusted EBIT in the MRO segment rose by € 18.4 million (19.6%) in 2012 to € 112.2 million. The adjusted EBIT margin increased to 8.6% (2011: 8.4%).

#### CAPITAL EXPENDITURE

Capital expenditure on intangible assets and property, plant and equipment grew by  $\in$  2.6 million to  $\in$  40.2 million (2011:  $\in$  37.6 million).

#### **EMPLOYEES**

The average number of employees increased at almost all locations, rising by a total of 185 to reach 3,241 (2011: 3,056).

#### 3.2. FINANCIAL SITUATION

#### PRINCIPLES AND OBJECTIVES OF FINANCIAL MANAGEMENT

The main objectives of financial management are to ensure the constant availability of adequate liquid reserves, avoid financial risks, and diversify sources of financing in the interests of flexibility. In order to ensure the company's liquidity and reduce risks, MTU accesses a variety of internal and external funding sources with differing maturities.

Longer-term liquidity forecasts are based on operational planning. Short- and medium-term forecasts are updated once a month. All consolidated group companies take part in this planning process.

The business operations of the operating segments and the resulting cash inflow represent the group's main source of liquidity. MTU utilizes cash flow surpluses generated by individual group companies to cover the funding requirements of other companies in the group (cash pooling). This reduces both interest expenses and the need for external loans. MTU also makes use of a variety of internal and external funding instruments to assure its future liquidity, including long-term financing via pension provisions, the issue of promissory notes and bonds, or credit arrangements. These sources of financing are supplemented by operating lease agreements. For information on the company's capacity to raise funds through approved and conditional capital increases, please refer to Note 29. to the consolidated financial statements (Equity). Through these diverse measures, MTU has created a sound basis on which to meet its future financing requirements.

# FINANCING INSTRUMENTS

The banking policy including procedures for the approval of banking relationships, loan agreements, liquidity and asset management, the management of currency and interest rate risks, and the management of the group's internal cash flow are set down in the treasury principles. It is a basic principle of the group that its lines of credit are administered at corporate level. By centralizing the liquidity management function, the group is in a position to allocate resources efficiently within the organization.

The group, including its subsidiaries, maintains good business relationships with a number of different banking partners, and in so doing avoids being too strongly dependent on a single institution. The banking partners are required to have a long-term credit rating of at least ,investment grade.'

Adjusted EBIT in the MRO segment rose by

19.6%

Financing instruments	Maturity date	Currency	Interest rate
Convertible bond	February 1, 2012	Euro	Fixed
Corporate bond	June 20, 2017	Euro	Fixed
			Yield as for premium
Pension obligations	Continuous	Euro	fixed-income industria
Promissory notes	June 5, 2014	Euro	Fixed
Revolving credit facility	December 1, 2015	Euro	Euribor rate + margin
Operating lease agreements	1 - 5 years	Euro / U.S. dollar	Fixed

The availability of financial resources is unrestricted. MTU's credit line, only a small part of which has been utilized, grants the company even greater scope in its financing activities.

The factors considered when choosing financial instruments include flexibility, credit terms, the profile of maturity dates, and borrowing costs. In keeping with standard banking practice, the main sources of financing include covenants requiring the company to ensure that its performance indicators remain within defined limits. MTU complied with the contractual obligations arising from such covenants at December 31, 2012 and at the end of every quarter. Further information on agreed covenants is provided in Note 33. to the consolidated financial statements (Financial liabilities). Significant agreements relating to change of control subsequent to a takeover bid are dealt with in Section 7. (Other disclosures).

In Section 6. of the group management report (Risk report) and Note 41. to the consolidated financial statements (Risk management), information is provided on MTU's approach to credit and valuation risks, methods used to hedge risks associated with interest rates and foreign currencies, and methods of dealing with price-change, non-payment and liquidity risks.

### FINANCIAL ANALYSIS

The sovereign debt crisis in the euro zone had no impact on the group's overall financial situation. MTU does not hold any financial instruments as defined in IAS 39 or IFRS 7 that are directly affected by the current sovereign debt crisis.

Neither in 2012 nor in any prior year did MTU engage in any transactions involving off-balance-sheet financial instruments, such as the sale of receivables in connection with asset-backed securities, sale-and-leaseback agreements, or obligations toward special-purpose entities, with the sole exception of operating lease arrangements.

#### BORROWING ARRANGEMENTS

At the reporting date of December 31, 2012, the group had access to a credit line amounting to  $\in$  100.0 million and made available by two banks. At December 31, 2012,  $\in$  13.7 million of this credit line had been utilized for guarantees in favor of third parties (December 31, 2011:  $\in$  12.4 million). The remaining available amount of  $\in$  86.3 million (December 31, 2011:  $\in$  87.6 million) ensures the group's financial flexibility in the medium term.

Any credit utilized is subject to interest at the customary market reference rates plus an additional margin. Unused credit facilities are subject to a loan commitment fee.

The sovereign debt crisis had no impact on the group's overall financial situation.

#### **NET FINANCIAL DEBT**

Net financial debt serves as an indicator of the MTU group's overall liquidity and is defined as the difference between gross financial debt and current financial assets. MTU's net financial debt at December 31, 2012 amounted to € 391.3 million, following a year-on-year increase of € 379.1 million (Dec. 31, 2011: € 12.2 million).

	Change 201	2-2011		
in € million	in € million	in %	Dec. 31, 2012	Dec. 31, 2011
Convertible bond	-156.3	-100.0		156.3
Corporate bond	252.5		252.5	
Financial liabilities arising from IAE V2500 stake increase	299.7		299.7	
Financial liabilities to banks				
Promissory notes	-13.6	-53.1	12.0	25.0
Other liabilities to banks	0.5	1.5	34.9	34.4
Finance lease liabilities	-0.4	-10.3	3.5	3.0
Derivative financial liabilities	-25.1	-60.6	16.3	41.4
Gross financial debt	357.3	> 100	618.9	261.
Cash and cash equivalents				
Demand deposits and cash	84.9	> 100	118.0	33.
Fixed-term and overnight deposits with an original maturity of 3 months or less	-122.5	-73.9	43.2	165.
Derivative financial assets	31.7	> 100	41.4	9.7
Financial assets not measured at fair value through profit or loss	-15.9	-38.9	25.0	40.
Financial assets	-21.8	-8.7	227.6	249.4
Net financial debt	379.1	> 100	391.3	12.2

# CONVERTIBLE BOND / CORPORATE BOND

In respect of the convertible bond amounting to  $\in$  152.7 million,  $\in$  62.6 million was repaid and  $\in$  90.1 million was converted into shares in MTU Aero Engines Holding AG in the first quarter of 2012.

In order to finance the components of the purchase price for the increase in the company's stake in the IAE V2500 engine program, MTU Aero Engines Holding AG, Munich, issued a corporate bond for a nominal amount of € 250.0 million with effect from June 20, 2012.

The contingent consideration for the acquisition of this asset, which is equivalent to the total amount of the increase in MTU's stake in the IAE V2500 engine program, was measured at fair value and recognized as a financial liability. This financial liability will be amortized over the contractually agreed term of 15 years on a pro rata basis according to the number of accumulated flying hours. Its fair value, which must be re-measured at each annual reporting date, amounted to € 299.7 million at December 31, 2012.

#### FINANCIAL LIABILITIES TO BANKS

On June 3, 2009, MTU placed four promissory notes for a total nominal note amount of € 65.0 million. Through these promissory notes, which consist of four tranches with fixed maturity dates as listed below, the group aims to diversify its sources of financing:

In 2012, MTU issued a corporate bond for a nominal amount of €

\		Note amount (nominal) at issue date	Repurchased 2010	Repaid on maturity June 5, 2012	Remaining note amount
Maturity date	Type of interest	in € million	in € million	in € million	in € million
June 5, 2012	fixed	1.5		1.5	0.0
lune 5, 2014	fixed	11.5			11.5
lune 5, 2012	variable	27.0	15.0	12.0	0.0
lune 5, 2014	variable	25.0	25.0		0.0
		65.0	40.0	13.5	11.5

The promissory notes were recognized at their fair value on the date of acquisition, which corresponds to the nominal note amount less transaction costs amounting to  $\in$  0.4 million. The promissory notes are measured at amortized cost. In the second quarter of 2012, the two promissory notes with a maturity date of June 5, 2012 were repaid in the amount of  $\in$  13.5 million.

Liabilities to banks decreased by €

The other liabilities to banks amounting to € 34.9 million (2011: € 34.4 million) relate to third-party loans provided to subsidiaries. At € 46.9 million, total financial liabilities to banks were € 13.1 million lower than the 2011 figure of € 60.0 million.

#### FINANCE LEASE LIABILITIES

Finance lease liabilities represent obligations under finance lease arrangements that are capitalized and amortized using the effective interest method. For information on the accounting treatment of lease assets and a summary of capitalized lease assets, please refer to Note 5.9. (Leasing) and Note 20. (Property, plant and equipment) to the consolidated financial statements.

#### DERIVATIVE FINANCIAL LIABILITIES AND ASSETS

In the financial year 2012, over 90% of the surplus income denominated in U.S. dollars with respect to expenses denominated in U.S. dollars was covered by forward foreign exchange contracts. At December 31, 2012, such contracts were in place for the financial years 2013, 2014 and 2015 covering 78%, 51% and 24% respectively of the surplus U.S. dollar income.

The decrease of  $\in$  25.1 million in derivative financial liabilities to  $\in$  16.3 million (2011:  $\in$  41.4 million) relates principally to changes in the fair value of forward foreign exchange contracts and currency options used to hedge cash flows.

The derivative financial assets mainly comprise fair value gains on forward foreign exchange transactions concluded for hedging purposes. Derivative financial assets increased by  $\in$  31.7 million to  $\in$  41.4 million (2011:  $\in$  9.7 million) as a result of market-related changes in the euro / U.S. dollar exchange rate.

For further information on financial instruments designated as cash flow hedges, please refer to Note 41. to the consolidated financial statements (Risk management).

#### **ANALYSIS OF CAPITAL EXPENDITURE**

#### CAPITAL EXPENDITURE BY CLASS OF ASSET

Capital expenditure relates to additions to intangible assets, property, plant and equipment, and financial assets:

	Change 2012-2011				
in € million	in € million	in %	2012	2011	
OEM	508.4	> 100	592.8	84.4	
MRO	0.6	7.9	8.2	7.0	
Intangible assets	509.0	> 100	601.0	92.0	
OEM	-16.3	-19.5	67.4	83.7	
MRO	2.0	6.7	32.0	30.0	
Tangible assets	-14.3	-12.6	99.4	113.7	
OEM	19.9	> 100	22.2	2.3	
Financial assets <sup>1)</sup>	19.9	> 100	22.2	2.3	
Total capital expenditure	514.6	> 100	722.6	208.0	

<sup>&</sup>lt;sup>1)</sup> Financial assets accounted for using the equity method or at cost.

#### CAPITAL EXPENDITURE ON INTANGIBLE ASSETS

Capital expenditure on intangible assets totaled € 601.0 million (2011: € 92.0 million) in the financial year 2012, including € 541.1 million in connection with MTU's increased stake in the IAE V2500 engine program.

In addition,  $\in$  40.7 million (2011:  $\in$  18.9 million, plus  $\in$  50.4 million for the purchase of program shares) in development expenditure was capitalized for the PW1100G, the new engine for the Airbus A320neo, and  $\in$  7.8 million (2011:  $\in$  8.7 million) in internally generated development costs was capitalized for GE38 engine program in the military engine business.

The commercial maintenance business develops special repair techniques designed to reduce the cost and increase the efficiency of engine maintenance. Development costs for these technologies totaling  $\leq 0.8$  million (2011:  $\leq 3.4$  million) were capitalized as intangible assets in 2012.

Further information on capital expenditure on intangible assets is provided in Note 18. to the consolidated financial statements (Analysis of changes in intangible assets, property, plant and equipment, and financial assets).

# CAPITAL EXPENDITURE ON PROPERTY, PLANT AND EQUIPMENT

Additions to land, leasehold rights and buildings, including buildings on non-owned land, which amounted to  $\in$  12.7 million (2011:  $\in$  1.6 million), relate mainly to completion of the new facility for blisk manufacturing. The capital expenditure on technical equipment, plant and machinery totaling  $\in$  17.0 million (2011:  $\in$  15.6 million) relates mainly to the purchase of CNC lathes and CNC grinding/milling machines.

Additions to advance payments and construction in progress in the financial year 2012 totaled € 32.6 million (2011: € 56.6 million). The major part of this expenditure in Germany relates to new special tools and equipment and to technical installations for the new blisk manufacturing facility.

Further details of capital expenditure on property, plant and equipment are provided in Note 18. to the consolidated financial statements (Analysis of changes in intangible assets, property, plant and equipment, and financial assets).

Capital expenditure in 2012 included MTU's new blisk manufacturing facility.

#### LIQUIDITY ANALYSIS

Corporate Governance

Free cash flow attained a level of € MTU uses free cash flow as an indicator of its liquidity. MTU determines free cash flow by combining cash flow from operating activities and cash flow from investing activities, and deducting the components that lie outside the control of operations management. In the financial year 2012, these components comprised non-recurring cash outflows amounting to € 231.9 million for the company's increased stake in the IAE V2500 engine program and for the acquisition of 12.9% of the shares of IAE International Aero Engines AG, Switzerland. An amount was also deducted for investments in and disinvestments of financial assets that are not measured at fair value through profit or loss because they can be sold at any time and are held as a liquidity reserve. In the financial year 2012, free cash flow decreased by € 43.3 million to € 85.7 million (2011: € 129.0 million).

	Change 201			
in € million	in € million	in %	2012	2011
Cash flow from operating activities	-58.1	-20.2	229.8	287.9
Cash flow from investing activities	-233.3	< 100	-360.0	-126.7
Cash flow from financing activities	169.5	> 100	93.0	-76.5
Translation differences	-2.6	< 100	-0.4	2.2
Change in cash and cash equivalents	-124.5	< 100	-37.6	86.9
Cash and cash equivalents at				
beginning of financial year			198.8	111.9
Cash and cash equivalents at				
end of financial year			161.2	198.8

#### CASH FLOW FROM OPERATING ACTIVITIES

Cash flow from operating activities in 2012 amounted to € 229.8 million, which was € 58.1 million (20.2%) lower than the 2011 figure of € 287.9 million.

# CASH FLOW FROM INVESTING ACTIVITIES

The cash flow from investing activities in the financial year 2012 amounted to € 360.0 million (2011: € 126.7 million). Capital expenditure on intangible assets amounted to € 265.7 million (2011: € 46.8 million) and, in addition to the capital expended to increase MTU's stake in the IAE V2500 engine program, mainly comprised capitalized development costs for the PW1100G and GE38 engine programs and for repair techniques.

Capital expenditure on property, plant and equipment, at € 99.1 million, was down on the previous year (2011: € 113.6 million), while capital expenditure on financial assets was almost entirely balanced by proceeds from the disposal of financial assets. The cash flow from investing activities includes proceeds from the disposal of intangible assets and property, plant and equipment amounting to € 0.5 million (2011: € 1.3 million).

#### CASH FLOW FROM FINANCING ACTIVITIES

In the financial year 2012, the cash inflow from financing activities totaled € 93.0 million (2011: cash outflow of € 76.5 million).

In order to finance the components of the purchase price for the increase in the company's stake in the IAE V2500 engine program, MTU issued a bond for a nominal amount of € 250.0 million with effect from June 20, 2012. This bond generated a cash inflow of € 248.5 million after deduction of transaction costs and discount.

In respect of the convertible bond for the amount of € 152.7 million, € 62.6 million was repaid and € 90.1 million was converted into shares in MTU Aero Engines Holding AG in the first quarter of 2012.

In addition, in the second quarter of 2012, two promissory notes for a total nominal amount of € 13.5 million and maturing June 5, 2012 were repaid, and € 60.8 million was paid out as a dividend for the financial year 2011.

#### 3.3. NET ASSETS

Total assets grew year-on-year by € 525.0 million (14.0%) to € 4,261.9 million (2011: € 3,736.9 million), while the equity ratio increased to 25.6% (2011: 22.9%) owing to the operating results.

#### CHANGES IN BALANCE SHEET ITEMS

	Change 2012	-2011	Dec. 31, 2	012	Dec. 31, 20	011
	in € million	in %	in € million	in %	in € million	in S
ssets						
Non-current assets						
Intangible assets and property, plant and equipment	523.4	28.3	2,374.3	55.7	1,850.9	49.
Other assets	43.5	> 100	76.8	1.8	33.3	1.
Total non-current assets	566.9	30.1	2,451.1	57.5	1,884.2	50.
Current assets						
Inventories	-15.0	-1.8	808.8	19.0	823.8	22.
Trade receivables <sup>1)</sup> , advance payments and other assets	10.7	1.3	840.8	19.7	830.1	22
Cash and cash equivalents	-37.6	-18.9	161.2	3.8	198.8	5
Total current assets	-41.9	-2.3	1,810.8	42.5	1,852.7	49.
otal assets	525.0	14.0	4,261.9	100.0	3,736.9	100.
Equity and liabilities  Equity	232.8	27.2	1,089.3	25.6	856.5	22.
<u></u>	232.8	27.2	1,089.3	25.6	856.5	22.
Equity	232.8	3.9	1,089.3	<b>25.6</b>	<b>856.5</b> 633.1	
Equity Non-curret debt						16
Equity Non-curret debt Provisions	24.7	3.9	657.8	15.4	633.1	16.
Equity Non-curret debt Provisions Liabilities	24.7	3.9 > 100	657.8	15.4	633.1	16.
Equity  Non-curret debt  Provisions  Liabilities  Total non-curret debt	24.7	3.9 > 100	657.8	15.4	633.1	16. 10. <b>27</b> .
Equity  Non-curret debt  Provisions  Liabilities  Total non-curret debt  Current debt	24.7 486.5 <b>511.2</b>	3.9 > 100 <b>50.0</b>	657.8 876.8 <b>1,534.6</b>	15.4 20.6 <b>36.0</b>	633.1 390.3 1,023.4	16. 10. <b>27.</b>
Equity  Non-curret debt  Provisions  Liabilities  Total non-curret debt  Current debt  Provisions / income tax liabilities	24.7 486.5 <b>511.2</b>	3.9 > 100 <b>50.0</b>	657.8 876.8 1,534.6	15.4 20.6 <b>36.0</b>	633.1 390.3 1,023.4	22. 16. 10. 27. 6. 43.

#### ASSETS

1) Trade receivables and construction contract receivables.

Intangible assets and property, plant and equipment increased by a total of € 523.4 million to € 2,374.3 million (2011: € 1,850.9 million). Expenditure meeting the recognition criteria for capitalization as intangible assets amounted to € 601.0 million (2011: € 92.0 million), of which € 541.1 million related to the increase in MTU's stake in the IAE V2500 engine program. Further details of the effects of the increased stake in the IAE V2500 engine program can be found in Section 3 (Financial situation – Effects of increased stake in the IAE V2500 engine program). Above and beyond this, the increase in intangible assets was principally due to capital expenditure of € 40.7 million on development of the PW1100G engine and € 7.8 million on the GE38 engine. The increase in property, plant and equipment was especially due to the completion of the building and technical installations for the new blisk manufacturing facility, and to special tools and equipment for the new engine programs. The net asset situation was negatively affected by write-downs on the book value of the F414 and JT8D-200 programs (see Section 3.1. Operating results).

In 2012, inventories grew by € 15.0 million or 1.8% to € 808.8 million (2011: € 823.8 million). Inventories of raw materials and supplies decreased by € 8.0 million to € 341.6 million (2011: € 349.6 million) while work in progress increased by € 12.0 million to € 434.7 million (2011: € 422.7 million). Advance payments decreased by € 19.0 million to € 32.5 million (2011: € 51.5 million). Inventories accounted for 19.0% of net assets, a lower ratio than in 2011 (22.0%). Inventory turnover amounted to 4.1 (2011: 3.8). Trade receivables, construction contract receivables (after deduction of advance payments received) and other current assets including prepayments rose year-on-year by a total of € 10.7 million (1.3%) to € 840.8 million. Within this item, trade receivables decreased by € 36.6 million (6.0%) to € 568.5 million, while construction contract receivables, net of the corresponding advance payments received, increased substantially by € 46.2 million (33.8%) to € 183.0 million.

Financial assets increased by

Financial assets, including assets accounted for using the equity method, increased by € 38.0 million (63.0%) to € 98.3 million.

Cash and cash equivalents amounted to € 161.2 million at the reporting date (2011: € 198.8 million). Expressed as a percentage of total assets, this item decreased to 3.8% (2011: 5.3%).

In terms of the structure of assets, the proportion of non-current assets increased by 7.0 percentage points to 57.5% (2011: 50.5%).

#### **GROUP EQUITY**

in € million	2012	2011
Equity at January 1	856.5	772.3
Other comprehensive income		
Hedging instruments	48.4	-12.9
Actuarial gains and losses on plan assets		
and pension obligations	-46.1	-3.6
Available-for-sale financial assets (AfS)	0.1	
Translation differences	12.9	1.2
Earnings after tax	173.9	159.2
Dividend payment to shareholders of MTU Aero Engines Holding AG	-60.8	-53.6
Purchase of treasury shares		-9.4
Bond conversion to equity	97.5	
Fair-value measurement and issue of treasury shares under the		
Matching Stock Program and Share Matching Plan	1.0	-4.2
Sale of treasury shares under the MAP employee stock option program	5.9	7.5
Total change in equity	232.8	84.2
Equity at December 31	1,089.3	856.5

# CHANGES IN THE FAIR VALUE OF FINANCIAL INSTRUMENTS DESIGNATED AS CASH FLOW HEDGES

At the end of 2012, MTU held forward foreign exchange contracts covering the period up to December 2015 for a nominal amount of U.S. \$ 1,550.0 million, which translates to € 1,174.8 million at the exchange rate prevailing on the reporting date. The company also holds other financial instruments designated as cash flow hedges covering periods extending to 2027 for a nominal amount of U.S. \$ 526.9, which translates to € 399.3 million at the exchange rate prevailing on the reporting date. Measurement of the fair value of the hedging instruments at the end of 2012, based on the euro / U.S. dollar exchange rate of 1.32 prevailing at the reporting date, resulted in a positive change of € 48.4 million in the fair value recognized under other comprehensive income (OCI) compared with December 31, 2011. Changes in the fair value of hedging instruments at the end of the financial year are recognized directly in equity as an adjustment to OCI. These adjustments are applied net of the corresponding changes in deferred tax assets (for hedging instruments with a negative change in fair value) or in deferred tax liabilities (for hedging instruments hedges with a positive change in fair value).

#### POSITIVE CHANGES IN GROUP EQUITY

The overall increase of € 232.8 million in group equity in 2012 (2011: increase of € 84.2 million) is mainly attributable to the earnings after tax (EAT) generated in the financial year, which amounted to € 173.9 million (2011: € 159.2 million), and to the positive change of € 48.4 million in the fair value of hedging instruments (2011: negative change of € 12.9 million). The sale of treasury shares to group employees under the MAP employee stock option program contributed a further € 5.9 million to group equity (2011: € 7.5 million). Translation differences led to a € 12.9 million improvement in group equity (2011: € 1.2 million). The convertible bond reached maturity on February 1, 2012 and the resulting exercise of conversion options raised group equity by an additional € 97.5 million. A further item that increased group equity by € 1.0 million in 2012 was the fair-value measurement of treasury shares under the Share Matching Plan. In 2011, this sharebased component of Board of Management compensation reduced group equity by € 4.2 million, including shares issued under the final tranche of the Matching Stock Program. A breakdown of the share-based components of Board of Management compensation is provided in Note 32. to the consolidated financial statements (Other provisions – Personnel obligations).

#### **NEGATIVE CHANGES IN GROUP EQUITY**

Negative changes in group equity in 2012 include an amount of € 60.8 million for the dividend payment to shareholders of MTU Aero Engines Holding AG for the financial year 2011 (2011: dividend payment of € 53.6 million for the financial year 2010), and an increase of € 46.1 million (2011: € 3.6 million) in actuarial losses on pension obligations. In 2011, the purchase of treasury shares reduced group equity by € 9.4 million.

#### FINANCIAL DEBT

Non-current debt increased by  $\in$  511.2 million (50.0%) to  $\in$  1,534.6 million, its share in total equity and liabilities increasing by 8.6 percentage points to 36.0% (2011: 27.4%). In total, non-current provisions increased by  $\in$  24.7 million to  $\in$  657.8 million. This figure includes pension provisions amounting to  $\in$  585.3 million (2011:  $\in$  513.2 million), which represents an increase of  $\in$  72.1 million (14.0%). Non-current other provisions decreased by  $\in$  47.4 million (39.5%) to  $\in$  72.5 million (2011:  $\in$  119.9 million) at December 31, 2012, mainly as a result of the measurement of contingent liabilities arising from business combinations. Changes in contingent liabilities are presented in more detail in Note 32. to the consolidated financial statements (Other provisions).

Non-current liabilities amounted to  $\in$  876.8 million (2011:  $\in$  390.3 million) and principally comprised financial liabilities amounting to  $\in$  539.0 million (2011:  $\in$  53.4 million) and deferred tax liabilities that amounted to  $\in$  207.4 million at December 31, 2012 (2011:  $\in$  209.3 million). The sharp increase in financial liabilities is attributable to the corporate bond issue and to obligations incurred in connection with the company's increased stake in the IAE consortium and the V2500 engine program.

The combined total of equity and non-current debt increased in the financial year 2011 by € 744.0 million (39.6%) to € 2,623.9 million (2011: € 1,879.9 million). This means that 107.0% (2011: 99.8%) of the company's non-current assets are matched by financing funds available on a medium- to long-term basis.

Current (i.e. short-term) debt capital was reduced by € 219.0 million (11.8%) to € 1,638.0 million, whereas provisions and income tax liabilities increased by € 6.5 million (2.9%) to € 234.1 million. This item includes pension provisions amounting to € 31.4 million (2011: € 17.8 million), current

Group equity increased by  $\in$  232.8

other provisions amounting to € 182.9 million, which decreased by € 16.9 million (8.5%) compared with 2011, and income tax payable, which increased from € 10.0 million to € 19.8 million. Current liabilities decreased by € 225.5 million (13.8%) to € 1,403.9 million. These include obligations toward employees totaling € 47.5 million (2011: € 41.0 million), financial liabilities amounting to € 79.9 million (2011: € 208.2 million), trade payables amounting to € 583.2 million (2011: € 592.7 million), the balance of construction contract payables after deduction of the corresponding receivables amounting to € 604.0 million (2011: € 715.0 million), and sundry other identifiable obligations.

Since December 31, 2011, current and non-current financial liabilities increased by € 357.3 million to € 618.9 million. In order to finance the components of the purchase price for the increase in the company's stake in the IAE V2500 engine program, MTU issued a bond for a nominal amount of € 250.0 million on June 20, 2012. The bond earns an annual rate of interest of 3% from the date of issue (June 20, 2012) until the repayment date (June 20, 2017). The interest is payable in arrears on June 21 of each year, initially on June 21, 2013. In addition to an immediate payment, it was also agreed in the context of the increase in MTU's stake in the IAE V2500 engine program that part of the purchase price would be contingent upon the number of flying hours recorded. Based on an assessment of the market opportunities and risks involved in this, a financial liability of € 299.7 million was recognized in the financial statements. The outstanding nominal amount of the convertible bond, namely € 152.7 million, was entirely redeemed in the first quarter of 2012, with € 62.6 million being repaid and € 90.1 million converted into shares in MTU Aero Engines Holding AG. Two tranches of the promissory notes issued by the company reached their maturity dates on June 5, 2012 and were repaid in the same financial year.

The equity ratio increased to 25.6%

Within the structure of equity and financial debt, the equity ratio increased by 2.7 percentage points to 25.6% (2011: 22.9%), while current debt capital decreased by 11.3 percentage points. Overall, there has been a shift in the structure away from current debt capital toward non-current debt capital.

# 3.4. COMPARISON OF ACTUAL AND FORECAST BUSINESS PERFORMANCE

The original forecast for the financial year 2012 made on February 23, 2012 was based on the knowledge available at the beginning of the year. That forecast was revised upward and made more specific in the half-yearly financial report issued on July 20, 2012.

	Actual	Forecast 2012 at	Forecast 2012 at	Actual	Change
in € million	2012	July 20, 2012	February 23, 2012	2011	2012-2011 in %
Revenues			increase in the		
			mid-single-digit %		
	3,378.6	3,300	range	2,932.1	15.2
Adjusted earnings before interest and tax			increase of		
(adjusted EBIT)	374.3	370	8 - 10 %	329.6	13.6
Adjusted earnings after tax			increase of		
	233.4	225	10 - 12%	197.7	18.1

#### **REVENUE FORECAST**

On February 23, 2012, the Board of Management forecast that revenues in 2012 would increase by a percentage in the mid-single-digit range (revenues in 2011: € 2,932.1). In its half-yearly financial report published on July 20, 2012, MTU raised its revenue forecast to € 3,300 million, among other things owing to the increase of five percentage points in the company's stake in the IAE V2500 engine program. Year-end revenues amounted to € 3,378.6 million, which is € 78.6 million higher than the revised forecast issued in July 2012 and significantly higher than the earlier forecast made in February 2012.

#### **EARNINGS FORECAST (ADJUSTED EBIT)**

MTU initially forecast an increase in adjusted EBIT in the region of 8–10%. On July 20, 2012, the group issued a more precise, upwardly revised forecast of  $\in$  370 million. Adjusted EBIT at year end amounted to  $\in$  374.3 million, which is  $\in$  4.3 million higher than the revised forecast issued in July 2012 and well above the earlier forecast made in February 2012.

#### **EARNINGS FORECAST (ADJUSTED EARNINGS AFTER TAX)**

In its initial forecast for 2012, the Board of Management expected adjusted earnings after tax to rise by 10–12%. A more precise forecast of  $\in$  225 million was issued on July 20, 2012. At December 31, 2012, adjusted earnings after tax amounted to  $\in$  233.4 million,  $\in$  35.7 million above the figure of 2011.

#### 3.5. OVERALL ASSESSMENT OF BUSINESS PERFORMANCE IN 2012

Although global economic growth weakened significantly in 2012, MTU bucked the general trend, posting an increase in revenues of 15.2% for the financial year. Adjusted EBIT rose to € 374.3 million (2011: € 329.6 million). A central focus of activities at MTU in the financial year 2012 was the production ramp-up for new engine programs. At the same time, MTU made strategic investments in future engine programs, especially in the PW1000G family, and increased its stake in the IAE V2500 program. Despite this additional expenditure, MTU nevertheless achieved an operating margin of 11.1%. Free cash flow once again developed very positively, reaching € 85.7 million. All the key performance indicators published by the group at the beginning of 2012 were revised moderately upward and made more specific in the course of the year. Ultimately, the company's performance was better than the revised forecast on all counts.

The MTU group exceeded its forecast for all key performance indicators.

# 4. Subsequent events

At the end of 2012, a resolution was passed to merge MTU Aero Engines GmbH into MTU Aero Engines Holding AG. Notarial certification of the merger agreement is scheduled for the first quarter of 2013. Above and beyond this, no events of material importance with any significant impact on the financial situation, net assets or operating results of the MTU group occurred after the end of the reporting period.

> No events of material importance with any significant impact on the financial situation, net assets or operating results of the MTU group occurred after the end of the reporting period.

> At the Supervisory Board meeting of MTU Aero Engines Holding AG, Munich, and MTU Aero Engines GmbH, Munich, held December 13, 2012, it was resolved to merge MTU Aero Engines GmbH into MTU Aero Engines Holding AG. A provisional date toward the end of the first quarter 2013 has been set for notarial certification of the merger agreement. The merger is expected to take effect in the second quarter of 2013, when MTU Aero Engines GmbH will cease to exist. For tax and financial reporting purposes, the merger will apply retroactively as from January 1, 2013. In addition, a proposal will be presented to the Annual General Meeting on May 3, 2013 to approve the change of name of the parent company from "MTU Aero Engines Holding AG" to "MTU Aero Engines AG." This does not have any impact on MTU's consolidated financial statements.

	Place: Munich, Germany	Date: July 25, 2012	
Aero Engines		MTU share price:  € 59.45	d .
Responsible: <i>Eeiner Winkler</i> ,	48°12'49" N, 11° 28' 53" E		Higher revenues
Chief Financial C	Segment: ☑OEM	and profits	
Subject: Forecast raised		<b>⊠</b> ′MRO	

# JULY 25, HALF-YEAR RESULTS: MTU RAISES ITS FORECAST



# **Press Release**

MTU continues on growth path and revises forecasts moderately upward

- Revenues up by 16% in the first half of 2012; expected to rise to £3.3 billion by year-end
- Operating profit increased by 7%, net income up by 11%
- Adjusted EBIT of €370 million, adjusted net income of €225 million anticipated for 2012

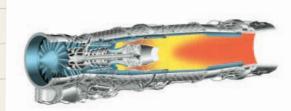
Munich, July 25, 2012 - MTU Aero Engines Holding AG is making good progress toward its growth targets: by the end of June 2012, the Group had increased its revenues by 16% to €1,559.0 million (1-6/2011: €1,346.5 million). Operating profit rose by 7% from €164.4 million to €175.8 million, resulting in an operating profit margin of 11.3% (1-6/2011: 12.2%). Net income<sup>2</sup> also registered a significant increase of 11%, rising to €109.7 million (1-6/2011: €98.4 million).

"These figures show that MTU is well positioned to achieve sustainable, profitable growth." Reiner Winkler, Cto

#### Moderately higher forecast for 2012 Guidance 2012 new FY 2011 Guidance 2012 old (m€) 3.300 +mid single digit 2,932.1 Revenues 100 thereof IAE upshare +8% to +10% 370 329.6 EBIT adj. 11.2% EBIT adj. Margin 225 +10% to +12% 197.7 Net Income adj.

# MTU's key revenue drivers:

- In the first six months of 2012, the key revenue drivers in MTU's commercial engine business were the V2500 for the Airbus A320 family, the PW2000 for the Boeing 757 and C-17, and the GP7000 for the Airbus A380.
- The main source of commercial MRO revenues was the V2500 engine.
- The biggest revenue earner in the military engine business was the EJ200 for the Furofighter.

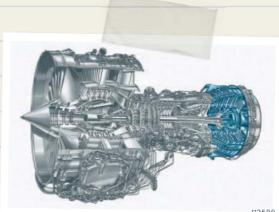


# Commercial engines:

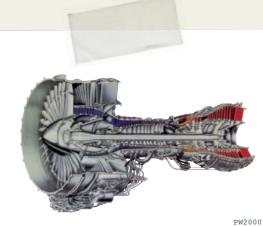
The GP7000 is deployed in the A380 mega-Airbus. MTU has a share of 22.5% in this engine program.



MTU is developing and manufacturing the V2500 in conjunction with Pratt & Whitney and Japanese Aero Engines Corporation. The V2500 powers the Airbus A320 family.



The PW2000 engines are used to power medium- and long-haul aircraft in both the commercial and military markets, e.g. the Boeing 757 and C-17.



Corporate Governance

# 5. Forecasts

Based on the predicted mildly upward trend in global economic growth, MTU expects its revenues to increase by 10 to 12% in 2013, compared with the previous year, and forecasts a similar increase of between 10 and 12% in the group's adjusted EBIT. In the longer term, the company expects to benefit from the growth trends in the aviation industry.

#### 5.1. GENERAL ECONOMIC CLIMATE

Although the Economist Intelligence Unit (EIU) expects global economic growth to increase again – from 2.1% in 2012 to 2.3% in 2013 (EIU, February 2013) – the International Monetary Fund is slightly more optimistic, forecasting a plus of 2.9% for 2013 (IMF World Economic Outlook, September 2012).

The biggest risks for global economic growth remain the sovereign debt crisis in the euro zone and the "fiscal cliff" in the United States, i.e. the combination of radical spending cuts and tax increases. As of February 2013, neither of these issues had yet been resolved.

The European economy is expected to grow by 0.2% in 2013, and the North American economy by 2.1%. The Asia-Pacific region will be the biggest contributor to global economic growth in 2013 (EIU, February 2013).

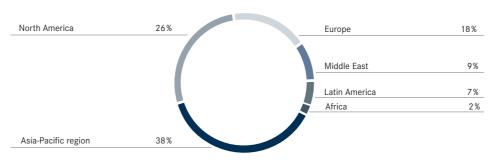
### 5.2. INDUSTRY-SPECIFIC DEVELOPMENTS IN THE AVIATION SECTOR

In September 2012, IATA issued forecasts for passenger and freight traffic in 2013, according to which passenger traffic is expected to rise by 4.5% and freight traffic by 1.4%. This means that the growth rate in passenger traffic is likely to stabilize at around its normal long-term level.

Growth in the aviation market will differ markedly from one region to another. The forecast weak economy will act as a brake on air traffic growth in Europe. North America is a saturated market offering only little chance of growth, while IATA expects to see an above-average recovery in the Asia-Pacific region, the Middle East, and Latin America.

IATA expects airline profits to reach a total of U.S. \$ 8.4 billion, thanks to the rising volume of air traffic and higher ticket prices. Stubbornly high fuel prices are likely to remain a driver of orders for new, fuel-efficient aircraft.

Order backlog for single-aisle and widebody aircraft by region (Source: Ascend Online, February 2013)



In 2013, global passenger air traffic is expected to grow by

Orders remain good for both the A320 and 737NG families and for the widebody jets of the A330, A380, 767 and 777 series. New, fuel-efficient models are gaining market share, notably the A320neo, 737MAX, CSeries, MS-21 and C919 in the short- and medium-haul segment, and the A350, 787 and 747-8 in the widebody segment.

For the time being, the European Union has decided not to impose an emissions tax on flights to and from Europe. The EU's decision was taken in response to criticism of the tax by China, Russia and the United States. The reason given by the EU for its change of policy is the decision by the International Civil Aviation Organization (ICAO) to agree internationally binding rules by the fall of 2013.

In the business jet market, a number of new aircraft programs will reach the delivery phase in 2013, and experts expect this to boost revenues (sources: NBAA 2012; JetNet iQ Survey and Honeywell "Global Business Aviation Forecast").

#### 5.3. OPPORTUNITIES FOR MTU

### OPPORTUNITIES PRESENTED BY CHANGES IN THE OPERATING ENVIRONMENT

MTU's systematic, forward-looking investment policy based on basic research and innovative engine technologies designed to lower fuel consumption and emissions, reduce noise, and cut costs serves to strengthen the company's position as a leader in innovation and technology. This, in turn, generates opportunities for the company to expand its position within risk- and revenue-sharing partnerships and to participate in lucrative new engine programs. Against this backdrop, MTU signed a supplemental agreement with Pratt & Whitney on June 29, 2012 to increase the company's overall stake in the IAE V2500 program by almost half, to 16%. This increase is set to secure MTU additional market opportunities because the V2500 will continue to play a key role in the international engine market for several decades to come. The IAE partners Pratt & Whitney, Japanese Aero Engine Corporation and MTU now plan to establish a joint venture with Rolls-Royce to construct engines for the next generation of short- and medium-haul aircraft. This constitutes a further step in MTU's long-term plans to secure its technological and competitive edge.

The V2500 engine will continue to play a key role for several decades to come.

Corporate Governance

MTU Maintenance Zhuhai expanded its capacity in 2012 by

MRO operations, too, are likely to benefit from rising demand and access to new engine programs. In order to meet the growing demand from the world market, MTU Maintenance Zhuhai - a joint venture with China Southern Air Holding Company - expanded its capacity by 50% in 2012, from the previous 200 shop visits per year to 300.

Among its customers in the military sector, MTU has established a reputation as a qualified partner with comprehensive system know-how in product development, manufacture and maintenance. MTU is constantly leveraging its opportunities in this sector to develop new engines and refine existing ones.

Brazilian aircraft manufacturer Embraer is planning to update its successful E-Jet family. The "second-generation" jets will be equipped with Pratt & Whitney PW1000G-series engines. Two derivatives of the existing geared turbofan technology - designated PW1700G and PW1900G - will be used to propel the new E-175 and E-190 aircraft. Contract negotiations between P&W and MTU will be pursued with the aim of securing MTU's share in the PW1700G and PW1900G on a similar level to that already held in other geared turbofan programs.

#### OPPORTUNITIES PRESENTED BY THE COMPANY'S BUSINESS PERFORMANCE

A stronger U.S. dollar against the euro would lead to a modest improvement in MTU's earnings situation. If energy prices were to stabilize or even retreat to a lower level, and if commodity prices were to fall, this would have a positive effect on MTU's cost structure and hence on its business results.

#### OTHER OPPORTUNITIES

Other opportunities can be seen in the SWOT analysis contained in Section 6.4. of the Risk report. For information on how the opportunities identified can be exploited and the associated risks avoided, see Section 6. (Risk report).

# 5.4. FUTURE DEVELOPMENT OF MTU

The statements below are based on the knowledge available at the beginning of 2013. Owing to the large number of new programs, any delays that might occur in development or in the ramp-up of series production would have an effect on the performance indicators.

# **NEW PRODUCTS AND SERVICES**

In recent years, MTU has acquired an interest in several new engine programs - such as those for the Airbus A380 (GP7000), the Boeing 787/747-8 (GEnx), the Bombardier CSeries (PW1524G), the Mitsubishi Regional Jet (PW1217G) and, most recently, the Airbus A320neo (PW1133G-JM) - which will account for a predominant share of its revenues in the decades ahead.

In the coming financial years, the company will continue to drive forward development of the geared turbofan for new engine programs and place volume production of the turbine center frame for the GEnx engine on a firm footing.

#### **OUTLOOK FOR 2013**

#### **TARGETS**

MTU's targets for the financial year 2013 are as follows:

in € million	Forecast 2013	Actual 2012
Revenues	Increase of 10-12%	3,378.6
Adjusted earnings before interest and tax		
(adjusted EBIT)	Increase of 10-12%	374.3
Adjusted earnings after tax	Increase of 10-12%	233.4

The company expects group revenues in 2013 to rise by 10–12% compared with 2012. MTU's risk- and revenue-sharing agreements with leading engine makers and its strong presence in its home market will serve to keep the regional distribution of the company's revenues stable. According to the company's plans, over 80% of total revenues will continue to be generated in its traditional markets of North America and Europe.

#### REVENUES BY OPERATING SEGMENT

MTU expects its revenues from the volume production of commercial engines to rise by 20–25% in U.S. dollar terms compared with 2012, with revenues from spare parts sales increasing by around 15%. This assumption is based on the ramp-up in deliveries of the GEnx engine for the Boeing 787 and 747-8, growing revenues from the GP7000 program for the Airbus A380, increasing deliveries of the V2500 engine for the A320 family, and the effects of the additional five-percent share in the V2500 engine program. Identified risks relate particularly to the possibility of delays in ramping up the Boeing 787 and 747-8 aircraft programs, extensions to the delivery schedule for the Airbus A380, and slowerthan-expected growth in revenues from spare parts sales.

MTU expects revenues from its military business to remain virtually unchanged.

Commercial maintenance revenues, expressed in U.S. dollars, are expected to increase by a percentage in the high single-digit range in 2013. MTU anticipates rising demand for maintenance of the GE90, V2500 and CF34 engines.

#### OPERATING PROFIT

MTU expects adjusted EBIT to grow by 10–12% in 2013 compared with 2012, while the adjusted EBIT margin is expected to be around 11%.

#### ADJUSTED EARNINGS AFTER TAX (ADJUSTED EAT)

Adjusted earnings after tax are expected to rise by 10-12% in 2013.

#### **FUTURE DIVIDEND**

It is MTU's policy to pay an attractive dividend, which is contingent upon both an economic situation that is conducive to distribution of a dividend and the approval of the corporate bodies responsible.

#### EMPLOYEES

MTU does not expect the size of its workforce in 2013 to differ from that of 2012.

### OUTLOOK FOR 2014

#### REVENUES

In the financial year 2014, MTU expects to see sustained growth in both the global economy and the aviation industry. Based on IATA's medium-term forecasts and the aircraft manufacturers' projected production volumes, and assuming an unchanged U.S. dollar exchange rate, MTU's revenues in 2014 are expected to grow by around five percent from the level of 2013.

#### OPERATING PROFIT

In 2014, while MTU expects to see a slight reduction in development expenditure compared with 2013, there will also be a sustained increase in volume production for the GEnx and GP7000 programs. In addition, 2014 will see the first deliveries of PW1524G engines for the Bombardier CSeries. On balance, however, the group expects earnings to remain on a positive course in the financial year 2014, accompanied by a stable adjusted EBIT margin. This provisional figure may change if the company acquires additional shares in engine programs.

#### 5.5. OVERALL PROGNOSIS OF FUTURE BUSINESS DEVELOPMENTS IN 2013 AND 2014

The MTU Board of Management remains optimistic that it will be able to profitably expand the company's business. In the years ahead, MTU will benefit from the strong growth generated by the V2500 program and the GEnx and GP7000 widebody programs as well as from above-average growth in its MRO business. In subsequent years, MTU expects to see a further rise in adjusted EBIT and an EBIT margin of 11–12% as well as attractive potential dividends for its shareholders.

In 2013, MTU expects adjusted EBIT to grow by

# 6. Risk report

In order to secure its competitiveness in the long term, MTU regularly analyzes and evaluates the risks inherent in its day-today business through the instrument of an integrated risk management system. No major change was identified in the company's risk exposure compared with 2011.

Risk is an inherent part of any entrepreneurial activity. To meet the expectations of its shareholders, MTU must exploit opportunities – and that entails a certain degree of risk.

MTU has an integrated opportunity and risk management system in place, which is linked to the group's value-oriented performance indicators and embedded in its organizational structure. The system ensures compliance with statutory requirements and is based on the internationally recognized COSO II Enterprise Risk Management (ERM) Framework.

MTU has an integrated opportunity and risk management system in place.

The systematic consideration of significant risk factors is of vital importance to the MTU group, and serves as a fundamental basis for value-oriented controlling functions and ongoing business success. MTU knows the risks it faces, is aware of their effects and can manage them appropriately.

#### Significant risk factors for MTU

#### General economy Strategy Operations Other risks industry/market ■ Business cycle ■ FFA-approved parts ■ Choice of Procurement: Human resources programs suppliers, quality manufacturers ■ U.S. dollar = IT ■ Development ■ Manufacturing: ■ Airline profitability ■ Commodity prices ■ Environment costs processes. ■ Budget situation ■ Compliance capacity. ■ M&A activities ■ Price concessions materials ■ Legal issues Joint ventures on commercial ■ Program Organization engines management Access to Non-payment maintenance licenses Liability

### 6.1. STRATEGY AND MANAGEMENT

# CONTROL ENVIRONMENT

MTU regards a suitable control environment as being essential for a functioning risk management system. The following are considered the main elements of such an environment:

- management style and philosophy,
- integrity and ethical values,
- staff training and development.

The concept of learning from mistakes is embodied in the MTU Principles, which describe it as a means of facilitating teamwork and promoting constructive behavioral attitudes. The logical consequence of striving for continuous improvement is the establishment of a Continuous Improvement Project (CIP), which aims to encourage employees to deal openly with weak points and create a culture that underpins a functioning risk management system.

#### RISK MANAGEMENT OBJECTIVES AND RISK STRATEGY

The ultimate objective of MTU's risk management system is to ward off risks to MTU's status as a going concern, and to safeguard the company's existence and future business success.

MTU does not merely limit itself to ensuring compliance with statutory requirements. It has integrated its corporate risk management system, including opportunity management, into all essential management processes, from strategic planning right through to reporting to the Board of Management and the Supervisory Board.

#### IDENTIFICATION, ANALYSIS AND MANAGEMENT OF RISKS

MTU regards risk management as a continuous, end-to-end process to ensure responsible behavior when dealing with specific risks at business unit level and general risks affecting several business units or the entire group, including risks which need to be assessed on a wider scale.

The risk inventory of the group, which encompasses all the business units and all the risk factors to which MTU is exposed, forms the basis for identifying risks. According to the COSO II Framework, it is divided into governance and compliance, strategy and planning, operations and infrastructure, and reporting.

The affiliates and business units are responsible for identifying, assessing, controlling and monitoring the risks in their specific areas, and documenting them in risk maps. They submit reports to the central risk management department for risks exceeding an amount of € 1 million over the five-year period under consideration, at dates allowing them to be reviewed together with the quarterly financial results. Risks are assessed based on uniform definitions of the probabilities of loss occurrence and, as far as quantifiable, as a possible deviation of the group performance indicators 'adjusted EBIT' and 'free cash flow' from the currently valid operational planning figures.

The central risk management department aggregates and consolidates the risks and evaluates the overall risk position at group level.

A cross-divisional Risk Management Board has been set up at group level to perform centralized control and monitoring functions. At its quarterly meetings, the Risk Management Board discusses the interactions between individual risks, ensures that all risks have been reported in full, and assesses the risk exposure of the group as a whole.

### RISK REPORTING AND COMMUNICATION

The Board of Management receives a risk report once a quarter that has been coordinated with the Risk Management Board, and is kept informed of the group's current risk situation. The Top Risk Map comprises all risks above € 5 million over a five-year period and gives details of their probability of occurrence as well as potential countermeasures.

Risks are not offset against opportunities. Moreover, the Top Risk Map for the group forms part of the regular reports submitted to the Board of Management and Supervisory Board.

#### MONITORING THE RISK MANAGEMENT PROCESS

Monitoring the risk management process is of crucial importance for ensuring the proper functioning and ongoing development of the risk management system.

The Top Risk Map comprises all risks above €

In addition to verification of the system employed for the early recognition of risks by the auditor during auditing of the annual financial statements, the risk management system is monitored and verified by a number of other functions:

- regular checks by the internal auditing department,
- supervision by the Supervisory Board,
- checking in the course of the EFQM audits,
- process reviews by the Risk Management Board in the form of a self-assessment.

# 6.2. THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM IN RELATION TO THE **ACCOUNTING PROCESS**

The currently valid German accounting policy DRS 5, including the amendments in DRÄS 5, is used as a basis for reports concerning the main features of the accounting-related internal control and risk management system.

# OBJECTIVES AND COMPONENTS OF THE INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM IN RELATION TO THE ACCOUNTING PROCESS

The Board of Management, Supervisory Board and Audit Committee of MTU attach the greatest importance to ensuring the regularity, accuracy and reliability of MTU's financial reporting for recipients of MTU's financial statements. The accounting-related internal control and risk management system, which provides the yardstick for the MTU Group's financial statements, helps ensure that these internal and external accounting requirements are systematically complied with. The Board of Management of MTU Aero Engines bears overall responsibility for establishing and refining the required control and monitoring systems. The systems are tailored to the MTU Group's business model and company-specific requirements, and are an important part of the comprehensive approach to corporate governance that defines the basic framework for creating sustainable value for shareholders, customers, employees and the public.

- The accounting-related risk management system (RMS) is an integral part of the group's comprehensive company-wide risk management system. It forms the basis for the uniform and appropriate handling of risks and for communicating them within the group. The risks entailed in financial reporting at group level are a part of the corporate risks to be monitored as a whole. (For details of the risk management process see Section 6.1.)
- The design of the accounting-related internal control system (ICS) at MTU meets the requirements of the German Accounting Law Modernization Act (BilMoG) as set out in the government's explanatory memorandum, the definition provided by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer IDW e.V.), the internationally recognized and established framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO I), and the specific operating environment of the MTU group. MTU understands an internal control system (ICS) to be the principles, procedures and measures introduced at the company by its management that are aimed at the organizational implementation of the decisions of management to
  - safeguard the effectiveness and economic efficiency of business operations which also includes protecting the company's assets -
  - to ensure the regularity and reliability of internal and external accounting, and
  - comply with statutory regulations relevant to the company.

MTU attaches the greatest importance to the regularity, accuracy and reliability of its financial reporting.

■ The Audit Committee of the Supervisory Board deliberates on risk management and on the findings of internal auditing. In accordance with Section 107(3) of the German Stock Corporation Act (AktG), as amended by the German Accounting Law Modernization Act (BilMoG), the Audit Committee is responsible also for monitoring the effectiveness of the risk management system, the internal control systems, the internal auditing systems, the financial reporting process and the audit of the financial statements, and, in particular, assessing their independence.

# MAIN FEATURES OF THE INTERNAL CONTROL SYSTEM AND THE RISK MANAGEMENT SYSTEM IN RELATION TO THE ACCOUNTING PROCESS

- MTU has a clear management and corporate structure. Key functions spanning more than one business unit are managed centrally. The individual subsidiaries nevertheless enjoy an adequate degree of autonomy.
- The integrity and responsibility of all employees, also in terms of finances and financial reporting, are ensured by their undertaking to observe the company's code of conduct.
- An adequate system of guidelines has been drawn up and is updated as required.
- The departments and business units involved in the accounting process are suitably equipped and regularly trained both in quantitative and qualitative terms.
- The IT systems are protected against unauthorized access by appropriate installations in the IT area. As far as possible, standard software is used in the finance systems area. Within the framework of the comprehensive IT strategy and the IT architecture, the IT system's application controls are reviewed internally and externally on a regular basis against a background of a high level of automatic controls and plausibility checks. The general IT controls are checked during internal and external IT audits.
- Suitable controls are in place in all accounting-relevant processes, such as dual control, analytical checks, and programmed plausibility checks during payment cycles in accounting or during the consolidation process.
- All annual financial statements of group companies included in consolidation are audited by an external accounting firm at least once a year. The same auditor also reviews the condensed consolidated financial statements and interim group management report in the half-yearly financial report.
- Accounting-relevant processes are also checked by the process-independent corporate audit department.
- In terms of reporting and annual/monthly closings, the group accounting department is the direct contact for the managing directors of the subsidiaries. It is responsible for preparing the consolidated financial statements in accordance with IFRS in consultation with all the group companies.

MTU has a clear management and corporate structure.

To our shareholders

- In the course of its monthly reports, the group accounting department monitors all the processes relating to the consolidated financial statements, such as capital consolidation, debt consolidation, consolidation of expenditures and revenues and the elimination of the unrealized results of intra-group transactions.
- The group accounting department is also the central point of contact and controlling body for specific reporting issues at group level - such as questions concerning the balance sheet - or within individual subsidiaries and joint ventures. If a need for support arises at short notice in connection with specific, complex IFRS issues or proposed company acquisitions, this demand is met by qualified staff or by employing the services of auditors.
- As every subsidiary and joint venture is obligated to report its business figures to the group holding company in a standardized reporting format on a monthly basis in compliance both with the local GAAP and IFRS requirements, any planned/actual deviations during the year can be identified rapidly, enabling a swift and appropriate response.

#### 6.3. SPECIFIC RISKS

#### RISKS ARISING FROM GENERAL ECONOMIC TRENDS

Significant risks to the MTU group's business development are presented by the U.S. dollar exchange rate, the level of commodity prices, and general economic factors. Even taking the latest market forecasts into account, MTU does not currently discern any major negative impacts for the company arising from the financial crisis. MTU does not hold any financial instruments within the scope of IAS 39 or IFRS 7 that are affected by the current sovereign debt crisis. If the current, positive rate of economic growth should begin to slacken again as a result of the financial crisis, this could potentially impact the volume of passengers using business jets, prompt a more cautious approach to orders for new air transportation capacity in both the freight and passenger segments, and - if national budgets are cut further - negatively impact the military engine business. Other risks affecting industry in general include rising energy costs, the unavailability of suppliers, and delays in deliveries from suppliers. From the present point of view, there are no identifiable risks from general economic trends that threaten MTU's status as a going concern.

# CURRENCY RISK, CREDIT RISK AND HEDGING TRANSACTIONS

More than 80% of MTU's revenues are generated in U.S. dollars (equivalent to approximately  $\emph{\textbf{€}}$  2,880 million in 2012). On the other hand, a large proportion of expenses is likewise invoiced in U.S. dollars, thus providing a 'natural hedge.' Most other expenses are incurred in euros and, to a lesser extent, in Polish zloty, Chinese yuan renminbi and Canadian dollars. Earnings are dependent on changes in the exchange rate parity between the U.S. dollar and the cited currencies from the order date to the delivery date, in the measure to which MTU does not make use of financial instruments to hedge against its current and future net exposure. In line with the corporate policy of generating profit solely on the basis of its operating activities and not through currency speculation, MTU makes use of hedging strategies for the exclusive purpose of controlling and minimizing the effect of U.S. dollar exchange rate volatility on EBIT.

The forward foreign exchange contracts concluded by MTU cover the greater part of the net exposure to currency risk, leaving only a small proportion of the U.S. dollar surplus exposed to this type of risk. The unhedged portion of forecast transactions is calculated at the average euro exchange rate on the date of settlement.

MTU holds a long-term hedge portfolio of forward foreign exchange contracts with terms to maturity stretching over several years. At December 31, 2012, the value of the portfolio of hedging instruments with terms until 2015, amounted to U.S. \$ 1,550.0 million (which translates to € 1,174.8 million at the exchange rate prevailing on the reporting date).

For accounting purposes, MTU prudently designates only a portion of its hedged forecast transactions as hedged items to reduce the expected net currency risk exposure.

The long-term hedge portfolio with terms up to 2015, amounts to a total value of U.S. \$

Further explanatory comments concerning financial instruments used to hedge future cash flows are provided in Note 41. to the consolidated financial statements (Risk management).

The company's long-term hedging strategy makes currency risks manageable.

#### INDUSTRY/MARKET RISKS

Since air traffic is so dependent on economic factors, and susceptible to crises, airlines frequently encounter financial difficulties. The already strained situation may be further exacerbated by escalating fuel prices and by an intensification of the difficult financial situation of many airlines. Given this, many airlines are striving to keep their aircraft and engine maintenance costs as low as possible, for example by delaying shop visits or replacing defective parts with used ones. The effects of this trend are discernible particularly in MTU's MRO business. However, thanks to its wide array of activities across different market segments and thrust classes, MTU is able to spread these risks across different markets.

MTU's military engine business customers are national and international agencies, whose budgets vary widely with the level of public spending. When they are faced with budgetary constraints, there is a risk that contracts might be rescheduled or canceled. In the military engine business, the company is firmly embedded in international cooperative ventures, which tends to have a limiting effect on risks because the partners work together to protect their common interests. The terms of existing contracts in the military sector are generally defined to cover a prolonged period of time, thus effectively excluding price risks.

The commercial engine market has an oligopolistic structure. MTU sells most of its products under risk- and revenue-sharing arrangements. The lead partners in the consortium determine the prices, conditions and concessions. As a consortium partner, MTU is bound by these conditions, but it is through such partnerships that the company gains access to the leading engine programs of the major manufacturers. The customers of these risk- and revenue-sharing partnerships in the commercial engine and MRO business are airlines. Various types of concessions to customers are common practice in the marketing of commercial production engines. MTU is obliged to absorb these concessions to the extent of its program share in risk- and revenue-sharing arrangements. The fact that the cooperation partners share a common interest helps to prevent excessive concessions during contract negotiations. Furthermore, risks are spread across the various programs. Concessions to major customers during the launch phase of a program are largely offset by a reduction in the marketing expenses for older programs.

From today's standpoint, MTU does not expect these industry/market risks to have any significant impact on the group's operating results, financial situation or net assets.

#### LIABILITY RISKS

In the aviation industry as elsewhere, accidents can still occur 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 forms of liability, especially in the commercial engine business, are covered by contractual clauses and by high-coverage insurance policies, including aircraft liability insurance. Other risks that could threaten the company's status as a going concern, such as loss of income through fire or the interruption of business operations, are similarly covered. By limiting liability risks and taking out insurance cover, the risks are rendered transparent and manageable.

#### RISKS ARISING FROM CORPORATE STRATEGY

The main forms of strategy risk are misjudgments when taking decisions concerning investments in engine programs, the establishment of new sites, and possible M&A activities. MTU's business model is based on long-term processes, particularly in the OEM segment. In the commercial sector, many years can pass between the decision to invest in a new engine and the breakeven MTU gains access to the leading engine programs of the major manufacturers through partnership arrangements.

point. The risk is that the original economic and technological parameters on which the decision was based might change over the course of time. MTU counters such strategy risks by engaging highly qualified specialists at the decision-making stage and by using documented processes to perform cost-benefit analyses, which make it compulsory to carry out the risk analysis on the basis of a variety of different scenarios. The company's broad product portfolio - comprising engines in all thrust classes - helps to spread the risk and minimize dependence on individual engine programs.

MTU has not identified any strategy risks at the present time that might endanger its status as a going concern.

#### **DEVELOPMENT RISKS**

Corporate Governance

In the commercial and military engine business, MTU undertakes to perform development work during which delays and additional costs may arise. The company nevertheless ensures strict adherence to time schedules and budgets by permanently monitoring project management and applying appropriate corrective measures where necessary. Furthermore, through its involvement in collaborative ventures, it works in partnerships that extend beyond corporate boundaries, thus spreading the risk.

MTU products are subject to extremely stringent safety requirements. The company requires numerous official certifications, particularly from the German Federal Office of Civil Aviation (LBA) and the U.S. Federal Aviation Administration (FAA), in order to carry out its activities. These certifications are valid for limited periods and can be renewed only after further tests have been carried out. Manufacturing and repair processes are documented in detail to ensure compliance with all regulations.

#### MUTUAL RISKS OF JOINT VENTURES

In the commercial maintenance business, MTU's interests in the Asian market include a 50:50 joint venture, MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China. In jointly controlled entities where decisions have to be made by consensus, there is always a risk of differences of opinion.

# RISKS ARISING FROM BUSINESS OPERATIONS

### PROCUREMENT AND PURCHASING RISKS

MTU is dependent on suppliers and third-party vendors for some raw materials, individual parts and components and for the provision of specific services. Risks can arise in the form of the unavailability of suppliers, problems with quality, and price increases. MTU strives to reduce its reliance on individual suppliers by securing the services of several, equally qualified, vendors for materials, parts and services. In the case of single-source suppliers, MTU enters into long-term agreements as a hedge against unforeseen shortages and to reduce the risk of sudden price hikes. The risks involved are manageable thanks to the broad diversity of the links in the supply chain.

#### PRODUCTION RISKS

Highly sophisticated components and new materials are called for to meet the requirements of the airlines and OEMs in respect of engine weight, fuel consumption and noise emissions. In order to produce and process such components, MTU develops - and gains official approval for innovative new manufacturing techniques suited to meeting these challenges. That can delay the start of production. It could also happen that these new techniques do not meet the requirements in full when volume production is due to start (see "Development risks"). MTU counters this risk by providing systematic support for the development and implementation process in the context of technology projects.

Delays may arise when ramping up production of new, high-volume programs involving new production capacities or production processes, thus affecting the agreed delivery deadlines. MTU minimizes this risk through strict project management, the deployment of specialists and the implementation of program-specific preventive measures.

MTU secures supplies by engaging the services of several, equally qualified vendors.

#### PROGRAM RISKS

At the present time, MTU has not identified any risks arising from the individual engine programs that are either of a material nature or could threaten the company's status as a going concern. However, because such programs involve long lead times, their measurement may be significantly affected by interest rate changes and by the postponement of deliveries.

In 2012, discussions and negotiations began concerning MTU's participation in financing agreements for certain types of aircraft. The talks had originally been initiated by the financial arm of United Technologies, which had approached the airlines involved. The program partners expect to reach a general agreement in the first half of 2013, while specific financing agreements could be concluded with individual airlines as early as the first quarter of 2013.

#### NON-PAYMENT RISK

In the commercial engine and commercial maintenance businesses, airlines are both indirect and direct customers of MTU. These companies may find themselves facing financial difficulties, with the result that their situation affects the receivables of MTU and its partners. The consortium leaders in the commercial engine and spare parts businesses have extensive receivables management systems in place. In the commercial maintenance business, the responsible MTU departments track open accounts receivable in short cycles. Before a deal is finalized, risks are assessed and necessary precautions are taken. Wherever possible, the company takes advantage of export credit guarantees (Hermes coverage) to protect itself against political and credit risk. As a matter of principle, the group avoids signing contracts for which the parameters cannot be calculated. Hence MTU considers non-payment risks to be transparent and manageable.

#### OTHER RISKS

#### PERSONNEL RISKS

MTU has drawn up guidelines and a code of conduct that are valid for all of its employees throughout the world and by means of which it strives to establish binding rules for internal and external communication. Employees who are entrusted with confidential or insider information make a solemn commitment to abide by the applicable regulations, such as those laid down in the German Investor Protection Improvement Act (AnSVG), and to exercise the appropriate integrity when handling such information.

The commitment, motivation and skills of the company's employees are major contributory factors in its business performance. There is considerable rivalry in the recruitment market for the aerospace sector, as companies compete to find the best-qualified employees to work on the development, manufacture and maintenance of cutting-edge technical products. This harbors a fluctuation risk. MTU minimizes the associated risks by means of fast-track professional training and development programs, performance-related compensation, mentoring schemes and early succession planning.

A high production capacity will be needed in the coming years to meet the demands of the new engine programs. MTU is meeting this challenge through the systematic training of entry-level employees and the targeted recruitment of specialists from outside the company. No major problems are to be expected in filling the positions in question.

Variations in the order volume present MTU with the challenge of managing its capacities according to current demand. The company has responded with flexible working time and work assignment models as well as with an upskilling campaign targeting its existing workforce. In order to meet changing capacity requirements, MTU also takes advantage of natural fluctuation and uses the system of flexible working hours to encourage employees to reduce their flextime credit.

MTU minimizes personnel risks by means of fast-track training and development programs and performance-related compensation. Insurance policies are in place to limit potential liability risks that might be caused by individuals employed by the company. Personnel risks are considered to be low.

#### IT RISKS

The main IT risks are loss of confidential data through espionage and system failures. Through its experience in dealing with military customers, MTU is particularly aware of the need to safeguard confidential data and operates a strictly controlled, highly advanced data security system. When new IT systems are launched, there is a possibility of workflows being disrupted. MTU minimizes these risks by employing qualified experts and using professional project management. MTU regards the risks in this area as being manageable.

#### **ENVIRONMENTAL RISKS**

MTU is subject to numerous laws and regulations aimed at protecting the environment. Any tightening of the applicable environmental requirements in connection with the use of chemicals in manufacturing and test rig emissions may give rise to additional investment costs. Further information can be found in Section 1.5. (Corporate responsibility). MTU requires special certification in order to operate certain production facilities. The regulations must be strictly observed and all procedures fully documented. An environmental management system certified to DIN EN ISO 14001 minimizes the risks in this area.

#### COMPLIANCE RISKS

Compliance risks exist in all areas of the company. They arise when managers or employees of the company fail to comply with laws and regulations or fail to observe internal rules. This can be particularly critical in areas where the protection of confidential documents and information plays a significant role.

To minimize risks and to assure compliance, MTU has implemented a number of measures:

- globally binding rules of conduct valid throughout the group,
- online compliance training of all business units and employees affected,
- setting up a central office to receive reports of suspected misconduct,
- setting up a Compliance Board,
- continuous security checks of employees.

The possibility of legal action in respect of compliance issues can never be entirely ruled out, whether this be due to lack of knowledge on the part of individual employees or to criminal intent.

# RISKS ARISING FROM GENERAL AND TAX LEGISLATION

MTU sees no important risks arising from general or tax legislation that could have a significant impact on the company's net assets, financial situation or operating results.

#### ORGANIZATIONAL RISKS

The company has not identified any risks arising from controlling and monitoring systems or relating to organization and management.

MTU has implemented a number of compliancemonitoring measures.

# 6.4. SWOT ANALYSIS

The results of an analysis of the main strengths, weaknesses, opportunities and threats (SWOT) presented by MTU's corporate structure and market environment can be summarized as follows:

# SWOT analysis of the MTU group

Corporate	Market
Strengths	Opportunities
Technological leadership  OEM: Excellence in engine modules: low-pressure turbines, high-pressure and IP compressors  MRO: Excellence in advanced repair techniques  Manufacturing technologies	Market environment of business units on a long-term growth trend
Balanced mix of production and after-market business, covering all stages from development and manufacturing to maintenance	Increasing technological complexity of future engines
Sustained capacity utilization assured by high order backlog	Good market opportunities for fuel-efficient engine designs (geared turbofan) in the event of steadily rising oil prices
High, stable profitability	Solid financing structure and technological leadership open the way to program investments
Focus on high-profit-margin engine business	Growth opportunities in the attractive GE90 market
Presence in fast-growing Asian market	Growth of MRO in newly industrializing countries
Long-term contracts in the OEM business, involvement in consortia and cooperative ventures	Airline outsourcing in order to concentrate on core activities offers additional opportunities for MRO business
Quality and on-time delivery form basis for reliable partnerships	Greater exploitation of synergies between areas of commercial business
Proximity of MRO sales network to customers	Positive changes in U.S. dollar exchange rate
Sound financial situation widens opportunities for M&A activities and program investments	
Weaknesses	Threats
High dependency on U.S. dollar	Low, volatile profitability on the part of end customers (airlines); possible spending cuts in the event of an economic downturn
Earnings dependent on market success of OEMs and their products	Inherent risk of advanced technology development with regard to estimated schedules and costs
High wage levels at home manufacturing sites	Entry of newly industrializing nations into the aerospace industry
	Restrained public spending may lead to defense budget cuts.
	Difficulty of obtaining licenses in the MRO business
	Competition in the market for maintenance services, resulting in excess capacity for certain MRO programs.

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Additional information

#### 6.5. OVERALL PROGNOSIS OF MTU'S RISK EXPOSURE

At December 31, 2012, there had been no substantial changes in MTU's risk exposure compared with the end of the previous year. The group is of the opinion that it would serve no purpose to aggregate the most important individual risks, on the grounds that it is improbable that hypothetical risks would arise simultaneously.

At the present time, MTU does not anticipate any fundamental changes in its risk exposure. The level of risk exposure is manageable. From the present point of view, the MTU group's continuing existence as a going concern is not endangered. MTU does not anticipate any fundamental changes in its risk exposure at the present time. MTU has taken every possible organizational measure to ensure early awareness of potential risk situations.

### 7. Other disclosures

MTU complies with the prescribed disclosure requirements by issuing a corporate governance statement, a management compensation report, information on directors' dealings, and disclosures in accordance with the Takeover Directive Implementation Act, as specified in Section 315(4) of the German Commercial Code (HGB). The rules applied in this context are customary practice for listed companies, and are not intended to obstruct or impede any possible takeover bid.

### 7.1. CORPORATE GOVERNANCE STATEMENT

### **DECLARATION OF CONFORMITY**

The management and supervisory boards of listed companies issue an annually renewed declaration stating that the recommendations of the Government Commission on the German Corporate Governance Code have been and are being complied with, where necessary citing those recommendations that have not been or are not being applied. The declaration of conformity of MTU Aero Engines is included in the section on corporate governance beginning on page 20.

There is also a section devoted to corporate governance on the MTU website at www.mtu.de under Investor Relations.

### MANAGEMENT PRACTICES EXTENDING BEYOND STATUTORY REQUIREMENTS

A full description of management practices that extend beyond statutory requirements is provided in the corporate governance report published as part of this 2012 Annual Report.

### WORKING PROCEDURES OF THE BOARD OF MANAGEMENT AND THE SUPERVISORY BOARD

A description of the working procedures of the Board of Management and Supervisory Board is provided in the corporate governance report.

### 7.2. REFERENCE TO MANAGEMENT COMPENSATION REPORT

The compensation awarded to members of the Board of Management is made up of fixed and variable components. A more detailed description, including a table of individual members' compensation entitlements, can be found in the 'Corporate governance' section of this Annual Report. The management compensation report forms an integral part of the group management report.

### 7.3. DIRECTORS' DEALINGS

Pursuant to Section 15a of the German Securities Trading Act (WpHG), members of the Board of Management and the Supervisory Board have a legal obligation to disclose transactions involving the purchase or sale of shares in MTU Aero Engines Holding AG, Munich, or of related financial instruments, on condition that the total amount of the transactions undertaken by a board member or related persons reaches or exceeds € 5,000 within a single calendar year. This disclosure requirement applies equally to any other management staff with executive powers and to persons closely related to them. These transactions are posted on the MTU website at www.mtu.de and published in the register of companies.

The total number of shares in MTU Aero Engines Holding AG, Munich held by members of the company's Board of Management and Supervisory Board at December 31, 2012, equaled less than 1% of the company's share capital (at December 31, 2011, less than 1%).

The mandates of members of the MTU Board of Management and Supervisory Board are described in the sections entitled 'The Board of Management' and 'The Supervisory Board' respectively. Information on related-party transactions is provided in Note 43. to the consolidated financial statements (Relationships with related companies and persons).

### 7.4. DISCLOSURES IN CONNECTION WITH THE TAKEOVER DIRECTIVE

The following disclosures are made pursuant to Section 315(4) of the German Commercial Code (HGB) (takeover directive implementation).

### COMPOSITION OF SUBSCRIBED CAPITAL

The subscribed capital (capital stock) of MTU Aero Engines Holding AG is unchanged, and amounts to € 52.0 million, divided into 52.0 million registered non-par shares. All shares have equal rights and each share entitles the holder to one vote at the Annual General Meeting.

### RESTRICTIONS CONCERNING VOTING RIGHTS AND THE TRANSFER OF SHARE OWNERSHIP

At December 31, 2012, MTU held 1,260,170 treasury shares (2011: 3,187,512). No voting rights are exercised in respect of treasury shares. The articles of association of MTU Aero Engines Holding AG do not contain any restrictions concerning voting rights or the transfer of share ownership. The Board of Management has no knowledge of any agreement between shareholders that could give rise to any such restrictions.

### CAPITAL INVESTMENTS EXCEEDING 10 % OF THE VOTING RIGHTS

According to its notification dated September 6, 2012, The Capital Group Companies, Inc., Los Angeles, U.S.A., holds 13.06% of MTU's voting rights (through 6,788,868 shares; 2011: 5,313,949 shares).

### SHARES WITH SPECIAL RIGHTS CONFERRING POWERS OF CONTROL ON THE HOLDER

MTU has not issued any shares with special rights conferring powers of control on the holder.

### METHOD OF CONTROLLING VOTING RIGHTS WHEN EMPLOYEES OWN STOCK CAPITAL AND DO NOT **EXERCISE THEIR CONTROL RIGHTS DIRECTLY**

Employees holding shares in MTU Aero Engines Holding AG exercise their control rights like any other shareholder, in strict compliance with statutory regulations and the company's articles of association.

### RULES GOVERNING THE APPOINTMENT AND DISMISSAL OF MEMBERS OF THE BOARD OF MANAGEMENT

Members of the Board of Management are appointed by the Supervisory Board in accordance with the provisions of Section 84 of the German Stock Corporation Act (AktG). The Supervisory Board also determines the number of members in the Board of Management which, according to the articles of association, must consist of at least two members. The Supervisory Board is entitled to select one member of the Board of Management to serve as its chairman. Members of the Board of Management serve for a term of office not exceeding five years.

This initial term of office may be prolonged, in the same or a different capacity, for an additional five years. Pursuant to Section 31 of the German Co-Determination Act (MitbestG), the appointment of a member of the Board of Management requires a two-thirds majority of the votes of the Supervisory Board. In default of a majority vote, the Supervisory Board's Mediation Committee is granted a one-month period within which it must submit an alternative proposal for the appointment. If no candidate is accepted as a result of this second vote, a third voting round is held, in which the chair of the Supervisory Board has two votes but the deputy chair is not entitled to a

The Supervisory Board has the right to refuse the appointment of a member or chair of the Board of Management on significant grounds - for instance gross breach of duty or incapacity to manage a business in an orderly manner.

### RULES GOVERNING AMENDMENTS TO THE ARTICLES OF ASSOCIATION

All amendments to the articles of association require a resolution on the part of the Annual General Meeting, pursuant to Section 179 of the German Stock Corporation Act (AktG). Under the terms of the articles of association, such resolutions must be carried by a simple majority of the votes or, in cases where a majority of the voting stock must be represented at the meeting, by the simple majority of the voting stock - unless otherwise stipulated by the law (Section 18(1) of the articles). The right to add amendments of a purely formal nature, for instance changes to the share capital as the result of utilization of the authorized capital, is

devolved to the Supervisory Board under the terms of Section 13 of the articles of association. Amendments to the articles of association become effective on the date at which they are entered in the commercial register (Section 181(3) of the German Stock Corporation Act, AktG).

AUTHORIZATIONS CONFERRED ON THE BOARD OF MANAGEMENT, ESPECIALLY CONCERNING THE ISSUE AND PURCHASE OF SHARES

#### AUTHORIZED CAPITAL

By resolution of the Annual General Meeting on April 22, 2010, the Board of Management is authorized until April 21, 2015 to increase the company's capital stock by up to € 5.2 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash contributions (Authorized capital I 2010).

By resolution of the Annual General Meeting on May 5, 2011, the Board of Management is further authorized until April 21, 2015 to increase the company's capital stock by up to € 15.6 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash contributions (Authorized capital II 2011).

In addition, by resolution of the same Annual General Meeting, the Board of Management is authorized until April 21, 2015 to increase the company's capital stock by up to € 5.2 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash and/or non-cash contributions (Authorized capital III 2011).

### CONDITIONAL CAPITAL

At the Annual General Meeting on April 22, 2010, the Board of Management was authorized until April 21, 2015 to issue conditional capital increases with the prior approval of the Supervisory Board:

- The company's capital stock may be conditionally increased by up to € 3.64 million through the issue of up to 3,640,000 new registered non-par-value shares. The purpose of this conditional capital increase is to issue shares to owners or creditors of convertible bonds and/or bonds with warrants in accordance with the authorization granted to the company's Board of Management under a resolution passed by the Annual General Meeting on May 30, 2005. Shares may be issued at a conversion price or warrant exercise price determined on the basis of the conditions laid down in the relevant authorization.
- The company's capital stock may be conditionally increased by up to € 22.36 million through the issue of up to 22,360,000 new registered non-par-value shares, each corresponding to a proportional amount (one euro) of the company's total capital stock (conditional capital). The purpose of this conditional capital increase is to issue shares to owners or creditors of convertible bonds and/or bonds with warrants in accordance with the authorization granted to the company's Board of Management under a resolution passed by the Annual General Meeting on April 22, 2010. Shares may be issued at a conversion price or warrant exercise price determined on the basis of the conditions laid down in the relevant authorization.

The Board of Management is authorized until April 21, 2015, to issue, with the prior approval of the Supervisory Board, bearer convertible bonds and/or bonds with warrants (collectively referred to as 'securities'), with or without maturity date, with a total nominal value of up to € 500 million, and to grant the owners of convertible bonds and/or bonds with warrants the right, obligation or option to convert them into registered non-par-value shares of the company representing a share in the capital stock of up to € 22.36 million under the conditions established for the issue of convertible bonds or bonds with warrants. The securities may be issued in return for cash contributions only. They may be issued in euros or - to an equivalent value - in any other legal currency, for instance that of an OECD country. They may also be issued by an affiliated company in which MTU holds a controlling interest (group company). In such cases, and subject to the prior approval of the Supervisory Board, the Board of Management is authorized to act as guarantor for the securities, and to grant the owners of the securities the right, obligation or option to convert them into new registered non-par-value shares in MTU.

### RESOLUTION CONCERNING THE AUTHORIZATION TO PURCHASE AND USE TREASURY SHARES PURSUANT TO SECTION 71(1) ITEM 8 OF THE GERMAN STOCK CORPORATION ACT (AKTG) AND CONCERNING THE EXCLUSION OF SUBSCRIPTION RIGHTS

At the Annual General Meeting on April 22, 2010, a resolution was passed by a majority of votes representing 98.03% of the stock capital with voting rights held by those present at the meeting to accept the proposal by the Supervisory Board and Board of Management concerning the authorization to purchase and use treasury shares pursuant to Section 71(1) item 8 of the German Stock Corporation Act (AktG) and concerning the exclusion of subscription rights. The resolution adopted by the Annual General Meeting conferred the following authorizations on the company:

- The company is authorized to purchase treasury shares accounting for a proportion of up to 10% of the company's issued capital stock, as applicable on the date of the resolution, during the period from April 23, 2010, through April 22, 2015, pursuant to Section 71(1) item 8 of the German Stock Corporation Act (AktG). At no point in time may the value of the acquired shares, together with other treasury shares in the company's possession or which are assigned to it pursuant to Section 71a et seq. of the German Stock Corporation Act (AktG), exceed 10% of the company's capital stock. At the discretion of the Board of Management, the shares may be purchased through the stock exchange or by means of a public offering addressed to all shareholders (or - if legally acceptable - through an open invitation to submit offers for sale). The shares must be sold in return for proceeds that do not lie more than 10% above or below the quoted share price, net of any supplementary transaction charges. The reference for the quoted share price as defined in the above ruling, in the case of a sale through the stock exchange, is the average value of share prices in the closing session of Xetra trading (or a comparable successor system) on the last three trading days prior to the publication of the offering or invitation. In the case of shares purchased by means of a public offering addressed to all shareholders (or an open invitation to submit offers for sale), the reference for the quoted share price is the average value of share prices in the closing session of Xetra trading (or a comparable successor system) on the last three trading days prior to the publication of the offering or invitation. In the event of substantial fluctuations in the share price, the Board of Management is authorized to publish a new public offering or invitation to submit offers for sale, based on a recalculated average value of share prices according to the previously mentioned formula. The volume of the offer can be limited in the case of shares purchased by means of a public offering addressed to all shareholders (or an open invitation to submit offers for sale). If the take-up of the offering (or the total number of offers) exceeds this volume, the purchase must be transacted in proportion to the number of shares offered. Preferential treatment may be given to small packages (up to 100 shares) offered for sale. Further conditions may be imposed in the offering or invitation to submit offers.
- The Board of Management is authorized to sell the purchased treasury shares in another manner than through the stock exchange or by means of a public offering addressed to all shareholders, on condition that the shares are sold in return for cash contributions at a price that does not lie significantly below the market price of similarly entitled MTU shares at the time of sale.
- The Board of Management is authorized, with the prior approval of the Supervisory Board, to sell the purchased treasury shares in another manner than through the stock exchange or by means of an offering addressed to all shareholders if the treasury shares are sold to program participants in conjunction with the company's stock option programs and those participants are, or were, employees or officers of the company or one of its associated companies. If shares are to be issued to active or former members of the MTU Board of Management under the terms of the company's stock option programs, the Supervisory Board is authorized to transact this issue.

- The Board of Management is furthermore authorized to use the purchased treasury shares as partial or complete payment in conjunction with business combinations or the acquisition, whether direct or indirect, of businesses, parts of businesses or equity investments.
- The Board of Management is also authorized, with the prior approval of the Supervisory Board, to use the purchased treasury shares to discharge obligations or exercise rights relating to convertible bonds, bonds with warrants, certificates of beneficial interest or income bonds (or combinations of such instruments) issued by the company or by a dependent group company.
- The Board of Management is moreover authorized, with the prior approval of the Supervisory Board and without any requirement for a further resolution to be passed by the Annual General Meeting, to retire purchased treasury shares in whole or in part. Their retirement may be effected by employing a simplified procedure without any capital reduction, by adapting the actuarial value of the outstanding portion of shares to that of the company's stock capital. The retirement may be limited to a defined fraction of the purchased shares. The authorization to retire shares may be utilized on one or more occasions. If the simplified procedure is employed, the Board of Management is authorized to amend the number of outstanding shares stated in the articles of association.
- The above-stated authorizations may be exercised on one or more occasions, in whole or in part, singly or in combination. They may be exercised also by group companies as defined in Section 17 of the German Stock Corporation Act (AktG).
- The subscription rights of existing shareholders in respect of these treasury shares are excluded insofar as the shares are utilized in the manner described in the above-stated authorizations.
- The authorization to purchase treasury shares granted to the company on May 26, 2009 is revoked as of the effective date of this new authorization. The authorization to use the treasury shares purchased under the terms of the above-mentioned earlier resolution dated May 26, 2009 remains in force.

### SIGNIFICANT AGREEMENTS RELATING TO CHANGE OF CONTROL SUBSEQUENT TO A TAKEOVER BID

If a change of control occurs, every bondholder is entitled to declare due part or all of his/her bond units for the nominal amount plus any accrued interest unless the issuer has called in the bonds before the exercise notice described below has been given.

A change-of-control event occurs if the rating is lowered in the course of the change of control. A lowering of the rating occurs if, (1) during the change-of-control period, a rating previously granted by a rating agency to MTU or to one of its outstanding non-current liabilities is withdrawn or is changed from an investment grade rating (equivalent to or higher than Baa3 (Moody's) BBB (Fitch) or BBB (S&P)), or if, (2) at the time of the change of control, no investment grade rating has been awarded by a rating agency to the bonds or to MTU and no rating agency awards an investment grade rating to the bond within the change-of-control period.

#### PROMISSORY NOTES

The promissory notes raised by MTU Aero Engines Holding AG, Munich, in 2009 gave rise to the following agreements relating to change of control subsequent to a takeover bid:

- Notwithstanding existing statutory cancellation rights, the lenders are entitled to declare due an amount that corresponds to their share in the loan and demand the immediate repayment of this amount of principal plus accumulated interest up to the date of repayment in the event that an individual or several individuals acting collectively, or one or several third parties acting on the instructions of said individual(s), at any time directly or indirectly (depending on whether the Board of Management or Supervisory Board has granted its approval to the borrower) hold(s) more than 50% of the outstanding subscribed capital or hold(s) or acquire(s) a number of the borrower's shares corresponding to 50% or more of the voting rights.
- Requests for repayment must be submitted in writing, citing the reason for the cancellation of the loan and the underlying circumstances, and sent by registered mail to the borrower and the paying agency.

### REVOLVING CREDIT FACILITY

The terms of the revolving credit facility entitle the lender to cancel the agreement in the event that an individual or group of individuals should acquire a controlling interest in MTU Aero Engines GmbH, Munich, or any other group company benefiting from the credit agreement, or in the event that an individual or group of individuals should hold more than 50% of the share capital or corporate capital.

#### OTHER AGREEMENTS

The group holding company, MTU Aero Engines Holding AG, Munich, has not entered into any other significant agreements with third parties or affiliated companies relating to change of control subsequent to a takeover bid.

It is possible that the group holding company might nevertheless be indirectly affected by a change of control though risk- and revenue-sharing agreements entered into by its group subsidiary, MTU Aero Engines GmbH, Munich. Under such agreements, a company acquires a stake in an engine program by investing its own resources - workforce capacity and financial resources (risk) - and in turn receives a proportion of the revenues corresponding to its percentage share in the program.

Such agreements, like certain other agreements concluded by other group subsidiaries operating in the MRO segment, often contain change-of-control clauses that entitle the other party to terminate the agreement in the event that one of that party's competitors should acquire a given percentage of the company's voting rights (generally 25-30%, occasionally rising to 50% of the equity capital).

### CLAIMS FOR COMPENSATION IN THE EVENT OF A TAKEOVER BID

The company has not entered into any agreements entitling members of the Board of Management or other employees to claim compensation in the event of a takeover bid.



SEPTEMBER 11, 2012

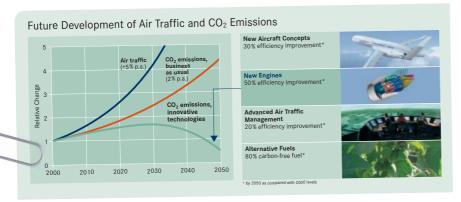
# ILA 2012: MTU PRESENTS NEXT-GENERATION ENGINES

toeWAED-LOOKING ENGINE POETFOLIO

FOCUS ON ECO-EFFICIENT FLIGHT

Buegeoning Geowth in Commercial Business;
MILITARY BUSINESS STABLE

Technology + Science



The six-month test of biofuel on regular domestic flights was conducted under Germany's aviation research program. For the tests, the German government provided funds to the tune

are electric engines. The use of biosynthetic fuel promises to make a substantial contribution towards achieving the ambitious target set by the International Air Transport Association

havior o problen our mo tant, Inr this: We engine using th we quic Delta G the trials behavio Biofuel percent Getting tests-" world," refinery

(HVO) r

percent

tainably

"Innovation has always been the driving force behind our company, and that is not going to change. We aim to further strengthen our position as a technology leader in the years ahead and acquire new program stakes."

Egon Behle, Chief Executive Officer



# 5 GF38

MTU develops and manufactures the power turbine for the GE38 engine. The company also holds a licensing agreement for the maintenance, final assembly and testing of the GE38 models to be deployed in the European tuture Transport Helicopter (FTH).



### PEFMIFEF

In addition to its production workshare in the GE38 program, MTU for the first time acts as a development participant in a U.S. military engine program. Certification tests for the engine are also being carried out at MTU's Munich plant.

### GF38

	APPLICATION	MTU'S SHARE
9E38	Sikorsky CH-53K	18%



# GEARED TURBOFAN

In the geared turbofan project, MTO is responsible for the high-speed low-pressure turbine and is manufacturing components for the high-pressure compressor; the company is also supplying brush seals.

### A NEW TYPE OF ENGINE: THE GEARED TURBOFAN

- > sets standards for eco-friendly technologies
- tuel consumption 15% lower than that of conventional engines
- Noise emissions around 20 db lower
  - => that equates to a halving of perceived noise levels!!

### GEARED TURBOFAN ENGINES:

ENGINE TYPE	APPLICATION	MTU'S SHARE
PW11009	Airbus A320neo	18 %
PW12009	Mitsubishi Regional Jet	15%
PW1400G	Irkut MS-21	18 %
PW1500G	Bombardier (Series	17 %

MTU is already working on optimizing the geared turbofan.

Goal: to achieve further reductions in fuel consumption and noise emissions

by 2035: 30% lower kerosene consumption and Co emissions

108 To our shareholders

Corporate Governance

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Additional information

# Consolidated Financial Statement

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# Consolidated Income Statement

in € million	Note	2012	2011
Revenues	(6.)	3,378.6	2,932.1
Cost of sales	(7.)	-2,823.3	-2,384.2
Gross profit		555.3	547.9
Research and development expenses	(8.)	-113.0	-131.6
Selling expenses	(9.)	-88.5	-80.3
General administrative expenses	(10.)	-72.5	-57.0
Other operating income and expenses	(11.)	5.7	5.6
Profit/loss of companies accounted for using the equity method	(12.)	1.0	
Profit/loss of companies accounted for at cost	(12.)	12.1	2.6
Earnings before interest and tax (EBIT)		300.1	287.2
Interest income		2.6	3.7
Interest expenses		-6.4	-16.4
Interest result	(13.)	-3.8	-12.
Financial result on other items	(14.)	-24.5	-42.
Financial result		-28.3	-54.
Earnings before tax		271.8	232.
Income taxes	(15.)	-97.9	-73.
Earnings after tax		173.9	159.
Earnings per share in €			
Undiluted (EPS)	(16.)	3.43	3.20
Diluted (DEPS)	(16.)	3.43	3.17

# Consolidated Statement of Comprehensive Income

in € million	Note	2012	2011
Earnings after tax		173.9	159.2
Change, net of deferred taxes, resulting from:			
Translation differences arising from the financial statements of international subsidiaries		12.9	1.2
Hedging instruments designated as cash flow hedges		48.4	-12.9
Actuarial gains and losses on plan assets and pension obligations		-46.1	-3.6
Available-for-sale financial assets		0.1	
Other comprehensive income	(29.7.)	15.3	-15.3
Total comprehensive income		189.2	143.9

# **Consolidated Balance Sheet**

in € million	Note	Dec. 31, 2012	Dec. 31, 2011	Jan. 1, 2011
Non-current assets				
Intangible assets	(19.)	1,774.4	1,266.3	1,225.4
Property, plant and equipment	(20.)	599.9	584.6	559.5
Financial assets	(21.)	40.2	16.2	25.8
Financial assets accounted for using the equity method	(21.)	20.9		
Other assets	(25.)	0.1	0.8	2.5
Deferred tax assets	(38.)	15.6	16.3	18.
Total non-current assets		2,451.1	1,884.2	1,831.3
Current assets				
Inventories	(22.)	808.8	823.8	701.0
Trade receivables	(23.)	568.5	605.1	531.9
Construction contract receivables	(24.)	183.0	136.8	138.2
Income tax claims	(27.)	13.8	5.8	
Financial assets	(21.)	37.2	44.1	77.9
Other assets	(25.)	33.1	34.2	25.8
Cash and cash equivalents	(26.)	161.2	198.8	111.9
Prepayments	(28.)	5.2	4.1	6.0
Total current assets		1,810.8	1,852.7	1,592.
Total assets		4,261.9	3,736.9	3,424.0

# Consolidated Balance Sheet

n € million	Note	Dec. 31, 2012	Dec. 31, 2011	Jan. 1, 2011
Equity	(29.)			
Subscribed capital		52.0	52.0	52.0
Capital reserves		383.2	340.9	348.2
Revenue reserves		740.5	627.4	521.8
Treasury shares		-37.9	-100.0	-101.2
Other comprehensive income		-48.5	-63.8	-48.5
Total equity		1,089.3	856.5	772.3
Non-current liabilities				
Pension provisions	(30.)	585.3	513.2	487.0
Other provisions	(32.)	72.5	119.9	137.6
Financial liabilities	(33.)	539.0	53.4	204.7
Other liabilities	(36.)	130.4	127.6	107.4
Deferred tax liabilities	(38.)	207.4	209.3	210.7
otal non-current liabilities		1,534.6	1,023.4	1,147.4
Current liabilities				
Pension provisions	(30.)	31.4	17.8	18.
Income tax liabilities	(31.)	19.8	10.0	71.2
Other provisions	(32.)	182.9	199.8	200.1
Financial liabilities	(33.)	79.9	208.2	57.2
Trade payables	(34.)	583.2	592.7	424.5
Construction contract payables	(35.)	604.0	715.0	666.3
Other liabilities	(36.)	136.8	113.5	66.9
Total current liabilities		1,638.0	1,857.0	1,504.3
Fotal equity and liabilities		4,261.9	3,736.9	3,424.0

# Consolidated Statement of Changes in Equity

	Sub-	Capital	Revenue	Treasury	Ot	her compreh	nensive incor	me	Grou
	scribed capital	reserves	reserves	shares	Translation differences	Financial assets	Actuarial gains and	Hedging instruments	equit
in € million						(AfS)	losses <sup>1)</sup>		
Carrying amount at Jan. 1, 2011	52.0	348.2	517.6	-101.2	4.0	-0.1		-1.2	819.
Adjustments <sup>2)</sup>			4.2				-51.2		-47
Adjusted carrying amount at Jan. 1, 2011	52.0	348.2	521.8	-101.2	4.0	-0.1	-51.2	-1.2	772.
Earnings after tax			159.2						159.
Other comprehensive income					1.2		-3.6	-12.9	-15
Total comprehensive income			159.2		1.2		-3.6	-12.9	143.
Total dividend payment			-53.6						-53
MAP employee stock option program		1.0		6.5					7.
Matching Stock Program		-8.7		4.1					-4
Share Matching Plan		0.4							0
Purchase of treasury shares				-9.4					-9
Carrying amount at Dec. 31, 2011	52.0	340.9	627.4	-100.0	5.2	-0.1	-54.8	-14.1	856
Earnings after tax			173.9						173
Other comprehensive income					12.9	0.1	-46.1	48.4	15
Total comprehensive income			173.9		12.9	0.1	-46.1	48.4	189
Total dividend payment			-60.8						-60
Conversion of convertible bond		38.0		59.5					97
MAP employee stock option program		3.3		2.6					5
Share Matching Plan		1.0							1
Carrying amount at Dec. 31,	52.0	383.2	740.5	-37.9	18.1	0.0	-100.9	34.3	1,089

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Relates to plan assets and pension obligations.

<sup>2)</sup> IAS 19 revised (2011)

# Consolidated Cash Flow Statement

in € million	Note	2012	201
Earnings after tax (EAT)		173.9	159.
+ Depreciation/amortization and impairment of non-current assets		203.8	135.
- Profit/loss of companies accounted for at cost		-12.1	-2.
- Profit/loss of companies accounted for using the equity method		-1.0	
+/- Gains/losses on the disposal of assets		0.1	-0
+ Increase in pension provisions	(30.)	17.5	21
- Decrease in other provisions	(32.)	-64.3	-18
+ Other non-cash items		16.9	10
Change in working capital			
+/- Inventories	(22.)	15.0	-122
+/- Trade receivables	(23.)	36.6 -157.2	-73 50
-/+ Construction contract receivables and payables +/- Other assets	(24.)/(35.) (25.)	0.7	-4
-/+ Trade payables	(34.)	-34.0	167
+ Other liabilities	(36.)	19.9	20
+ Interest result	(12.)	3.8	12
- Interest paid		-6.0	-12
+ Interest received		2.7	4
+ Dividends received		2.6	2
+ Income taxes	(15.)	97.9	7:
- Income taxes paid		-87.0	-13
Cash flow from operating activities		229.8	287
nvesting activities			
Capital expenditure on:			
- Intangible assets	(19.)	-265.7 -99.1	-4 <i>c</i> -113
- Property, plant and equipment - Financial assets	(20.) (21.)	-99.1 -46.7	-133
Proceeds from disposal of:		_	
+ Intangible assets / property, plant and equipment	(19.)/ (20.)	0.5	
+ Financial assets	(21.)	51.0	16
Cash flow from investing activities		-360.0	-120
Financing activities			
+ Corporate bond issue, net of transaction costs and discount	(33.)	248.5	
- Repayment of promissory notes	(33.)	-13.5	
+ Increase in current financial liabilities		0.5	
- Repayment of current financial liabilities		-0.4	-20
- Repayment of non-current financial liabilities			-4
- Repayment of convertible bond	(33.)	-62.6	
- Total dividend payment		-60.8	-5
- Purchase of treasury shares	(29.6.)		-9
+ Sale of shares under the MAP employee stock option program	(36.)	5.9	
- Financing agreements for A320neo / IAE stake increase		-24.6	
Cash flow from financing activities		93.0	-76
Net change in cash and cash equivalents during the year		-37.2	84
-/+ Effect of translation differences on cash and cash equivalents		-0.4	2
+ Cash and cash equivalents at beginning of financial year (January 1)		198.8	111
Cash and cash equivalents at end of financial year (December 31)		161.2	198

# Reporting by operating segment

Corporate Governance

	Commercial a engine busine		Commercial main business (M	
in € million	2012	2011	2012	2011
External revenues	2,077.3	1,819.0	1,301.3	1,113.1
Intersegment revenues	29.1	27.6	4.4	3.5
Total revenues	2,106.4	1,846.6	1,305.7	1,116.6
Gross profit	368.6	389.4	176.1	153.7
Amortization	54.4	44.4	8.8	8.3
Depreciation	63.7	61.0	23.2	21.7
Impairment loss	53.7			
Total depreciation/amortization	171.8	105.4	32.0	30.0
Earnings before interest and tax (EBIT)	194.1	200.2	108.5	90.0
Depreciation/amortization effects of purchase price allocation/V2500 stake increase	45.4	38.7	3.6	3.7
IAE stake increase	-9.5			
Impairment loss	34.7			
Adjusted earnings before interest and tax (adjusted EBIT)	264.7	238.9	112.1	93.7
Assets	3,648.3	3,258.4	1,017.1	966.2
Liabilities	2,723.1	2,418.8	589.7	548.6
Significant non-cash items	57.1	70.4		12.7
Capital expenditure on:				
Intangible assets	592.8	84.4	8.2	7.0
Property, plant and equipment	67.4	83.7	32.0	30.0
Total capital expenditure on intangible assets and property, plant and equipment	660.2	168.1	40.2	37.0
Key segment data				
EBIT in % of revenues	9.2	10.8	8.3	8.
Adjusted EBIT in % of revenues	12.6	12.9	8.6	8.4

Detailed explanatory comments on the information disclosed for the operating segments is provided in the following tables and in Part V. of these Notes (Segment Information), together with information on major customers, and an analysis by geographical area. The contribution to EBIT (earnings before interest and tax) by associates and joint ventures in the MRO segment accounted for using the equity method amounted to € 1.0 million in the financial year 2012 (2011: € 0.0 million).

Other entities/h	olding company	Consolidation,	/reconciliation	MTU grou	р
2012	2011	2012	2011	2012	2011
				3,378.6	2,932.1
 24.2	7.4	-57.7	-38.5	0.0	0.0
24.2	7.4	-57.7	-38.5	3,378.6	2,932.1
24.2	7.4	-13.6	-2.6	555.3	547.9
				63.2	52.7
				86.9	82.7
				53.7	0.0
				203.8	135.4
-2.7	-2.0	0.2	-1.0	300.1	287.2
				49.0	42.4
				-9.5	0.0
				34.7	0.0
-2.7	-2.0	0.2	-1.0	374.3	329.6
1,121.6	873.1	-1,525.1	-1,360.8	4,261.9	3,736.9
323.0	211.5	-463.2	-298.5	3,172.6	2,880.4
	0.5				
				601.0	92.0
				99.4	113.7
				700.4	205.7
				700.4	200.7
-11.2	-27.0			8.9	9.8
-11.2	-27.0			11.1	11.2

Intersegment sales are transacted on an arm's-length basis at normal market transfer prices – no different from those employed in transactions with external third parties.

in € million	2012	2011
Commercial engine business		
Manufacturing	1,532.1	1,332.1
Other products	71.0	69.0
Total commercial engine business	1,603.1	1,401.1
Military engine business		
Manufacturing	302.1	239.4
Other products	201.2	206.
Total military engine business	503.3	445.5
Total commercial and military engine business (OEM)	2,106.4	1,846.6
Commercial maintenance business (MRO)		
Engine maintenance, repair and overhaul	1,155.0	1,004.6
Other products	150.7	112.0
Total commercial maintenance business (MRO)	1,305.7	1,116.6
Total other products of other entities	24.2	7.4
Consolidation	-57.7	-38.5
Group revenues	3,378.6	2,932.1

in € million	2012	2011
Revenues from major customers	2,111.3	1,803.8
of which attributable to:		
Commercial engine business (OEM)	1,554.1	1,302.2
Military engine business (OEM)	426.8	379.3
Commercial maintenance business (MRO)	130.4	122.3

Approximately 62% of MTU's revenues (2011: approximately 62%) are attributable to nine major customers (2011: nine major customers). Three of these customers each separately accounted for more than 10% of total group revenues.

### ANALYSIS BY GEOGRAPHICAL AREA

n € million	2012	2011
Germany	484.3	429.5
Europe	252.5	281.
North America	2,232.5	1,907.
Asia	273.3	210.
Other regions	136.0	102.7
otal	3,378.6	2,932.

Approximately 66% of MTU's revenues were generated from business with customers in North America (2011: 65%).

n € million	2012	2011
Germany	143.0	191.6
Europe	548.6	6.5
North America	5.1	6.0
Asia	3.7	1.0
Other regions		
otal	700.4	205.7

Approximately 78% (2011: approximately 3%) of the capital expenditure on intangible assets and on property, plant and equipment relates to expenditure by group companies in Europe (excluding Germany).

n € million	Dec. 31, 2012	Dec. 31, 201
Germany	1,770.6	1,764.
Europe	608.5	51.
North America	28.9	26.
Asia	43.1	42.
Other regions		
otal	2,451.1	1,884.2

The non-current assets comprise intangible assets, property, plant and equipment, financial assets, other non-current assets, and deferred tax assets.

### **IMPAIRMENT LOSSES**

Owing to the cost/earnings situation, the economic outlook for MTU's interest in GE's F414 military engine program for the F/A-18 (Super Hornet) deteriorated substantially, leading to a write-down of  $\in$  19.0 million in the value of the program asset and a negative impact on adjusted EBIT.

High kerosene prices are making operation of older aircraft models such as the MD-80 less and less economical. In the opinion of the Board of Management, extended deployment of the corresponding engine, the JT8D-200, is unlikely. As a result, the value assigned to the program asset in connection with the purchase price allocation at January 1, 2004 requires adjustment. The write-down of € 34.7 million in the value of the program asset has no impact on adjusted EBIT as it forms part of the PPA valuation allowance.

n € million	2012	2011
Total revenues		
Revenues of the reportable segments	3,436.3	2,970.6
Consolidation	-57.7	-38.5
Group revenues	3,378.6	2,932.1

n € million	2012	2011
Adjusted earnings before interest and tax (adjusted EBIT)		
Adjusted EBIT of the reportable segments	374.1	330.6
Depreciation/amortization effects of purchase price allocation/V2500 stake		
increase	-49.0	-42.4
IAE stake increase	9.5	
Impairment losses	-34.7	
Consolidation	0.2	-1.0
Earnings before interest and tax (EBIT)	300.1	287.2
Interest income	2.6	3.7
Interest expenses	-6.4	-16.4
Financial result on other items	-24.5	-42.2
Earnings before tax	271.8	232.3

n € million	Dec. 31, 2012	Dec. 31, 201
Assets		
Assets of the reportable segments	5,787.0	5,097.7
Consolidation	-1,525.1	-1,360.8
Group assets	4,261.9	3,736.
Liabilities		
Liabilities of the reportable segments	3,635.8	3,178.9
Consolidation	-463.2	-298.
Group liabilities	3,172.6	2,880.4

### I. Accounting Policies and Principles

### 1. GENERAL INFORMATION

MTU Aero Engines Holding AG, Munich, together with its consolidated group of companies (hereinafter also referred to as MTU or the MTU group), is among the world's leading manufacturers of engine modules and components, and is the world's largest independent provider of MRO services for commercial aero engines.

The business activities of the MTU group range through the entire lifecycle of an engine program, i.e. from development, construction, testing and production of new commercial and military engines and spare parts, through to maintenance, repair and overhaul of commercial and military engines. MTU divides its activities into two operating segments: the OEM segment (commercial and military engine business) and the MRO segment (commercial maintenance business).

MTU's commercial and military engine business covers the development and production of modules, components and spare parts for engine programs, including final assembly. MTU's military engine business additionally includes maintenance services for these engines. The commercial maintenance business covers activities in the areas of maintenance and logistical support for commercial engines.

MTU Aero Engines Holding AG (parent company), registered office Dachauer Str. 665, 80995 Munich, Germany, is registered under HRB 157 206 in the commercial registry at the district court of Munich.

The consolidated financial statements were approved for publication by the Board of Management of MTU Aero Engines Holding AG, Munich, on February 7, 2013.

### 1.1. ACCOUNTING PRINCIPLES

MTU's consolidated financial statements have been drawn up in accordance with International Financial Reporting Standards (IFRSs), such as they apply in the European Union (EU), and the supplementary requirements of Section 315a (1) of the German Commercial Code (HGB). All IFRSs issued by the International Accounting Standards Board (IASB) that were effective at the time these consolidated financial statements were drawn up and that were applied by MTU have been endorsed by the European Commission for use in the EU. MTU's consolidated financial statements thus also comply with the IFRSs issued by the IASB. The terms IAS and IFRS used in this document refer to both sets of standards.

The consolidated financial statements and group management report as at December 31, 2012 have been compiled in accordance with Section 315a (1) of the German Commercial Code (HGB) and published in the electronic version of the Federal Gazette (Bundesanzeiger).

The financial year is identical with the calendar year. Comparative data for the previous year are disclosed in the consolidated financial statements.

In the presentation of the balance sheet, a distinction is made between non-current and current assets and liabilities. A more detailed presentation of certain of these items in terms of their timing is provided in the notes to the consolidated financial statements. The income statement is laid out according to the cost-of-sales accounting format, in which revenues are balanced against the expenses incurred in order to generate these revenues, and the expenses are recorded in the appropriate line items by function: manufacturing, development, selling and general administration. The consolidated financial statements have been compiled in euros. All amounts are stated in millions of euros (€ million), unless otherwise specified.

The financial statements prepared by MTU Aero Engines Holding AG, Munich, and its subsidiaries are included in the consolidated financial statements. Uniform methods of recognition and measurement are applied throughout the group.

### ACCOUNTING STANDARDS AND INTERPRETATIONS, AND REVISED/AMENDED ACCOUNTING STANDARDS AND INTERPRETATIONS, APPLIED FOR THE FIRST TIME IN THE FINANCIAL YEAR 2012

The following revised or amended standards and interpretations were endorsed by the EU and applied by MTU for the first time in the financial year 2012:

### New and revised standards and interpretations

Standard	Title	Applicable to
IFRS 7	Financial Instruments: Disclosures (enhancing disclosures about the transfer of financial assets)	Annual periods beginning on or after July 1, 2011.
IAS 19 (2011)	Employee Benefits	Annual periods beginning on or after January 1, 2013 <sup>1)</sup> .

<sup>&</sup>lt;sup>1)</sup> Voluntary early adoption as from the financial year 2012.

Application of the amended IFRS 7 had no material effect on the methods of reporting used by MTU.

The effect of the amendments to IAS 19 (2011) is as follows:

MTU applied the amended IAS 19 (2011) "Employee Benefits" in 2012 in advance of its effective date. The amendments to IAS 19 concern the accounting treatment of defined benefit plans and termination benefits. Major consequences arise from discontinuation of the corridor method applied to actuarial gains and losses. The latter must now be recognized immediately in other comprehensive income. In addition, interest cost from the defined benefit obligation (DBO) and expected return on plan assets are combined in a net interest component. The net interest income/expense is the product of the net benefit obligation at the start of the period and the discount rate on which measurement of the DBO is based. The net benefit obligation is calculated as follows: the defined benefit obligation (DBO) less the fair value of the plan assets. The amended standard also means more extensive disclosures in the notes to the financial statements.

The present consolidated financial statements are the first in which MTU has applied the amended IAS 19 (2011). The amended standard was applied retroactively in the financial statements, and consequently the presentation includes comparative figures as at January 1, 2011. The adjustments made to the corresponding items in the consolidated balance sheet and in the consolidated statement of comprehensive income for 2011 as of January 1, 2011 and December 31, 2011 respectively are presented below:

in € million	Adjusted amount 2011	Adjustment	Stated amount 2011
Cost of sales	-2,384.2	1.6	-2,385.8
Gross profit	547.9	1.6	546.3
Earnings before interest and tax (EBIT)	287.2	1.6	285.6
Financial result on other items	-42.2	-0.1	-42.1
Financial result	-54.9	-0.1	-54.8
Earnings before tax	232.3	1.5	230.8
Income taxes	-73.1	-0.5	-72.6
Earnings after tax	159.2	1.0	158.2
Earnings per share in €			
Undiluted (EPS)	3.26	0.02	3.24
Diluted (DEPS)	3.17	0.02	3.15

in € million	Adjusted amount 2011	Adjustment	Stated amount 2011
Earnings after tax	159.2	1.0	158.2
Adjustment to actuarial gains and losses			
on plan assets and pension obligations	-3.6	-3.6	
Other comprehensive income	-15.3	-3.6	-11.7
Total comprehensive income	143.9	-2.6	146.5

in € million	Adjusted amount Jan. 1, 2011	Adjustment	Stated amount Jan. 1, 2011
Other assets	2.5	-3.5	6.0
Deferred tax assets	18.1	1.4	16.7
Non-current assets	20.6	-2.1	22.7
Total assets	3,424.0	-2.1	3,426.1
Revenue reserves	521.8	4.2	517.6
Other comprehensive income	-48.5	-51.2	2.7
Total equity	473.3	-47.0	520.3
Pension provisions	487.0	78.0	409.0
Other provisions	137.6	-2.4	140.0
Other liabilities	107.4	-4.0	111.4
Deferred tax liabilities	210.7	-20.8	231.5
Non-current liabilities	942.7	50.8	891.9
Pension provisions	18.1	-6.1	24.2
Other liabilities	66.9	0.2	66.7
Current liabilities	85.0	-5.9	90.9
Total equity and liabilities	3,424.0	-2.1	3,426.1

in € million	Adjusted amount Dec. 31, 2011	Adjustment	Stated amount Dec. 31, 2011
Other assets	0.8	-4.3	5.1
Deferred tax assets	16.3	2.6	13.7
Non-current assets	17.1	-1.7	18.8
Total assets	3,736.9	-1.7	3,738.6
Revenue reserves	627.4	5.2	622.2
Other comprehensive income	-63.8	-54.8	-9.0
Total equity	563.6	-49.6	613.2
Pension provisions	513.2	84.7	428.5
Other liabilities	127.6	-5.4	133.0
Deferred tax liabilities	209.3	-20.3	229.6
Non-current liabilities	850.1	59.0	791.1
Pension provisions	17.8	-10.7	28.5
Other provisions	199.8	-0.1	199.9
Other liabilities	113.5	-0.3	113.8
Current liabilities	331.1	-11.1	342.2
Total equity and liabilities	3,736.9	-1.7	3,738.6

### ACCOUNTING STANDARDS AND INTERPRETATIONS, AND AMENDED ACCOUNTING STANDARDS AND INTERPRETATIONS, ISSUED BUT NOT YET APPLIED

The following new or amended standards and interpretations have been issued, endorsed by the EU, and are applicable for the first time in the financial year 2013:

### New and revised standards and interpretations

Standard	Title	Applicable to
IAS 1	Amendment: Presenting Comprehensive Income	Annual periods beginning on or after July 1, 2012.
IAS 12	Amendment: Deferred Tax - Recovery of Underlying Assets	Annual periods beginning on or after January 1, 2013.
IFRS 1	Amendment: Severe Hyperinflation and Removal of Fixed Dates for First-time Adopters	Annual periods beginning on or after January 1, 2013.
IFRS 7	Amendment: Disclosures - Offsetting Financial Assets and Financial Liabilities	Annual periods beginning on or after January 1, 2013.
IFRS 13	Fair Value Measurement	Annual periods beginning on or after January 1, 2013.
IFRIC 20	Stripping Costs in the Production Phase of a Surface Mine	Annual periods beginning on or after January 1, 2013.

The following new or amended standards and interpretations have been issued and are applicable as from the financial year 2013. However, their application remains subject to endorsement by the EU:

### New and revised standards and interpretations

Standard	Title	Applicable to
IFRS 7	Amendment: Government Loans	Annual periods beginning on or after January 1, 2013.
IFRS 10 - 12	Consolidated Financial Statements, Joint Arrangements and Disclosure of Interest in Other Entities: Transition Guidance	Annual periods beginning on or after January 1, 2013.
Annual revisions to IFRS 2009 - 2011	IFRS 1 - First-time Adoption of IFRSs IAS 1 - Presentation of Financial Statements IAS 16 - Property, Plant and Equipment IAS 32 - Financial Instruments: Presentation IAS 34 - Interim Financial Reporting	Annual periods beginning on or after January 1, 2013.

The following new or amended standards and interpretations have been issued, endorsed by the EU, and are applicable for the first time from the financial year 2014 onward:

#### New and revised standards and interpretations

Group management report

Standard	Title	Applicable to
IFRS 10	Consolidated Financial Statements	Annual periods beginning on or after January 1, 2014.
IFRS 11	Joint Arrangements	Annual periods beginning on or after January 1, 2014.
IFRS 12	Disclosure of Interests in Other Entities	Annual periods beginning on or after January 1, 2014.
IAS 27 (2011)	Separate Financial Statements	Annual periods beginning on or after January 1, 2014.
IAS 28 (2011)	Investments in Associates and Joint Ventures	Annual periods beginning on or after January 1, 2014.
IAS 32	Amendment: Offsetting Financial Assets and Financial Liabilities	Annual periods beginning on or after January 1, 2014.

The following new or amended interpretations have been issued and are applicable from the financial year 2014 onward. However, they have not yet been endorsed by the EU:

#### New and revised standards and interpretations

Standard	Title	Applicable to
IFRS 10, 12, IAS 27 (2011)	Amendment: Investment Entities	Annual periods beginning on or after January 1, 2014.
IFRS 9 (2010)	Financial Instruments	Annual periods beginning on or after January 1, 2015.

MTU does not intend to apply any of these standards and interpretations, or any amendments made to them, in advance of their effective date.

In the interests of efficient reporting practice, the following descriptions of standards and interpretations are limited to those that, in view of MTU's business model and on the basis of the currently available knowledge of business transactions within the MTU group, will very probably have an impact on the methods of reporting used in future reporting periods.

### AMENDMENTS TO IAS 1, PRESENTATION OF FINANCIAL STATEMENTS

This amendment concerns the presentation of other comprehensive income. The key requirement for companies is to present items that will be reclassified to profit or loss at a future point in time separately from items that will never be reclassified. These amendments do not concern the content of other comprehensive income.

Adoption of the amendments will necessitate adjustments to the presentation of OCI items in future reporting periods.

### IFRS 13, FAIR VALUE MEASUREMENT

The objective of IFRS 13 is to improve continuity in measurement and to reduce complexity. It describes how the fair value is to be defined, how it is measured and what disclosures are to be made. The requirements, which bring about a harmonization of IFRS with US-GAAP, do not extend the scope of application of fair value measurement. Rather, they explain how fair value is to be applied in those cases in which the standards already require or permit its application. MTU assumes that the first-time adoption of IFRS 13 will necessitate more extensive disclosures in the notes to the consolidated financial statements.

### IFRS 9, FINANCIAL INSTRUMENTS

This standard deals with the classification, recognition and measurement of financial assets and financial liabilities. IFRS 9 was issued in November 2009 and October 2010, and replaced those sections of IAS 39 'Financial Instruments: Recognition and Measurement' dealing with the classification and measurement of financial instruments.

In accordance with IFRS 9, financial assets are assigned to one of two measurement categories: those assets measured at fair value and those that are measured at amortized cost. This assignment is carried out at initial recognition and depends both on how MTU has managed its financial instruments and what contractual cash flows they generate.

Most of the requirements contained in IAS 39 were retained for financial liabilities. The main change is that, in cases where the company opts for fair value measurement, the amount of change in the fair value of a liability that is attributable to changes in credit risk must be presented in other comprehensive income instead of in profit or loss, unless said presentation in OCI would create or enlarge an accounting mismatch in profit or loss.

Given the complexity of the subject matter, it is not yet possible to make any reliable detailed statements regarding the potential impact of these amendments to IFRS 9 on the methods of reporting used by MTU.

NEW AND AMENDED STANDARDS ON CONSOLIDATION, JOINT ARRANGEMENTS AND DISCLOSURE OF INVESTMENTS IN ASSOCIATES AND JOINT VENTURES - IFRS 10, 11 AND 12, IAS 27 (2011) AND IAS 28 (2011)

In May 2011, the IASB published a package of five standards dealing with consolidated financial statements (IFRS 10), joint arrangements (IFRS 11), the disclosure of interests in other entities (IFRS 12), consolidated and separate financial statements (IAS 27 (2011)), and investments in associates and joint ventures (IAS 28 (2011)).

The main requirements of these new standards are as follows:

IFRS 10 supersedes the previous requirements concerning consolidated financial statements in IAS 27 and on special-purpose entities in SIC 12. In IFRS 10, the IASB makes a uniform principle of the concept of control. IFRS 10 states that a company has controlling interest in another entity when all of the following three conditions are met:

- the investor has power over the investee,
- the investor is exposed to, or has rights to, variable returns from its involvement with the investee, and
- the investor has the ability to use its power to affect the amount of those returns.

The standard also provides comprehensive application guidance.

IFRS 11, which replaces the previous requirements in IAS 31 and SIC 13, deals with the classification of joint arrangements. A joint arrangement is defined as a contractual arrangement via which two or more parties exercise joint control over the arrangement. A joint arrangement is either a joint operation or a joint venture. In contrast with IAS 31, the recognition of assets under joint control is no longer addressed separately in IFRS 11 - instead, the rules for joint business activities apply. Whether a joint arrangement is classified as a joint operation or as a joint venture depends on the rights and obligations accruing to the parties under the agreement.

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In addition, IFRS 11 stipulates that joint ventures must be accounted for using the equity method, whereas IAS 31 states that either the equity method or the proportionate consolidation method is permissible for the accounting of jointly controlled entities.

The IFRS 12 standard concerns disclosures in the notes to financial statements. It is to be applied by companies that hold interests in subsidiaries, joint arrangements (joint operations or joint ventures), associates and/or unconsolidated structured entities. As a general rule, the disclosures required under IFRS 12 are much more extensive than those of the standards currently in force.

The new standards IFRS 10-12 entail fundamental amendments to IAS 27 (2011) and IAS 28 (2011).

For MTU, application of these five new standards will result in the obligation to provide additional disclosures in the notes to the consolidated financial statements. What is more, the first-time adoption of IFRS 11 will entail changes in reporting of the joint venture MTU Maintenance Zhuhai, which was previously accounted for using the proportionate consolidation method. The first-time adoption of IFRS 11 was originally intended for annual periods beginning on or after January 1, 2013. Its application will trigger a drop in revenues in the first accounting period in which it is adopted. In the financial year 2012, these revenues amounted to around € 160 million.

### 1.2. INVOCATION OF SECTION 264 (3) OF THE GERMAN COMMERCIAL CODE (HGB)

MTU Aero Engines GmbH, Munich, MTU Maintenance Hannover GmbH, Langenhagen, and MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde, which are consolidated affiliated companies of MTU Aero Engines Holding AG, Munich, and for which the consolidated financial statements of MTU Aero Engines Holding AG, Munich, constitute the exempting consolidated financial statements, have invoked the provisions of Section 264 (3) of the German Commercial Code (HGB). The official notice of these companies' invocation of the exemption was published in the electronic version of the Federal Gazette (Bundesanzeiger) on October 18/19, 2012.

### 1.3. NOTES RELATING TO CHANGES IN THE REPORTING OF THE CONSOLIDATED FINANCIAL **STATEMENTS**

EARLY ADOPTION OF THE AMENDED IAS 19 (2011)

MTU applied the amended IAS 19 (2011) "Employee Benefits" in 2012 in advance of its effective date. Further details are given in Note 1.1. (Accounting principles).

### 2. GROUP REPORTING ENTITY

At December 31, 2012, the MTU group, including MTU Aero Engines Holding AG, Munich, comprised 28 companies (2011: 26). These are presented in detail in the list of major shareholdings in Note 43.1.2. The two new companies are AES Aerospace Embedded Solutions GmbH, Munich, and MTU Maintenance IGT Service do Brasil Ltda., which has its headquarters in São Paulo, Brazil. Further information on the changes in the group reporting entity is given later on in this Note. The assets of MTU München Unterstützungskasse GmbH, Munich, are classified as plan assets as defined in IAS 19. The fair value of these plan assets was included in the calculation of the group's defined benefit obligation for pensions. For this reason, MTU München Unterstützungskasse GmbH, Munich, is not consolidated.

### EFFECTS OF INCREASED STAKE IN THE IAE V2500 ENGINE PROGRAM AS OF JUNE 29, 2012

By virtue of an agreement signed on April 12, 2012 and a supplementary agreement signed on June 29, 2012 with United Technologies Corporation, East Hartford (CT) U.S.A., Rolls-Royce plc, London, U.K., and Pratt & Whitney Aero Engines International GmbH (PWAEI), Lucerne, Switzerland, MTU increased its overall stake in the V2500 engine program by five percentage points to 16%.

PWAEI initially acquired Rolls-Royce's previous shareholding in the IAE V2500 engine program and sold on five percentage points of that share to MTU. The acquired collaboration right guarantees MTU an additional five percent stake in the successful risk- and revenue-sharing partnership for the V2500 engine program, and also increases the company's share in the subsequent maintenance business for this engine.

The fair value of the acquired assets and liabilities at the acquisition date is presented below.

n € million	June 29, 2012
Intangible assets	547.9
Financial assets accounted for using the equity method	10.3
Total assets	558.2
Non-current financial liabilities	286.9
Other current liabilities and provisions	30.8
Total liabilities	317.7

The addition to intangible assets amounting to € 547.9 million as measured at the acquisition date relates to the purchase price for MTU's additional five-percent stake in the IAE V2500 program and comprises the following components:

An initial amount of € 223.2 million was paid on June 29, 2012. A further amount of € 286.9 million is to be paid over the next 15 years, and comprises deferred payments conditional on the number of flight hours, for which a financial liability corresponding to the fair value was recognized. This fair value takes into account the future market opportunities and risks associated with MTU's stake in the V2500 engine program, and must be remeasured at each reporting date. The third component of these intangible assets is an amount of € 30.8 million relating to the transfer of working capital.

The working-capital component of the overall purchase price of € 547.9 million, as established at June 29, 2012, includes provisional estimates which led to the reimbursement of a portion of the purchase price amounting to € 6.8 million in the second half of 2012. As a result, the total capital expenditure on intangible assets in connection with this acquisition amounted to € 541.1 million.

The addition to financial assets accounted for using the equity method relates to the acquisition of 12.9% of the shares of IAE International Aero Engines AG, Zurich, Switzerland.

Prior to June 28, 2012, MTU held 12.1% of the capital and voting rights of this company. As a result of the acquisition of a further 12.9% of the shares, MTU holds 25% of the capital and voting rights of IAE International Aero Engines AG, Zurich, Switzerland and therefore has significant influence over it. The 25% investment satisfies the criteria of an associated company pursuant to IAS 28 and, with effect from June 29, 2012, has been accounted for using the equity method.

in € million	June 29, 2012
Purchase price for acquisition of 12.9% of voting rights	10.3
Fair value of previous level of voting rights (12.1%)	9.6
Investments in associated companies	19.9
Acquirer's proportionate share of the fair value of identified assets and liabilities	
	13.2
fair value of identified assets and liabilities	
fair value of identified assets and liabilities  Net assets	11.2
fair value of identified assets and liabilities  Net assets  Customer relations	13.2 11.2 -4.3 <b>20.1</b>

The previous shareholding in IAE (12.1%) was accounted for at its acquisition cost of € 0.1 million in accordance with IAS 39. As a result of the change in status of the investment, a gain of € 9.5 million was recognized on derecogition of the previous shareholding based on the fair value of the shares, and included in the profit/loss of companies accounted for at cost. This one-off effect will be adjusted in EBIT. Together with the payment of € 10.3 million for the new shares in IAE, this makes up the investment in the associated company IAE. A comparison of this purchase consideration with the fair value of the group's proportionate share of identifiable assets and liabilities resulted in recognition of a further gain of € 0.2 million in accordance with IAS 28. This gain was included in the profit/loss of companies accounted for using the equity method.

### CHANGE IN COMPOSITION OF GROUP REPORTING ENTITY

PRESENTATION OF CHANGES IN THE GROUP COMPANIES AND EQUITY INVESTMENTS IN ASSOCI-ATED COMPANIES AND JOINT VENTURES INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS The number of group companies and equity investments in associated companies and joint ventures included in the consolidated financial statements developed as follows:

	Germany	International	Total
Shareholdings at December 31, 2010	12	11	23
Acquisitions 2011		3	3
Shareholdings at December 31, 2011	12	14	26
Acquisitions 2012	1	1	2
Shareholdings at December 31, 2012	13	15	28

In the third quarter of 2012, MTU established MTU Maintenance IGT Service do Brasil Ltda. with headquarters in São Paulo, Brazil. The purpose of the company is the maintenance of industrial gas turbines. The company is assigned to MTU's MRO segment (commercial maintenance business).

Also in the third quarter of 2012, MTU signed an agreement with Sagem, a member of the Safran Group, to set up the joint venture AES Aerospace Embedded Solutions GmbH, Munich. The purpose of this joint venture is to develop security-critical software and hardware for both military and commercial aviation applications. The company is assigned to MTU's OEM segment (commercial and military engine business).

As both these companies are of immaterial importance to the MTU group's operating results, financial situation and net assets, they are not consolidated, but appear under non-current financial assets with a total carrying amount of € 1.4 million.

### **SUBSIDIARIES**

The consolidated financial statements of MTU Aero Engines Holding AG, Munich, include all significant companies in which MTU Aero Engines Holding AG, Munich, has a controlling interest by virtue of holding the majority of voting rights in those subsidiaries. Entities are consolidated as from the date on which control arises and are deconsolidated when control comes to an end.

Associated companies are companies in which MTU has significant powers of control and which are neither subsidiaries nor joint ventures. Entities corresponding to this definition over whose financial and operating policies MTU directly or indirectly exercises significant influence are accounted for using the equity method or - if non-significant - at cost. Significant powers of control are assumed to exist if MTU Aero Engines Holding AG, Munich, directly or indirectly owns 20% or more of the voting stock of an entity. The shares in IAE International Aero Engines AG, Zurich, Switzerland, are now accounted for using the equity method (2011: accounted for at cost).

### **JOINT VENTURES**

Joint ventures are companies over which MTU exercises joint control together with another entity. Holdings in joint ventures with a significant impact on the consolidated financial statements are either consolidated proportionately or accounted for using the equity method.

MTU's holding in the joint venture MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China, is proportionately consolidated at 50%. The following assets, liabilities, expenses and income are recognized in the consolidated financial statements:

in € million, 50% share	2012	2011
Disclosures relating to the income statement		
Income	162.3	142.8
Expenses	-149.9	-128.4
Balance of income and expenses	12.4	14.4
Disclosures relating to the balance sheet		
Non-current assets	43.1	42.2
Current assets	110.1	88.9
Total assets	153.2	131.1
Equity	75.9	72.2
Non-current liabilities	2.8	20.9
Current liabilities	74.5	38.0
Total equity and liabilities	153.2	131.1

At December 31, 2012, MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China, had a total of 641 employees (2011: 614 employees).

The group's investment in Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde, is accounted for using the equity method and included in the consolidated financial statements. Equity investments in all other joint ventures are recognized at cost on grounds of immateriality.

### NON-SIGNIFICANT INVESTMENTS

Non-significant investments are shares in companies and stakes in engine programs whose overall impact on the group's net assets, financial situation and operating results is not material. These equity investments are accounted for at cost in the consolidated financial statements.

### 3. CONSOLIDATION PRINCIPLES

All business combinations are accounted for using the acquisition method as defined in IFRS 3. Under the acquisition method, the acquirer accounts for the business combination by measuring and recognizing the identifiable assets acquired and the liabilities and contingent liabilities assumed. The identifiable assets, liabilities, and contingent liabilities are measured at fair value. In accordance with IAS 36, goodwill is tested for impairment at least annually, or at shorter intervals if there is an indication that the asset might be impaired. If the group's interest in the net fair value of the acquired identifiable net assets exceeds the cost of the business combination, that excess (negative goodwill) is immediately recognized in the income statement – after remeasurement as required by IFRS 3.36.

The effects of intragroup transactions are eliminated. Accounts receivable and accounts payable as well as expenses and income between the consolidated companies are netted. Internal sales are recorded on the basis of market prices and intragroup profits and losses are eliminated.

In accordance with IAS 12, deferred taxes are recognized on temporary differences arising from the elimination of intragroup profits and losses.

### 4. CURRENCY TRANSLATION

Transactions in foreign currencies are translated to the functional currency using the exchange rate prevailing on the date of the transaction. At the reporting date, monetary items are translated using the exchange rate prevailing at that date, whereas non-monetary items are translated using the exchange rate prevailing on the transaction date. Translation differences are recognized in the income statement. The assets and liabilities of group companies whose functional currency is not the euro are translated from the corresponding local currency to the euro using the closing exchange rate at the reporting date. In the income statements of foreign group companies whose functional currency is not the euro, income and expense items are translated each month using the exchange rate applicable at the end of the month; from these can be derived the average exchange rate for the year. The translation differences arising in this way are recognized in other comprehensive income and do not have any impact on the net profit/loss for the year.

### 5. ACCOUNTING POLICY AND MEASUREMENT METHODS

Group management report

The financial statements of MTU Aero Engines Holding AG, Munich, and of its subsidiaries are drawn up using uniform accounting policies in accordance with IAS 27.

### 5.1. REVENUES

Revenues from the sale of goods are recognized when goods are delivered to the customer and accepted by the latter - in other words when the significant risks and rewards of ownership of the goods have been transferred by the seller. Further recognition criteria are the probability that economic benefits associated with the transaction will flow to the seller and that the revenues and costs can be measured reliably. The company's customers are trading partners in risk- and revenue-sharing programs, original equipment manufacturers (OEMs), cooperation entities, public-sector contractors, airlines and other third parties.

Revenues from maintenance contracts in the MRO segment are recognized when the maintenance service has been performed and the criteria for recognizing revenues have been met. In the case of long-term service agreements in the commercial maintenance business and of military development and construction contracts, revenues are recognized by reference to the percentage of completion in accordance with IAS 18 and IAS 11. If the outcome of a contract cannot be estimated reliably, the zero-profit method is applied, whereby revenues are recognized only to the extent that contract costs have been incurred and it is probable that those costs will be recovered. Contracts are recognized in the balance sheet under 'construction contract receivables' (Note 24. Construction contract receivables) or under 'construction contract payables' (Note 35. Construction contract payables). Further explanation of the measurement of percentage of completion is given in connection with work in progress (Note 5.12. Inventories).

Revenues are reported net of trade discounts and concessions and customer loyalty awards.

The group's forward foreign currency contracts satisfy the conditions for applying hedge accounting in accordance with IAS 39. The instruments used to hedge cash flows are measured at fair value, with gains and losses recognized initially under other comprehensive income. They are subsequently recorded as revenues when the hedged item is recognized.

### 5.2. COST OF SALES

Cost of sales comprises the production-related manufacturing cost of products sold, development services paid, and the cost of products purchased for resale. In addition to the direct material cost and production costs, it also comprises systematically allocated overheads, including amortization/ depreciation of the production installations and production-related other intangible assets, writedowns on inventories and an appropriate portion of production-related administrative overheads. Cost of sales also includes expenses charged by OEMs for marketing new engines in conjunction with risk- and revenue-sharing programs.

### 5.3. RESEARCH AND DEVELOPMENT EXPENSES

Expenditure in connection with research activities (research costs) is charged to expense in the period in which it is incurred.

In the case of development costs, a distinction is drawn between purchased ('externally acquired') development assets and self-created ('internally generated') development assets. Project costs attributable to externally acquired development assets are generally allocated to construction contract receivables on the basis of percentage of completion. Any surplus expense or income remaining after the end of a development project is amortized proportionately over the subsequent production phase.

Development costs generated in the context of company-funded R&D projects are capitalized at construction cost to the extent that they can be attributed directly to the product and on condition that the product's technical and commercial feasibility has been proved. There must also be reasonable probability that the development activity will generate future economic benefits. The capitalized development costs comprise all costs directly attributable to the development process. Capitalized development costs are amortized over the expected product life cycle from the start of production onward.

Capitalized development costs, as well as previously capitalized development projects that have not been completed by the end of the financial year, are subjected to an impairment test at least once a year. An impairment charge is recognized only if the carrying amount of the capitalized asset exceeds the recoverable amount.

### **5.4. INTANGIBLE ASSETS**

Externally acquired and internally generated intangible assets are recognized in accordance with IAS 38 if it is probable that a future economic benefit associated with the asset will flow to the entity and the cost of the asset can be measured reliably.

Intangible assets with a finite useful life are carried at cost and amortized on a straight-line basis over their useful lives. As from the financial year 2011, the acquisition and construction costs in the case of qualified assets contain borrowing costs that were capitalized in accordance with the accounting methods used by MTU.

With the exception of goodwill, technology assets, customer relations and capitalized program assets, intangible assets are generally amortized over a period of 3-5 years. Program assets including development costs are amortized over their useful lives of up to 30 years, technology assets over 10 years, and customer relations over periods of between 4 and 26 years.

Goodwill is apportioned between the cash-generating units (CGUs) for the purpose of impairment testing. Consistent with the distinction made for segment reporting purposes, the OEM segment (commercial and military engine business) and the MRO segment (commercial maintenance business) are viewed as cash-generating units.

Group management report

Public sector grants and assistance are recognized in accordance with IAS 20 only if there is reasonable assurance that the conditions attached to them will be complied with and that the grants will be received. Grants are recognized as income over the periods necessary to match them with the related costs that they are intended to compensate. In the case of capital expenditure on property, plant and equipment and on intangible assets, the amount of the public sector grant awarded for this purpose is deducted from the carrying amount of the asset. The grants are then recognized in the income statement using reduced depreciation/amortization amounts over the lifetime of the depreciable asset.

## 5.6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are subject to wear and tear and are carried at their acquisition or construction cost less cumulative depreciation charges and cumulative impairment losses. The acquisition and construction costs contain payments for external services and, in the case of qualified assets, borrowing costs that were capitalized in accordance with the accounting methods used by MTU. The qualified assets are assigned to an appropriate category of property, plant and equipment once they have been completed or are operational. The revaluation model is not applied. Depreciation on property, plant and equipment is calculated using the linear method in accordance with the useful life of the asset.

Depreciation is based on the following useful lives:

Assets	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 of machines used in multi-shift operation is accelerated by using a higher shift coefficient to take account of additional usage.

The residual values, useful lives and depreciation methods pertaining to property, plant and equipment are regularly assessed for relevance, at least at every reporting date, and adjustments are made where necessary to the estimates used when compiling the financial statements.

The cost of items of self-constructed plant and equipment comprises all directly attributable costs and an appropriate proportion of production-related overheads, including depreciation, pro rata administrative and social security costs, and, in the case of qualified assets, borrowing costs as applicable.

### 5.7. BORROWING COSTS

Borrowing costs directly related to the acquisition, construction or production of qualified assets, i.e. those that take a substantial period of time to be made ready for sale or their intended use, are recognized under the construction costs of these assets until such time as the assets in question have for the most part been made ready for sale or their intended use.

In accordance with the requirements of IAS 23, borrowing costs as presented in Note 13. (Interest result) are capitalized only insofar as they relate to the purchase and preparation of qualifying assets for their intended use or sale, and only include activities that commenced on or after January 1, 2009.

Income generated from the interim investment of debt capital specifically raised to pay for qualifying assets is deducted from the recognized borrowing costs.

All other borrowing costs are recognized in the income statement in the period in which they are incurred.

### 5.8. INVESTMENT PROPERTY

The MTU group does not hold any investment property. An insignificant part of the buildings recognized under property, plant and equipment is rented out to external third parties. The rental income from this property amounted to € 1.4 million in the financial year 2012 (2011: € 1.2 million).

### 5.9. LEASING

The beneficial ownership of leased assets is attributed to the contracting party in the lease arrangement that bears the substantial risks and rewards associated with ownership of the leased asset. If the lessor retains the substantial risks and rewards (operating lease), the leased asset is recognized in the lessor's balance sheet. The lessee in an operating lease arrangement recognizes lease payments as an expense throughout the duration of the lease arrangement.

If the substantial risks and rewards associated with ownership of the leased asset are transferred to the lessee (finance lease), the leased asset is recognized in the lessee's balance sheet. The leased object is recognized at its fair value as measured at the date of acquisition, or at the present value of future minimum lease payments if lower, and depreciated over its estimated useful life, or the contract duration if shorter. The lessee immediately recognizes a finance lease liability corresponding to the carrying amount of the leased asset. The effective interest rate method is employed to amortize and update the lease liability in subsequent periods.

# 5.10. IMPAIRMENT LOSSES ON INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

At each reporting date, an assessment is carried out to reveal any indication that the value of intangible assets or assets of property, plant and equipment might be impaired. If impairment is indicated, the recoverable amount of the asset in question is estimated. Assets with an indefinite useful life, intangible assets that are not yet ready for use, and goodwill acquired in connection with a business combination are not subject to amortization, but are instead reviewed for impairment at least once each year.

The impairment loss on intangible assets and property, plant and equipment is determined by comparing the carrying amount with the recoverable amount. If it is not possible to attribute separate future cash flows to discrete assets that have been generated independently of other assets, then an impairment test must be carried out on the basis of the cash-generating unit to which the asset ultimately belongs. If the reasons for impairment losses recognized in a prior period no longer exist, the impairment loss on these assets is reversed, except in the case of goodwill.

The recoverable amount is the higher amount of the fair value of the asset (or of the cash-generating unit) less costs to sell and value in use. The recoverable amount of the assets or cash-generating units is usually determined using a discounted cash flow (DCF) method. This involves making forecasts of the cash flow that can be generated over the estimated useful life of the asset or cash-generating unit, applying a discount rate that takes into account the risks associated with the asset or cash-generating unit. The forecast cash flows reflect certain assumptions on the part of management, which are validated by reference to external sources of information.

### 5.11. NON-CURRENT FINANCIAL ASSETS

Group management report

Investments in subsidiaries and equity investments in joint ventures that are neither fully nor proportionately consolidated, investments in associated companies, and other equity investments do not have a major qualitative and quantitative impact on the MTU group's net assets, financial situation and operating results. Since in most cases it is not possible to reliably measure their fair value because an active market does not exist, these investments are carried at cost - with appropriate adjustments for impairment loss where necessary. Dividend income and shares in the profit/loss of these investments are included in the financial result on other items.

The group's share in the profit or loss of companies accounted for using the equity method is allocated on a pro rata basis to profit/loss and the corresponding carrying amount of the investment. This profit/loss is reported in the financial result as a separate line item under 'profit/loss of companies accounted for using the equity method.'

### 5.12. INVENTORIES

Raw materials and supplies are measured at the lower of average acquisition cost and net realizable value. Trade discounts and concessions and customer loyalty awards are taken into account when determining acquisition costs. Advance payments for inventories are capitalized. Acquisition cost comprises all direct costs of purchasing and other costs incurred in bringing the inventories to their present location and condition. Net realizable value is the estimated selling price generated in the ordinary course of business for the finished product in question, less estimated costs necessary to make the sale (costs to complete and selling costs).

Work in progress is recognized at the lower of manufacturing cost and net realizable value. Manufacturing cost comprises all production-related expenses based on normal capacity utilization. In addition to direct costs, these include an appropriate and necessary portion of the cost of material and production overheads, including production-related depreciation. Administrative expenses are also included to the extent that they can be attributed to production operations. Borrowing costs are not capitalized because work in progress does not meet the definition of a qualifying asset as defined in IAS 23.

The group uses the percentage-of-completion (PoC) method to recognize all construction contracts. If the outcome of a specific construction contract can be estimated reliably, revenues and income are recognized in proportion to the percentage of completion. The percentage of completion is determined as the ratio of contract costs incurred to total contract costs (cost-to-cost method). If the outcome of a contract cannot be estimated reliably, the zero-profit method is applied, whereby revenues are recognized only to the extent that contract costs have been incurred, resulting in a balance of zero. If settlement has not yet been received for a construction contract, the construction costs - taking profit sharing into account where relevant - are recognized as future contract receivables in the balance sheet and as revenues arising from construction contracts in the income statement. These items are defined as the difference between the sum of contract costs incurred and measured up to the reporting date and income received less losses incurred and partial settlements.

Receivables from construction contracts are recognized separately from trade receivables in the balance sheet under the item 'construction contract receivables.' If advance payments received from customers are lower than the amount of receivables, the difference is deducted from the amount of construction contract receivables and accounted for as an asset. If the advance payments received are higher than the construction contract receivables, the negative balance of the construction contracts is recognized under construction contract payables. Construction contract receivables and construction contract payables are not offset against one another.

# **5.13. FINANCIAL INSTRUMENTS**

A financial instrument is a contract that simultaneously gives rise to a financial asset in one company and to a financial liability or equity instrument in another company.

### 5.14. FINANCIAL ASSETS

Financial assets include, in particular, cash and cash equivalents, trade receivables, loans and other receivables, financial investments held to maturity, and non-derivative and derivative financial assets held for trading.

Financial assets are measured in accordance with their classification as per IAS 39. The measurement of a financial asset subsequent to initial recognition depends on whether the financial instrument is held for trading, held to maturity, available for sale, or whether it falls into the loans and receivables category. The assignment of an asset to a measurement category must be performed at the time of acquisition and is primarily determined by the purpose for which the financial asset is held. No financial assets were reclassified in the financial year 2012 or in prior reporting periods.

At initial recognition, financial assets are measured at their fair value. In the case of financial assets that are not subsequently measured at fair value through profit or loss, the transaction costs directly attributable to the acquisition of the financial asset are included in the initial measurement.

Financial instruments held for trading are measured at fair value through profit or loss. The subcategory 'held for trading' primarily includes derivative financial instruments that do not form part of an effective hedging relationship as defined in IAS 39 and which must therefore be classified as 'held for trading'. Any gain or loss resulting from remeasurement is recognized in the income statement.

Financial investments that are intended and expected, with reasonable certainty, to be **held to maturity** are measured at amortized cost using the effective interest method.

Financial assets classified as 'loans and receivables' are measured at amortized cost less impairment, using the effective interest method where appropriate.

Impairment loss on trade receivables is sometimes accounted for by means of valuation allowances. The decision whether to account for credit risk by means of an allowance account or by directly recording an impairment loss on receivables depends on the degree of certainty with which the risk situation can be assessed.

Other non-derivative financial assets are classified as 'available for sale.' These are always measured at fair value. Gains or losses resulting from the measurement of fair value are recognized directly in equity. If it is not possible to reliably measure the fair value of an equity instrument that is not quoted in an active market, the investment is measured at acquisition cost (less impairment where appropriate).

### IMPAIRMENT LOSS ON FINANCIAL ASSETS

At each reporting date, the carrying amounts of financial assets that are not measured at fair value through profit or loss are assessed to determine whether there is any substantial objective indication of impairment.

Examples of such indications include significant financial difficulties of the debtor or a high probability that the debtor will enter bankruptcy or financial reorganization, the closure of an active market for the financial asset, significant changes in technological, economic, legal or market conditions affecting the issuer, or a significant or persistent decline in the fair value of the financial asset below its (amortized) cost. The amount of the impairment loss is recognized in the income statement. If impairment is indicated for available-for-sale financial assets, the amounts previously recognized in equity are eliminated from other comprehensive income up to the amount of the assessed impairment loss and recycled to the income statement.

If, in a subsequent period, there is objective evidence that the fair value has increased due to an event occurring after the impairment was originally recognized, the impairment loss is reversed through profit or loss. Impairment losses affecting available-for-sale equity instruments and equity instruments not quoted in an active market are not allowed to be reversed through profit or loss until such time as that loss becomes recoverable. When testing for impairment, the estimated fair value of held-to-maturity investments, and the fair value of loans and receivables measured at amortized cost, is approximated to the present value of future estimated cash flows discounted at the financial asset's original effective interest rate. The fair value of equity instruments measured at cost and not quoted in an active market is calculated on the basis of the future estimated cash flows discounted at the current rate consistent with the specific risks to which the investment is exposed.

## 5.15. FINANCIAL LIABILITIES

Financial liabilities often entitle the holder to return the instrument to the issuer in return for cash or another financial asset. These include, in particular, bonds and other debts evidenced by certificates, trade payables, liabilities to banks, finance lease liabilities, promissory notes and derivative financial liabilities.

Financial liabilities are measured at their fair value at the time of acquisition, which is normally equivalent to the net loan proceeds. Transaction costs directly attributable to the acquisition are deducted from the amount of all financial liabilities that are not measured at fair value through profit or loss subsequent to initial recognition. If a financial liability is interest-free or bears interest at below the market rate, it is recognized at an amount below the settlement price or nominal value. The financial liability initially recognized at fair value is amortized subsequent to initial recognition using the effective interest method.

# 5.16. CASH AND CASH EQUIVALENTS

Cash and cash equivalents include current accounts and short-term bank deposits, have a maturity of three months or less from the date of acquisition, and are measured at cost.

### 5.17. DERIVATIVE FINANCIAL INSTRUMENTS

MTU uses derivative financial instruments as a hedge against currency, interest rate and price risks arising out of its operating activities and financing transactions.

At initial recognition, derivative financial instruments are measured at their fair value. The fair value is also of importance to subsequent measurement. The fair value of traded derivative financial instruments is derived, wherever possible, from quoted market prices in an active market. If no quoted market prices in an active market are available, the fair value is calculated using recognized actuarial models. The fair value of derivative financial instruments is represented by the amount that MTU would receive or would have to pay at the reporting date when the financial instrument is terminated. This value is calculated on the basis of the relevant exchange rates, interest rates and credit standing of the contractual partners at the reporting date.

The accounting treatment of derivative financial instruments depends on whether or not a hedging relationship exists between the underlying transaction and the hedged item. Derivative financial instruments that do not form part of an effective hedging relationship as defined in IAS 39 must be classified as 'held for trading' and are therefore recognized in the balance sheet at their fair value.

### HEDGE ACCOUNTING (HEDGING RELATIONSHIPS)

MTU satisfies the requirements relating to hedging instruments in accordance with IAS 39 to hedge future payment cash flows. This reduces volatility in cash flows that could affect profit or loss. When a hedge is undertaken, the relationship between the financial instrument designated as the hedging instrument and the underlying transaction is documented, as are the risk management objective and strategy for undertaking the hedge. This includes assigning specific hedging instruments to the corresponding future transactions and assessing the effectiveness of the designated hedging instrument. Existing cash flow hedges are monitored for effectiveness on a regular basis.

Cash flow hedges are used to hedge the exposure of future cash flows arising from underlying transactions to fluctuations in foreign currency exchange rates. When a cash flow hedge is in place, the effective portion of the change in value of the hedging instrument is recognized under other comprehensive income, together with attributable deferred taxes, until such time as the outcome of the hedged transaction is recognized.

The effective hedge is recycled to the income statement as soon as the hedged transaction is recognized in profit or loss. The ineffective portion of the change in value of the hedging instrument is recognized on each reporting date in the financial result.

# 5.18. CURRENT AND DEFERRED TAXES

Current and deferred tax assets and liabilities are recognized in the consolidated financial statements on the basis of the tax laws in force in the relevant tax jurisdictions. Current and deferred tax assets and liabilities are recognized in equity if they relate to business transactions that directly lead to a decrease or increase in equity.

Deferred tax assets and liabilities are established for temporary differences between the tax bases of assets and liabilities used when calculating taxable income and the carrying amount of these assets and liabilities in the consolidated balance sheet ('balance sheet liability method'). Similarly, where appropriate, deferred tax assets are established on tax losses, interest expense and tax credits available for carry-forward. Deferred tax assets are recognized to the extent of the probability that taxable income will be available against which the deductible temporary difference can be applied together with losses that are permitted to be carried forward for tax purposes and tax refunds. Deferred tax assets and liabilities are measured on the basis of the tax rates expected to be applicable on the date when the temporary differences are reversed. Deferred tax assets and liabilities are offset, insofar as this meets the requirements of IAS 12.74.

# 5.19. PENSION OBLIGATIONS

Pension provisions are accounted for using the projected unit credit method in accordance with IAS 19. This method takes account not only of pension and other vested benefits known at the reporting date, but also of estimated future increases in pensions and salaries, applying a conservative assessment of the relevant parameters.

Actuarial gains and losses arising from the measurement of the defined benefit obligation (DBO) and the plan assets, and resulting from changes in the actuarial assumptions or from differences between previous actuarial assumptions and the actual development, are recognized in other comprehensive income in the period in which they arise, and are presented separately in the statement of comprehensive income. Past service cost is recognized directly in profit or loss. Where reinsurance claims exist and the criteria given in IAS 19 are met, these claims are treated as plan assets and netted against the pension obligations. Interest income from plan assets and the interest cost on obligations are recognized under financial result on other items. Service cost is recognized under personnel expenses.

## 5.20 OTHER PROVISIONS

Provisions are accrued to cover the cost of legal disputes and claims for damages if the group incurs a current obligation arising from a lawsuit, government investigation or other claims that derive from past events and are pending, or if it is possible that such proceedings could be initiated against the group or be enforced at a future date, and if it is probable that an outflow of economic resources will be necessary to fulfill the obligation, and it is possible to reliably estimate the amount of the obligation. Non-current provisions due in more than one year are measured on the basis of their settlement amount, discounted to the reporting date. The company measures provisions for pending losses on onerous contracts at the lower of the expected costs on settlement of the contract and the expected costs on termination of the contract.

Provisions for pre-retirement part-time working arrangements and long-service awards are measured on the basis of actuarial reports prepared in accordance with IAS 19.

### **5.21. CONTINGENT LIABILITIES**

Contingent liabilities are potential obligations arising from past events whose existence depends on the occurrence or non-occurrence of one or more uncertain future events that are not wholly within the control of MTU.

Contingent liabilities are also present obligations for which there is unlikely to be an outflow of economic resources, or where the amount of the obligation cannot be reliably estimated.

Obligations arising from contingent liabilities assumed and identified in connection with an acquisition are recognized if it is possible to reliably determine their fair value. After initial recognition, contingent liabilities are recognized at the higher of the following: (a) the amount that would have been recognized as a provision in accordance with IAS 37, (b) the originally recognized amount amortized by the actual cash flows. Negative values of engine programs resulting from the purchase price allocation are accounted for as contingent liabilities.

### 5.22. SHARE-BASED PAYMENT TRANSACTIONS

Under IFRS 2 (Share-based Payment), a distinction is made between share-based payment transactions settled in cash and those settled using equity. In the case of both instruments, the fair value is calculated at the grant date and recognized as a compensation expense over the period during which the beneficiary earns a vested right to the promised instruments. MTU recalculates the fair value of cash-settled commitments at the end of every reporting period and again on the relevant settlement date. The fair values of share-based payments are estimated using recognized option pricing models.

### 5.23. DIVIDEND PAYMENT AND PROFIT DISTRIBUTION

The claims of shareholders to dividend payments and profit distribution relating to a specific reporting period (financial year) are recognized as a liability in the period in which the corresponding resolution is passed. Disclosures relating to the Board of Management's proposal to the Annual General Meeting concerning the dividend payment are provided in Part VII of these Notes under the subheading 'Proposed profit distribution.'

### 5.24. DISCRETIONARY SCOPE, MEASUREMENT UNCERTAINTIES AND SENSITIVITY

The presentation of the group's net assets, financial situation and operating results in the consolidated financial statements depends on the use of recognition and measurement methods and of assumptions and estimations. The estimations and corresponding assumptions detailed below are crucial to an understanding of the underlying risks of financial reporting and the effects that these estimations, assumptions and uncertainties might have on the consolidated financial statements. Actual values may occasionally deviate from the assumed and estimated values. Adjustments may be made to carrying amounts at the time that better knowledge comes to light. This is especially the case in the following circumstances:

Both at initial measurement and subsequent measurement after initial recognition, the determination of the carrying amount of intangible assets and contingent liabilities identified in connection with business combinations as defined in IFRS 3 involves substantial use of forwardlooking estimates, due to the long product life cycles. These estimates rely on assumptions concerning factors such as risk adaptation of cash flows or discount rates and future price changes with an impact on other costs including price escalation and possible contract penalties. In the financial year 2012, the contingent liabilities for individual engine programs identified and measured in connection with the purchase price allocation were affected by the utilization of cash flows, which resulted in changes in the measurement of the engine programs, and by the consequences of the prior year's delays in the delivery of engines, modified schedules for the delivery of engines and spare parts, modification of the escalation rates included in price projections, and anticipated development costs. The carrying amount recognized for contingent liabilities arising from business combinations was € 51.3 million at December 31, 2012 (December 31, 2011: € 102.8 million). If the discount rate had been 100 basis points higher at December 31, 2012, the carrying amount of these liabilities would have been approximately € 118 million. In contrast, if the discount rate had been 100 basis points lower at December 31, 2012, the carrying amount of the liabilities would have been € 0 million. Further explanations are given in Note 32. (Other provisions).

- Following the signing of an agreement in principle the 'A400M Understanding' in the financial year 2010, the customer nations (represented by the procurement agency OCCAR) and Airbus Military subsequently agreed the details of the changes to the A400M contract. The program assets recognized for the entire TP400-D6 engine program were remeasured at December 31, 2012 in view of the first engine deliveries that had taken place during the reporting period, the agreed delivery timeframes and the developments concerning export orders, while also taking into consideration expenditure on engine control software and hardware, and modified price escalations. Due to the prolonged product life cycle, changes in the applied interest rates have a significant impact on the measurement of the engine program. A sensitivity analysis of the extent of possible consequences of price changes or possible contract penalties is not sufficiently detailed to assess the consequences of individual events, due to the multitude of sensitivity scenarios and associated high degrees of uncertainty. For more information, please refer to Note 24. (Construction contract receivables).
- The measurement of property, plant and equipment, intangible assets and financial assets (insofar as they are accounted for using the equity method or at cost) comprising a carrying amount at the end of the financial year of € 2,406.2 million (2011: € 1,860.6 million) involves the use of estimates. Estimations are also employed to determine the expected useful life of assets. Judgments by management form the basis for determining the fair value of assets and liabilities and the useful life of assets. In the process of determining the impairment loss on property, plant and equipment, intangible assets and financial assets, estimations are made concerning such parameters as the source, timing and amount of the impairment loss. Many different factors can give rise to an impairment loss. Factors always considered are changes in the competitive situation, expectations concerning the growth of aviation and the aircraft industry, changes in the cost of capital, changes in the future availability of financing funds, aging and obsolescence of technologies, the suspension of services, replacement costs, purchase prices paid in comparable transactions, and other general changes providing evidence of impairment.

Management is required to make estimations concerning the identification and verification of indicated impairments, expected cash flows, relevant discount rates, corresponding useful lives and residual values in order to determine the recoverable amounts for the operating segments 'commercial and military engine business' and 'commercial maintenance business', and the fair value of assets (or groups of assets). In particular, the estimation of cash flows on which the recoverable amounts are based in the case of new engine programs in both the commercial and military engine businesses depends on the assumption that it will be possible to raise funds on a continuous basis, but also that it will be necessary to make continuous investments in order to generate sustainable growth. If the demand for engines is slower than expected, this could reduce earnings and cash flows and possibly lead to the recognition of impairment losses on these investments. This could in turn have negative repercussions on operating results.

These estimations and the method used to obtain them may have a significant impact on the determined recoverable amount and on the amount of the impairment loss recognized on goodwill. Reference is made to Note 40. (Sensitivity analysis of goodwill) for a sensitivity analysis of the goodwill of the commercial and military engine business and of the commercial maintenance business.

Management creates allowances for doubtful accounts. Judgment of the appropriateness of allowances for doubtful accounts is based on the repayment structure of the balance of settlements and past experience with the writing-off of debts, the customer's credit standing, and changes in the conditions of payment. At December 31, 2012, valuation allowances on trade receivables amounted to € 10.2 million (2011: € 7.9 million). If the customer's financial situation should deteriorate, the volume of the allowances that have to be created may exceed the expected volume.

- Revenues in the military engine business and in the commercial maintenance business are recognized in progressive stages as the work advances, using the percentage-of-completion method, if it is sufficiently probable that future economic benefits associated with the business will flow to MTU. The percentage of completion is determined by comparing the actual costs up to the reporting date with estimated total contract costs. If the outcome of a construction contract cannot be estimated reliably, revenues are recognized only to the extent that contract costs have been incurred and it is probable that those costs can be recovered (zero-profit method). Management regularly reviews all estimates made in connection with these construction contracts, making adjustments where necessary. Revenues from the sale of engine components in the month of December are partially estimated for bookkeeping purposes. These estimates are derived principally from preliminary data supplied by the consortium leader and from material flow data, which provides a sufficiently reliable basis for estimating revenues.
- Income taxes must be determined for each tax jurisdiction in which the group operates. The current income taxes have to be calculated for each taxable entity, and temporary differences arising from the different treatment of certain balance sheet items in the IFRS consolidated financial statements and the tax statements need to be determined. All identified temporary differences lead to the recognition of deferred tax assets and liabilities in the consolidated financial statements. Additionally, deferred tax effects may arise, particularly from tax losses, interest expense and tax credits available for carry-forward. Management judgments come into play in the calculation of current taxes and deferred taxes.

Deferred tax assets totaling € 15.6 million (2011: € 16.3 million) were recognized at December 31, 2012. The utilization of deferred tax assets depends on the possibility of generating sufficient taxable income in a particular tax category and tax jurisdiction, taking into account where appropriate any statutory restrictions relating to the maximum periods over which losses may be carried forward. A variety of factors are used to assess the probability that it will be possible to utilize deferred tax assets, including past operating results, operating business plans, the periods over which losses can be carried forward, and tax planning strategies. If the actual results deviate from these estimations, or if these estimations have to be adjusted in a future period, this may have detrimental effects on the group's net asset position, financial situation and operating results. If there is a change in the value assessment of deferred tax assets, the recognized deferred tax assets may have to be written down.

The discount rate is an important factor when determining the provisions to be allocated for pensions and similar obligations. An increase of 50 basis points in the discount rate can lower the amount of pension obligations by approximately € 30 million. A decrease of 20 basis points in the discount rate can raise the amount of pension obligations by approximately € 12 million. Pension obligations for employee benefits that are classified and accounted for as defined benefit plans are not covered by any other plan assets except for the plan assets of MTU Maintenance Canada Ltd., Richmond, Canada, and MTU München Unterstützungskasse GmbH, Munich. The existing plan assets are offset against the pension obligations. If the plan assets exceed the corresponding pension obligations, the surplus amount of the plan assets is capitalized.

The total value of pension obligations and therefore the expenses in connection with employees' retirement benefits are determined using actuarial methods based on assumptions concerning interest rates and life expectancy. If it should become necessary to modify these assumptions, this could have a significant effect on the future amount of pension provisions or the expenses for pensions.

■ The recognition and measurement of other provisions amounting to € 255.4 million (2011: € 319.7 million) and contingent liabilities amounting to € 122.0 million (2011: € 110.7 million), especially in connection with pending legal disputes or other pending claims arising from conciliation or arbitration proceedings, joint committee procedures, government lawsuits or other types of contingent liability (particularly those arising from risk- and revenue-sharing partnerships) involve substantial estimations on the part of MTU. For instance, the assessment of the probability that a pending case will be won or that an obligation will arise, or the quantification of the probable payment, all depend on an accurate evaluation of the prevailing situation. Provisions are accrued when a present legal or de facto obligation arises from a past event, it is probable that an outflow of economic resources will be required to fulfill this obligation and it is possible to reliably estimate the amount of the obligation. Due to the uncertainties attached to this assessment, the actual losses may deviate from those originally estimated, and hence from the amount of the provision. Furthermore, the calculation of certain specific provisions (for example to cover tax obligations, environmental obligations and legal risks) also involves considerable use of estimations. These estimations may change in the light of new information.

All assumptions and estimates are based on the prevailing conditions and judgments made at the reporting date. Estimations of future business developments also take into account the economic environment of the industry and the regions in which MTU is active, such as are deemed realistic at that time. In order to obtain new information, MTU relies on the services of internal experts and external consultants such as actuaries and legal counsels. Changes to the estimations of these obligations can have a significant impact on future operating results.

# II. Notes to the Consolidated Income Statement

# 6. REVENUES

Revenues have developed as follows:

in € million	2012	2011
Commercial engine business		
Manufacturing	1,532.1	1,332.1
Other products	71.0	69.0
Total commercial engine business	1,603.1	1,401.1
Military engine business		
Manufacturing	302.1	239.4
Other products	201.2	206.1
Total military engine business	503.3	445.5
Total commercial and military engine business (OEM)	2,106.4	1,846.6
Commercial maintenance business (MRO)	1,305.7	1,116.6
Other entities / consolidation	-33.5	-31.1
Total revenues	3,378.6	2,932.1

A more detailed presentation of revenues, with tables showing external and intersegment revenues, their derivation from products and services and their attribution to major customers, is provided in the section preceding these Notes, under 'Reporting by operating segment'. Additional information can be found in Section 3.1. (Operating results) of the group management report.

# 7. COST OF SALES

n € million	2012	2011
Cost of materials	-2,293.1	-1,942.0
Personnel expenses	-420.1	-398.2
Depreciation and amortization	-181.8	-121.4
Other cost of sales	71.7	77.4
otal cost of sales	-2,823.3	-2,384.2

'Other cost of sales' mainly comprises changes in inventories for work in progress, the effect of translation differences, and changes in provisions.

Cost of sales includes an increase of € 13.2 million (2011: € 6.0 million) in write-downs on inventories, in order to account for them at their net realizable value. Further explanatory comments on write-downs on inventories are provided in Note 22. (Inventories).

# 8. RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses, defined as company-funded research and development expenditure less capitalized development costs, have developed as follows:

n € million	2012	2011
Cost of materials	-71.6	-86.4
Personnel expenses	-78.0	-72.0
Depreciation and amortization	-11.1	-7.4
Company-funded research and development expenditure	-160.7	-165.8
of which the following amounts were capitalized:		
Development costs (OEM)	46.9	30.8
Development costs (MRO)	0.8	3.4
Capitalized development costs	47.7	34.2
Research and development costs recognized as expense	-113.0	-131.6

# 9. SELLING EXPENSES

n € million	2012	2011
Cost of materials	-13.1	-13.4
Personnel expenses	-53.5	-49.2
Depreciation and amortization	-3.7	-2.5
Other selling expenses	-18.2	-15.2
Total selling expenses	-88.5	-80.3

Selling expenses comprise expenses for advertising and marketing, expenses in connection with air shows, trade fairs and exhibitions, media relations expenses, and valuation allowances and write-downs on trade receivables.

# 10. GENERAL ADMINISTRATIVE EXPENSES

n € million	2012	2011
Cost of materials	-7.6	-6.7
Personnel expenses	-50.0	-40.3
Depreciation and amortization	-7.2	-4.
Other administrative expenses	-7.7	-5.9
otal general administrative expenses	-72.5	-57.0

General administrative expenses are expenses incurred in connection with administrative activities unrelated to development, production or sales activities.

# 11. OTHER OPERATING INCOME AND EXPENSES

in € million	2012	2011
Income		
Gains from the disposal of intangible assets and property, plant and equipment	0.4	0.5
Reimbursement of insurance claims	0.8	0.
Rental income from		
sublet property owned by MTU	1.4	1.2
sublet property owned by third parties	0.8	0.7
Sundry other operating income	5.1	5.8
Total other operating income	8.5	8.3
Expenses		
Losses from the disposal of intangible assets and property, plant and equipment	-0.5	-1.3
Rental payments for sublet property	-0.8	-0.7
Expenses associated with insurance claims	-0.7	-0.2
Sundry other operating expenses	-0.8	-0.5
Total other operating expenses	-2.8	-2.7
Balance of other operating income and expenses	5.7	5.6

The MTU group does not hold any investment property. An insignificant part of the buildings recognized under property, plant and equipment is rented out to external third parties.

In 2012, as in the previous year, other operating income did not include any government grants.

# 12. PROFIT/LOSS OF COMPANIES ACCOUNTED FOR USING THE EQUITY METHOD/AT COST

In the financial year 2012, the profit/loss of companies accounted for using the equity method comprises MTU's share of the profit of IAE International Aero Engines AG, Zurich, Switzerland. As in the previous year, the profit/loss of Pratt & Whitney Canada Service Centre Europe GmbH, Ludwigsfelde, which is also accounted for using the equity method, was not recognized in the financial year 2012 owing to the overall negative business outlook.

The profit/loss of related companies accounted for at cost amounted to € 12.1 million (2011: € 2.6 million), including remeasurement of the former IAE shares in the amount of € 9.5 million.

in € million	2012	2011
Profit/loss of companies accounted for using the equity method		
IAE International Aero Engines AG, Zurich, Switzerland	1.0	
Total profit/loss of companies accounted for using the equity method	1.0	
Profit/loss of companies accounted for at cost		
Military program coordination and management companies	0.5	0.5
Other related companies	11.6	2.1
Total profit/loss of companies accounted for at cost	12.1	2.6

Corporate Governance

in € million	2012	2011
Interest income	2.6	3.7
Interest expense on		
Convertible bond	-0.4	-8.1
Liabilities to banks	-3.0	-3.6
Finance lease agreements	-0.2	-1.2
Transactions with non-consolidated companies	-0.1	-0.1
Corporate bond	-4.1	
Other interest expenses	-0.8	-3.9
Capitalized borrowing costs for qualifying assets	2.2	0.5
Interest expenses	-6.4	-16.4
Interest result	-3.8	-12.7
Thereof: on financial instruments classified in accordance with IAS 39 as:		
Loans and receivables	2.2	2.0
Available-for-sale financial assets	0.3	1.5
Financial instruments measured at amortized cost	-6.4	-16.5
Financial instruments not within the scope of IFRS 7 or IAS 39	1.1	1.9

Interest income on financial instruments not within the scope of IFRS 7 or IAS 39 amounted to € 1.1 million (2011: € 1.9 million) and related to cash and cash equivalents.

In the financial year 2012, borrowing costs in the amount of € 2.2 million (2011: € 0.5 million) were capitalized, triggering a decrease in the net interest expense. Where the borrowing costs can be directly attributed to a specific qualifying asset, the actual amount of those borrowing costs is capitalized.

# 14. FINANCIAL RESULT ON OTHER ITEMS

The financial result on other items improved in the financial year 2012. The net expense decreased by € 17.7 million to €-24.5 million (2011: €-42.2 million). The main factors responsible for this change were fair value gains on derivatives amounting to € 17.9 million (2011: fair value losses amounting to €7.1 million), which helped to counterbalance the interest portion included in the measurement of receivables, other provisions, plan assets, liabilities and advance payments from customers amounting to € 11.6 million (2011: € 2.4 million).

in € million	2012	2011
Effects of currency translation		
Exchange rate gains/losses on currency holdings	-1.2	-5.0
Exchange rate gains/losses on financing transactions		1.4
Exchange rate gains/losses on finance leases	0.1	-0.
Fair value gains/losses on derivatives		
Currency and interest rate derivatives	18.6	-4.7
Forward commodity sales contracts	-0.7	-2.4
Interest portion included in measurement of assets and liabilities		
Pension provisions	-24.2	-23.0
Contingent liabilities	-5.8	-7.0
Receivables, other provisions, plan assets, liabilities and advance payments from customers	-11.6	-2.4
Result on other financial instruments	0.3	1.0
Financial result on other items	-24.5	-42.2
Thereof: on financial instruments classified in accordance with IAS 39 as:		
Financial assets at fair value through profit or loss - held for trading	40.4	15.2
Financial liabilities at fair value through profit or loss - held for trading	-22.2	-20.3

The financial result on other items groups together all income and expense items on financial instruments classified as 'held for trading' in accordance with IAS 39.

## FAIR VALUE GAINS/LOSSES ON DERIVATIVES

Fair value gains on currency and interest rate derivatives amounted to € 18.6 million (2011: fair value losses of € 4.7 million). The collective forward transactions concluded with German banks had a positive effect on this result. More detailed information on these transactions is given in Note 41.2. (Market risks). Fair value losses on forward commodity sales contracts for nickel amounted to € 0.7 million (2011: losses of € 2.4 million).

# INTEREST PORTION INCLUDED IN MEASUREMENT OF ASSETS AND LIABILITIES

Expenses from the unwinding of the discount on pension obligations amounting to € 24.2 million in 2012 remained roughly at the previous year's level (2011: € 23.6 million) due to the unchanged forecast discount rate for the financial year 2012. The discount rate applied when measuring the fair value of contingent liabilities, as recognized in the income statement, was based on the WACC method. A net expense of € 11.6 million (2011: € 2.4 million) was recognized for the interest portion included in the measurement of receivables accounted for at amortized cost, other provisions, plan assets, liabilities and advance payments from customers.

## 15. INCOME TAXES

Recognized income taxes comprise current income taxes paid or payable in the countries in which the group operates, and deferred tax income or expense.

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in € million	2012	2011
Tax expense incurred in current period	-89.7	-66.6
Tax expense (-) / income incurred in prior periods	0.9	
Current tax expense	-88.8	-66.6
Deferred tax expense (-) / income resulting from temporary differences	-10.5	0.1
Deferred tax expense (-) / income resulting from tax credits	1.4	-4.6
Deferred tax expense (-) / income resulting from losses available for carry-forward		-2.0
Deferred tax expense	-9.1	-6.5
Recognized tax expense	-97.9	-73.1

A more detailed presentation of the deferred tax expense and income is provided in Note 38. (Deferred tax assets and liabilities).

### TAX RECONCILIATION

Deferred tax assets and liabilities are calculated on the basis of the tax rates which, according to the current tax legislation in the individual countries concerned, will apply or are expected to apply when the taxes are paid.

For the financial year 2012, all deferred tax assets and liabilities of German entities were measured on the basis of the expected tax rate of 32.6%. This rate comprises, on the one hand, the uniform corporation tax rate of 15.0% that applies in Germany plus a solidarity surcharge of 5.5% on the calculated corporation tax expense, resulting in an overall corporation tax rate of 15.8%. Taking into account an average factor of 480.0%, the municipal trade tax on earnings for German companies equals 16.8%. This and the corporation tax together make up the income tax rate of 32.6% (2011: 32.6%). In the case of companies outside Germany, deferred tax assets and liabilities are calculated using the relevant tax rates for the country in question, which are unchanged at between 19% and 39%. Reference is made to Note 38. (Deferred tax assets and liabilities) for changes in deferred tax assets and liabilities.

Reconciliation of expected tax expense to recognized tax expense:

n € million	2012	2011
Earnings before tax	271,8	232,3
Income tax rate (including municipal trade tax)	32.6%	32.6%
xpected tax expense	-88.6	-75.7
Impact of:		
Recognition and measurement adjustments and write-downs on deferred tax assets	0.9	1.8
Non-tax-deductible expenses and tax-exempt income		-2.8
Lower tax rate for companies outside Germany	-15.2	3.5
Investments accounted for using the equity method	0.3	
Tax field audit	0.9	
Tax credits available for carry-forward	1.4	-4.4
Tax deducted at source on profit distribution of MTU Maintenance, Zhuhai	-0.8	-0.6
Change in tax rate for MTU Maintenance, Zhuhai		1.9
Other impacts	3.2	3.2
ecognized tax expense	-97.9	-73.1
Effective tax rate	36.0%	31.5%

# 16. EARNINGS PER SHARE

Earnings per share in the financial year 2012 were no longer diluted by the conversion rights attached to the convertible bond that was issued on February 1, 2007 and matured on February 1, 2012.

The potential dilutive effects of the Share Matching Plan offered for the first time in the financial year 2010 are negligible.

The computation of diluted earnings per share for the previous year involves adding the maximum number of common shares that could be issued through the exercise of conversion rights or the granting of equity instruments to the weighted average number of outstanding shares during the corresponding period.

The number of common shares that could be issued already includes all shares newly issued in the reporting period, weighted on a time-proportionate basis. At the same time, group earnings during the corresponding previous-year period are adjusted in respect of the interest expense (net of taxes) on the convertible bond.

The following tables show not only earnings per share, but also the dilutive effects of shares that could potentially be issued:

		Reconciliat	tion of financial instrum	ents	
	Undiluted earnings per share	Interest expense on convertible bond and no. of shares	Current and deferred taxes	Share Matching Plan shares	Diluted earnings per share
Earnings after tax in € million	173.9				173.
Weighted average number of outstanding shares (shares)	50,695,186			21,187	50,716,37
rnings per share (common stock) in €	3.43				3.4

		Reconciliat	tion of financial instrum	ients	
	Undiluted earnings per share	Interest expense on convertible bond and no. of shares	Current and deferred taxes	Share Matching Plan shares	Diluted earnings per share
Earnings after tax in € million	159.2	8.1	-2.6		164.7
Weighted average number of outstanding shares (shares)	48,820,788	3,084,849		14,882	51,920,51
arnings per share (common stock) in €	3.26				3.1

The number of shares under the Share Matching Plan relates to the deferred share-based component of the Board of Management's compensation.

# 17. ADDITIONAL DISCLOSURES RELATING TO THE INCOME STATEMENT

After adjustments to eliminate the effect of purchase price allocation in connection with the acquisition of the group companies, and of non-recurring items, and after addition of depreciation/ amortization and impairment losses, the following intermediate results are obtained:

n € million	2012	2011
Earnings before interest and tax (EBIT)	300.1	287.2
Depreciation/amortization effects of purchase price allocation/V2500 stake increase		
Intangible assets	47.3	40.1
Property, plant and equipment	1.7	2.3
Impairment loss on:		
Intangible assets	34.7	
Total depreciation/amortization expense and impairment losses	83.7	42.4
IAE stake increase	-9.5	
Adjusted EBIT	374.3	329.6

Costs by function include the following personnel expenses items:

n € million	2012	2011
Wages and salaries	493.8	452.9
Social security, pension and other benefit expenses	90.8	91.1
Total personnel expenses	584.6	544.0

Pension benefits account for € 11.2 million (2011: € 16.6 million) of these expenses. The employer's share of social security contributions, which is recognized as an expense, amounted to € 79.6 million (2011: € 74.5 million).

The average number of persons employed during the financial year 2012 breaks down as follows:

verage number of	2012	2011
Industrial staff	3,603	3,484
Administrative staff	3,785	3,643
Employees on temporary contracts	460	416
Trainees	326	320
Students on work experience projects	250	237
otal average number of employees	8,424	8,100

Costs by function include the following cost-of-materials items:

n € million	2012	2011
Cost of raw materials and supplies	985.4	825.9
Cost of purchased services	1,349.3	1,190.4
Total cost of materials	2,334.7	2,016.3

The fees paid in the financial year 2012 to the accounting firm Deloitte & Touche GmbH, Wirtschaftsprüfungsgesellschaft, for services that include the auditing of the consolidated financial statements amounted to a total of € 1.1 million, as in the previous year. The separate items are presented below in accordance with Section 314(1) no. 9 of the German Commercial Code (HGB).

n € million	2012	2011
Financial statement auditing services	0.6	0.6
Tax consulting services	0.3	0.4
Other independent auditing services	0.2	0.1
otal fees paid to the auditor	1.1	1.1

The expense item 'Financial statement auditing services' comprises all fees paid to the external group auditor for the auditing of the financial statements of all MTU companies.

The expense for tax consulting services mainly comprises services rendered to expatriated MTU employees on international assignment outside Germany. The item 'Other independent auditing services' primarily relates to the auditing of the group's interim financial reports.

# III. Notes to the Consolidated Balance Sheet

# 18. ANALYSIS OF CHANGES IN INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT, AND FINANCIAL ASSETS

in € million	Balance at Jan. 1, 2012	Translation differences	Additions	Transfer	Disposals	Balance at Dec. 31, 2012
Program assets	892.3	23.3	541.4			1,457.0
Program-independent technologies	124.7					124.7
Customer relations	68.6					68.6
Rights and licenses	89.6	0.5	4.7	2.9	-3.7	94.0
Goodwill	406.5	-0.2				406.3
Prepayments on intangible assets	5.5		5.6	-1.8	-0.4	8.9
Development costs	124.4		49.3			173.7
Intangible assets	1,711.6	23.6	601.0	1.1	-4.1	2,333.2
Land, leasehold rights and buildings, including buildings on non-owned land	384.6	2.1	12.7	16.8		416.2
Technical equipment, plant and machinery	436.0	1.8	17.0	21.1	-3.6	472.3
Other equipment, operational and office equipment	313.7	0.5	37.1	11.1	-13.6	348.8
Advance payments and construction in progress	67.6	0.2	32.6	-50.1		50.3
Property, plant and equipment	1,201.9	4.6	99.4	-1.1	-17.2	1,287.6
Investments in subsidiaries	0.5		0.2			0.7
Investments in associated companies	0.4		20.8	0.1		21.3
Equity investments in joint ventures	4.3		1.2			5.5
Other equity investments	4.5			-0.1		4.4
Other loans						
Financial assets <sup>1)</sup>	9.7		22.2	0.0		31.9
Total assets	2,923.2	28.2	722.6	0.0	-21.3	3,652.7

 $<sup>^{\</sup>scriptsize 1)}$  Insofar as they are accounted for using the equity method or at cost.

in € million	Balance at Jan. 1, 2012	Translation differences	Depre- ciation/ amort- ization	Impairment loss	Disposals	Balance at Dec. 31, 2012	Carrying amoun Dec. 31 2013
Program assets	249.7	0.1	38.4	53.7		341.9	1,115.
Program-independent technologies	99.7		12.5			112.2	12.
Customer relations	32.1		2.9			35.0	33.0
Rights and licenses	61.9	0.2	8.0		-3.7	66.4	27.0
Goodwill							406.3
Prepayments on intangible assets							8.
Development costs	1.9		1.4			3.3	170.
ntangible assets	445.3	0.3	63.2	53.7	-3.7	558.8	1,774.
Land, leasehold rights and buildings, including buildings on non-owned land	81.4	0.2	12.1			93.7	322.
Technical equipment, plant and machinery	318.8	0.2	36.3		-3.5	351.8	120.
Other equipment, operational and office equipment	217.1	0.1	38.5		-13.5	242.2	106.
Advance payments and construction in progress							50.
Property, plant and equipment	617.3	0.5	86.9		-17.0	687.7	599.
Investments in subsidiaries							0.
Investments in associated companies							21.
Equity investments in joint ventures							5.
Other equity investments							4.
Other loans							
Financial assets <sup>1)</sup>							31.
Total assets	1,062.6	0.8	150.1	53.7	-20.7	1,246.5	2,406.2

 $<sup>^{\</sup>scriptsize 1)}$  Insofar as they are accounted for using the equity method or at cost.

# ANALYSIS OF CHANGES IN INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT, AND FINANCIAL ASSETS 2011

in € million	Balance at Jan. 1, 2011	Translation differences	Additions	Transfer	Disposals	Balance at Dec. 31, 2011
Program assets	841.9		50.4			892.3
Program-independent technologies	124.7					124.7
Customer relations	67.7	0.9				68.6
Rights and licenses	87.0	-0.3	3.4	0.5	-1.0	89.6
Goodwill	405.2	1.3				406.5
Prepayments on intangible assets	1.4		3.7	0.4		5.5
Development costs	90.8		34.5		-0.9	124.4
Intangible assets	1,618.7	1.9	92.0	0.9	-1.9	1,711.6
Land, leasehold rights and buildings, including buildings on non-owned land	383.5	-1.5	1.6	1.6	-0.6	384.6
Technical equipment, plant and machinery	408.7	-0.7	15.6	18.1	-5.7	436.0
Other equipment, operational and office equipment	300.2	0.1	39.9	8.7	-35.2	313.7
Advance payments and construction in progress	40.4	-0.1	56.6	-29.3		67.6
Property, plant and equipment	1,132.8	-2.2	113.7	-0.9	-41.5	1,201.9
Investments in subsidiaries			0.5			0.5
Investments in associated companies	0.4					0.4
Equity investments in joint ventures	4.3					4.3
Other equity investments	3.1		1.4			4.5
Other loans	2.1		0.4		-2.5	0.0
Financial assets <sup>1)</sup>	9.9		2.3		-2.5	9.7
Total assets	2,761.4	-0.3	208.0	0.0	-45.9	2,923.2

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Insofar as they are accounted for using the equity method or at cost.

in € million	Balance at Jan. 1, 2011	Translation differen- ces	Depre- ciation / amort- ization	Impair- ment loss	Disposals	Balance at Dec. 31, 2011	Carryin amoun Dec. 31 201
Program assets	221.3		28.4			249.7	642.
Program-independent technologies	87.2		12.5			99.7	25.0
Customer relations	29.0	0.3	2.8			32.1	36.
Rights and licenses	54.9	0.1	8.0		-1.1	61.9	27.
Goodwill							406.
Prepayments on intangible assets							5.
Development costs	0.9		1.0			1.9	122.
Intangible assets	393.3	0.4	52.7		-1.1	445.3	1,266.
Land, leasehold rights and buildings, including buildings on non-owned land	70.4	0.2	11.3		-0.5	81.4	303.
Technical equipment, plant and machinery	287.0	0.9	36.5	-0.1	-5.5	318.8	117.
Other equipment, operational and office equipment	215.9	0.4	34.9	0.1	-34.2	217.1	96.
Advance payments and construction in progress							67.
Property, plant and equipment	573.3	1.5	82.7	0.0	-40.2	617.3	584.
Investments in subsidiaries							0.
Investments in associated companies							0.
Equity investments in joint ventures							4.
Other equity investments							4.
Other loans							
Financial assets <sup>1)</sup>							9.
Total assets	966.6	1.9	135.4		-41.3	1,062.6	1,860.6

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Insofar as they are accounted for using the equity method or at cost.

### 19. INTANGIBLE ASSETS

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Intangible assets mainly comprise program assets capitalized as part of the purchase price allocation, program-independent technologies and software (the latter mostly for engineering applications), and acquired goodwill.

The amortization and impairment expense on intangible assets is included in the presentation of the following line items as follows: cost of sales € 102.6 million (2011: € 46.8 million), research and development expenses € 7.1 million (2011: € 2.8 million), selling expenses € 2.5 million (2011: € 1.4 million), and general administrative expenses € 4.7 million (2011: € 1.7 million).

In the financial year 2012, additions to intangible assets totaled € 601.0 million (2011: € 92.0 million). In addition to the capitalized expenditure in connection with MTU's increased stake in the IAE V2500 engine program amounting to € 541.1 million (see Note 2. Group reporting entity), these assets primarily comprise the following:

### **PW1100G ENGINE PROGRAM**

Expenditure of € 41.0 million was incurred in the financial year 2012 (2011: € 69.3 million) in connection with MTU's 18% stake in the PW1100G, the new engine for the A320 family. Of this amount, € 16.8 million (2011: € 55.5 million) related to development assets acquired in return for payment, while € 24.2 million (2011: € 13.8 million) related to internally generated development costs.

#### **GE38 ENGINE PROGRAM**

Internally generated development costs amounting to € 7.8 million (2011: € 8.7 million) were capitalized for General Electric's GE38 helicopter engine program in 2012.

### MRO

The commercial maintenance business has developed special repair processes capable of increasing the efficiency of engine maintenance, allowing intangible assets amounting to € 0.8 million as (2011: € 3.4 million) to be capitalized.

# 20. PROPERTY, PLANT AND EQUIPMENT

Through its capital expenditure on property, plant and equipment for the OEM segment, MTU aims to consolidate and extend its position as a leading engine manufacturer, improve efficiency, and modernize equipment and machinery to state-of-the-art standards.

In the financial year 2012, the group's total capital expenditure on property, plant and equipment amounted to € 99.4 million (2011: € 113.7 million). The depreciation expense on property, plant and equipment is included in the presentation of the following line items as follows: cost of sales € 79.2 million (2011: € 74.4 million), research and development expenses € 4.0 million (2011: € 4.6 million), selling expenses € 1.2 million (2011: € 1.2 million), and general administrative expenses € 2.5 million (2011: € 2.5 million).

# LAND, LEASEHOLD RIGHTS AND BUILDINGS, INCLUDING BUILDINGS ON NON-OWNED LAND

Additions to this item in the financial year 2012 amounted to € 12.7 million (2011: € 1.6 million) and relate mainly to completion of the new building for the blisk manufacturing facility.

## TECHNICAL EQUIPMENT, PLANT AND MACHINERY

Capital expenditure on technical equipment, plant and machinery totaling € 17.0 million (2011: € 15.6 million) relates mainly to the purchase of CNC lathes and CNC grinding/milling machines.

# OTHER EQUIPMENT, OPERATIONAL AND OFFICE EQUIPMENT

The capital expenditure on other equipment, operational and office equipment, which mainly comprises special tools and equipment, fixtures and other tools for new and ongoing programs, was within normal limits in the year under review.

# ADVANCE PAYMENTS AND CONSTRUCTION IN PROGRESS

Additions to this item in the financial year 2012 amounted to € 32.6 million (2011: € 56.6 million) and relate mainly to work in progress on special tools and equipment, especially for new engine programs, and advance payments on technical installations for the new blisk manufacturing facility in Munich.

Capitalized assets under finance lease agreements are based on the following components:

in € million	2012	2011
Future minimum lease payments		
due in less than one year	2.6	3.9
due in more than one and less than five years	0.1	0.1
due in more than five years		
Total future minimum lease payments	2.7	4.0
Interest portion of future minimum lease payments		
due in less than one year		-0.1
due in more than one and less than five years		
due in more than five years		
Total interest portion of future minimum lease payments		-0.1
Present value of future minimum lease payments		
due in less than one year	2.6	3.8
due in more than one and less than five years	0.1	0.1
due in more than five years		
Total present value of future minimum lease payments	2.7	3.9

The following carrying amounts resulted from the capitalized assets under finance lease agreements at the reporting date:

in € million	Carrying amount Dec. 31, 2012	Carrying amount Dec. 31, 2011
Technical equipment, plant and machinery, operational and		
office equipment	0.3	1.0

# 21. FINANCIAL ASSETS

The following table shows the carrying amounts of financial assets included in the consolidated financial statements:

in € million	Dec. 31, 2012	Dec. 31, 2011
Financial assets accounted for using the equity method	20.9	
Joint ventures accounted for at cost	5.5	4.3
Financial assets accounted for at cost	5.5	5.4
Subtotal	31.9	9.7
Financial assets classified as cash flow hedges	26.6	8.9
Derivative financial instruments without hedging relationship	14.8	0.8
Subtotal	41.4	9.7
Available-for-sale financial assets	25.0	40.9
Total	98.3	60.3

At the reporting date, no unrealized gains or losses on available-for-sale financial assets were recognized in other comprehensive income (2011: unrealized losses of € 0.2 million, net of deferred tax). The carrying amounts in 2011 included accrued interest of € 0.1 million.

The derivative financial assets can be broken down as follows:

	Total		Non-current		Current	
in € million	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011
Forward foreign exchange contracts	26.6	8.9	15.0	6.5	11.6	2.4
Forward commodity sales contracts		0.1				0.1
Currency options	14.8	0.7	14.2		0.6	0.7
Total	41.4	9.7	29.2	6.5	12.2	3.2

The following amounts have been recognized in respect of the assets, liabilities, income and expenses of joint ventures and associated companies, with the exception of MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China:

in € million	Joint ventures 2012	Associated companies 2012	Joint ventures 2011	Associated companies 2011
Disclosures relating to the income statement				
Income	152.4	3,212.5	134.0	1,091.9
Expenses	-149.3	-3,207.3	-127.2	-1,091.0
Balance of income and expenses	3.1	5.2	6.8	0.9
Disclosures relating to the balance sheet				
Non-current assets	19.3	215.1	18.1	4.0
Current assets	82.8	1,593.6	71.4	215.8
Total assets	102.1	1,808.7	89.5	219.8
Equity	23.7	53.1	14.6	3.6
Non-current liabilities	6.5	251.8	7.4	23.9
Current liabilities	71.9	1,503.8	67.5	192.3
Total equity and liabilities	102.1	1,808.7	89.5	219.8

The disclosures for the joint venture Ceramic Coating Center S.A.S., Paris, France, and for the associated companies relate to the prior year, as the actuals for the year stated were not available at the time of reporting.

As of the financial year 2012, the disclosures for associated companies also include the business results of IAE International Aero Engines AG, Zurich, Switzerland, in which MTU now holds 25% of the equity after having acquired an additional 12.9% of the shares in this company. This investment has therefore been reclassified.

# FINANCIAL ASSETS ACCOUNTED FOR USING THE EQUITY METHOD

Financial assets accounted for using the equity method amounted to € 20.9 million (Dec. 31, 2011: € 0.0 million) and comprise MTU's shares in IAE International Aero Engines AG, Zurich, Switzerland, and in Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde, Germany, whereby the latter investment is written down to zero.

For an explanation of the effects of the acquisition of 12.9% of the shares in IAE, and of the effects of the remeasurement of the previous capital share of 12.1% in the same company, we refer you to Note 2. (Group reporting entity).

## 22. INVENTORIES

The carrying amount of inventories, after write-downs, comprises the following components:

in € million	Dec. 31, 2012	Dec. 31, 2011
Raw materials and supplies	341.6	349.6
Work in progress	434.7	422.7
Advance payments	32.5	51.5
Total inventories	808.8	823.8

The change in inventories attributable to write-downs on raw materials and supplies and work in progress is as follows:

2012	2011
64.3	58.3
13.2	6.0
77.5	64.3
	64.3

In line with the group's business model, the write-down method represents the best possible means of estimating the net realizable value of inventories held by MTU.

# 23. TRADE RECEIVABLES

Dec. 31, 2012	Dec. 31, 2011
547.3	577.4
21.2	27.7
568.5	605.1
	547.3

Transactions with related companies are presented in more detail in Note 43.1.1. (Business with related companies).

The valuation allowances on trade receivables changed as follows:

in € million	2012	2011
Allowances at January 1	7.9	9.4
Translation differences		0.2
Additions (expense for specific allowances)	5.5	3.1
Utilized	-0.4	-2.3
Reversed	-2.8	-2.5
Allowances at December 31	10.2	7.9

The net expense for bad debts on trade receivables written off as uncollectable offset against income from bad debts recovered amounted to €-0.6 million (2011: €-2.3 million).

All expense and income amounts arising from valuation allowances and the write-off of uncollectable bad debts on trade receivables are recognized as selling expenses.

# 24. CONSTRUCTION CONTRACT RECEIVABLES

n € million	Dec. 31, 2012	Dec. 31, 2011
Construction contract receivables	547.0	469.5
thereof: Advance payments received	-364.0	-332.7
Total construction contract receivables	183.0	136.8

Interest-free advance payments received for construction contracts directly attributable to an engine project are offset against the corresponding receivables. If the amount of the directly attributable advance payments received exceeds the amount of the receivables, the balance is recognized under construction contract payables.

Income from construction contracts in the financial year 2012 amounted to € 46.0 million (2011: € 27.2 million). Contract-related costs to be offset against this income amounted to € 36.5 million (2011: € 21.7 million). The amount of € 547.0 million for construction contract receivables at December 31, 2012 (2011: € 469.5 million) includes advance payments received amounting to € 364.0 million (2011: € 332.7 million). No amounts were retained for partial settlement of construction contract receivables.

For disclosures relating to construction contract receivables that have been offset against directly attributable advance payments received, please refer to Note 35. (Construction contract payables).

The following table shows the carrying amounts and a breakdown of the due dates of unimpaired trade and construction contract receivables at the reporting date:

n € million	Dec. 31, 2012	Dec. 31, 201	
Carrying amount	1,115.5	1,074.6	
Thereof:			
Neither impaired nor past due at the reporting date	878.3	885.4	
Not impaired and due in the following time windows:	212.8	167.0	
Less than 90 days	151.6	135.	
Between 90 and 180 days	25.1	14.	
Between 181 and 360 days	25.9	12.	
More than 360 days	10.2	5.7	
Impaired	24.4	22.2	

### 25. OTHER ASSETS

Other assets comprise the following items:

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	To	otal	Non-c	current	Cur	rent
in € million	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011
Other taxes	16.2	15.8			16.2	15.8
Receivable from employees	0.9	1.3			0.9	1.3
Receivable from suppliers	2.1	2.7			2.1	2.7
Sundry other assets	14.0	15.2	0.1	0.8	13.9	14.4
Total other assets	33.2	35.0	0.1	0.8	33.1	34.2

The other taxes totaling € 16.2 million (2011: € 15.8 million) mainly comprise input taxes.

The sundry other assets totaling € 14.0 million (2011: € 15.2 million) groups together a variety of different assets.

At December 31, 2012, other assets, excluding tax assets, did not require adjustment and almost all of these assets were within due date and had a due date of less than one year.

# 26. CASH AND CASH EQUIVALENTS

The cash and cash equivalents of € 161.2 million (2011: € 198.8 million) comprise cash in hand and bank deposits. This item also includes foreign currency holdings amounting to €71.9 million (2011: € 108.0 million).

MTU is not free to dispose of cash and cash equivalents in the amount of € 6.5 million (2011: € 11.6 million) held by MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China.

# 27. INCOME TAX CLAIMS

Income tax claims in the financial year 2012 amounted to € 13.8 million (2011: € 5.8 million).

# 28. PREPAYMENTS

The prepayments of € 5.2 million (2011: € 4.1 million) consist primarily of prepayments for insurance premiums and rents.

# 29. EQUITY

Changes in group equity are set out in the consolidated statement of changes in equity.

# 29.1. SUBSCRIBED CAPITAL

The company's subscribed capital (capital stock) is unchanged and amounts to € 52.0 million, divided into 52.0 million registered non-par shares.

### 29.2. AUTHORIZED CAPITAL

The Board of Management is authorized until April 21, 2015, to increase the company's capital stock by up to € 5.2 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash contributions (Authorized capital I 2010).

The Board of Management is further authorized until April 21, 2015, to increase the company's capital stock by up to € 15.6 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash contributions (Authorized capital II 2011).

In addition, the Board of Management is authorized until April 21, 2015, to increase the company's capital stock by up to  $\in$  5.2 million, with the prior approval of the Supervisory Board, by issuing, either in a single step or in several steps, new registered non-par-value shares in return for cash and/or non-cash contributions (Authorized capital III 2011).

### 29.3. CONDITIONAL CAPITAL

At the Annual General Meeting on April 22, 2010, the Board of Management was authorized until April 21, 2015, to issue conditional capital increases with the prior approval of the Supervisory Board:

- The company's capital stock may be conditionally increased by up to € 3.64 million through the issue of up to 3,640,000 new registered non-par-value shares. The purpose of this conditional capital increase is to issue shares to owners or creditors of convertible bonds and/or bonds with warrants in accordance with the authorization granted to the company's Board of Management under a resolution passed by the Annual General Meeting on May 30, 2005. Shares may be issued at a conversion price or warrant exercise price determined on the basis of the conditions laid down in the relevant authorization.
- The company's capital stock may be conditionally increased by up to € 22.36 million through the issue of up to 22,360,000 new registered non-par-value shares, each corresponding to a proportional amount (one euro) of the company's total capital stock (conditional capital). The purpose of this conditional capital increase is to issue shares to owners or creditors of convertible bonds and/or bonds with warrants in accordance with the authorization granted to the company's Board of Management under a resolution passed by the Annual General Meeting on April 22, 2010. Shares may be issued at a conversion price or warrant exercise price determined on the basis of the conditions laid down in the relevant authorization.

The Board of Management is authorized until April 21, 2015 to issue, in a single step or in several steps and with the prior approval of the Supervisory Board, bearer convertible bonds and/or bonds with warrants (collectively referred to as 'securities'), with or without maturity date, with a total nominal value of up to € 500 million, and to grant the owners of convertible bonds and/or bonds with warrants the right, obligation or option to convert them into registered non-par-value shares of the company representing a stake in the capital stock of up to € 22.36 million under the conditions established for the issue of convertible bonds or bonds with warrants. The securities may be issued in return for cash contributions only. They may be issued in euros or – to an equivalent value – in any other legal currency, for instance that of an OECD country. They may also be issued by an affiliated company in which MTU holds a controlling interest (group company). In such cases, and subject to the prior approval of the Supervisory Board, the Board of Management is authorized to act as guarantor for the securities, and to grant the owners of the securities the right, obligation or option to convert them into new registered non-par-value shares in MTU.

### 29.4. CAPITAL RESERVES

Capital reserves include premiums from the issue of shares, the equity component (net of proportional transaction costs) of the bond issued in 2007 and repaid/converted in the first quarter of 2012, the fair value of shares granted under the Share Matching Plan, and an amount of € 3.3 million (2011: € 1.0 million) representing the difference between the proceeds of shares sold under the MAP employee stock option program and their original acquisition cost. The MAP employee stock option program is described in Note 36. (Other liabilities).

### SHARE MATCHING PLAN (SMP)

#### MTU Board of Management

At the end of a four-year assessment period, members of the Board of Management have the option of converting the payment under the Performance Share Plan (PSP), which constitutes part of their deferred compensation, into shares of MTU Aero Engines Holding AG, which must then be held for a further three years. At the end of the vesting period, these shares are matched on the basis of a Share Matching Plan (SMP), which entitles each Board of Management member to one additional free share for every three MTU shares acquired in this way. The entitlement to additional free shares is deemed to have expired once the corresponding number of such shares has been transferred to the member of the Board of Management. The total value of the free shares allocated at the end of the vesting period is limited to three times the purchase price of the shares originally acquired through the PSP.

The number of future matching shares depends on the amount of benefits payable under the Performance Share Plan (PSP). For more information on the PSP, please read the explanatory comments in Note 32. (Other provisions). In order to determine the fair value, a combined Monte Carlo simulation and Black-Scholes pricing model is used. The expected payout is dermined on the basis of the exact same assumptions used to measure the PSP. The result of this calculation serves as a basis for measuring the SMP in accordance with the Black-Scholes pricing model. The fair value of this forward option at the grant date is recognized in the balance sheet taking into account the conditions of exercise. The vesting period of the forward option is 52 months. The number of options granted to members of the Board of Management under the SMP is determined on the basis of the performance-related compensation approved by the Supervisory Board, and must in turn be approved by the Personnel Committee.

The compensation for senior managers is linked to the performance-related compensation awarded to the Board of Management. The options do not confer dividend or voting rights on the holder.

# Senior managers of MTU

Starting in 2010, MTU expanded the scope of the Share Matching Plan (SMP) it had previously introduced for members of the Board of Management, with annual allocations of shares at the beginning of each financial year, to include the top two tiers of senior management (OFK and FK) at the company and its subsidiaries.

# Tier-1 senior managers (OFK)

In accordance with the conditions of the plan, tier-1 senior managers (OFK) may, after expiry of a three-year PSP vesting period, use the benefits payable under the PSP and the Annual Performance Bonus (APB) to invest in shares of MTU Aero Engines Holding AG, which must then be held for a further two years under the terms of this supplementary plan, the Share Matching Plan (SMP). At the end of this supplementary vesting period, on condition that the SMP participant is still employed by MTU, this investment is matched by a cash payment corresponding to one-third of the amount invested in MTU shares. The total investment qualifying tier-1 senior managers to receive a matching payment under the SMP is limited to a maximum of € 60,000 per eligible manager.

# Tier-2 senior managers (FK)

In accordance with the conditions of the plan, tier-2 senior managers (FK) may, after expiry of a two-year PSP vesting period, use the benefits payable under the PSP and the Annual Performance Bonus (APB) to invest in shares of MTU Aero Engines Holding AG, which must then be held for a further two years under the terms of this supplementary plan, the Share Matching Plan (SMP). At the end of this supplementary vesting period, on condition that the SMP participant is still employed by MTU, this investment is matched by a cash payment corresponding to one-third of the amount invested in MTU shares. The total investment qualifying tier-2 senior managers to receive a matching payment under the SMP is limited to a maximum of € 30,000 per eligible manager.

The fair value of the forward options for members of the Board of Management of MTU Aero Engines Holding AG were determined at the grant date on the basis of the following parameters and assumptions:

Model parameters		Forward options				
	Tranche 3 Board of Management Financial year 2012	Tranche 2 Board of Management Financial year 2011	Tranche 1b Board of Management Financial year 2010	Tranche 1a Board of Management Financial year 2010		
Option period	88 months	88 months	88 months	88 months		
Vesting period	52 months	52 months	52 months	52 months		
Measurement date	Jan. 1, 2012	Jan. 1, 2011	July 1, 2010	Jan. 1, 2010		
Average share price at acquisition date	47.47	47.03	46.52	36.63		
Dividend yield	2.23%	1.84%	2.07%	2.44%		
Fluctuation	4.00%	4.00%	4.00%	4.00%		
Expected volatility	35.18%	51.40%	52.82%	52.08%		
Risk-free interest rate	0.70%	1.76%	1.37%	2.30%		

The fair value of the forward options for tier-1 (OFK) and tier-2 (FK) senior managers of group companies were determined at the grant date on the basis of the following parameters and assumptions:

Model parameters		Forward options					
	Tranche 3 tier 1 (OFK) Financial year 2012	Tranche 3 tier 2 (FK) Financial year 2012	Tranche 2 tier 1 (OFK) Financial year 2011	Tranche : tier 2 (FK Financia year 201			
Option period	64 months	52 months	64 months	52 months			
Vesting period	40 months	28 months	40 months	28 months			
Measurement date	Jan. 1, 2012	Jan. 1, 2012	Jan. 1, 2011	Jan. 1, 201			
Average share price at acquisition date	47.47	47.47	47.03	47.03			
Dividend yield	2.23%	2.23%	1.84%	1.84%			
Fluctuation	4.00%	4.00%	4.00%	4.00%			
Expected volatility	35.18%	35.18%	51.40%	51.40%			
Risk-free interest rate	0.36%	0.14%	1.38%	1.00%			

Corporate Governance

The number of performance shares not yet exercisable under the Share Matching Plan (SMP) at the beginning and end of the reporting period is shown in the following tables:

number of shares or value in €	Fair value at grant date	Grante	d performance	Performance shares not yet exercisable at year end	Time to end of vesting period for performance shares	
	€	Number at Jan. 1, 2012 shares	Acquired in 2012 shares	Number at Dec. 31, 2012 shares	Number at Dec. 31, 2012 shares	Time at Dec. 31, 2012 months
Board of Management						
Performance shares tranche 1a issued Jan. 1, 2010	3.722	28,666		28,666	28,666	16
Performance shares tranche 1b issued July 1, 2010	4.233	6,031		6,031	6,031	22
Performance shares tranche 2 issued Jan. 1, 2011	4.779	34,285		34,285	34,285	28
Performance shares tranche 3 issued Jan. 1, 2012	5.771		36,009	36,009	36,009	40
Personal total / average	4.799	68,982	36,009	104,991	104,991	28

number of shares or value in €	Fair value at grant date	Granted performance shares			Performance shares not yet exercisable at year end	Time to end of vesting period for performance shares
	€	Number at Jan. 1, 2012 shares	Acquired in 2012 shares	Number at Dec. 31, 2012 shares	Number at Dec. 31, 2012 shares	Time at Dec. 31, 2012 months
Tier-1 senior managers (OFK)						
Performance shares tranche 2 issued Jan. 1, 2011	4,779	20.514		20.514	20.514	16
Performance shares tranche 3 issued Jan. 1, 2012	5,771		21.185	21.185	21.185	28
Personal total / average	5,283	20.514	21.185	41.699	41.699	22
Tier-2 senior managers (FK)						
Performance shares tranche 2 issued Jan. 1, 2011	4,779	32.291		32.291	32.291	4
Performance shares tranche 3 issued Jan. 1, 2012	5,771		35.906	35.906	35.906	16
Personal total / average	5,301	32.291	35.906	68.197	68.197	10
Cumulative total / average	5,294	52.805	57.091	109.896	109.896	15

Note: In the financial year 2012, no performance shares were exercised or forfeited, nor did any lapse.

The total expense incurred in the financial year 2012 for share-based compensation settled by issuance of equity instruments amounted to € 1.0 million (2011: € 0.5 million). The total expense incurred for share-based compensation settled by cash payment is presented in Note 32. (Other provisions).

# **29.5. REVENUE RESERVES**

Revenue reserves comprise the post-acquisition and non-distributed earnings of consolidated group companies.

#### 29.6. TREASURY SHARES

# PURCHASE OF TREASURY SHARES IN ACCORDANCE WITH THE AUTHORIZATION GRANTED BY THE ANNUAL GENERAL MEETING ON APRIL 22, 2010

The Board of Management of MTU Aero Engines Holding AG, Munich, has been authorized by resolution of the Annual General Meeting to buy back shares. These shares may be purchased on the stock market or by means of a public offering addressed to all shareholders. The purchase price paid in consideration of these shares must not exceed or undercut the market value by more than 10%, net of any supplementary transaction fees.

The Board of Management of MTU was thus authorized to purchase treasury shares with an aggregate nominal value not exceeding 10% of the company's issued capital stock, as applicable on the date of the resolution, during the period from April 23, 2010, through April 22, 2015, pursuant to Section 71 (1) item 8 of the German Stock Corporation Act (AktG). At no point in time may the value of the acquired shares, together with other treasury shares in the company's possession or which are assigned to it pursuant to Section 71a et seq. of the German Stock Corporation Act (AktG), exceed 10% of the company's capital stock.

### **PURCHASE OF TREASURY SHARES**

In the financial year 2012, the company purchased no shares (2011: 200,000 shares for a total price of € 9.4 million). The average acquisition cost of the shares purchased in 2011 was € 47.07 per share. The shares were purchased in order to meet contractual obligations attached to the convertible bond issue, to issue shares to group employees under the fifth and final tranche of the Matching Stock Program (MSP) and under the MAP employee stock option program, and to make provision for the future issue of matching shares to the Board of Management under the Share Matching Plan (SMP).

The following table shows the change in the number of treasury shares.

		2012			2011	
number of shares	Outstanding	Treasury shares	Outstanding	Outstanding	Treasury shares	Outstanding
Balance at January 1		3,187,512			3,247,593	
Buyback and issue of shares						
January (conversion of convertible bond)	48,812,488	-1,820,197	50,632,685	48,752,407		48,752,407
February	50,632,685		50,632,685	48,752,407		48,752,407
March	50,632,685		50,632,685	48,752,407		48,752,407
April	50,632,685		50,632,685	48,752,407		48,752,407
May	50,632,685		50,632,685	48,752,407		48,752,407
June (issue MSP / MAP)	50,632,685	-107,145	50,739,830	48,752,407	-260,081	49,012,488
July	50,739,830		50,739,830	49,012,488		49,012,488
August (buyback)	50,739,830		50,739,830	49,012,488	200,000	48,812,488
September	50,739,830		50,739,830	48,812,488		48,812,488
October	50,739,830		50,739,830	48,812,488		48,812,488
November	50,739,830		50,739,830	48,812,488		48,812,488
December	50,739,830		50,739,830	48,812,488		48,812,488
Balance at December 31		1,260,170			3,187,512	
Weighted average at December 31			50,695,186			48,820,788

### RECONCILIATION OF WEIGHTED AVERAGE NUMBER OF OUTSTANDING SHARES

After exercise of conversion rights by holders of the convertible bonds and taking into account the shares issued under the MAP employee stock option program, MTU held 1,260,170 treasury shares at December 31, 2012 (2011: 3,187,512 shares). This represents 2.4% of the company's capital stock (2011: 6.1%).

At December 31, 2012, a total of 50,739,830 MTU registered non-par shares (2011: 48,812,488 shares) were in issue and entitled to receive a dividend.

#### ISSUE OF SHARES TO EMPLOYEES UNDER EMPLOYEE STOCK OPTION SCHEMES

In the financial year 2011, a total of 104,763 treasury shares were issued to the Board of Management and other executive managers under the fifth tranche of the Matching Stock Program (MSP). The MSP ended in that year.

A total of 107,145 shares (2011: 154,165 shares) were sold to group employees in the financial year 2012 under the MAP employee stock option program.

### 29.7. OTHER COMPREHENSIVE INCOME (OCI)

In 2012, other comprehensive income (OCI) improved by € 15.3 million to a negative balance of €-48.5 million (2011: €-63.8 million), principally as a result of translation differences arising from the financial statements of international subsidiaries and the change in fair value of hedging instruments.

The table below shows the income and expenses recognized in other comprehensive income, including fair value changes, both before and after income taxes:

Items recognized in other comprehensive income							
		2012			2011		
		Income taxes			Income taxes		
in € million	Before		After	Before		After	
Translation differences	12.9		12.9	1.2		1.2	
Actuarial gains and losses on plan							
assets and pension obligations	-68.2	22.1	-46.1	-4.8	1.2	-3.6	
Available-for-sale financial assets	0.2	-0.1	0.1				
Change in fair value of hedging instruments							
designated as cash flow hedges	65.9	-17.5	48.4	-19.1	6.2	-12.9	
Income and expenses recognized in							
other comprehensive income	10.8	4.5	15.3	-22.7	7.4	-15.3	

### 29.8. DISCLOSURES RELATING TO CAPITAL MANAGEMENT

MTU strives to maintain a strong financial profile in the interests of carrying out the company's business within a flexible financing framework and in order to generate confidence on the part of its shareholders.

Consequently, the group's capital management activities are focused on optimizing the ratio between equity and net financial debt, and on improving the equity ratio.

in € million	Dec. 31, 2012	Dec. 31, 2011
Adjusted EBIT	374.3	329.6
Net financial debt	391.3	12.2
Balance-sheet total	4,261.9	3,736.9
Equity	1.089.3	856.5
Equity ratio	25.6%	22.9%
Gearing = ratio of net financial debt to equity	35.9%	1.4 %

#### 30. PENSION PROVISIONS

Defined benefit and defined contribution plans are in place for MTU employees. In the case of defined contribution plans, the company has no further obligations beyond the payment of fixed contributions to the plan. In the case of defined benefit plans, the company has an obligation to fulfill commitments to current and former employees. For group companies in Germany, these benefits are financed primarily by provisions recognized in the financial statements, which are covered only to a minor extent by plan assets. In contrast, MTU Maintenance Canada Ltd., Richmond, Canada, has a fund-financed retirement benefit plan.

In some cases, it is difficult to differentiate between defined contribution and defined benefit plans. In Germany, for example, a minimum level of benefits is guaranteed for defined contribution plans, such that, even when the plan is organized via an external fund or insurance company, it is still the employer that remains liable. The so-called 'ultimate liability of the employer' is governed by Section 1 (1) sentence 3 of the German Law on Retirement Pensions (BetrAVG). For financial reporting purposes, the term 'defined benefit plans' is required to be interpreted on the basis of the underlying economic substance of the arrangements. Insofar as the MTU group has no further obligations beyond its so-called ultimate liability once the contributions have been paid to state and private retirement funds, these plans are classified as defined contribution plans. Current contributions are recognized as expenses in the period in which payments are made.

# 30.1. DEFINED CONTRIBUTION PLANS

Since January 1, 2007, no new pension benefits have been granted to new employees in Germany. Instead MTU pays contributions to a company-sponsored external fund for employees who joined the company after that date. Other plans that exist within the MTU group are direct insurance contracts funded by employee contributions.

Employer's contributions to the state pension scheme in the financial year 2012 totaled € 36.3 million (2011: € 34.5 million).

### **30.2. DEFINED BENEFIT PLANS**

The pension obligations of MTU are measured using the projected unit credit method in accordance with IAS 19, taking account of future salary and pension increases and other adjustments expected to be made to benefits and pension plans, such as stock-flow adjustments. The provision for defined benefit plans recognized in the balance sheet corresponds to the present value of the benefits payable for current and past service (the defined benefit obligation) of beneficiaries less the fair value of plan assets at the reporting date. Extensive actuarial reviews and computations are carried out annually for each pension plan by independent actuaries.

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Actuarial gains or losses can result from increases or decreases either in the present value of the defined benefit obligations or in the fair value of the plan assets. Causes of actuarial gains or losses include the effect of changes in the measurement parameters, changes in the assessment of risks on pension obligations, and differences between the actual and expected return on plan assets. The interest rates used to calculate present values are usually determined by reference to high-quality corporate bonds with similar maturities.

In order to calculate the funding status or the pension obligation recognized, the present value of the provision-financed and fund-financed obligations is balanced against the fair value of the plan assets.

Present value and funding status of the defined benefit obligation:

in € million	Dec. 31, 2012	Dec. 31, 2011
Present value of provision-financed pension obligations	615.4	531.9
Fair value of plan assets	-5.3	-6.8
Total Germany	610.1	525.1
Present value of fund-financed pension obligations	28.7	26.1
Fair value of plan assets	-22.1	-20.2
Total other countries	6.6	5.9
Recognized pension obligations	616.7	531.0

The following weighted parameters were applied to measure the pension obligations at December 31 of the respective year and to measure the pension plan expense in the respective year under review:

n %	Dec. 31, 2012	Dec. 31, 2011
Interest rate for accounting purposes	3.20	4.50
Salary trend	2.50	2.50
Pension trend	1.50	2.00

n %	Dec. 31, 2012	Dec. 31, 2011
Interest rate for accounting purposes	3.75	4.00
Salary trend	3.00	3.00
Pension trend	2.50	2.50

The market yields on high-quality corporate bonds in Germany have fallen markedly compared to the previous year. For this reason, obligations for pensions were discounted at December 31, 2012, using a discount rate of 3.2%. The biometric tables issued by Prof. Dr. Heubeck (RT 2005G) were used for the purpose of measuring the obligations of pension plans in Germany. In the case of group companies in other countries, up-to-date biometric assumptions for each relevant country were applied. The expected salary trend refers to the expected rate of salary increase, which is estimated depending on inflation and the length of service of employees within the group. Employee turnover, mortality and disability rates were estimated on the basis of statistical data.

The present value of pension obligations changed as follows in the financial year 2012:

n € million	2012	2011	
Defined benefit obligation at January 1	558.0	533.9	
Current service cost	9.8	10.4	
Past service cost		3.8	
Contributions for pension plan subscribers	5.1	5.1	
Interest cost	24.2	23.0	
Transfers / translation differences	0.1	0.2	
Actuarial gains (-) / losses (+)			
Financial assumptions	63.7		
Demographic assumptions	5.5	3.0	
Plan curtailments or settlements	-1.5	-1.0	
Pension benefit and capital payments	-20.8	-21.0	
Defined benefit obligation at December 31	644.1	558.0	

The fair value of plan assets changed as follows in the financial year 2012:

n € million	2012	2011
air value of plan assets at January 1	27.0	28.9
Interest income on plan assets	1.1	1.3
Actuarial gains / losses (-) from:		
Income/expenses (-) arising from plan assets	0.9	-1.8
Transfers / translation differences	0.1	0.2
Employer contributions	1.1	1.2
Employee contributions to plan	0.1	0.
Pension benefit payments	-2.9	-2.9
Fair value of plan assets at December 31	27.4	27.0

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The expense from defined benefit pension plans and similar obligations recognized in the income statement for the relevant reporting periods comprised the following items:

n € million	2012	2011
Current service cost	9.8	10.4
Past service cost		3.8
Total service cost	9.8	14.2
Interest cost	24.2	23.6
Interest income on plan assets	-1.1	-1.3
Net interest cost	23.1	22.3
Fotal expense	32.9	36.5

Current and past service cost are recognized under personnel expenses, whereas the other components of the expense from defined benefit pension plans and similar obligations are recognized in the financial result on other items. Remeasurement of the net benefit obligation is recognized in the statement of comprehensive income as part of other comprehensive income.

### **EXPECTED FUTURE PENSION BENEFIT PAYMENTS**

In addition to the employer's contributions to plan assets, the company is expecting the following pension benefit payments in the coming years:

Expected distribution of pension benefit payments over annual periods						
in € million	2013	2014	2015	2016		
Expected amount of pension benefit payments	21.5	22.1	22.7	23.4		

As a result of switching to the new 'MTU kapitalPlus 2006' and 'MTU Pension Capital' pension plans, in place since the financial year 2006, all group employees have the option of receiving their retirement benefits as an immediate cash payment, as a ten-year series of payments by installment, or as a life-long pension based on actuarially indexed payments. The expected distribution of pension benefit payments over annual periods is based on the assumption that beneficiaries will choose a balanced mix of the available payment options.

The main actuarial assumptions used to calculate the defined benefit obligation (DBO) are the discount rate and the expected annual increases in salaries at year end. The following scenario-based sensitivity analyses show how the DBO would have been influenced by potential changes in the underlying assumptions:

- If the discount rate had been 50 basis points higher, the DBO would have fallen by € 29.5 million, all other assumptions being equal.
- If the discount rate had been 20 basis points lower, the DBO would have risen by € 12.4 million, all other assumptions being equal.
- If the expected salary increase had been 50 basis points higher, the DBO would have risen by € 14.0 million, all other assumptions being equal.
- If the assumed life expectancy of each person entitled to a pension had been one year higher, the DBO would have risen by € 10.4 million, all other assumptions being equal.

In fact, there are interdependencies between the actuarial assumptions, especially between the discount rate and the expected salary increases, as both depend to a certain extent on the expected rate of inflation. The sensitivity analysis does not take these interdependencies into account.

### 31. INCOME TAX PAYABLE

The income tax payable amounting to € 19.8 million (2011: € 10.0 million) comprises corporation and municipal trade tax amounting to € 13.7 million (2011: € 7.8 million) and taxes on the income of group companies outside Germany amounting to € 6.1 million (2011: € 2.2 million).

in € million	2012	2011
Balance at January 1	10.0	71.2
Utilized	-10.0	-71.2
Allocated	19.8	10.0
Balance at December 31	19.8	10.0

The income tax liabilities are due for payment within one year.

### 32. OTHER PROVISIONS

At the reporting date, other provisions comprised the following items:

	Total		Non-current		Current	
in € million	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011
Warranty obligations and risks from pending						
losses on onerous contracts	24.0	26.4	6.8	6.1	17.2	20.3
Personnel obligations	58.4	46.4	14.4	11.0	44.0	35.4
Contingent liabilities arising from business combinations	51.3	102.8	51.3	102.8		
Losses arising from the settlement of accounts	67.3	82.5			67.3	82.5
Other obligations	54.3	61.5			54.3	61.5
Other tax obligations	0.1	0.1			0.1	0.1
Total other provisions	255.4	319.7	72.5	119.9	182.9	199.8

### WARRANTY OBLIGATIONS AND RISKS FROM PENDING LOSSES ON ONEROUS CONTRACTS

Risks from pending losses on onerous contracts primarily contain provisions for pending losses on onerous contracts, and legal disputes, and relate to current obligations in respect of probable third-party claims for which the likely expense can be reliably estimated. Provisions for warranties mainly consist of obligations in connection with product entry into service, products that have been sold and for which accounts have been settled, and a variety of other services.

In the commercial maintenance business, MTU has identified onerous contracts for the maintenance of engines in which the unavoidable costs of fulfilling contractual obligations are higher than the expected economic benefits. A provision was recognized to cover the probable expenditure in excess of the expected inflow of economic benefits, and is included in the amount of € 24.0 million (2011: € 26.4 million) recognized for warranty obligations and risks from pending losses on onerous contracts. It was not necessary to recognize impairment losses on assets relating to these contracts in 2012 or 2011 beyond those already recognized in previous financial years.

### PERSONNEL OBLIGATIONS

The provisions for personnel obligations include provisions for long-service awards amounting to € 5.3 million (2011: € 5.3 million), provisions for restructuring measures following the introduction of single-status pay agreements (ERA) amounting to € 0.9 million (2011: € 1.9 million) and, in particular, for profit-sharing.

The provisions for pre-retirement part-time working arrangements amounted to € 0.2 million (2011: € 0.5 million) and are based on the collective agreement on flexible transition into retirement, which came into effect in the German collective bargaining regions in the financial year 2010. In addition, each of the MTU group companies in Germany entered into a supplementary agreement with the Works Council, effective until December 31, 2016, which sets down upper limits for the number of employees - both those covered by the collective agreement and those with freely negotiated contracts - who can assert a claim to a pre-retirement part-time employment contract.

Whereas all available places on the scheme at MTU Aero Engines GmbH in Munich have been taken up, the uptake at MTU Maintenance Hannover GmbH in Langenhagen was below the full complement when the closing date for applications was reached. The employees of MTU Maintenance Berlin-Brandenburg GmbH in Ludwigsfelde are not subject to any time limit for applications, and the maximum number of available places had not yet been filled at that location on December 31, 2012.

Implementation of the individual pre-retirement part-time working contracts concluded with employees will be spread over the period to 2016 for all German group companies. On the basis of the agreements made with group employees, provisions to cover unfunded pension liabilities amounting to  $\in$  0.2 million (2011:  $\in$  0.7 million) – net of corresponding plan assets of  $\in$  9.8 million – were recognized in the financial year 2012. Within the scope of the agreed terms for pre-retirement part-time working arrangements, agreements on top-up and severance payments were concluded with group employees. Reference is made to Note 36. (Other liabilities).

The provisions for profit-sharing and performance-related bonuses amounted to € 50.0 million (2011: € 36.6 million). They relate to the annual performance bonus for all employees and the long-term compensation for the Board of Management and senior managers.

For more detailed explanatory comments concerning the annual performance bonus (APB) for the Board of Management, please refer to the management compensation report in the Corporate Governance section of this Annual Report. One half of the annual performance bonus is paid in the calendar year following the financial year in which it was earned. The remaining 50% is deferred and paid in two equal portions in the two subsequent years. A provision was recognized for the deferred components of the 2010 annual performance bonus (Deferral 2) and the 2011 annual performance bonus (Deferral 1), based on the level of goal achievement attained in the respective financial years. At December 31, 2012, a provision was recognized for the deferred components of the 2011 annual performance bonus (Deferral 2), based on the level of goal achievement attained in the financial year 2011, and a provision was recognized for the deferred components of the 2012 annual performance bonus (Deferrals 1 and 2), based on the level of goal achievement attained in the financial year 2012. The ultimate amount to be paid depends on the level of goal achievement attained in respect of the two key performance indicators at group level and on the discretionary factor applied in the financial years 2013 and 2014.

A portion of the annual performance bonus for senior managers – 70% for tier-1 (OFK) and 80% for tier-2 (FK) – is paid in the calendar year following the financial year in which it was earned. Payment of the remaining 30% (OFK) or 20% (FK) is deferred to the subsequent year. Consequently, the ultimate amount to be paid depends on the level of goal achievement attained in respect of the two key performance indicators at group level in that subsequent financial year.

The long-term compensation awarded to members of the Board of Management and to the top two tiers of senior management is granted in annual tranches under the Performance Share Plan (PSP). This procedure is described below.

Starting in the financial year 2010, the members of the Board of Management and – for the first time in the financial year 2011 – the top two tiers of senior managers were allocated phantom stocks of MTU Aero Engines Holding AG (so-called performance shares) at the beginning of each financial year. The number of performance shares granted to the Board of Management is determined in accordance with the level of performance-related compensation as approved by the Supervisory Board. The value of the performance shares granted to tier-1 (OFK) and tier-2 (FK) senior managers is limited to a maximum of € 60,000 (OFK) and € 30,000 (FK) respectively per eligible manager.

In the case of the Board of Management, the performance shares are disbursed after a vesting period of four years; in the case of senior managers, the vesting period is three years for the first tier and two years for the second.

The number of performance shares that may be settled in cash or shares at the end of the respective vesting period depends on the number of performance shares initially allocated and on the MTU share price performance during the respective period compared with that of other MDAX companies. Depending on whether the performance thresholds are reached, the participants can

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expect to receive a payment equivalent to between 25% (minimum) and 150% (maximum) of the value of the individually allocated performance shares. If the minimum performance threshold ranking at least 45th in the MDAX - is not achieved, the participants receive no payment. The amount paid out is capped at three times the individual participant's long-term target compensation as assigned at the grant date and can subsequently be reinvested in MTU shares.

The purchased shares must be held for three years (Board of Management) or two years (senior managers) in order to qualify for the matching amount equivalent to one-third of the amount invested.

In order to determine the fair value, a combined Monte Carlo simulation and Black-Scholes pricing model was used. The expected payout was determined on the basis of the exact same assumptions used to value the PSP. The payout calculated serves as a basis for valuing the SMP in accordance with the Black-Scholes pricing model. The fair value of each tranche was calculated for each particular group entitled to receive it; in this way, the fair values of the PSP tranches were reduced to make allowance for the residual probability that they might lapse. The calculation therefore incorporated an assumed fluctuation rate of 4% p.a. Given that a collective method of calculation was used, no individual departure probabilities based on age or years of service were factored in.

(number of shares or value in €)	Average Xetra share price <sup>1)</sup>	Grante	d performance	shares		shares not yet e at year-end	Time to end of vesting period for performance shares
Financial year 2012	€	Number at Jan. 1, 2012 shares	Acquired in 2012 shares	Number at Dec. 31, 2012 shares	Number at Dec. 31, 2012 shares	Fair value at Dec. 31, 2012 €	Time a Dec. 31, 2012 months
Board of Management							
Performance shares tranche 1a granted 2010	36.63	28,666		28,666	28,666	64.15	12
Performance shares tranche 1b granted 2010	46.64	6,031		6,031	6,031	55.55	18
Performance shares tranche 2 granted 2011	47.03	34,285		34,285	34,285	60.80	24
Performance shares tranche 3 granted 2012	47.47		36,009	36,009	36,009	53.51	3
Total/average	60.96	40,316	36,009	76,325	76,325	81.04	34
Tier-1 senior managers (OFK)							
Performance shares tranche 2 granted 2011	47.03	20,514		20,514	20,514	65.81	1:
Performance shares tranche 3 granted 2012	47.47		21,185	21,185	21,185	57.27	24
Total/average	23.14	20,514	21,185	41,699	41,699	61.47	18
Tier-2 senior managers (FK)							
Performance shares tranche 2 granted 2011	47.03	32,291		32,291	32,291	67.16	
Performance shares tranche 3 granted 2012	47.47		35,906	35,906	35,906	61.75	1:
Total/average	22.27	32,291	35,906	68,197	68,197	64.31	-
Total/average	38.32	93,121	93,100	186,221	186,221	70.53	20

Note: In the financial year 2012, no performance shares were exercised or forfeited, nor did any lapse.

At January 1, 2013, the fair value per performance share of the tranche of the PSP granted for the financial year 2013 amounted to € 47.98 for the Board of Management, € 50.15 for tier-1 senior managers (OFK), and € 51.93 for tier-2 senior managers (FK), assuming a fluctuation rate of 4% p.a. At January 1, 2012, the fair value per performance share of the tranche of the PSP granted for the financial year 2012 amounted to € 34.26 for the Board of Management, € 36.27 for tier-1 senior managers (OFK), and € 37.91 for tier-2 senior managers (FK).

<sup>&</sup>lt;sup>1)</sup> Average Xetra share price during the 30 days preceding the grant date.

The resulting data for the financial year 2011 are shown below:

(number of shares or value in €)	Average Xetra Granted performance shares share price <sup>1)</sup>			Performance shares not yet exercisable at year-end		Time to end of vesting period for performance shares	
Financial year 2011	€	Number at Jan. 1, 2011 shares	Acquired in 2011 shares	Number at Dec. 31, 2011 shares	Number at Dec. 31, 2011 shares	Fair value at Dec. 31, 2011 €	Time at Dec. 31, 2011 months
Board of Management							
Performance shares tranche 1a granted 2010	36.63	28,666		28,666	28,666	42.33	24
Performance shares tranche 1b granted 2010	46.64	6,031		6,031	6,031	38.60	30
Performance shares tranche 2 granted 2011	47.03		34,285	34,285	34,285	39.84	36
Total/average	42.67	34,697	34,285	68,982	68,982	40.77	30
Tier-1 senior managers (OFK)							
Performance shares tranche 2 granted 2011 <sup>2)</sup>	47.03		20,514	20,514	20,514	43.14	24
Total/average	47.03		20,514	20,514	20,514	43.14	24
Tier-2 senior managers (FK)							
Performance shares tranche 2 granted 2011 <sup>2)</sup>	47.03		32,291	32,291	32,291	47.12	12
Total/average	47.03	0	32,291	32,291	32,291	47.12	12
Total/average	44.57	34,697	87,090	121,787	121,787	42.86	24

Note: In the financial year 2011, no performance shares were exercised or forfeited, nor did any lapse.

At January 1, 2011, the fair value per performance share of the tranche of the PSP granted for the financial year 2011 amounted to  $\in$  31.26 for the Board of Management,  $\in$  34.40 for tier-1 senior managers (OFK), and € 37.25 for tier-2 senior managers (FK).

Share-based compensation gave rise to the following expenses:

in € million	Expense 2012	Balance at Dec. 31, 2012	Expense 2011	Balance at Dec. 31, 2011
Recognized expense for cash-settled				
share-based payment	6.1		1.8	
Carrying amount of cash-settled				
share-based payment liabilities		8.2		2.1
Total	6.1	8.2	1.8	2.1

 $<sup>^{\</sup>scriptsize\textrm{1}\!\scriptsize\textrm{)}}$  Average Xetra share price during the 30 days preceding the grant date.

<sup>&</sup>lt;sup>2)</sup> Previous-year adjustment.

### CONTINGENT LIABILITIES ARISING FROM BUSINESS COMBINATIONS

Group management report

The obligations arising under engine programs absorbed in the purchase price allocation relate to the amortized measurement of contingent liabilities for engine programs identified and measured in connection with the acquisition of the company by Kohlberg Kravis Roberts & Co. from the then DaimlerChrysler AG. The contingent liabilities are measured in accordance with IFRS 3.56. Reference is made to further comments in Note 5.24. (Discretionary scope, measurement uncertainties and sensitivity) for sensitivity assumptions and other estimating parameters in respect of the measurement of contingent liabilities.

### LOSSES ARISING FROM THE SETTLEMENT OF ACCOUNTS

Losses arising from the settlement of accounts relate to retrospective price adjustments or special conditions agreed with end customers by the consortium leader, expected cancellations by end customers leading to loss of revenues as well as disputed amounts from contracts already invoiced between the consortium leaders and end customers, and potential reimbursement claims asserted by public-sector customers.

#### OTHER OBLIGATIONS

Provisions for other obligations cover a multitude of identifiable individual risks and contingent liabilities.

#### OTHER TAX OBLIGATIONS

Other tax obligations relate to probable obligations in respect of trade taxes and other taxes on business operations, for which provisions have been allocated to cover payments due in 2011 and previous financial years.

Non-current other provisions developed as follows:

n € million	Balance at Jan. 1, 2012	Transferred	Utilized	Allocated	Discount reversed	Balance at Dec. 31, 2012
Warranty obligations and risks from pending						
losses on onerous contracts	6.1			0.4	0.3	6.8
Personnel obligations	11.0	-5.2	-0.5	8.7	0.4	14.4
Contingent liabilities arising from business combinations	102.8		-57.3		5.8	51.3
Total non-current other provisions	119.9	-5.2	-57.8	9.1	6.5	72.5

The following cash outflows are expected from the carrying amounts of non-current other provisions:

	Carrying amount	Probable cash outflow/fina	-
in € million	Dec. 31, 2012	2013	2014
Warranty obligations and risks from pending losses on onerous contracts	6.8		3.1
Personnel obligations	14.4		6.1
Contingent liabilities arising from business combinations	51.3	133.9	128.7
Total expected cash outflow from non-current other provisions	72.5	133.9	137.9

Since the carrying amount of contingent liabilities arising from business combinations is a discounted figure, the expected cash outflows each year do not tally with the carrying amount. What is more, further cash outflows and inflows are expected in the years to come.

MTU expects that the stated personnel obligations will become due within the next one to five years.

Current other provisions developed as follows:

€ million	Balance at Jan. 1, 2012	Transferred	Utilized	Allocated	Translation differences	Balance at Dec. 31, 2012
Warranty obligations and risks from pending						
losses on onerous contracts	20.3		-9.7	6.6		17.2
Personnel obligations	35.4	5.2	-33.5	36.8	0.1	44.0
Losses arising from settlement of accounts	82.5		-37.4	22.2		67.3
Other obligations	61.5		-25.0	17.9	-0.1	54.3
Other tax obligations	0.1		-0.1	0.1		0.1
otal current other provisions	199.8	5.2	-105.7	83.6	0.0	182.9

The cash outflows resulting from the carrying amounts of current other provisions are expected to be realized in the calendar year following the reporting period.

# 33. FINANCIAL LIABILITIES

	Total		Non-current		Current	
in € million	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 201
Convertible bond		156.3				156.
Corporate bond	252.5		248.5		4.0	
Financial liabilities in connection with IAE-V2500 stake increase	299.7		271.3		28.4	
Liabilities to banks						
Promissory notes	12.0	25.6	11.5	11.5	0.5	14.
Revolving credit facility						
Other liabilities to banks	34.9	34.4	2.3	20.4	32.6	14.
Finance lease liabilities	3.5	3.9	0.1	0.1	3.4	3.
Derivative financial liabilities	16.3	41.4	5.3	21.4	11.0	20.
Total financial liabilities	618.9	261.6	539.0	53.4	79.9	208.

# **CONVERTIBLE BOND**

In the financial year 2007, MTU Aero Engines Finance B.V., Amsterdam, Netherlands, issued a convertible bond with a par value of € 180.0 million (divided into 1,800 units). In September and October 2008, MTU repurchased units of its own convertible bond on the market for the nominal amount of € 27.2 million prior to maturity. In the first quarter of 2012, € 62.6 million of the convertible bond's remaining amount of € 152.7 million was repaid, while € 90.1 million was converted into shares in MTU Aero Engines Holding AG.

### **CORPORATE BOND**

In order to finance the components of the purchase price for the increase in the company's stake in the IAE V2500 engine program, MTU Aero Engines Holding AG, Munich, issued a bond for a nominal amount of € 250.0 million with effect from June 20, 2012. The bond earns an annual rate of interest of 3% from the date of issue (June 20, 2012) until the repayment date (June 20, 2017). The interest is payable in arrears on June 21 of each year, initially on June 21, 2013.

The bond was recognized at amortized cost under financial liabilities for a total amount of € 1.5 million, which includes transaction costs and the discount on the bond.

In the event of a change of control, every bondholder is entitled to declare due part or all of his/ her bond units for the nominal amount plus any accrued interest unless the issuer has called in the bonds before the exercise notice described below has been given.

A change-of-control event occurs if the rating is lowered in the course of the change of control. A lowering of the rating occurs if, (1) during the change-of-control period, a rating previously granted by a rating agency to MTU or to one of its outstanding non-current liabilities is withdrawn or is changed from an investment grade rating (equivalent to or higher than Baa3 (Moody's) BBB (Fitch) or BBB (S&P)), or if, (2) at the time of the change of control, no investment grade rating has been awarded by a rating agency to the bonds or to MTU and no rating agency awards an investment grade rating to the bond within the change-of-control period.

### FINANCIAL LIABILITIES IN CONNECTION WITH IAE-V2500 STAKE INCREASE

For details of the financial liabilities in connection with the financing of the company's increased stake in the IAE V2500 engine program, amounting to € 299.7 million, we refer you to Note 2. (Group reporting entity - Effects of increased stake in the IAE V2500 engine program).

### LIABILITIES TO BANKS

### PROMISSORY NOTES

Of the four promissory notes placed on June 3, 2009, for a total nominal note amount of € 65.0 million, MTU repurchased the nominal amount of € 30.0 million on June 7, 2010, and the nominal amount of € 10.0 million on December 6, 2010. Two promissory notes matured and were repaid on June 5, 2012, leaving an outstanding note amount of € 11.5 million. The promissory notes comprised the following tranches with fixed maturity dates:

		Note amount (nominal)	Repurchased 2010	Repaid on maturity	Remaining note amount
Maturity	Type of	at issue date		June 5, 2012	
date	interest	in € million	in € million	in € million	in € million
June 5, 2012	fixed	1.5		1.5	0.0
June 5, 2014	fixed	11.5			11.5
June 5, 2012	variable	27.0	15.0	12.0	0.0
June 5, 2014	variable	25.0	25.0		0.0
		65.0	40.0	13.5	11.5

The promissory notes were recognized at their fair value on the date of acquisition, which corresponds to the nominal note amount less transaction costs amounting to € 0.4 million. The promissory notes are measured at amortized cost.

### REVOLVING CREDIT FACILITY

The group has access to revolving credit facilities amounting to € 100.0 million, which are made available by two banks and have a term until December 1, 2015. Of this line of credit, a total of € 13.7 million had been drawn down as bank guarantees in favor of third parties at December 31, 2012 (December 31, 2011: € 12.4 million). Other than this, as in 2011, the group did not draw down any further funds under its revolving credit facility.

Any credit actually utilized is subject to interest at market index average rates plus an additional margin. Unused credit facilities are subject to a loan commitment fee.

MTU has undertaken to ensure that certain financial indicators remain within defined boundaries throughout the respective terms of the revolving credit facility and the promissory notes, as follows: MTU's debt-equity ratio at the end of each quarter shall not exceed 2.5; the times interest earned ratio at the end of each quarter shall not fall below 4.0.

The financial indicators are calculated according to the following formulae:

- Times interest earned ratio = adjusted EBITDA / consolidated net interest expense
- Debt-equity ratio = consolidated net financial debt / adjusted EBITDA (earnings before interest, tax, depreciation and amortization)

These financial indicators are obtained from the quarterly interim financial reports.

### OTHER LIABILITIES TO BANKS

The other liabilities to banks amounting to € 34.9 million (2011: € 34.4 million) relate to thirdparty loans provided to subsidiaries.

### FINANCE LEASE LIABILITIES

Finance lease liabilities represent obligations under finance lease arrangements that are capitalized and amortized using the effective interest method; see Note 20. (Property, plant and equipment).

### **DERIVATIVE FINANCIAL LIABILITIES**

Derivative financial liabilities amounting to € 16.3 million (2011: € 41.4 million) relate principally to changes in the fair value of forward foreign exchange contracts and currency option transactions.

### 34. TRADE PAYABLES

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n € million	Dec. 31, 2012	Dec. 31, 2011
rade accounts payable to:		
Third parties	476.1	493.6
Related companies		
Associated companies, joint ventures and other equity investments	102.1	92.5
Non-consolidated subsidiaries	5.0	6.6
otal trade payables	583.2	592.7

The total amount of trade payables is due within one year.

# 35. CONSTRUCTION CONTRACT PAYABLES

Liabilities arising from construction contracts primarily concern advance payments received for construction contracts in connection with specific engine programs.

n € million	Dec. 31, 2012	Dec. 31, 2011
Advance payments received for construction contracts	968.0	1.047.7
offset against:		
Construction contract receivables	-364.0	-332.7
Total construction contract payables	604.0	715.0

Advance payments received for construction contracts are offset against construction contract receivables, and any excess amount due in more than 12 months is measured at fair value by application of a discount rate.

# **36. OTHER LIABILITIES**

	Total		Non-current		Current	
in € million	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011	Dec. 31, 2012	Dec. 31, 2011
Personnel-related liabilities						
Social security	2.2	2.6			2.2	2.6
Pre-retirement part-time working arrangements	17.2	17.3	13.2	13.5	4.0	3.8
Other personnel-related liabilities	45.2	38.2	3.9	3.6	41.3	34.6
Accrued interest expense	14.0	16.6	14.0	16.6		
Outstanding maintenance work on returned operate-lease engines	3.4	4.3	3.4	4.3		
Repayment of grants toward development costs	58.0	58.0	53.3	55.3	4.7	2.7
Sundry other liabilities	120.3	97.6	42.6	34.3	77.7	63.3
Other tax liabilities	6.9	6.5			6.9	6.5
Total other liabilities	267.2	241.1	130.4	127.6	136.8	113.5

### PERSONNEL-RELATED LIABILITIES

Amounts due for social security principally comprise contributions to social insurance against occupational accidents amounting to € 0.6 million (2011: € 1.9 million) and amounts due to health insurers totaling € 1.6 million (2011: € 0.7 million).

The collective agreement on flexible transition into retirement came into effect in the German collective bargaining regions in the financial year 2010. In addition, each of the MTU group companies in Germany entered into a supplementary agreement with the Works Council, effective until December 31, 2016, which supersedes the collective bargaining agreement. Whereas all available places on the scheme at MTU Aero Engines GmbH in Munich have been taken up, the uptake at MTU Maintenance Hannover GmbH in Langenhagen was below the full complement when the closing date for applications was reached. The employees of MTU Maintenance Berlin-Brandenburg GmbH in Ludwigsfelde are not subject to any time limit for applications, and the maximum number of available places had not yet been filled at that location on December 31, 2012. Implementation of the individual pre-retirement part-time working contracts concluded with employees will be spread over the period to 2016 for all German group companies. Within the scope of the agreed terms for pre-retirement part-time working arrangements, agreements on top-up and severance payments were concluded with group employees. At December 31, 2012, the liabilities associated with these obligations amounted to € 17.2 million (2011: € 17.3 million).

Other personnel-related liabilities are composed of unclaimed vacation entitlements, flexitime credits, and obligations arising from efficiency-improvement programs in prior periods. This item also includes liabilities to group employees under the MAP employee stock option program.

In the financial year 2012, the Board of Management of MTU Aero Engines Holding AG, Munich, again invited group employees to purchase shares under the MAP employee stock option program, which runs for a period of two years in each case. Under this program, MTU offers to match each participant's investment at the end of a two-year vesting period with a taxable cash payment of an amount corresponding to 50% of the amount invested by the employee in MTU shares at the beginning of the program.

The number of shares sold to group employees under the terms of the MAP employee stock option program since the financial year 2008 is as follows:

Issue date	Number of shares sold	Average acquisition cost	Total proceeds of sale	Selling price per share
		(in € million)	(in € million)	(in €)
June 2012	107,145	2.6	5.9	55.33
June 2011	154,165	6.5	7.5	48.10
June 2010	59,096	2.7	2.5	42.58
June 2009	150,863	6.7	3.3	21.80
June 2008	192,959	8.2	4.9	25.19

The total expense for the matching exercise in connection with the MAP in the financial year 2012 amounted to € 3.2 million (2011: € 2.1 million) and was recognized in the income statement on a pro rata basis over the duration of the respective tranche. At December 31, 2012, the liability amounted to € 4.3 million (2011: € 2.4 million).

The purchase price for the MTU shares distributed in the financial year 2012 amounted to € 55.33 per share. The shares transferred to the employees, valued at the average acquisition cost, were removed from the equity item 'treasury shares.' The difference between the proceeds of the sale and the original acquisition cost amounted to € 3.3 million and was allocated to capital reserves (2011: € 1.0 million).

#### **ACCRUED INTEREST EXPENSE**

Long-term advance payments received for construction contracts are discounted at the prevailing market rate over the duration of financing and recognized under 'Other liabilities' until the engine is delivered to the customer. The interest expense relates to advance payments received for longterm military construction contracts amounting to € 14.0 million (2011: € 16.6 million).

### OUTSTANDING MAINTENANCE WORK ON RETURNED OPERATE-LEASE ENGINES

These non-current liabilities relate to outstanding maintenance work on the present fleet of five operate-lease engines.

#### REPAYMENT OF GRANTS TOWARD DEVELOPMENT COSTS

In the financial years from 1976 to 1991, MTU received grants from the German Federal Ministry of Economics and Technology toward the internally generated costs of developing the PW2000 engine, which were recognized in the income statement. Once the contractually agreed sales figures of PW2000 production engines have been reached for the Boeing 757 and C-17, MTU is obliged to pay back the grants within a timeframe of ten years. In the financial year 2012, an amount of € 2.7 million (2011: € 0.7 million) was repaid.

#### SUNDRY OTHER LIABILITIES

Sundry other liabilities amount to € 120.3 million and mainly comprise external development costs incurred in connection with two engine programs: the PW1524G for the CSeries regional jet, amounting to € 21.4 million (2011: € 19.3 million), and the PW1217G for the MRJ, amounting to € 15.2 million (2011: € 15.5 million). Sundry other liabilities also includes liabilities in connection with the company's stake in the PW1100G program for the A320neo amounting to € 52.7 million (2011: € 46.5 million) and a multitude of minor individual obligations.

### OTHER TAX LIABILITIES

The tax liabilities totaling € 6.9 million (2011: € 6.5 million) mainly comprise transactional taxes.

# PAYMENT CASH FLOWS FOR FINANCIAL LIABILITIES

The following tables list the contractually agreed, discounted payments of interest and principle on the non-derivative financial liabilities and derivative financial instruments held by MTU, measured at fair value through profit or loss.

		Cash	n flows 2	013	Casl	n flows 20	014	Cash	flows 20	015	Cash	flows 20	16 ff.
n € million	Carrying amount Dec. 31, 2012	Fixed inte- rest	Vari- able inte- rest	Prin- ciple									
Trade payables	583.2			583.2									
Bonds	252.5	7.5			7.5			7.5			15.0		250.0
Liabilities to banks	46.9	0.9	0.7	32.6	0.9	0.1	11.5		0.1	2.3			
Financial liabilities in connection with IAE-V2500 stake increase	299.7			44.0			44.7			45.4			306.1
Other interest-bearing liabilities	118.93)						27.2			18.4			64.6
Other interest-free liabilities	96.0			92.6			2.9			0.4			0.1
Derivative financial liabilities													
Derivates without hedging relationship	5.4			2.6			0.8			2.0			
Derivatives with hedging relationship	10.9			8.5			2.4						
Other disclosures													
Contingent liabilities under risk- and revenue-sharing partnerships	58.9			58.91)									
Guarantees	63.1			63.1									
Finance lease liabilities	3.5			3.4			0.1						
Other financial liabilities not within the scope of either IFRS 7 or IAS 39	731.42)			113.7			29.4			28.1			194.2

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Relates to delay-related contingent liabilities arising from RRSP contracts.

 $<sup>^{\</sup>mbox{\tiny 2]}}$  Cash flows from pension provisions known only for the period to 2022, as stated in the expert assessment.

<sup>&</sup>lt;sup>3)</sup> Including discounted cash flow valuation of interest expense.

		Cas	hflow 20	12	Cas	hflow 20	13	Cas	hflow 20	14	Cash	flow 201	5 ff.
n € million	Carrying amount Dec. 31, 2011	Fixed inte- rest	Vari- able inte- rest	Prin- ciple									
Trade payables	592.7			592.7	_			_	_		_		
Bonds	156.3	4.2		152.8									
Liabilities to banks	60.0	1.0	1.6	27.5	0.9	0.6	18.1	0.9	0.1	13.8			
Other interest-bearing liabilities	111.63)						16.8			16.5			73.3
Other interest-free liabilities	83.5			79.2			4.0			0.3			
Derivative financial liabilities													
Derivatives without hedging relationship	11.5			5.2			0.9			2.5			2.9
Derivatives with hedging relationship	29.9			14.8			11.2			3.7			0.2
Other disclosures													
Contingent liabilities under risk- and revenue-sharing partnerships	69.7			69.71)									
Guarantees	41.0			41.0									
Finance lease liabilities	3.9			3.8						0.1			
Other financial liabilities not within the scope of either IFRS 7 or IAS 39	630.72)			105.9			34.5			38.0			310.8

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<sup>&</sup>lt;sup>1)</sup> Relates to delay-related contingent liabilities arising from RRSP contracts. <sup>2)</sup> Cash flows from pension provisions known only for the period to 2021, as stated in the expert assessment.

<sup>&</sup>lt;sup>3)</sup> Including discounted cash flow valuation of interest expense.

The statement includes all instruments in the portfolio at December 31, 2012 for which payment terms had been contractually agreed. It does not include planned estimates for future new liabilities. Amounts denominated in a foreign currency are translated at the exchange rate prevailing on the respective reporting date. The variable-rate interest payments on the financial instruments are based on the most recent interest rate fixed prior to December 31, 2012. Financial liabilities with no fixed repayment date and contingent liabilities are always assigned to cash flows on the basis of the earliest likely repayment dates. For further information concerning the stated carrying amounts, please refer to Note 42. (Contingent liabilities and other financial obligations).

### 37. ADDITIONAL DISCLOSURES RELATING TO FINANCIAL INSTRUMENTS

# CARRYING AMOUNTS. MEASUREMENT/RECOGNITION METHODS AND FAIR VALUES AGGREGATED BY CATEGORY

In the following tables, the carrying amounts of financial instruments are aggregated by category, regardless of how they are recognized and irrespective of whether or not the instruments fall within the scope of IFRS 7 or IAS 39. The information presented also includes separate amounts for each category as a function of the measurement/recognition method applied. Finally, the carrying amounts are set opposite the fair values for comparison. Note 5.14. (Financial instruments) provides explanatory material on the categories of financial instruments as defined in the International Financial Reporting Standards and the accounting policies applied.

Disclosures concerning financial instruments carrying amounts, measurement/recognition methods and fair values aggregated by category 2012

	Category as defined	Carrying amount	Cash reserve
	in IAS 39 /	Dec. 31, 2012	Nominal
in € million	Other category		value
ASSETS			
Other assets			
Loans and receivables	LaR	16.9	
Held-to-maturity investments	HtM	10.7	
Available-for-sale financial assets	AfS	36.0	
Financial assets held for trading	FAHfT		
Trade receivables	LaR	568.5	
Construction contract receivables	LaR	547.0	
Derivative financial assets		017.0	
Derivatives without hedging relationship	FAHfT	14.8	
Derivatives with hedging relationship	n.a.	26.6	
Cash and cash equivalents	Cash reserve	161.2	161.2
		101.2	101.2
EQUITY AND LIABILITIES			
Trade payables	FLAC	583.2	
Bonds	FLAC	252.5	
Liabilities to banks	FLAC	46.9	
Financial liabilities in connection with IAE-V2500 stake increase	FLAC	299.7	
Other interest-bearing liabilities	FLAC	118.9	
Other interest-free liabilities	FLAC/n.a.	96.0	
Derivative financial liabilities			
Derivatives without hedging relationship	FLHfT	5.4	
Derivatives with hedging relationship	n.a.	10.9	
OTHER DISCLOSURES			
Contingent liabilities under risk- and revenue-sharing partnerships	Financial guarantees	58.9	
Guarantees	Financial guarantees	63.1	
Thereof aggregated by category as defined in IAS 39			
Loans and receivables	LaR	1,132.4	
Held-to-maturity investments	HtM		
Available-for-sale financial assets	AfS	36.0	
Financial assets held for trading	FAHfT	14.8	
Financial liabilities measured at amortized cost	FLAC	1,397.2	
Financial liabilities held for trading	FLHfT	5.4	
Finance lease liabilities	n.a.	3.5	
Financial instruments not within the scope of either IFRS 7 (IFRS 7 B2b) or IAS 39		752.3	

Abbreviations:

LaR = Loans and Receivables

HtM = Held-to-Maturity

AfS = Available-for-Sale Financial Assets

FAHfT = Financial Assets Held for Trading

FLAC = Financial Liabilities Measured at Amortised Cost

FLHfT = Financial Liabilities Held for Trading

Fair value Dec. 31, 2012	Total	Financial instruments not within the	Amount carried in balance sheet IAS 17			ed in balance sheet in	
		scope of IAS 39 or IFRS 7		Fair value recognized in income statement	Fair value recognized in equity	Measured at cost	Measured at amortized cost
16.9	16.9						16.9
36.0	36.0				25.0	11.0	
568.5	568.5						568.5
547.0	547.0						547.0
14.8	14.8			14.8			
26.6	26.6				26.6		
161.2	161.2						
583.2	583.2						583.2
261.5	252.5						252.5
46.9	46.9						46.9
299.7	299.7						299.7
118.9	118.9						118.9
96.0	96.0		3.4				92.6
5.4	5.4			5.4			
10.9	10.9				10.9		
58.9	58.9						
63.1	63.1						
1 122 /	1 122 4						1 122 /
1,132.4	1,132.4						1,132.4
36.0	36.0				25.0	11.0	
14.8	14.8			14.8			
1,397.2	1,397.2		3.4				1,393.8
5.4	5.4			5.4			
3.5	3.5		3.5				
752.3	752.3	752.3					

The table below provides comparative information on the carrying amounts, measurement/recognition methods and fair values aggregated by category for the financial year 2011.

### Disclosures concerning financial instruments carrying amounts, measurement/recognition methods and fair values aggregated by category 2011

	Category as defined	Carrying amount	Cash reserve
	in IAS 39 /	Dec. 31, 2011	Nominal
in C = 100	Other		value
in € million	category		
ASSETS			
Other assets			
Loans and receivables	LaR	19.2	
Held-to-maturity investments	HtM		
Available-for-sale financial assets	AfS AfS	50.6	
Financial assets held for trading	FAHfT		
Trade receivables	LaR	605.1	
Construction contract receivables	LaR	469.5	
Derivative financial assets			
Derivatives without hedging relationship	FAHfT	0.8	
Derivatives with hedging relationship	n.a.	8.9	
Cash and cash equivalents	Cash reserve	198.8	198.8
EQUITY AND LIABILITIES			
Trade payables	FLAC	592.7	
Bonds	FLAC	156.3	
Liabilities to banks	FLAC	60.0	
Other interest-bearing liabilities	FLAC	111.6	
Other interest-free liabilities	FLAC/n.a.	83.5	
Derivative financial liabilities			
Derivatives without hedging relationship	FLHfT	11.5	
Derivatives with hedging relationship	n.a.	29.9	
OTHER DISCLOSURES			
Contingent liabilities under risk- and revenue-sharing partnerships	Financial guarantees	69.7	
Guarantees	Financial guarantees	41.0	
Thereof aggregated by category as defined in IAS 39			
Loans and receivables	LaR	1,093.8	
Held-to-maturity investments	HtM		
Available-for-sale financial assets	AfS	50.6	
Financial assets held for trading	FAHfT	0.8	
Financial liabilities measured at amortized cost	FLAC	1,004.1	
Financial liabilities held for trading	FLHfT	11.5	
Finance lease liabilities	n.a.	3.9	
Financial instruments not within the scope of either IFRS 7 (IFRS 7 B2b) or IAS 39		630.7	

Abbreviations:

LaR = Loans and Receivables

HtM = Held-to-Maturity

AfS = Available-for-Sale Financial Assets

FAHfT = Financial Assets Held for Trading

FLAC = Financial Liabilities Measured at Amortised Cost

FLHfT = Financial Liabilities Held for Trading

Fair val Dec. 31, 20	Total	Financial instruments	Amount carried in balance sheet	IAS 39	n accordance with	ed in balance sheet i	Amount carri
		not within the scope of IAS 39 or IFRS 7	IAS 17	Fair value recognized in income statement	Fair value recognized in equity	Measured at cost	Measured at amortized cost
19	19.2						19.2
50	50.6				40.9	9.7	
605	605.1						605.1
469	469.5						469.5
(	0.8			0.8			
	8.9				8.9		
198	198.8						
592	592.7						592.7
150	156.3						156.3
60	60.0						60.0
11	111.6						111.6
83	83.5		4.3				79.2
1	11.5			11.5			
29	29.9				29.9		
69	69.7						
4	41.0						
1,093	1,093.8						1,093.8
50	50.6				40.9	9.7	
(	0.8			0.8			
1,004	1,004.1		4.3				999.8
1	11.5			11.5			
	3.9		3.9				
630	630.7	630.7					

Cash and cash equivalents, trade receivables and construction contract receivables are generally due within a relatively short time. For this reason, their carrying amounts at the reporting date are approximated to the fair value.

As a rule, trade payables and construction contract payables are due within a relatively short time; the amounts carried in the balance sheet are approximated to the fair value.

# CLASSIFICATION OF FAIR VALUE MEASUREMENTS OF FINANCIAL ASSETS AND LIABILITIES ACCORDING TO THE FAIR VALUE HIERARCHY

In order to evaluate the significance of the factors used as input when measuring financial assets and liabilities at their fair value, MTU assigns these assets and liabilities to three levels of a fair value hierarchy.

The three levels of the fair value hierarchy are described below, together with their utilization when measuring financial assets and liabilities:

- Level 1: Quoted prices in active markets for identical assets or liabilities (unadjusted input)
- Level 2: Directly observable market inputs other than Level 1 inputs, i.e. input factors that can be related directly (price) or indirectly (derived from price) to the financial assets or liabilities
- Level 3: Input factors used to measure assets and liabilities that are not based on observable market data (unobservable input factors)

In the following table, financial assets and liabilities measured at fair value are allocated to the three levels of the fair value hierarchy:

in € million	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Derivative financial instruments		41.4		41.4
Available-for-sale financial assets	25.0			25.0
Total financial assets	25.0	41.4		66.4
Financial liabilities measured at fair value				
Derivative financial instruments		16.3		16.3
Total financial liabilities		16.3		16.3

The result of applying the fair value hierarchy to the fair value measurement of financial assets and liabilities in the prior year is shown in the following table:

in € million	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Derivative financial instruments		9.7		9.7
Available-for-sale financial assets	30.1	10.8		40.9
Total financial assets	30.1	20.5		50.6
Financial liabilities measured at fair value				
Derivative financial instruments		41.4		41.4
Total financial liabilities		41.4		41.4

# EXPLANATORY COMMENTS RELATING TO NET GAIN/LOSS ON FINANCIAL INSTRUMENTS BY CATEGORY

The table below shows the gains/losses arising from transactions involving financial instruments, aggregated by category. Interest income and expense in connection with financial assets and liabilities, which are recognized in the income statement at fair value, are not included here.

Aggregated by category as defined in IAS 39	from	from		from reme	asurement		from	Net gain/
	interest	invest- ments	at fair	value	currency translation	valuation allowan-	disposal	loss 2012
in € million			recog- nized	unrecog- nized		ces		
Loans and receivables (LaR)	2.2				-19.3	-0.3		-20.1
Held-to-maturity investments (HtM)								
Available-for-sale financial assets (AfS)	0.3	2.6						2.9
Financial assets held for trading (FAHfT)			40.4					40.4
Financial liabilities measured at amortized cost (FLAC)	-6.4		-12.1		20.4			1.9
Financial liabilities held for trading (FLHfT)			-22.2					-22.2
Financial instruments not within the scope of either IFRS 7 or IAS 39	1.1	10.5			-1.2			10.4
Total	-2.8	13.1	6.1		-0.1	-0.3		13.3

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The following table provides comparative information on the effect of transactions involving financial instruments, aggregated by category.

Aggregated by category as defined in IAS 39	from	from		from reme	from	Net gain/		
	interest	invest- ments	at fair	value	currency translation	valuation allowan-	disposal	loss 2011
in € million			recog- nized	unrecog- nized		ces		
Loans and receivables (LaR)	2.0				11.7	-0.7		13.0
Held-to-maturity investments (HtM)								
Available-for-sale financial assets (AfS)	1.5	2.6						4.1
Financial assets held for trading (FAHfT)			12.5				2.7	15.2
Financial liabilities measured at amortized cost (FLAC)	-16.5		-3.1		1.3			-18.3
Financial liabilities held for trading (FLHfT)			-19.5				-1.2	-20.7
Financial instruments not within the scope of either IFRS 7 or IAS 39	1.9				-5.1			-3.2
Total	-11.1	2.6	-10.1		7.9	-0.7	1.5	-9.9

The interest component of financial instruments is recognized under net interest expense (see Note 13. Interest result). Other components of net income or loss are recorded in MTU's financial statements in the financial result on other items (Note 14. Financial result on other items), with the exception of the expense for allowances on trade receivables, which comes under the category of loans and receivables and is recognized under selling expenses, and gains/losses arising from translation differences on trade receivables and payables, which are recognized under revenues or cost of sales respectively.

### **EXPLANATORY COMMENTS RELATING TO NET INTEREST EXPENSE**

The net interest expense on financial liabilities classified as financial liabilities measured at amortized cost (an expense of € 6.4 million) mainly comprises interest expenses attributable to the corporate bond, finance lease liabilities and credit agreements with banks.

# EXPLANATORY COMMENTS RELATING TO MEASUREMENT SUBSEQUENT TO INITIAL RECOGNITION

# Measurement of fair value

Financial instruments measured at fair value mainly comprise securities transactions, exchange rate gains and losses on ineffective currency hedging transactions, and losses arising from the measurement of interest rate derivatives.

### **Translation differences**

Losses from the currency translation of financial assets classified as loans and receivables amounting to € 19.3 million (2011: gains of € 11.7 million) are mainly attributable to exchange rate gains/losses arising from the measurement of trade receivables. These losses are balanced by currency translation gains amounting to € 20.4 million on trade payables, which are classified as financial liabilities measured at amortized cost.

# 38. DEFERRED TAX ASSETS AND LIABILITIES

Deferred taxes arise on temporary differences between the tax bases of assets and liabilities of the individual group companies and their carrying amounts in the consolidated balance sheet. Deferred tax assets and liabilities were created for assets and liabilities as well as for actuarial gains and losses on plan assets and pension obligations and for hedging instruments. Income tax assets were also recognized for tax credits and losses available for carry-forward.

	Dec. 31,	2012	Dec. 31	, 2011	2012	
In € million	tax	Deferred tax liabilities ance sheet	Deferred tax assets recognized in ba	Deferred tax liabilities lance sheet	Tax income / expense (-) recognized in profit/loss <sup>1)</sup>	recognized in equity
Assets						
Intangible assets	0.5	176.7	0.6	195.0	18.2	
Property, plant and equipment	3.6	60.2	2.3	61.6	2.7	
Financial assets			0.1		-0.1	
Inventories	5.1	16.4	2.7	8.7	-5.3	
Receivables and other assets	3.9	19.3	3.8	23.0	4.3	-0
Subtotal Assets	13.1	272.6	9.5	288.3	19.8	-0
Equity						
Convertible bond (equity component)				5.1		
Available-for-sale financial assets not measured at fair value through profit or loss			0.1			(
Hedging instruments <sup>2)</sup>		10.7	6.8			-17
Actuarial gains and losses on plan assets and pension obligations	47.5		25.4			22
Subtotal Equitiy	47.5	10.7	32.3	5.1		9
Liabilities						
Pension provisions	12.3	2.2	12.5		-2.4	
Other provisions	11.2	24.9	23.1	0.3	-36.5	
Liabilities	29.7	0.5	22.8	2.4	8.5	
Subtotal Liabilities	53.2	27.6	58.4	2.7	-30.3	
Deferred tax on assets and liabilities	113.8	310.9	100.2	296.1	-10.5	9
Tax credits and losses available for carry-forward						
Tax credits carried forward <sup>3)</sup>	49.1		17.5		29.9	
Tax losses carried forward <sup>4)</sup>	7.0		7.4			-(
Valuation allowances and unrecognized recoverable tax payments						
Valuation allowance on tax credits	-42.5		-12.8		-28.5	
Valuation allowance on tax losses carried forward	-7.0		-7.4			(
Temporary differences for which no deferred tax assets were recognized	-1.3		-1.8			(
Tax credits and losses carried forward	5.3		2.9		1.4	
Deferred tax assets/liabilities before offset	119.1	310.9	103.1	296.1	-9.1	10
Offset	-103.5	-103.5	-86.8	-86.8		
Net deferred tax assets/liabilities	15.6	207.4	16.3	209.3	-9.1	10

<sup>&</sup>lt;sup>1)</sup> Recognized in income statement.

<sup>&</sup>lt;sup>2)</sup> Balance of assets and liabilities.

<sup>&</sup>lt;sup>3)</sup> MTU Aero Engines Polska Sp. z o.o., Rzeszów, Poland.

<sup>&</sup>lt;sup>4)</sup> MTU Aero Engines North America Inc., Newington, U.S., and Vericor Power Systems LLC., Atlanta, U.S.

Reference is made to Note 15. (Income taxes) for further information relating to current and deferred tax assets and liabilities resulting from the balance sheet and other items listed above and to the reconciliation between expected and actual tax expense.

Group management report

Deferred tax assets and liabilities are offset only if the balances relate to income taxes levied by the same taxation authority and with similar maturities.

Deferred tax assets were recognized for deferred tax losses/credits available for carry-forward in the case of the following group companies:

in € million	U.S. 2012	Poland 2012	Total 2012	Total 2011
Unused tax losses	18.0		18.0	18.9
Tax credits available for carry-forward		49.1	49.1	17.5
Potential tax impact of tax losses/credits available for carry-forward	7.0	49.1	56.1	24.9
Valuation allowance on tax losses carried forward	-7.0		-7.0	-7.4
Valuation allowance on tax credits		-42.5	-42.5	-12.8
Balance sheet effect of deferred tax assets on		6.6	6.6	4.7

#### UNITED STATES

In the financial year 2012, MTU Aero Engines North America Inc., Newington, U.S., and Vericor Power Systems LLC., Atlanta, U.S., made no use of loss carry-forwards for tax purposes. No deferred tax assets are recognized for these companies because the unused tax losses amounting to € 18.0 million were fully written down in previous years through valuation allowances. In the United States, tax losses can be carried forward for 20 years.

### POLAND

The tax credits of € 6.6 million (2011: € 4.7 million) relate to the production site of MTU Aero Engines Polska Sp. z o.o., Rzeszów, Poland. These credits are available to the Polish company to promote business investments due to the fact that the production site is located in a special economic zone. The actual utilization of the tax credits depends on the level of investment and actual taxable profits through to the financial year 2017.

Temporary differences for which no deferred tax assets were recognized totaled € 2.6 million in the financial year 2012 (2011: € 3.6 million) and related to MTU Aero Engines North America. The resulting potential tax impact of € 1.3 million (2011: € 1.8 million) was therefore not taken into account in the computation of income tax expense.

# DEFERRED TAX LIABILITIES FOR TAXABLE TEMPORARY DIFFERENCES ARISING FROM INVESTMENTS IN SUBSIDIARIES AND JOINT VENTURES

In accordance with IAS 12, deferred tax liabilities were not recognized for temporary differences amounting to € 191.8 million (2011: € 147.2 million) that arose in connection with investments in subsidiaries and joint ventures. If these differences were to lead to the creation of deferred tax liabilities, they would result in a tax liability amounting to € 6.2 million (2011: € 5.1 million), based on the current provisions of Section 8b of the German Corporate Income Tax Act (KStG).

# IV. Other Disclosures

# 39. MEASUREMENT OF THE RECOVERABLE AMOUNT OF OPERATING SEGMENTS TO WHICH GOODWILL HAS BEEN ATTRIBUTED

The group tests the goodwill of the cash-generating units for impairment annually. At MTU, the two operating segments - OEM (commercial and military engine business) and MRO (commercial maintenance business) - are viewed as cash-generating units. The value in use of each of the two operating segments at June 30, 2012, was calculated in order to determine their respective recoverable amounts. The recoverable amount determined for each operating segment was compared with the corresponding carrying amount. The calculations are based on the following assumptions:

- The calculations are based on the planned EBIT for each of the two operating segments, from which the future free cash flows are derived (cash inflows and outflows are planned without reference to financing activities or taxation).
- An analysis of possible changes to the planned cash flows, in respect of both the amount and the timing.
- The variables that enter into the calculation of weighted average cost of capital (WACC) before tax are:
  - · risk-free base interest rate
  - entrepreneurial risk, i.e. market risk premium multiplied by a beta coefficient based on peer group analysis
  - · perpetuity divided by discount rate less growth rate
  - · costs of debt capital, and
  - the group's capital structure.

The WACC is taken as a basis for the discount rate before tax, and is measured as a function of the cost of capital, averaged to account for both debt capital and equity capital. The cost of equity capital is first calculated after tax. For this purpose, MTU in 2012 used a risk-free base interest rate of 2.25%, a market risk premium of 6.5% and a beta coefficient of 1.1 based on peer group analysis. The cost of debt capital was 2.3% after tax. A growth rate of 1.0% was subtracted from the above discount rate to determine the present value of the perpetuity. The underlying assumptions on which the Board of Management based its calculation of the value in use included long-term growth rates of between 4.2% and 17.8% (2011: between 7.8% and 10.4%), operating margins of 11.5% to 15.1% (2011: 15.2% to 17.2%) and discount rates of 10.4% (2011: 11.2%) for the OEM segment (commercial and military engine business) and 10.3% (2011: 10.7%) for the MRO segment (commercial maintenance business).

The carrying amount of goodwill in the OEM segment (commercial and military engine business) was unchanged compared with 2011, at € 304.4 million, and the carrying amount for goodwill in the MRO segment (commercial maintenance business) was € 101.9 million (2011: € 102.1 million). The detailed forecasting period for the projected EBIT and cash flow figures used to determine the value in use of the two operating segments is five years.

The calculations present no indications at the present time that could lead MTU to the conclusion that an impairment loss on goodwill for either of the operating segments is necessary.

To our shareholders

### 40. SENSITIVITY ANALYSIS OF GOODWILL

Group management report

The group makes estimations and assumptions relating to future events and conditions. These estimations and assumptions, which imply a significant risk in the form of possible major adjustments to the carrying amounts of assets and liabilities during the next financial year, are discussed in the following sections.

Sensitivity analyses were carried out to determine the possible impact that a sustained reduction in planned earnings before interest and tax (EBIT) might have on the goodwill amounts allocated to each of the two operating segments. This analysis included sensitivity factors affecting the calculation of the weighted average cost of capital.

Assuming an unchanged weighted average cost of capital (WACC), the sensitivity analyses concluded that there would be no necessity to recognize an impairment loss on goodwill either in the OEM or MRO operating segment, even in the event of a sustained reduction in EBIT ranging to 30 % below the earnings forecast established by management.

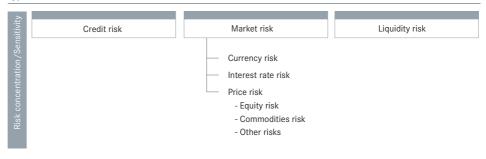
### **41. RISK MANAGEMENT**

### PRINCIPLES OF RISK MANAGEMENT

MTU is exposed to credit risks, market risks, and liquidity risks with respect to its assets, liabilities and forecast transactions. The objective of financial risk management is to minimize these risks by means of current financing-related activities. This involves the use of selected hedging instruments, depending on the estimated degree of risk exposure. Hedging is principally used to ward off risks affecting the group's cash flow.

The group's basic financial policy guidelines are defined by the Board of Management and monitored by the Supervisory Board. The responsibility for implementing the agreed financial policy and performing ongoing risk management lies with the group's Treasury Board. Certain transactions require the prior approval of the Board of Management, whose members are kept regularly informed of the extent and amount of current risk exposure.

# Types of risk



### 41.1. CREDIT RISK

MTU is exposed to a number of credit risks arising from its operating and financing activities. Outstanding payments in connection with operating activities are constantly monitored by the operating segments. Specific allowances are used to account for the risk of non-payment.

The consortium leaders in the commercial engine and spare parts businesses have extensive receivables management systems in place. In the commercial maintenance business, the responsible MTU departments track open accounts receivable in short cycles. Before a deal is finalized, risks are assessed and any necessary precautions are taken.

In the case of derivative financial instruments, e.g. forward foreign exchange contracts, the group is also exposed to a credit risk which arises as a result of contract partners not fulfilling contractual agreements. In the context of financing activities, this credit risk is diminished by ensuring that business is conducted only with partners with a credit rating of investment grade (IG). For this reason, the general credit risk resulting from the use of derivative financial instruments is not considered to be significant.

There are no indications of any concentrations of credit risk arising from business relations, individual debtors, or groups of debtors.

The maximum credit risk is represented on the one hand by the carrying amounts of the financial assets recognized in the balance sheet. No material agreements exist at the reporting date which could reduce the maximum credit risk. On the other hand, MTU is exposed to a liability risk and hence potential credit risk as a result of obligations assumed in connection with risk- and revenuesharing partnerships and the associated contingent liability. At the reporting date, proportionate shares of contingent liability under risk- and revenue-sharing partnerships totaled a nominal amount of € 58.9 million (2011: € 69.7 million). In addition to these contingent liabilities, the group also held guarantees issued for group companies amounting to € 63.1 million (2011: € 41.0 million).

### 41.2. MARKET RISKS

Corporate Governance

#### 41.2.1. CURRENCY RISK

More than 80% of MTU's revenues are generated in U.S. dollars. Approximately half of this currency risk is offset in the normal course of business by costs incurred likewise in U.S. dollars. Most other costs are incurred in euros and in Chinese yuan renminbi, and to a lesser extent in Canadian dollars and Polish zloty. Changes in currency exchange rates in the unhedged portion of the portfolio thus have a direct impact on EBIT and cash flow.

#### HEDGING STRATEGY

MTU uses a hedging model to protect certain portions of its expected net foreign currency portfolio in order to minimize the effects of the volatility of the U.S.-dollar exchange rate on the company's EBIT and cash flow. For accounting purposes, MTU designates future cash flows as hedged items, with the aim of reducing the expected net currency risk exposure. As a result, postponements or cancellations of business transactions and the associated cash inflows do not affect the hedging relationship as long as the actual gross inflow of a foreign currency exceeds the hedged amount.

Translation differences resulting from the translation of annual financial statements into the group's functional currency are not included.

### FINANCIAL INSTRUMENTS DESIGNATED AS CASH FLOW HEDGES

At December 31, 2012, MTU held forward foreign exchange contracts for a contractual period up to December 2015 to sell a nominal volume of U.S. \$ 1,550.0 million (which translates to € 1,174.8 million at the exchange rate prevailing at the reporting date). Changes in the fair value of the forward foreign exchange contracts amounted to a gain of € 36.7 million in 2012 (2011: a loss of € 19.1 million). At December 31, 2011, MTU had hedged cash flows amounting to U.S. \$ 1,485.0 million (which translates to € 1,147.7 million at the exchange rate prevailing at December 31, 2011) for the financial years 2012–2015.

Out of the total nominal volume of forward foreign exchange contracts, the following amounts are expected to be used in the subsequent financial years:

in U.S. \$ million	2012	2011
2012		545.0
2013	785.0	510.0
2014	535.0	300.0
2015	230.0	130.0
Total in U.S. \$	1,550.0	1,485.0
Translated into € million		
at the exchange rate prevailing on the reporting date	1,174.8	1,147.7

In the financial year 2012, a loss of € 13.2 million (2011: a gain of € 4.6 million) was realized from effective forward foreign exchange contracts and recycled from equity to revenues. The company also holds other financial instruments designated as cash flow hedges covering periods extending to 2027 and representing a nominal amount of U.S. \$ 526.9 million (2011: U.S. \$ 0), which translates to € 399.3 million (2011: € 0) at the exchange rate prevailing at the reporting date. The majority of the hedged future cash flows are spread evenly over the period covered by these instruments. The ineffective portion of the realized forward foreign exchange contracts in 2012, amounting to a loss of € 0.8 million (2011: a loss of € 0.9 million), was recognized as an expense in the financial result on other items. At December 31, 2012, net of deferred taxes, fair value gains on forward foreign exchange contracts amounting to € 10.6 million (2011: fair value losses of € 14.1 million) were recognized directly in equity.

There were no forecast transactions for which cash flow hedges were recognized in prior periods that are not expected to occur.

As a further element of its risk management strategy, MTU employs derivative financial instruments that do not form part of a hedging relationship as defined by IAS 39.

### **CURRENCY OPTION TRANSACTIONS**

Simple option transactions (commonly referred to as 'plain vanilla options') enable MTU to sell a defined quantity of U.S. dollars at agreed euro exchange rates on a range of different dates. The risk of financial loss from these transactions is limited to the premiums that have already been paid.

In addition to these plain vanilla options, the group also holds short-position options. The latter are concluded in connection with plain vanilla options in order to reduce the amount paid in premiums. These products present a risk if the exchange rate falls since MTU is obliged to sell U.S. dollars at a previously agreed euro/U.S. dollar exchange rate.

#### **CURRENCY SWAPS**

During the financial year 2012, U.S. dollar holdings were sold at the daily rate and repurchased after a certain time using a swap. As the selling and purchase prices differ marginally, these swaps are immaterial in terms of risk. The purpose of this transaction was to optimize interest income.

#### COLLECTIVE FORWARD TRANSACTIONS

In the period up to December 2012, MTU concluded collective forward foreign exchange contracts with German banks for a nominal amount of U.S. \$ 280 million. The contract-specific hedging rates lie between 1.1720 euros/U.S. dollar and 1.2690 euros/U.S. dollar for terms between 2014 and 2016. If the effective daily rate of the U.S. dollar lies within the corridor specified in a given contract, a fixed volume of U.S. dollars is hedged. If the rate is above the corridor, no volume is hedged; if it is below the corridor, the volume is doubled. The corridors in the contracts are generally between 1.20 euros/U.S. dollar and 1.55 euros/U.S. dollar. The fair value gain on these contracts amounted to € 12.0 million at the reporting date (2011: fair value loss of € 5.2 million). This gain was recognized in the income statement under financial result on other items, with a corresponding entry in the balance sheet under financial assets.

# **EXCHANGE RATE SENSITIVITY ANALYSIS**

As part of the disclosures concerning market risk, IFRS 7 requires a sensitivity analysis showing the effects of hypothetical changes in relevant risk variables on equity and earnings after tax. The periodic effects are determined by applying the hypothetical changes in the risk variables to the financial instruments held at the reporting date. This implies the assumption that the holding at the reporting date is representative of the whole year.

A large proportion of trade receivables and payables, and of finance lease liabilities, are invoiced in U.S. dollars, and therefore have an impact on earnings after tax and on equity as a result of exchange rate parities. All other non-derivative financial instruments are denominated in the functional currency and are hence not included in the exchange rate sensitivity analysis.

The equity instruments held by the group are not of a monetary nature, and so consequently do not present a currency risk as defined by IFRS 7.

If it is assumed that the exchange rate of the euro to the U.S. dollar at December 31, 2012, or at the prior year's reporting date had been 10% higher or lower than the actual closing rate, the sensitivity analysis based on this assumption produces the following hypothetical effects on earnings after tax (EAT) and equity:

Group management report

in € million	2012		2011	
	-10%	+10%	-10%	+10%
Closing exchange rate Dec. 31, 2012: 1,3194				
(Dec. 31, 2011: 1.2939)	1.19	1.45	1.16	1.42
Earnings after tax	-23.6	12.7	-13.1	4.8
Equity <sup>1)</sup>	-71.4	62.9	-67.2	55.0
of which: hedge reserve (Fair Value) <sup>1)</sup>	-87.5	71.6	-85.1	69.7

#### 41.2.2. INTEREST RATE RISK

MTU is exposed to interest rate risk principally in the euro zone, and to a lesser extent in Canada, China, Poland and the United States.

### Euro interest rate cap transaction

The purpose of the interest rate cap is to hedge against a rise in interest rates. It is a purely financial transaction that poses a minor interest rate risk.

At December 31, 2012, an interest rate cap was in place for an amount of € 10 million and maturing on June 5, 2014. The agreed interest rate ceiling is 4%.

### Interest rate sensitivity analysis

IFRS 7 requires the presentation of interest rate risk in the form of a sensitivity analysis. This demonstrates the effects of changes in market interest rates on interest payments, interest income and expense, other income statement items, earnings after tax, and equity. The interest rate sensitivity analysis is based on the following assumptions:

Changes in the market interest rate of non-derivative financial instruments bearing interest at a fixed, normal rate have an effect on earnings after tax and equity only if these financial instruments are classified as 'at fair value through profit or loss' or were so designated at initial recognition. Consequently, all fixed-interest financial instruments measured at amortized cost have no effects on earnings after tax and equity that must be accounted for.

Changes in the market interest rate of financial instruments that have been designated as hedging instruments for the purposes of a cash flow hedge to reduce exposure to variations in payment due to interest rates have an impact on the hedge reserve in equity and are therefore included in the sensitivity analysis. Consequently, financial instruments that do not form part of a hedging relationship as defined by IAS 39 have an effect on the 'financial result on other items' (adjustment of fair value of derivative instruments). These effects are taken into account in the incomerelated sensitivity analysis.

In the financial year 2012, an average of 97% (2011: 89%) of the group's financial liabilities denominated in euros were subject to interest at a fixed rate. This average is representative for the whole year.

If it is assumed that the market interest rate at December 31, 2012, had been 100 basis points lower or higher, the sensitivity analysis based on this assumption produces the following hypothetical effects on earnings after tax for the year:

Interest rate sensitivity in basis points in € million	201	2	20	11
iii e minion	-100	+100	-100	+100
Earnings after tax (EAT)	-10.7	9.9	-0.6	1.0

#### 41.2.3. PRICE RISK

In connection with the presentation of market risk, IFRS 7 also requires disclosure of the effects that hypothetical changes in risk variables relating to prices and the fair value of financial instruments might have on earnings after tax for the year and on equity. The risk variable of most relevance in this context is forward commodity sales contracts for nickel alloys.

#### Forward commodity sales contracts

At December 31, 2012, MTU had concluded forward commodity sales contracts with financial institutions for a total of 350 metric tons of nickel (2011: 680 metric tons) over the period 2013 to 2014 in order minimize the risk associated with increasing commodity prices for the necessary quantity of nickel. The contracted fixed prices for nickel range between U.S. \$ 19,300 and U.S. \$ 24,500 per metric ton (2011: between U.S. \$ 15,700 and U.S. \$ 24,900 per metric ton).

If the market price for nickel on the respective due date exceeds the agreed fixed price, MTU will receive a payment for the difference from the bank with which the contract was concluded. In the opposite case, MTU is obligated to compensate the bank. No effective hedging relationship as defined in IAS 39 has been established for these transactions. The fair value losses of € 0.7 million (2011: fair value losses of € 2.4 million) arising from these forward commodity sales contracts are recognized in the financial result on other items (see Note 14. Financial result on other items).

If it is assumed that the market price of forward commodity sales contracts for nickel had been 10% higher or lower, the effect on earnings after tax would have been € 0.5 million higher or lower, respectively (2011: € 0.7 million).

## 41.3. LIQUIDITY RISK

Liquidity risk management is the responsibility of the Treasury Board. The controlling process is based on an analysis of all future cash flows. The process includes the monitoring and limitation of aggregated cash outflow and cash borrowing. Observed parameters include diversification effects and customer concentration. To guarantee MTU's solvency and financial flexibility at all times, a liquidity reserve consisting of lines of credit, and cash and cash equivalents is kept available. Transactions in connection with financing activities are conducted exclusively with partners who have an excellent credit rating. Outstanding payments in connection with operating activities are monitored on an ongoing basis. Specific allowances are used to account for the risk of non-payment (see Note 23. Trade receivables).

The unhedged revolving credit facility provided by two banks amounts to € 100.0 million and has a term until December 1, 2015. Its general purpose is to finance investment in production facilities. At December 31, 2012, the group had not drawn down any funds through these lines of credit. However, € 13.7 million (2011: € 12.4 million) had been drawn down at the reporting date as bank guarantees in favor of third parties. The availability of the unused lines of credit amounting to € 86.3 million (2011: € 87.6 million) increases the scope and flexibility of the group's financing opportunities. As of December 31, 2012, MTU and its affiliates had met all loan repayment and other obligations (covenants) arising from financing agreements.

Corporate Governance

The maximum credit risk is represented by the carrying amounts of the financial assets recognized in the balance sheet. In order to minimize default risk, payment arrangements are secured by collateral, credit rating information is obtained, or historical data from the existing business relationship (and in particular payment patterns) are used.

MTU is also exposed to default risk through contingent liabilities and other financial obligations (see Note 42. Contingent liabilities and other financial obligations).

#### 42. CONTINGENT LIABILITIES AND OTHER FINANCIAL OBLIGATIONS

#### **42.1. CONTINGENT LIABILITIES**

in € million	Dec. 31, 2012	Dec. 31, 2011
I. Contingent liabilities under risk- and revenue-sharing partnerships with:		
IAE International Aero Engines AG	38.1	48.0
Pratt & Whitney Aircraft Company	17.7	19.8
General Electric Company	3.1	1.9
Total contingencies	58.9	69.7
I. Guarantees and other contingent liabilities	63.1	39.6
III. Obligations arising from equity investments in joint ventures		1.4
Total contingent liabilities	122.0	110.7

No provisions were allocated for contingent liabilities in 2012, as the risk of their being invoked is considered very unlikely.

When MTU enters into risk- and revenue-sharing agreements, the company assumes obligations with respect to the sales financing of engines for selected airlines. The means of providing sales financing are generally secured through access rights granted by the consortium leader in an engine program. MTU additionally benefits from safeguarding clauses drawn up by the leader of the engine consortium, which take the imputed risks and legislative framework into consideration. MTU is of the view that the estimated market value of the financed engines is sufficient to offset potential losses arising from financing transactions.

Guarantees and other contingent liabilities relate primarily to service agreements for gas turbine maintenance and guarantee obligations arising from maintenance agreements amounting to € 19.8 million (2011: € 13.0 million), and investment grants amounting to € 20.7 million (2011: € 20.7 million).

#### 42.2. OTHER FINANCIAL OBLIGATIONS

#### 42.2.1. OBLIGATIONS ARISING FROM OPERATING LEASE ARRANGEMENTS

The rental and lease contracts for buildings, machines, tools, office and other equipment have terms of one to ten years and in certain cases contain extension and purchase options and/or price adjustment clauses. With regard to rental and lease agreements, payments of € 18.3 million (2011: € 18.8 million) were expensed in the financial year 2012.

The nominal total of future minimum lease payments arising from non-terminable operating lease agreements is as follows (based on due payment dates):

n € million	Dec. 31, 2012	Dec. 31, 2011
Due in less than one year	12.2	11.2
Due in more than one and less than five years	24.4	16.5
Due in more than five years	10.2	3.8
otal future minimum lease payments	46.8	31.5

The increase in the nominal total of future minimum lease payments from € 31.5 million in 2011 to € 46.8 million at December 31, 2012, is mainly attributable to the adjustment and renewal of existing contracts.

In addition to payments for operate-lease engines provided to customers by MTU Maintenance Hannover GmbH, Langenhagen, and for the rented buildings occupied by MTU Maintenance Canada Ltd., Richmond, Canada, which together total around € 25 million (2011: around € 18 million), other major individual obligations totaling € 17.6 million (2011: € 11.0 million) comprise the future lease payments for offices occupied by MTU Aero Engines GmbH, Munich, the building at the air base in Erding made available as part of a cooperative arrangement with the German Air Force, and rental payments for industrial trucks.

In arithmetical terms, 78% of the leasing contracts were due to expire within 5 years at December 31, 2012. 22% are valid for more than 5 years, while a small number of leasing contracts have no definite expiry date.

### 42.2.2. FUTURE INCOME AND EXPENSES ARISING FROM RENTAL AGREEMENTS FOR SUBLET PROPERTY

n € million	Dec. 31, 2012	Dec. 31, 2011
Total future minimum income from property subletting agreements	1.9	1.8
Total future minimum expenses associated with property subletting		
agreements	-1.9	-1.8
Balance of income and expenses	0.0	0.0

# 42.2.3. ORDER COMMITMENTS FOR FINANCIAL OBLIGATIONS

At December 31, 2012, other financial obligations comprised order commitments for the purchase of intangible assets, totaling € 0.3 million (2011: € 0.2 million), and financial obligations for the purchase of property, plant and equipment, totaling € 28.0 million (2011: € 33.2 million). These financial obligations were thus within normal limits.

#### 42.2.4. MISCELLANEOUS

In 2012, MTU Maintenance Hannover GmbH, Langenhagen, concluded a long-term rental agreement for a warehouse. This rental agreement is due to begin in 2013, and will run until December 31, 2025. The future obligations arising out of the rental agreement amount to € 4.9 million.

#### 43. RELATIONSHIPS WITH RELATED COMPANIES AND PERSONS

#### 43.1. RELATED COMPANIES

Corporate Governance

MTU maintains normal business relationships with non-consolidated, related subsidiaries. Transactions between group companies and joint ventures or associated companies were, without exception, conducted in the context of their normal business activities and made on terms equivalent to those that prevail in arm's length transactions.

Business transactions between companies included in the consolidated financial statements were eliminated in the course of consolidation and are therefore not subject to any further separate disclosure in these Notes.

# 43.1.1. BUSINESS WITH RELATED COMPANIES

During the course of the business year, companies within the group conducted transactions among themselves (intragroup sales). The following business transactions were carried out with non-consolidated related companies in the financial year 2012 and in 2011:

	Outstandi	ng balance	V	alue of business	transactions	
	Recei	vables	Revenues/incom	me/sales	Expenses/pur	chases
in € million	Dec. 31, 2012	Dec. 31, 2011	2012	2011	2012	2011
Current receivables						
Eurojet Turbo GmbH, Munich	8.5	21.7	203.1	230.5	-1.0	-2.1
MTU Turbomeca Rolls-Royce ITP GmbH, Hallbergmoos	1.3	1.1	9.6	8.1	-0.1	-0.9
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde	1.1	1.2	37.7	36.0	-0.2	-0.1
Ceramic Coating Center S.A.S., Paris, France	0.2	0.3			-2.8	-3.3
Turbo Union Ltd., Bristol, England	7.5	3.4	49.9	60.3		
Airfoil Services Sdn. Bhd., Kota Damansara, Malaysia	2.0		0.3		-5.9	
Middle East Propulsion Company Ltd., Riyadh, Saudi Arabia			0.1	0.1		-0.6
Gesellschaft zur Entsorgung von Sondermüll in Bayern GmbH, Munich					-0.2	-0.2
MTU Maintenance Service Center Ayutthaya Ltd., Ayutthaya, Thailand	0.6		0.1		-0.4	
Total	21.2	27.7	300.8	335.0	-10.6	-7.2

	Outstandi	ng balance	Value of business transactions				
	Liabi	ilities	Revenues/inco	me/sales	Expenses/pu	rchases	
in € million	Dec. 31, 2012	Dec. 31, 2011	2012	2011	2012	2011	
Current liabilities							
IAE International Aero Engines AG, Zurich, Switzerland	88.0	70.7	602.0	524.1	-510.9	-367.7	
MTU Turbomeca Rolls-Royce GmbH, Hallbergmoos	0.7	1.0	5.8	5.5	-0.1	-0.7	
MTU Versicherungsvermittlungs- und Wirtschaftsdienst GmbH, Munich					-9.8	-9.3	
EPI Europrop International GmbH, Munich	4.5	16.8	19.3	2.0	-19.6	-1.5	
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China	8.9	3.6	1.9	1.5	-25.7	-27.1	
MTU München Unterstützungskasse GmbH, Munich	5.0	6.5			-0.1	-0.1	
Airfoil Services Sdn. Bhd., Kota Damansara, Malaysia		0.4		0.3		-4.6	
MTU Maintenance Dallas Inc., Grapevine, U.S.		0.1	1.7		-1.7	-0.2	
MTU Maintenance do Brasil Ltda., Sao Paulo, Brazil					-0.1		
Total	107.1	99.1	630.7	533.4	-568.0	-411.2	

#### 43.1.2. MAJOR SHAREHOLDINGS

The list of major shareholdings shows MTU's capital share in each company together with the equity that this represents at December 31, 2012, and the profit or loss generated by each company in the financial year 2012:

Name and registered office of entity	Consolidation method <sup>9)</sup>	Shareholding in % Dec. 31, 2012	Equity in € 000 Dec. 31, 2012	Profit/loss in € 000 2012
I. Investments in subsidiaries				
MTU Aero Engines Finance B.V., incorporated in Amsterdam, Netherlands	full	100.00	4,304	1,857
MTU Aero Engines GmbH, Munich	full	100.00	754,846	20,9728)
MTU Maintenance Hannover GmbH, Langenhagen	full	100.00	65,470	2)
MTU Maintenance Berlin-Brandenburg GmbH, Ludwigsfelde	full	100.00	88,620	2)
MTU Aero Engines North America Inc., Newington, U.S.	full	100.00	5,8453)	1,1415)
MTU Maintenance Canada Ltd., Richmond, Canada	full	100.00	11,5733)	7,8065)
Vericor Power Systems LLC., Atlanta, U.S.	full	100.00	24,9433)	3,6395)
RSZ Beteiligungs- und Verwaltungs GmbH, Munich	full	100.00	13,430	-1
MTU Aero Engines Polska Sp. z o.o., Rzeszów, Poland	full	100.00	260,0583)	-24,9735
MTU Versicherungsvermittlungs- und Wirtschaftsdienst GmbH, Munich	at cost	100.00	26	2)
MTU München Unterstützungskasse GmbH, Munich	10)	100.00	5,036	
MTU Maintenance Service Centre Ayutthaya Ltd., Ayutthaya, Thailand	at cost	100.00	7 1 1)6)	-531)7
MTU Maintenance Dallas Inc., Grapevine, U.S.	at cost	75.00	1143)	1045
MTU Maintenance IGT Service do Brasil Ltda., Sao Paulo, Brazil	at cost	100.00	4)	4
II. Investments in associated companies				
Turbo Union Ltd., Bristol, England	at cost	39.98	2941)	-1 <sup>1</sup>
EUROJET Turbo GmbH, Hallbergmoos	at cost	33.00	2,3921)	8821
EPI Europrop International GmbH, Munich	at cost	28.00	4361)	3821
MTU Turbomeca Rolls-Royce GmbH, Hallbergmoos	at cost	33.33	731)	351
MTU Turbomeca Rolls-Royce ITP GmbH, Hallbergmoos	at cost	25.00	1171)	901
IAE International Aero Engines AG, Zurich, Switzerland	at equity	25.25	54,2603)	4,4905
III. Equity investments in joint ventures				
MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China	proportionate	50.00	114,6703)	22,9405
MTU Maintenance Hong Kong Ltd., Hong Kong, China <sup>11)</sup>	at cost	50.00	163)	25
Pratt & Whitney Canada Customer Service Centre Europe GmbH, Ludwigsfelde <sup>11)</sup>	at equity	50.00	2,499	10
Ceramic Coating Center S.A.S., Paris, France	at cost	50.00	7,0911)	1,0141
Airfoil Services Sdn. Bhd., Kota Damansara, Malaysia	at cost	50.00	12,1743)	2,6625
AES Aerospace Embedded Solutions GmbH, Munich	at cost	50.00	1,956	-544
IV. Other equity investments				
Middle East Propulsion Company Ltd., Riyadh, Saudi Arabia	at cost	19.30	28,1941/6)	3,4951/7)

<sup>1)</sup> Data for previous year, actuals not available.

- at cost = measured at acquisition cost, because fair value cannot be reliably determined.
- at equity = carrying amount of investment increased or reduced to reflect changes in equity of group's percentage interest.
- proportionate = consolidated in the same proportion as the group's interest.
- 10) Plan assets according to IAS 19.

<sup>&</sup>lt;sup>2)</sup> Profit/loss for German GAAP purposes (HGB) transferred under profit and loss transfer agreement 2012.

<sup>&</sup>lt;sup>3)</sup> Translated at closing exchange rate, Dec. 31, 2012.

<sup>&</sup>lt;sup>4)</sup> Figures not yet available.

<sup>&</sup>lt;sup>5)</sup> Translated at annual average exchange rate for 2012.

<sup>&</sup>lt;sup>6)</sup> Translated at closing exchange rate, Dec. 31, 2011.

<sup>&</sup>lt;sup>7)</sup> Translated at annual average exchange rate for 2011.

<sup>&</sup>lt;sup>8)</sup> Excluded from net profit available for distribution, pursuant to Section 268(8) of the German Commercial Code (HGB).

<sup>9) -</sup> full = fully consolidated.

<sup>&</sup>lt;sup>11)</sup> Indirect shareholding.

# **43.2. RELATED PERSONS**

No group company has conducted any business subject to disclosure requirements with members of the group's Board of Management or Supervisory Board or with any other individuals holding key management positions, or with companies in which these persons hold a seat on the managing or supervisory board, with the exception of the transactions presented in Note 43.2.4. (Other related party transactions). This is also applicable for close family members of this group of persons. For information concerning the purchase of shares and share options by members of the Board of Management and the Supervisory Board, please refer to Note 43.2.4. (Other related party transactions).

#### 43.2.1. BOARD OF MANAGEMENT

At December 31, 2012, the Board of Management of MTU Aero Engines Holding AG, Munich, comprised the following members:

#### **Board of Management**

Egon Behle	
Chief Executive Officer	Munich
Dr. Rainer Martens	
Chief Operating Officer	Munich
Dr. Stefan Weingartner	
President and CEO Commercial Maintenance	Munich
Reiner Winkler	
Chief Financial Officer	Munich

## 43.2.2. BOARD OF MANAGEMENT COMPENSATION

The members of the Board of Management were awarded total compensation amounting to € 7.5 million (2011: € 6.4 million) in the financial year 2012 for their services as board members. This total amount can be broken down into the following components:

	2012	2	2011	
	in € million	in %	in € million	in %
Short-term employee benefits				
Non-performance-related components	2.4		2.2	
Performance-related components without				
long-term incentive effect	1.2		1.3	
Performance-related components with				
long-term incentive effect	1.7		0.9	
Total short-term employee benefits	5.3	70.7	4.4	68.7
Post-employment benefits				
Service cost / past service cost	0.8		0.8	
Total post-employment benefits	0.8	10.7	0.8	12.5
Share-based payment benefits				
Performance-related components with				
long-term incentive effect	1.4		1.2	
Total share-based payment benefits	1.4	18.6	1.2	18.8
Total compensation	7.5	100.0	6.4	100.0

At December 31, 2012, the provisions for current and future pension obligations toward former members of the Board of Management amounted to € 6.1 million (2011: € 4.6 million).

More detailed information on the compensation system introduced in the financial year 2010 and the effects of the amended pension plan contracts for MTU's Board of Management is provided in the management compensation report in the Corporate Governance section of this Annual Report.

Members of the Board of Management did not receive any compensation for mandates on boards of the group's own companies.

At December 31, 2012, as in the previous year, no loan facilities or advances were granted to members of the Board of Management. Similarly, as in the previous year, no contingent liabilities were assumed by the company in favor of members of the Board of Management.

#### 43.2.3. MEMBERS OF THE SUPERVISORY BOARD

As in the previous year, the members of the Supervisory Board did not receive any additional compensation for supervisory board mandates over and above that received for their supervisory board mandate with MTU Aero Engines Holding AG, Munich. Compensation for active members of the Supervisory Board amounted to € 0.7 million (2011: € 0.7 million).

At December 31, 2012, as in the previous year, no loan facilities or advances were granted to members of the Supervisory Board. Similarly, as in the previous year, no contingent liabilities were assumed by the company in favor of members of the Supervisory Board.

For details of the compensation awarded to individual members of the Supervisory Board, and other related information, please refer to the management compensation report in the Corporate Governance section of this Annual Report.

#### 43.2.4. OTHER RELATED PARTY TRANSACTIONS

As in the previous year, MTU shares and options bought or sold by members of the Board of Management and the Supervisory Board in the financial year 2012 were bought or sold under normal market conditions. The transactions were published in the commercial registry and posted on the MTU website at www.mtu.de/en under Investor Relations > Corporate Governance > Directors' Dealings.

# V. Segment Information

#### 44. SEGMENT REPORTING

MTU reports on two operating segments: the OEM segment (commercial and military engine business) and the MRO segment (commercial maintenance business). Segmentation is based on classifications used in the internal organizational structure and reporting system, and takes into account the risks and returns to which the segments are subject.

#### COMMERCIAL AND MILITARY ENGINE BUSINESS (OEM)

Group management report

In the commercial and military engine business, the group develops, manufactures, assembles and delivers commercial and military engines and components. Maintenance, repair and overhaul of military engines is also included in this segment.

#### COMMERCIAL MAINTENANCE BUSINESS (MRO)

In the commercial maintenance business, the group maintains, repairs and overhauls aircraft engines and industrial gas turbines. Activities encompass full engine maintenance and repair, the complete overhaul of engine modules and special repairs.

#### PROFIT/LOSS OF COMPANIES ACCOUNTED FOR USING THE EQUITY METHOD

The carrying amount and the share in profit/loss of consolidated group companies accounted for using the equity method are included in reporting by operating segment if such companies can be directly allocated to an operating segment.

#### **SEGMENT ASSETS**

Segment assets and liabilities comprise all assets and liabilities that can be allocated to specific operating activities and whose positive or negative operating results have an impact on earnings before interest and tax (EBIT / adjusted EBIT). Assets are allocated to the operating segment in which they are used to generate business. The positive consolidation/reconciliation amount of € 1,525.1 million (2011: € 1,360.8 million) in the segment assets line relates to the consolidation of the fair value of subsidiaries and of accounts receivable from intersegment sales.

#### SEGMENT LIABILITIES

Liabilities are allocated to the operating segment that bears the legal obligation for their settlement. In the segment information, the liabilities amount of € 463.2 million (2011: € 298.5 million) in the 'consolidation/reconciliation' column relates to internal liabilities of the group companies that were reconciled with financial liabilities of the holding company

# SEGMENT CAPITAL EXPENDITURE

Segment capital expenditure relates to additions to intangible assets and to property, plant and equipment.

#### CONSOLIDATION/RECONCILIATION COLUMN

The amounts in the 'consolidation/reconciliation' column for earnings before interest and tax (EBIT/adjusted EBIT) are used to eliminate revenues from intersegment sales from group revenues.

#### SEGMENT INFORMATION BY GEOGRAPHICAL AREA

An analysis by geographical area is provided for external revenues, for capital expenditure on intangible assets and property, plant and equipment, and for non-current assets. The geographical areas are defined as the regions in which MTU is active: Germany, Europe (excluding Germany), North America, Asia and other regions. North America consists of the United States and Canada.

Capital expenditure on intangible assets and property, plant and equipment, and non-current assets are allocated to the geographical areas according to the location of the asset in question. The non-current assets mainly consist of intangible assets and property, plant and equipment. External revenues are allocated according to the customer's country of domicile.

# VI. Events After the Reporting Date

No other events of material importance with any significant impact on the financial situation, net assets or operating results of the MTU group occurred after the end of the reporting period.

At the Supervisory Board meeting of MTU Aero Engines Holding AG, Munich, and MTU Aero Engines GmbH, Munich, held December 13, 2012, it was resolved to merge MTU Aero Engines GmbH into MTU Aero Engines Holding AG. A provisional date toward the end of the first quarter 2013 has been set for notarial certification of the merger agreement. The merger is expected to take effect in the second quarter of 2013, when MTU Aero Engines GmbH will cease to exist. For tax and financial reporting purposes, the merger will apply retroactively as from January 1, 2013. In addition, a proposal will be presented to the Annual General Meeting on May 3, 2013 to approve the change of name of the parent company from "MTU Aero Engines Holding AG" to "MTU Aero Engines AG." This does not have any impact on MTU's consolidated financial statements. Corporate Governance

# VII. Reconciliation of Group Earnings after Tax to the Net Profit Available for Distribution by MTU Aero Engines Holding AG, Munich

Unlike the consolidated financial statements, which are based on the IFRSs issued by the IASB, the annual financial statements of MTU Aero Engines Holding AG, Munich, are prepared in accordance with the German Commercial Code (HGB) and German Stock Cooperation Act (AktG). The IFRS rules are also applied in the separate financial statements where it is permissible and fitting to do so. In numerous cases, the accounting policies applied in the annual financial statements of MTU Aero Engines Holding AG, Munich, and those of the German subsidiaries differ from the accounting policies applied in the consolidated financial statements.

The following reconciliation table contains the major differences between group earnings after tax and the net profit available for distribution by MTU Aero Engines Holding AG, Munich:

in € million	2012	2011
Earnings after tax (IFRS)	173.9	159.2
Income taxes	97.9	73.1
Earnings before tax	271.8	232.3
Elimination of share in profit/loss of group companies outside Germany	17.0	-25.6
+/- Deviations from German Commercial Code (HGB)		
Construction contract receivables / PoC	-8.3	-5.5
Amortization of goodwill	-11.0	-11.0
Non-capitalized development costs	-7.2	-13.7
Earnings and measurement differences arising from the capitalization of development costs	-3.8	-1.8
Exclusion of self-created intangible assets recognized in the balance sheet	-20.7	-12.1
Different recognition method for inventories	-30.0	5.
Unrealized gains on derivatives	-11.9	3.0
Dividend payment of MTU Maintenance Zhuhai Ltd., China	7.3	5.2
Reversal of impairment loss on MTU Aero Engines North America Inc., U.S.	11.6	
Reversal of impairment loss on MTU Maintenance Canada Ltd., Canada	3.3	
Remeasurement of IAE shareholding and equity interest in IAE International Aero Engines AG, Switzerland	-10.5	
Other deviations	-30.8	-18.7
Earnings before tax of MTU Aero Engines Holding AG (HGB)	176.8	157.2
Income taxes	-56.5	-56.0
Net profit of MTU Aero Engines Holding AG (HGB)	120.3	101.2
Allocation to revenue reserves		
to other reserves	-51.0	-40.0
Distributable net profit of MTU Aero Engines Holding AG (HGB)	69.3	61.2

#### EXPLANATORY COMMENTS RELATING TO KEY ITEMS IN THE RECONCILIATION TABLE

#### Construction contract receivables / PoC

Contrary to the provisions of the German Commercial Code (HGB), the international financial reporting standards (IFRSs) prescribe the use of the percentage-of-completion (PoC) method under certain conditions when accounting for construction contracts in accordance with IAS 11. MTU satisfies the requirements for recognizing a proportion of the profits from certain of its engine projects, which must consequently be eliminated in the reconciliation between IFRS and HGB statements. Further information on the relevant accounting policies is provided in Note 5.12. (Inventories) and Note 24. (Construction contract receivables).

#### Amortization of goodwill

Group earnings before tax (EBT) do not include any impairment of goodwill (IAS 36). The goodwill arising from the acquisition of the company is reported in the HGB balance sheet and is subject to amortization over 15 years in accordance with Section 246 (1) sentence 4 in combination with Section 253 (3) of the German Commercial Code (HGB).

#### Non-capitalized development costs

In the annual financial statements prepared in accordance with the German Commercial Code, a total amount of €7.2 million (2011: €13.7 million) was recognized as an expense for internally generated development costs incurred for the GE38 engine program (in the OEM segment) and for improved repair techniques (in the MRO segment).

#### Earnings and measurement differences arising from the capitalization of development costs

When capitalizing the development costs of the PW1100G engine for the A320neo, measurement differences arose because different components of the construction costs were capitalized differently.

#### Exclusion of self-created intangible assets recognized in the balance sheet

In the financial year 2012, self-created intangible assets amounting to € 20.7 million (2011: € 12.1 million) were recognized in the HGB balance sheet of MTU Aero Engines GmbH, Munich, for the PW1100G engine program. Pursuant to Section 301 of the German Stock Corporation Act (AktG) in conjunction with Section 268 (8) of the German Commercial Code (HGB), this capitalization of assets must be excluded from the net profit available for distribution, provided the free reserves remaining after distribution are at least equal in value to the capitalized assets. No deferred taxes had to be taken into account as the entity liable for taxes, MTU Aero Engines Holding AG, Munich, and the subsidiary recognizing the asset, MTU Aero Engines GmbH, Munich, are not identical.

# Unrealized gains on derivatives

The unrealized gains arising from the measurement of derivatives, which relate mainly to collective forward transactions and are recognized in the consolidated financial statements, were deducted from amounts stated in the financial statements for German GAAP purposes (HGB).

#### Dividend payment of MTU Maintenance Zhuhai Co. Ltd., China

In the financial year 2012, MTU Maintenance Zhuhai Co. Ltd., Zhuhai, China, distributed a dividend of € 7.3 million (2011: € 5.2 million) to each of its two shareholders, China Southern Airlines and MTU Aero Engines GmbH. This event is eliminated in the consolidated financial statements.

# Impairment loss reversal of the carrying amounts for MTU Aero Engines North America Inc., U.S.A., and MTU Maintenance Canada Ltd., Canada

In the financial year 2012, the carrying amounts for the subsidiaries MTU Aero Engines North America Inc., U.S.A., and MTU Maintenance Canada Ltd., Canada, were compared with their recoverable amounts. As a result, it became necessary to reverse earlier impairment losses in the HGB balance sheet. This event is eliminated in the consolidated financial statements.

Remeasurement of the shares in and equity result of IAE International Aero Engines AG, Switzerland In the course of increasing MTU's stake in the IAE V2500 engine program, the company's previous 12.1 % stake in IAE had to be measured at fair value, resulting in a gain of € 9.5 million. Since its stake was increased by 12.9 % to 25 %, MTU is assumed to have significant powers of control. As a result, from the point in time of the increase the company had to be accounted for using the equity method. This led to a gain of € 1.0 million in the financial year 2012. IAE International Aero Engines AG, Switzerland, is recognized in the HGB balance sheet at cost.

#### Allocation to revenue reserves

In accordance with Section 58 (2) of the German Stock Corporation Act (AktG), a total of € 51.0 million of the 2012 net profit was allocated to other reserves by the Board of Management and the Supervisory Board of MTU Aero Engines Holding AG (2011: € 40.0 million of the 2011 net profit).

#### Proposed profit distribution

At the Annual General Meeting on May 3, 2013, the Board of Management and the Supervisory Board of MTU Aero Engines Holding AG, Munich, intend to recommend that a dividend of € 1.35 (2011: € 1.20) per share be distributed for the financial year 2012 after transfers to other reserves. On condition that this proposal is accepted by the Annual General Meeting, the total dividend payment for the 50,739,830 shares entitled to a dividend will amount to € 68.5 million. Based on the quoted share price at the close of 2012 of € 68.80 (2011: € 49.44), this is equivalent to a dividend yield of 2.0 % (2011: 2.4%).

Pending approval by the Annual General Meeting, the dividend for the financial year 2012 is to be paid on May 6, 2013.

### Federal Gazette (Bundesanzeiger)

The annual financial statements of MTU Aero Engines Holding AG, Munich, which were granted an unqualified audit certificate by Deloitte & Touche GmbH, Wirtschaftsprüfungsgesellschaft, Munich, are published in the Electronic Federal Gazette (elektronischer Bundesanzeiger). Print copies can be obtained on request from MTU Aero Engines Holding AG, 80995 Munich, Germany.

# Declaration of conformity with the German Corporate Governance Code

The declaration of conformity 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) is published in the MTU Annual Report 2012 and also permanently available to shareholders on the MTU website at www.mtu.de.

#### Statement by the legal representative

We hereby affirm that, to the best of our knowledge, the consolidated financial statements present a true and fair view of the group's net assets, financial position and operating results in accordance with the applicable financial reporting standards, and that the group management report provides a faithful and accurate review of the group's business performance, including operating results and situation, and outlines the significant risks and opportunities of the group's likely future development.

Munich, February 7, 2013

Egon Behle

Chief Executive Officer

Dr. Stefan Weingartner

President Commercial Maintenance

Dr. Rainer Martens **Chief Operating Officer** 

R. Martin

Reiner Winkler

Chief Financial Officer

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# INDEPENDENT AUDITOR'S REPORT

Corporate Governance

We have audited the consolidated financial statements prepared by MTU Aero Engines Holding AG, Munich, comprising Consolidated Income Statement and Consolidated Statement of Comprehensive Income, Consolidated Balance Sheet, Consolidated Statement of Changes in Equity, Consolidated Cash Flow Statement, Group segment reporting and Notes to the Consolidated Financial Statements, together with the Group Management Report for the business year from January 1 to December 31, 2012. 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 (1) HGB, are the responsibility of the company's Board of 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 generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer). 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 (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, February 27, 2013

Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft

(Prosig) (Pinckernelle)

German Public Auditor German Public Auditor

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# Glossary of engine terms

Corporate Governance

#### **ACARE 2020**

In its Strategic Research Agenda, published in 2002, the Advisory Council for Aeronautical Research in Europe (ACARE) set out the goals it hopes to see achieved by 2020: aircraft should consume 50% less fuel, emit 50% less CO2 and 80% less NOx, and their perceived noise level should be reduced by half. For manufacturers, this means cutting the fuel consumption of their engines by 20% before 2020.

#### COMBUSTOR

A combustor or combustion chamber consists of an outer casing and a flame tube or 'can' in which the actual combustion takes place. Inside, the compressed air flowing into the chamber is mixed with fuel, which is then ignited and burns at a temperature of over 2,000 degrees Celsius. Due to the high temperatures involved, combustors require special thermal barrier coatings.

#### COMPRESSOR

The task of the compressor is to ingest air and compress it before it is fed into the combustor. Compressors consist of bladed disks (rotors) that rotate at very high speed between stationary guide vanes (stators). In order to achieve a compression ratio of over 40:1, which is standard in all modern two-shaft engines, it is necessary to use multi-stage low-pressure and high-pressure compressors rotating at different speeds on dual concentric shafts. These are driven by the corresponding turbines.

#### FAN

The first rotor of the low-pressure compressor is called the fan. It accelerates the bypass stream flowing aftward and provides the engine's main thrust. It is driven by the low-pressure turbine via the low-pressure shaft.

# **GEARED TURBOFAN**

Geared turbofan engines consume far less fuel and generate significantly less noise than today's engine types. They therefore have every chance of becoming the standard type for use in future aircraft. Normally, an engine's fan, low-pressure compressor and low-pressure turbine are all rigidly connected to one shaft. In contrast, the geared fan is 'decoupled' from the low-pressure section by means of a reduction gear unit. This enables the low-pressure turbine and the low-pressure compressor to run at their optimum high speeds, while the fan rotates at a much lower speed (in a ratio of approx. 3:1). This results in significantly improved overall engine efficiency and greatly reduced noise levels.

#### INDUSTRIAL GAS TURBINES

The operating principle of an industrial gas turbine is essentially the same as that of an aero engine. However, instead of the customary low-pressure turbine used in aircraft, industrial gas turbines have a power turbine. This turbine delivers the power, either directly or via a gear unit, to an additional attached power unit such as a pump or generator. Nearly all industrial gas turbines of the lower and intermediate power classes are aero-engine derivatives.

#### **MRO BUSINESS**

MRO stands for maintenance, repair and overhaul. At MTU, the term 'MRO business' is also used more specifically to designate one of the company's two business segments, where it refers to maintenance services for commercial engines, or commercial MRO.

#### OEM BUSINESS

OEM stands for original equipment manufacturer. At MTU, the term 'OEM business' is used to designate one of the company's two operating segments, where it refers to the development, manufacture and assembly of (new) commercial and military engines. Spare parts for (in-service) commercial and military engines and maintenance services for military engines are also included in this operating segment.

#### RISK- AND REVENUE-SHARING PARTNERSHIP

In a risk- and revenue-sharing partnership, each partner contributes a certain share of the resources needed for a specific engine program (work capacity and funding), thus bearing part of the risk. In return, each partner is entitled to a corresponding percentage of the overall sales revenue from that program.

#### **SUBSYSTEM**

A complete aircraft engine is made up of a number of subsystems. These include the high-pressure and low-pressure compressors, the combustor, the high-pressure and low-pressure turbines and the engine control system.

#### THRUST CLASS

Jet engines are generally grouped into three thrust classes: engines with a thrust of between 2,500 and around 20,000 pounds (around 10 - around 90 kN), engines with a thrust of between 20,000 and approximately 50,000 pounds (around 90 - around 225 kN), and engines with a thrust ranging from 50,000 to more than 100,000 pounds (around 225 - around 450 kN).

#### **TURBINE**

In a turbine, the energy contained in the gases emerging at high pressure and velocity from the combustor is converted into mechanical energy. Like the compressor, the turbine is subdivided into a high-pressure and a low-pressure section, each of which is directly connected to the corresponding compressor via the respective shaft. The turbine has to withstand much higher stresses than the compressor, as it has to deal not only with the high gas temperatures but also with extreme centrifugal forces of several tons acting on the outer rim of its disks.

#### **TURBINE CENTER FRAME**

The turbine center frame connects the high-pressure to the low-pressure turbine. It has to be able to withstand high mechanical and thermal loads. The center frame includes struts to support the shaft bearings, clad with an aerodynamic fairing, and the air and oil supply lines.

## **TURBOFAN ENGINE**

The turbofan is an advancement of the turbojet principle, the main difference being its enlarged first compressor stage, the fan. While in turbojet engines, all of the ingested air flows consecutively through the compressor, the combustor and the turbine, turbofans separate the air stream behind the fan. A fraction of the air reaches the combustor via a number of further compressor stages and is burned. The rest, however - which constitutes a much larger fraction - is channeled around the inner components. The ratio between these two airflows is known as the bypass ratio. In modern commercial engines, this ratio can be higher than 10:1. The greater the bypass ratio, the more economical, environmentally compatible and silent the engine. Turbofans are far more fuel-efficient than turbojets.

#### **TURBOPROP ENGINE**

The most noticeable external feature of a turboprop is its propeller. Inside, however, the engine differs only slightly from the turbojet and the turbofan. The turbine is larger, and drives not only the compressor but also the propeller, the latter via a gear unit. Consequently, more energy has to be drawn from the exhaust gas stream in the turbine of a turboprop than in that of other engine types. Over 90 percent of the energy is required for the compressor and the propeller. Turboprop airplanes can achieve flight speeds of up to 800 km/h. They are thus slower than turbojets or turbofans, but they do have the advantage of consuming far less fuel. This predestines them for use in roles where speed is less important, such as on short-haul routes or for air freight.

## **TURBOSHAFT ENGINE**

Turboshaft engines are used in helicopters and are similar to turboprops.

# Overview of engines

# **Commercial Engines**

490 - 512 kN	Boeing 777-200LR, 777-200F, 777-300ER
340 - 440 kN	Boeing 777
315 - 380 kN	Airbus A380
235 - 333 kN	Boeing 787, 747-8
180 - 320 kN	Airbus A300, A310, A330, Boeing 747, 767, DC-10, MD-11
170 - 190 kN	Boeing 757, C-17
82 - 154 kN	Boeing 737, Airbus A318 - A321
100 - 150 kN	Airbus A319, A320, A321, Boeing MD-90
67 – 146 kN	Airbus A320neo, Bombardier CSeries, Mitsubishi Regional Jet, Embraer E-170/E-190, Irkut MS-21
98 - 106 kN	Airbus A318
90 - 100 kN	Boeing MD-80-series
41-91 kN	business- and regional jets
18 - 30 kN	medium-weight business and regional jets
13 - 20 kN	light and medium-weight business jets
500 - 2.000 shp	business- and cargo-props
500 - 1.000 shp	light-to-medium weight twin-engined helicopters
	340 - 440 kN 315 - 380 kN 235 - 333 kN 180 - 320 kN 170 - 190 kN 82 - 154 kN 100 - 150 kN 67 - 146 kN 98 - 106 kN 90 - 100 kN 41-91 kN 18 - 30 kN 13 - 20 kN 500 - 2.000 shp

Group management report

# **Industrial Gas Turbines**

Туре	Original engine; Thrust	Application
LM6000	CF6-80; up to 44,000 kW	Electrical power stations
LM5000	CF6-50; up to 34,000 kW	Electrical power stations, mechanical power systems, oil and gas industry
LM2500/LM2500+	CF6-6; to 22,000/30,500 kW	Electrical power stations, mechanical power systems, oil and gas industry, power systems for ships
ASE/TF 40/50	up to 4,100 kW	Electrical power systems, power systems for ships, mechanical power systems, generator sets

# Military Engines

Туре	Description; Thrust	Application
F110	Two-spool turbofan engine with afterburner; 122 – 145 kN	Lockheed F-16, Boeing F-15K
F404/F414	Two-spool turbofan engine with afterburner; 80 – 97 kN	Boeing F/A-18 Hornet, amongst others
EJ200	Two-spool turbofan engine with afterburner, 90 kN	Eurofighter
RB199	Three-spool turbofan engine with afterburner and thrust reverser; 70 – 80 kN	Panavia Tornado
J79	Single-shaft turbojet engine with afterburner; 70 – 80 kN	F-4 Phantom
Larzac04	Two-spool turbofan engine; 14 kN	Alpha Jet
TP400-D6	Three-spool engine; 8,000 kW	Airbus A400M
GE38	Turboprop engine; 5,500 kW	Sikorsky CH-53K
Tyne	Turboprop engine; 3,955 kW power range	Breguet Atlantic und Transall C-160
T64	Turboshaft engine; 3,000 kW	Sikorsky CH-53G
MTR390/MTR390 Enhanced	Enhanced Turboshaft engine; 950 kW	Eurocopter Tiger
RR250-MTU-C20B	Turboshaft engine; 310 - 340 kW	PAH1, Bo105 and others

<sup>\*</sup>MRO only

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# Financial calendar

April 25, 2013	Interim Report as at March 31, 2013
	Conference calls with journalists, analysts and investors
May 3, 2013	Annual General Meeting
July 24, 2013	Interim Report as at June 30, 2013
	Conference calls with journalists, analysts and investors
October 23, 2013	Interim Report as at September 30, 2012
	Conference calls with journalists, analysts and investors
November 26, 2013	MTU Investor and Analyst Day

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