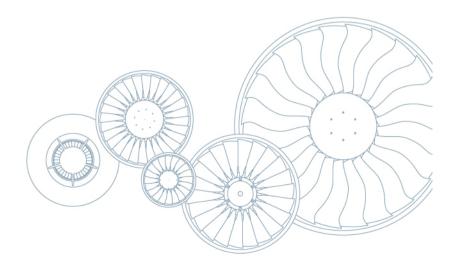




## Investor & Analyst Day 2012 MTU Aero Engines

Munich, 27. November 2012





## **Agenda I – MTU Investor and Analyst Day 2012**

| Time          | Agenda   | Speaker                                   |
|---------------|--|---|
| 12:00 – 12:05 | Welcome  | Peter Kameritsch<br>VP Investor Relations |
| 12:05 – 12:30 | Market Situation / Milestones / Challenges                         | Egon Behle, CEO                           |
| 12:30 – 13:00 | Commerical Business  | Dr. Anton Binder                          |
|               | Growth and Transition  | SVP Commercial Programs                   |
| 13:00 – 13:30 | Challenges of MTU's supply chain                                   | Dr. Rainer Martens, COO                   |
| 13:30 – 14:30 | Lunch Break  |   |
| 14:30 – 15:30 | Shop Tour – Blisk Hall, GenX<br>Production, Additive Manufacturing |   |
| 15:30 – 15:45 | Coffee Break   |   |



## **Agenda II – MTU Investor and Analyst Day 2012**

| Time          | Agenda  | Speaker   |
|---------------|---|---|
| 15:45 – 16:15 | The GTF – a Game Changing<br>Concept  | Dr. Jörg Henne<br>SVP Engineering and<br>Technology |
| 16:15 – 16:45 | Current Trends in MRO Market  | Leo Koppers SVP Marketing and Sales                 |
| 16:45 – 17:15 | Financials and Summary Wrap-up  | Reiner Winkler, CFO                                 |
| 19:00         | Optional: Dinner Bustransfer from MTU to restaurant Ristorante Acetaia Nymphenburger Str. 215, Munich |   |





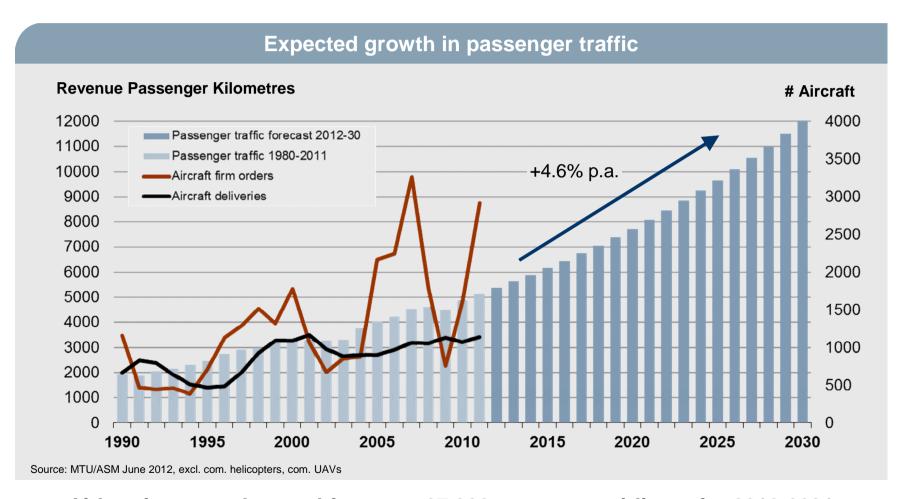
Market Situation/ Milestones/ Challenges

Egon Behle, CEO

Munich, 27. November 2012



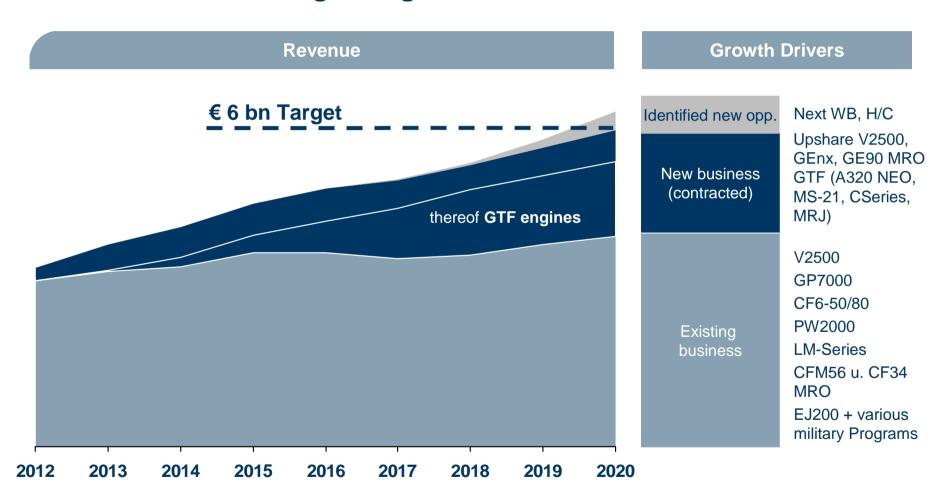
### **Outline of Future Air Traffic**



Airbus foresees the need for some 27,300 passenger airliners for 2012-2031



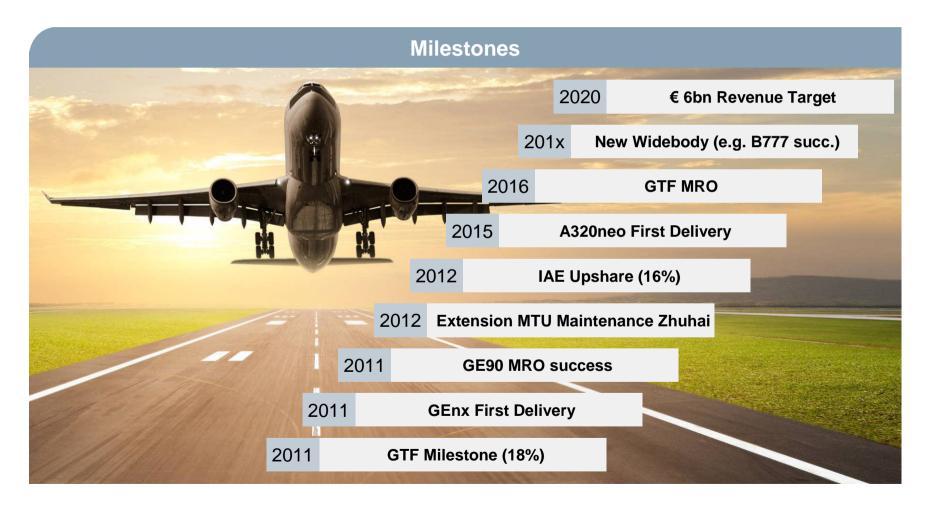
### MTU Revenues: Strategic Target € 6 billion until 2020



Source: Strategic Planning



### MTU on track for 2020





### **Commercial OEM Business**

- Over 2,900 GTF engines on firm order or optioned
- Last Bolt Ceremony of PW1100G (A320neo)
   was Oct. 26th, first engine run planned for Nov. 28st
- PW1500G (CSeries) on track for certification by end of 2012
- Preparation of GTF engine production ramp-up running according to plan
- Transition of IAE-Upshare parts running well
- Strong series sales according to guidance expected







### **Military Business**

- EJ200 export campaigns together with Eurofighter currently running in UAE (60 a/c), Oman (12 a/c) and Malaysia (18 a/c)
- EJ200 sales initiative in Korea/Indonesia (120/50 a/c) for indigenous fighter aircraft
- 1st A400M series aircraft to be delivered to France in Q2/2013
- Military overhaul business running better than expected
- Guidance 2012 of 5% growth confirmed







### **Commercial MRO Business**

- GE90 ramp-up successful (4th customer Aerologic, first shop visits successfully performed)
- Induction buffer volatile but on high level
- Contract volume very positive due to contract wins over € 1bn in 2012
- MRO expected to reach upper area of guidance range

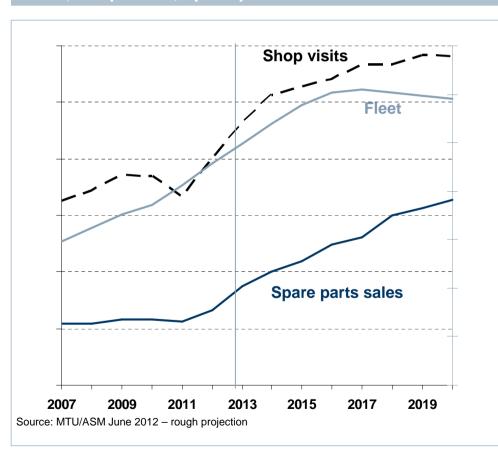






### **V2500 Aftermarket Outlook – It's Coming**

### Fleet, shop visits, spare parts sales



#### Remarks

- Shop visit delaying strategies of airlines (e.g. engine wash, engine swap) have come to an end
- Reliability improvements of V2500 have further delayed shop visits
- Number of V2500 shop visits in total increased from 2011 to 2012 by 14%
- Additional revenues of ~ € 250m per year from 2013 onwards through IAE-Upshare
- Growing EBIT contribution



### **Upcoming Challenges for MTU**

 Growing Passenger Traffic Volatile economy Demanding environmental standards (e.g. ACARE, Flightpath 2050): Market/ - Fuel efficiency **Environment** - CO2/Noise/NOx reduction **Development Milestones**  World class cost structure (GTF engine certification) and supply chain Industrialization of GTF Project for WOC (blisk production, improvement Fulfilment of margin target assembly line, etc.) **Profitability Programme**  Strong increase of and FCF Ramp-Up Widebody volume





# Thank you for your attention!





# **Commercial Engines - Growth and Transition**

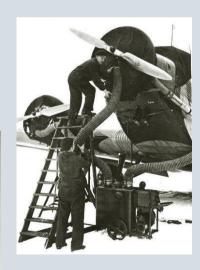
Anton Binder, SVP Commercial Business

Munich, 27. November 2012



## **Commercial Engines**

## **Managing Growth and Transition**









### **Commercial Engines – Key Programs of Transition**

### **Narrowbody**

- V2500 Program (Airbus A320ceo)
- GTF Engine Programs
  - Mitsubishi MRJ,
  - Bombardier CSeries
  - Airbus A320neo

### Widebody

- GP7000 (Airbus A380)
- GEnx Program (Boeing B787, B747-8)

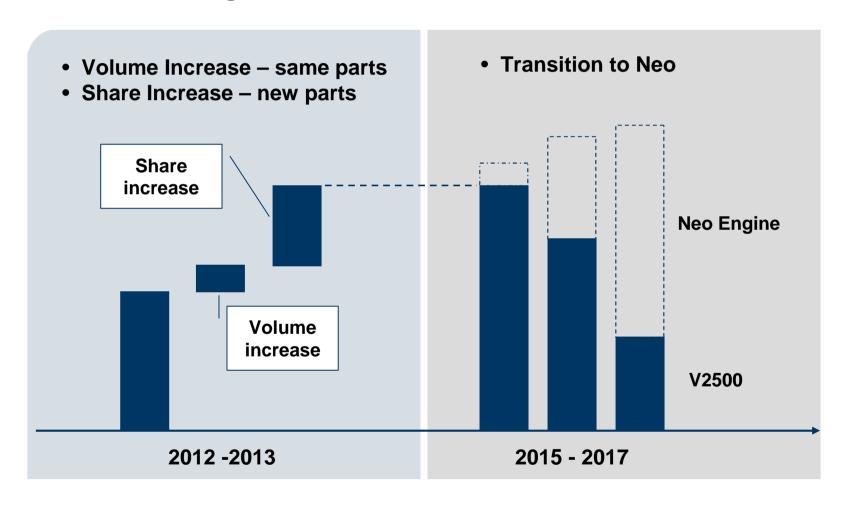








## **Commercial Engines – Series Revenues V2500**





### **Over 2,900 GTF Engines Firm and Option Orders**



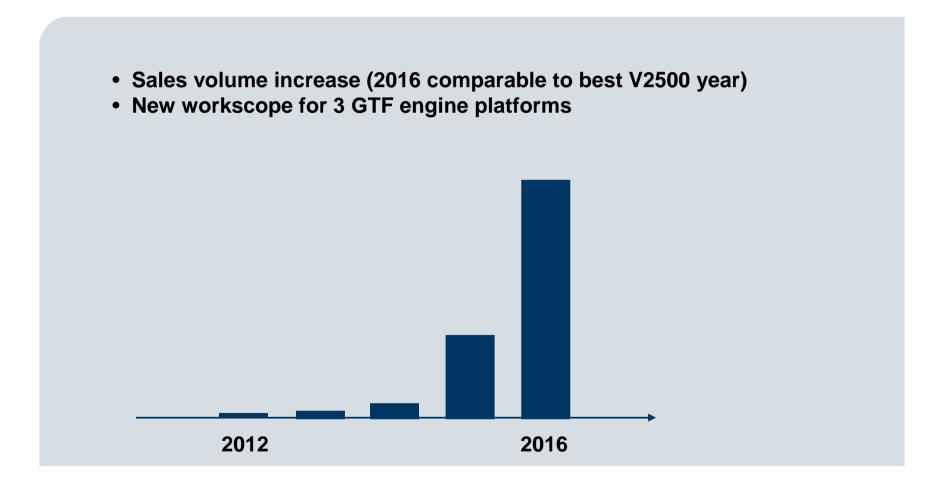


## MTU's Involvement in the GTF Engine Programs

|             | MRJ          | CSeries                     | A320neo   |
|-------------|--------------|-----------------------------|---|
| MTU Share   | 15%          | 17%                         | 18%   |
| Products    | LPT<br>4 HPC | LPT<br>4 HPC<br>Brush Seals | LPT 4 HPC Brush Seals 2 Nickel Blisk Assy &Test Share |
| Aftermarket | Prog. share  | Prog. share                 | Prog. share   |

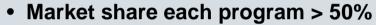


### **Commercial Engines – Series Revenues for GTF Engine Platforms**

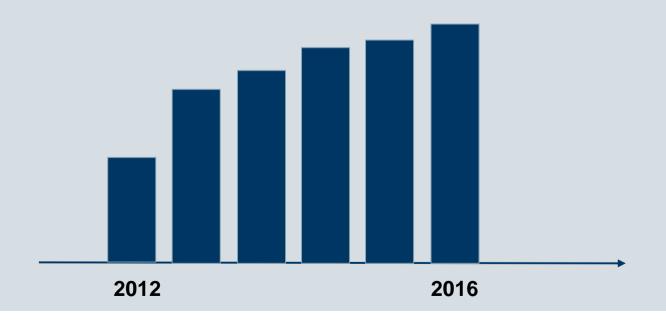




# Commercial Engines – Series Revenues of Widebody Engines (GP7000, GEnx)

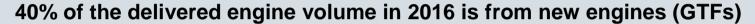


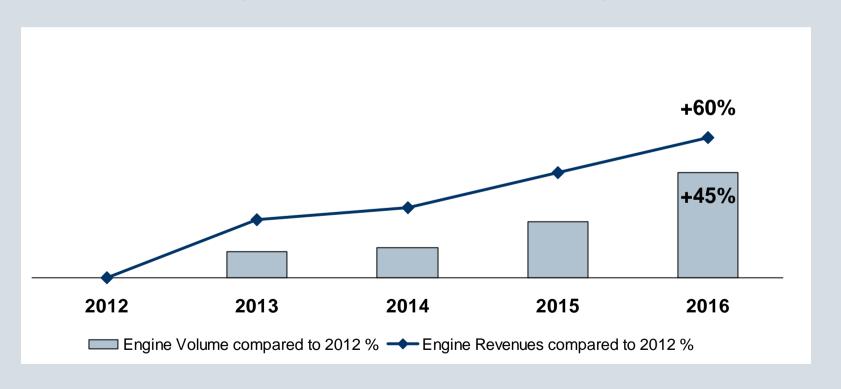
- Sales volume more than doubles
- Ramp up of 2 young engine platforms





# Commercial Engine Business – A Growth Path Engine Volumes & Revenues (incl. IAE upshare)







# Commercial Engines – Focus is execution excellence...

- Stay Close to the Market
- Keep a Tight Look on Supply Chain
- Manage Working Capital
- Keep R&D Efforts on Track











# Thank you for your attention!

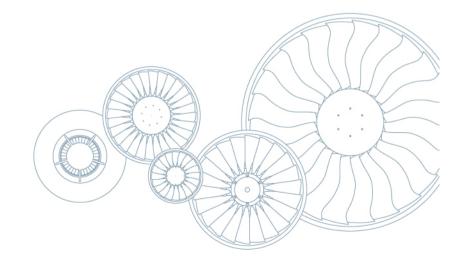




## **MTU Supply Chain Strategy**

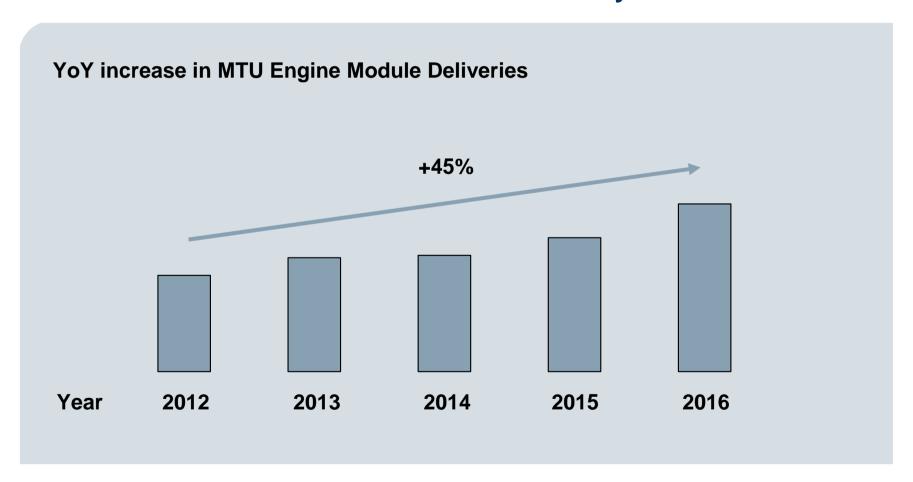
Dr. Rainer Martens, COO

Munich, 27. November 2012





# Airbus and Boeing Planned Rates Mean +40% Deliveries in 2011-14 MTU OEM Production Increases Simultaneously





## Challenging Increase in Business – but no Compromise on ....

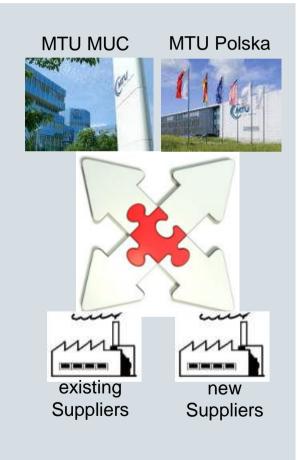
- Airworthiness
- On time delivery
- Flexibility
- Competitiveness





### **Supply Chain – Roadmap for Ramp up**

- In house manufacturing concentrating on important and complex products
  - high degree of automation
  - 3 shift working model with improved worker efficiency and equipment utilization
  - investment in infrastructure
- Consequent utilization of cost advantages in the supply base incl. low cost opportunities
- Dual source strategy on bottleneck products
- Constant and careful management of the internal and external capacity situation.





### **External Supply Chain Measures**

#### **Capacity**

- Supplier assessment for A-Supplier
- Development supplier become production supplier
- Double source of critical parts
- Long term contracts for critical materials and components
- On-site representatives in major sourcing regions (US, Mexico, China)
- Ramp up monitoring for A-parts

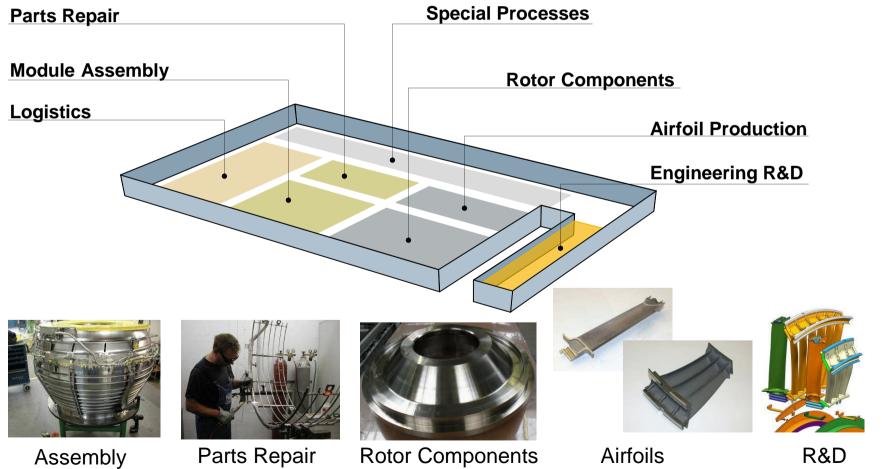
#### Competitiveness

- Concentration of critical parts at strategic suppliers
- Targeting 30% production material procurement volume in low cost countries
- Early supplier involvement in the component design of development programs



## Internal Supply Chain – Strategic Investments in MTU Polska

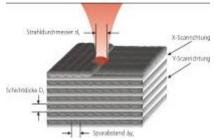






### **Internal Supply Chain – Strategic Investments in Main Plant Munich**

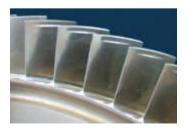
### Additive manufacturing



Blisk manufacturing

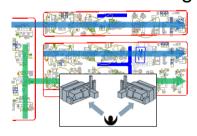


PECM – Ni Blisk mfg.



MIN profision

Advanced rotor mfg.



TCF - Hub Strut Case



TCF - Assembly



TCF - Flow Path Hardware





## **Internal Supply Chain – New Blisk Manufacturing**

#### **Key Facts**

• Invest € 50 million

• Capacity 3.000 parts p.a.

- Improvements
  - Automation increase
  - Lead time reduction
  - Process stability improvement
  - Efficiency gains







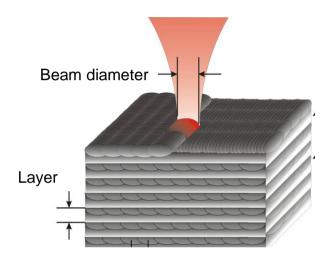
### **New Technology – Additive Manufacturing or Parts out of a "Printer"**

#### **Key Facts**

Invest 6 machines

• Capacity 18.000 hours/year

- Improvements
  - High automation
  - Engineering lead time reduction
  - Production lead time reduction
  - Production cost reduction
  - Product weight reduction







### **Summary – Ramp up of Business Drives Change in Supply Chain**

- Restructure manufacturing portfolio
- Concentrate critical & complex parts in Munich
- Concentrate critical & less complex parts in Poland
- *Increase* share of highly automated manufacturing
- Introduce new manufacturing technologies
- Leverage up capacity by double sourcing of critical parts
- Increase low cost sourcing



Improve cost & technologyStrengthen competitive position of MTU





# Thank you for your attention!

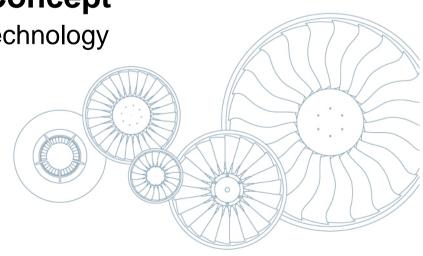




## **The GTF - A Game Changing Concept**

Dr. Jörg Henne, SVP Engineering & Technology

Munich, 27. November 2012





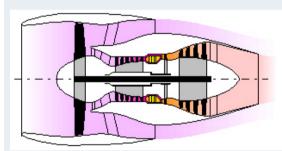
# The Concept



# The GTF in Comparison with Direct Drive Turbofans (DDTF)

### 2-Spool DDTF

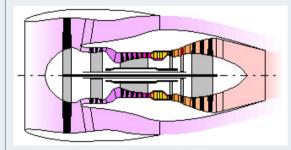
Gas Generator w/ low speed turbo machinery (LPC)



Fan speed higher than desired for high LPT η LPT speed lower than desired for acceptable Fan noise

# 3-Spool DDTF

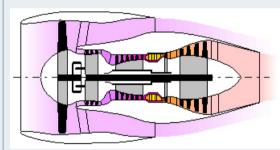
Gas Generator w/ high speed turbo machinery



Fan speed higher than desired for high LPT η LPT speed lower than desired for acceptable Fan noise

#### **GTF**

Gas Generator w/ high speed turbo machinery

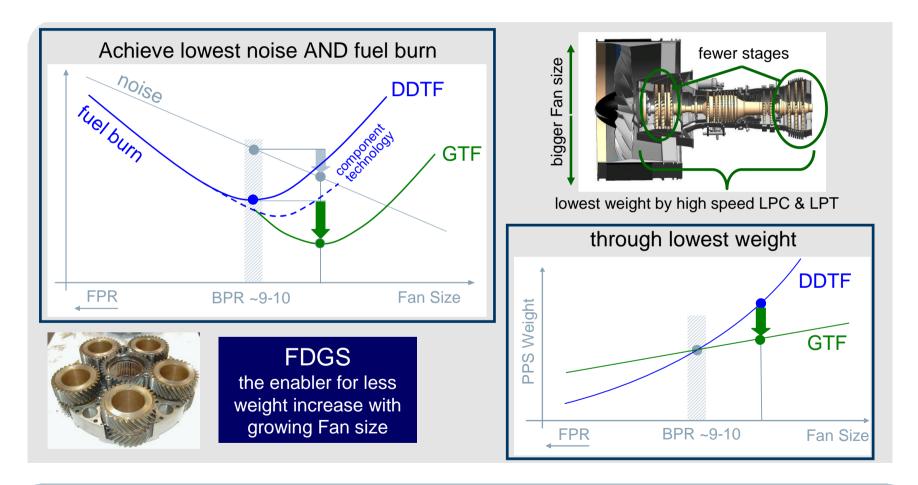


Fan speed low, as desired, for high propulsive efficiency LPT speed high, as desired

The GTF provides the best mechanical concept to fulfill all functional requirements.



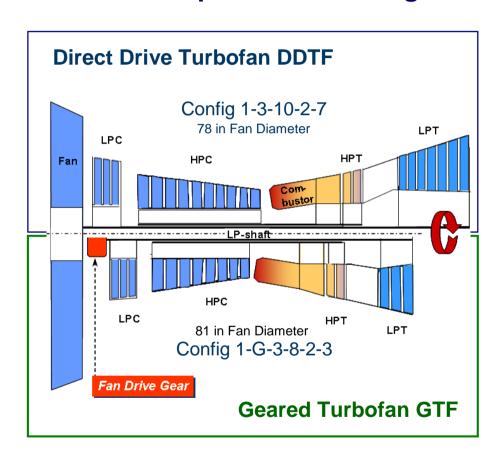
# The GTF Enables Highest BPR Engines at Lowest Weight



Step change in fuel burn, emissions and noise as well as maintenance cost, all simultaneously.



# **The GTF Competitive Advantage**



#### GTF relative to Direct Drive Turbofan:

- 25% less stages
- 45% less airfoils
- lower cycle temperature
  - = lower maintenance cost
- higher propulsive efficiency
- higher low spool component efficiencies
- shorter & lighter
  - = 3% less fuel burn
- 3 to 4 dB quieter (EPNdB, cum.)

The GTF concept achieves a significant competitive advantage over the DDTF.



# **The Achievements**



# PW1200G for MRJ & PW1500G for CSeries Test Summary

Two Engines of the NGPF-Family Running Ahead of Time of the A320NEO Program



~4000 hours of testing completed including ~460 flight hours.



# **PW1500G Engine Certification on Schedule**



Demonstration of engine durability & robustness through very successful testing.



# **PW1100G-JM Engine Benefits for A320NEO**



First Engine to Test @ Last Bolt Ceremony Oct 26, 2012

### The engine will deliver:



PW1100G-JM the third engine of the NGPF-family will incorporate all learning at lowest risk.

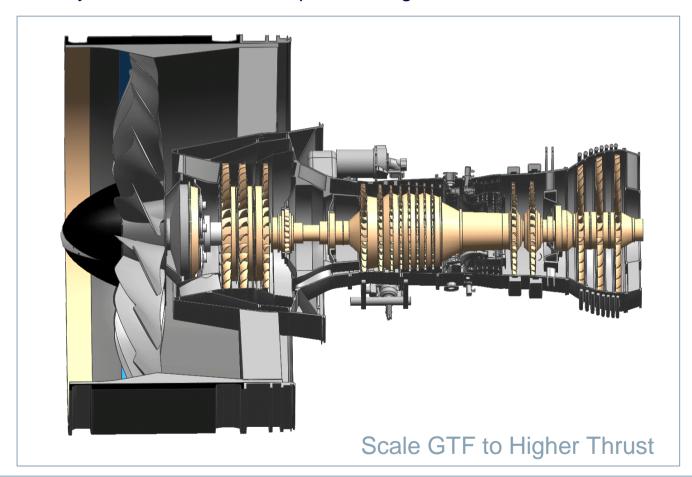


# **The Potential**



# **GTF Further Improvement & Application Range**

Optimization Beyond its Generic Concept Advantage



The GTF concept is very well suited also for high thrust applications.



# **Summary & Conclusions**

- The GTF is a game changing engine concept that will provide 15% less fuel burn and 50% less perceived noise relative to the V2500 engine
- It provides 3% less fuel burn, lower noise and lower maintenance cost relative to today's competing Direct Drive Turbofan
- The Fan Drive Gear System enables higher low spool component efficiencies, higher propulsive efficiency and lower engine weight
- The development programs are well under way
- The GTF concept offers further improvement potentials for narrow as well as for widebody aircraft applications







... thank you for your attention

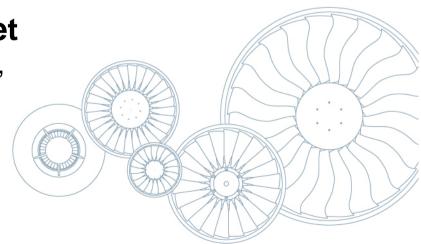




# **Current Trends in MRO Market**

Leo Koppers, SVP Marketing & Sales, MTU Maintenance

Munich, 27. November 2012





# **Current Market Trends** – per November 2012

| GDP GDP                | +2.5% → +2.2%<br>2011A 2012E           | <ul><li>Economic slowdown, serious risks</li><li>Eurozone crisis start to affect BRIC countries</li></ul>  |
|------------------------|--|--|
| Freight traffic        | -0.7% → -0.4%<br>2011A 2012E           | <ul><li>Cargo traffic recovering (+0.6% in Sept)</li><li>Structural impact of high fuel prices</li></ul>   |
| Passenger traffic      | +5.9% → +5.3%<br>2011A 2012E           | <ul><li>Growth above long-term trend</li><li>Slowdown since mid 2012</li></ul>   |
| Aircraft utilization   | +6% → +3%<br>2011 2012                 | Deceleration affecting out-of-production types disproportionately  |
| Airliner engine fleet  | 36,200 → 37,300<br>Sep 11 Sep 12       | <ul> <li>Active fleet growing moderately with +3% YOY</li> <li>Older fleets in decline (CF6-50, CFM56-3)</li> </ul>                              |
| Airline profits        | +\$6.9b → +\$4.1b<br>2011E 2012E       | <ul><li>3rd year of profitability</li><li>Airlines affected by difficult economic environment</li></ul>  |
| Fuel price (crude oil) | \$111 <b>&gt;</b> \$112<br>2011A 2012E | <ul> <li>Stable at a high level</li> <li>Poor economic outlook unlikely to lead to price<br/>spikes unless geopolitics come into play</li> </ul> |
|                        |  |  |



# **Aircraft Utilization Development**



#### **Highlights**

- Ongoing growth in utilization although at lower level
- Slowdown in utilization vs. previous prediction:
- Q3 to grow 2.2% instead of 3%
- 2012 +3% instead of 3.5%
- Flight schedules indicate 2.7% in Q4 but this could also end up lower
- Strong differences depending on aircraft models with some out-of-production aircraft seeing double-digit declines

Source: UBS, OAG

\* Western Commercial Jets (Airbus, Boeing, Bombardier, Embraer)





# **Market Indicators per Engine Type**

|         | Engine           | Active fleet           | Park<br>rate | Flight<br>Hours¹ | Y-O-Y as of 31 October 2012   |
|---------|------------------|------------------------|--------------|------------------|---|
| Ø       | Airliner engines | 37,320<br><b>+3.1%</b> | 10.4%        | 2.2%             | Growth decelerating   |
| 8       | CF34-3           | 1,494<br><b>-7%</b>    | 17%          | -8%              | Fleet and flight hours in steep decline 50-seater operating costs are too high              |
|         | CF34-8/-10E      | 2,928<br><b>+9%</b>    | 3%           | +10%             | Strong E-190/CF34-10E deliveries<br>Storage up as Pluna ceases operation                    |
| 8       | CF6-50           | 473<br><b>-15%</b>     | 30%          | -38%²            | Strong fleet/utilization decrease coupled with high fuel price sensitivity, lots of surplus |
|         | CF6-80C2         | 2,885<br><b>-1%</b>    | 7%           | -3%²             | Slight utilisation decrease with weakness in freight traffic                                |
| 8       | CFM56-3          | 2,594<br><b>-11%</b>   | 19%          | -9%              | Fleet/hours decline fast, driven by retirements and storage, high fuel price sensitivity    |
|         | CFM56-5B/-7      | 13,106<br><b>+11%</b>  | 1%           | 9%               | Strong growth, first teardowns for spare parts  |
|         | GE90G            | 958<br><b>+21%</b>     | 0%           | 12%              | Success story goes on   |
|         | PW2000 civ.      | 756<br><b>-2%</b>      | 9%           | -5%              | Storage up, fleet/hours in decline  |
| <u></u> | V2500-A1/-D5     | 272<br><b>-3%</b>      | 32%          | 0%               | Stabilisation, refurbished Delta MD-90s re-entering service, retirements are only A1s       |
|         | V2500-A5         | 3,984<br><b>+9%</b>    | 3%           | 8%               | Storage rise due to insolvencies (Spanair, Kingfisher, Mexicana)                            |

Source: Ascend, Innovata 1) 3rd Quarter 2012 2) 2nd Quarter 2012, 3rd Quarter data under review 3) last 4 quarters, % is retirements/fleet, based on aircraft retirements



# **Engine MRO and Shop Visit Cost Reduction Potential**

#### **DRIVERS OPERATIONS:** Measures to defer shop visits\*



**Operational** parameters



environment

**Procedure** 

**On-wing** adjustments maintenance cleaning (derate take off)



**Engine** (compressor wash)



Condition monitoring



**Engine swap** (spare engines)

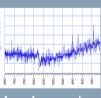
**MRO TRIGGER** 



FOD



LLP expiry



Hardware/ Performance

#### **SHOP VISIT**: Measures to reduce (operating) cost\*



Module/LLP swap



**DER repairs** (e.g. coatings)



Used material



Reduced workscoping (short-built engines)

<sup>\*</sup> Decision by airline and/or MRO

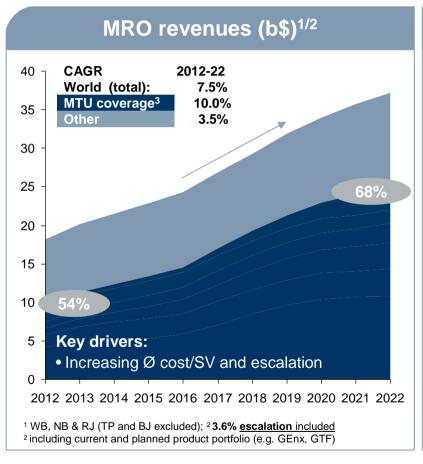


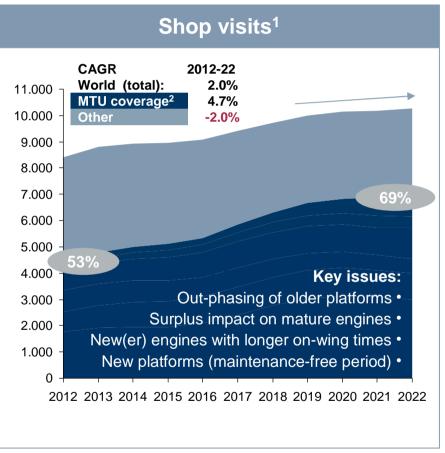
# **MTU Maintenance Workload Development**

|            | Engine                          | 2012<br>trend | 2013<br>trend | Workscope<br>content |  |
|------------|---------------------------------|---------------|---------------|----------------------|--|
| Ø          | Commercial engines <sup>1</sup> | 0             | 0             | n/a                  |  |
| <u>••</u>  | CF34-3                          | 00            | 00            | n/a                  | Workload waves driven by customer fleets   |
| <b>©</b>   | CF34-8/-10E                     | 00            | 00            | n/a                  | Fast growing workload  |
| 8          | CF6-50                          | 00            | O             | HIGH                 | Last commercial visits expected in 2013; stable military workload with very high workload content                                      |
|            | CF6-80C2                        | 0             | <b>-</b>      | MED                  | Stable workload due to customer wins   |
|            | CFM56-3                         | 00            | 0             | LOW                  | Increasing volume against industry trend;<br>Large new base customer acquired (secured<br>workload until 2018, incl. teardown concept) |
| <b>(2)</b> | CFM56-5B/-7                     | 00            | 00            | MED                  | First -5B heavy visit wave from base customers;<br>Growth mainly driven by new fleets under contract<br>and market share gain          |
|            | PW2000 civ.                     | 0             | <b>-</b>      | LOW                  | Traditionally low workscope level as module customers included   |
|            | V2500                           | 0             | 0             | HIGH                 | Continuous -A5 growth from a high volume base with approx. 1/3 market share; -A1/-D5 workload expected for another few years           |



# **Commercial Engine MRO Market 2012-22**





Over-proportional growth of MTU-served market; switch to newer technology leads to more costly shop visits with longer on-wing times

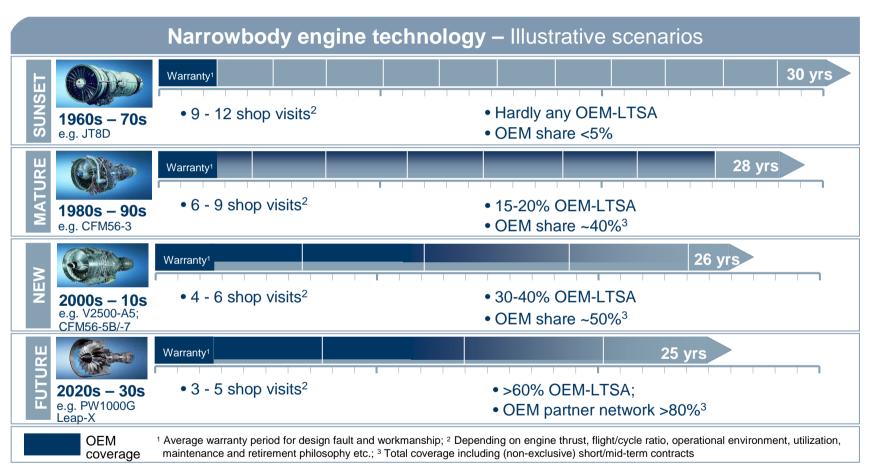


# **Market Challenges and Opportunities**

|                    | Challenges   | Opportunities   |
|--------------------|--|---|
| Fleet<br>dynamics  | <ul> <li>Change of ownership of mature fleets</li> <li>Decreasing MRO demand for older engines (retirements of large fleets)</li> <li>Increased surplus</li> </ul>       | <ul> <li>Better market access and shares</li> <li>Increased competitiveness<br/>(tailored surplus solutions)</li> <li>Higher margins</li> </ul> |
| Compe-<br>tition   | <ul> <li>Overcapacity</li> <li>High price competition</li> <li>New competitor breed<br/>(surplus/exchange)</li> </ul>  | <ul> <li>Capacity adjustments</li> <li>Consolidation process started<br/>(Finnair, PWNEC, LTQE, Aveos)</li> </ul>                               |
| New<br>technology  | <ul> <li>Longer on-wing times, less but more costly shop visits during life cycle</li> <li>High entry barriers (technology, license)</li> <li>High investment</li> </ul> | <ul> <li>High MTU internal synergies<br/>(R&amp;D activities)</li> <li>Technological edge/advantage vs.<br/>other independents</li> </ul>       |
| OEM<br>penetration | <ul> <li>OEM-LTSA with new aircraft sales</li> <li>OEM market share &gt; 50%<br/>(up to 80-90% on new engines)</li> </ul>  | Market entry via OEM RSP cooperation on new programs  |



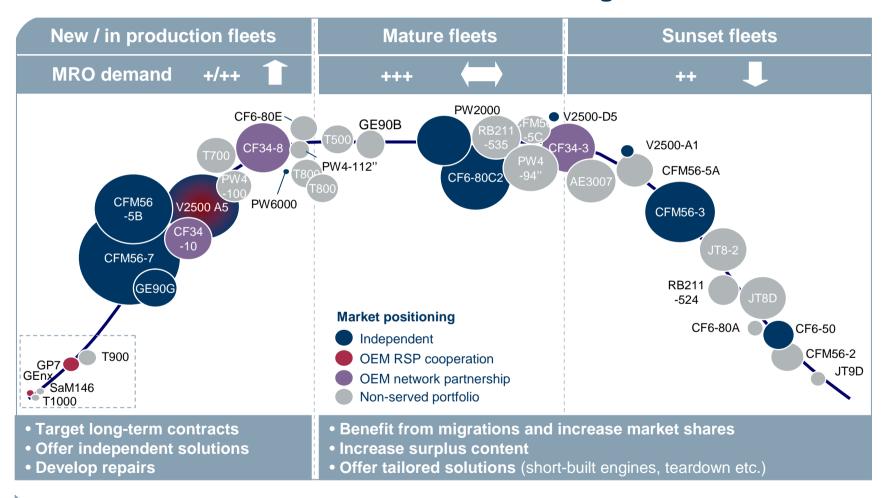
# Impact of New Technology on Engine Life Cycle and MRO Demand







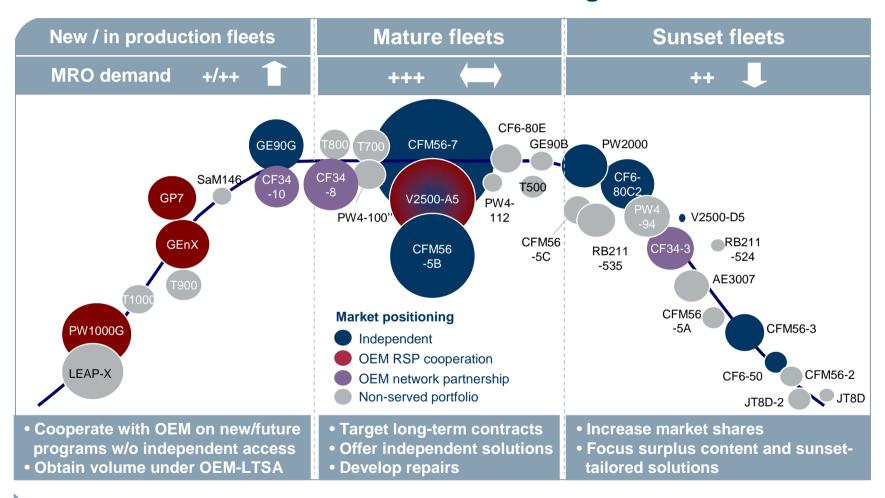
# **Current MTU Maintenance Portfolio Positioning**



Market approach as independent with strong market access over next decade



# **Future MTU Maintenance Portfolio Positioning**



**OEM** cooperation secures entry into next generation programs



# **Market Access Options**









| Independent<br>MRO | t |
|--------------------|---|
|                    |   |

CF6 CFM56 GE90 PW2000 V2500 Airline
Joint Venture

CFM56 V2500 **OEM** cooperation

V2500 CF34
GP7 LPT PWC
GEnx TCF
PW1000

Other services

On-site services
Parts repair
Spare engine support
LRU Mgmt



#### **Outlook**

#### Short to medium term forecast

- •No impact of utilisation deceleration workload to increase in 2013
- Growing average shop visit turnover
- Challenging market dynamics offer opportunities in terms of market access, competitiveness and profitability

### **MTU Maintenance long-term strategy**

- •Grow organically thanks to ramp-up of existing programs and new program introductions
- Cooperate with OEMs via MTU Aero Engines to secure access to new/future engine types
- •Offer independent solutions on newer programs whenever market demand is sufficient





# Thank you for your attention!

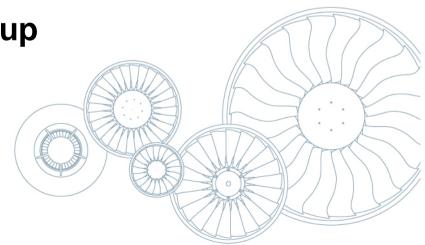




Financials & Summary-Wrap up

Reiner Winkler, CFO

Munich, 27. November 2012

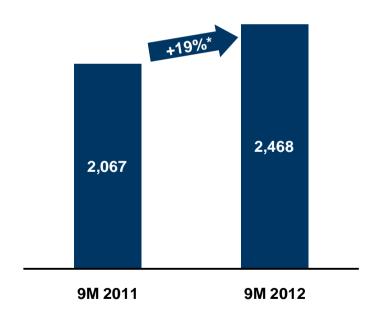




# 9M 2012: **Group Revenues Increased by 19%**

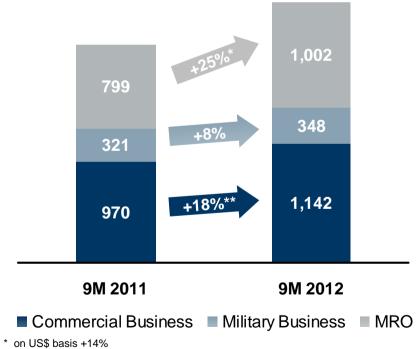
### **MTU Group Revenues**

in m €



### **Segment Revenues**

in m €

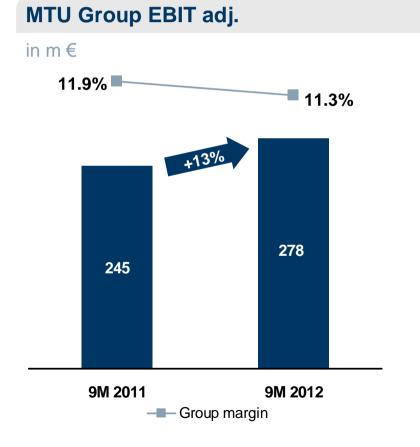


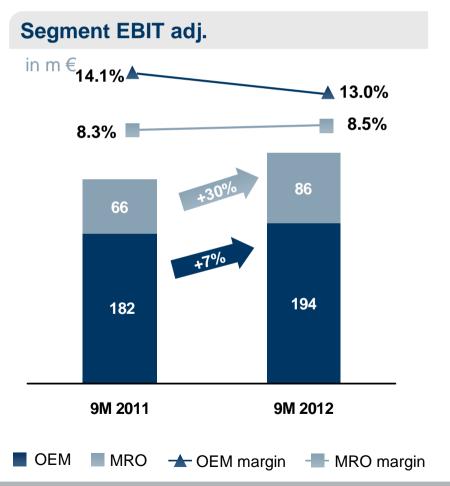
<sup>\*\*</sup> on US\$ basis +7%

<sup>\*</sup> US\$ basis +10%



# 9M 2012: **Group EBIT adj. Increased by 13%**







# **Guidance 2012 Confirmed**

| in m€            | FY 2011 | Guidance 2012 |  |
|------------------|---------|---------------|--|
| Revenues         | 2,932   | 3,300         |  |
| EBIT adj.        | 328     | 370           |  |
| EBIT adj. Margin | 11.2%   |               |  |
| Net income adj.  | 196     | 225           |  |

- Commercial series sales up 10%
- Commercial spare parts flat
- Commercial MRO up 5% -10% (upper end)
- Military business up 5%
- Decrease in research & development (~€ 15m -20m)



# IAS 19 Revised: Impact on Pension Provisions and Equity

- Abolishment of "Corridor Approach"
- Actuarial gains and losses have to be recognised in other comprehensive income (OCI)
- Change in discount rate for pension provisions (actual lower interest rates lead to higher DBO value)
  - ➤ Impact on balance sheet: Increase in pension provisions and decrease in equity
  - ➤ IAS19 revised effective for annual periods beginning on or after 1 January 2013, implementation already planned for year end 2012



# IAS 19 Revised: Impact on Pension Provisions and Equity

#### Pension provision will be increased by actuarial losses

|   | Pension provisions |
|---|--------------------|
| Expected DBO Dec 31, 2012 "corridor method"                               | € 485 m            |
| Actuarial losses from previous years                                      | € 76 m             |
| New actuarial losses – due to change in discount rate to ~ 3.5% from 4.5% | ~ € 80 m           |
| Expected DBO Dec 31, 2012 " IAS19 revised"                                | € 641 m            |

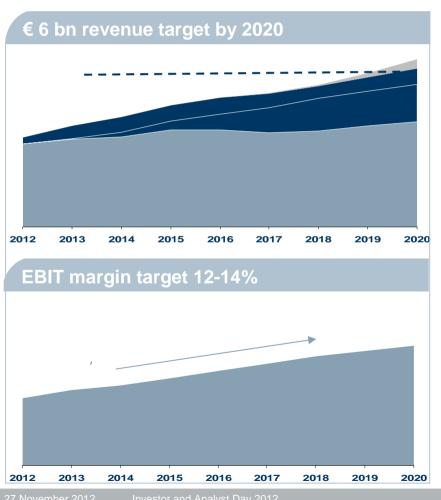
### Equity will be decreased by actuarial losses

- · Higher equity volatility in the future
- Mark-to-market valuation of hedge book already in equity
- Decrease in equity ratio to ~25%\*) ("corridor method": 27%)

\*) post tax / after deferred tax



# **Cash Deployment**



#### **FCF** development

#### **Growth target:**

- Revenue target of € 6bn by 2020
- EBIT mid-long term target 12-14%

#### CF short to mid term - headwinds:

- Higher inventories due to ramp up of new engine programs (GP7000, GEnx, GTF)
- Decrease in military prepayments in 2013-2015

#### CF mid to long term – potential:

• Significant growth after 2015



# **Priority List of Cash Flow Use**

# 1) Invest in Organic Growth

- 2) Dividend increase
- 3) M&A transactions
- 4) Share Buy-back

#### **Options ranked based on priority – considering:**

- Benefit/ positive contribution
- Probability
- Cash Impact



# **Priority List of Cash Flow Use**

#### 1) Invest in Organic Growth

Com. OEM: B777x, further GTF applications

· Military: New helicopter engine

MRO: New JV in Emerging Markets

Cash Impact: Med - high

**Probability:** Almost certain

#### 3) M&A transactions

Strict financial and strategic M&A criteria:

ROCE > WACC

No EPS dilution

· Maintain Investment Grade Rating

Potential options are rare but constantly under review

Cash Impact: High
Probability: Unlikely

#### 2) Dividend increase

 Dividend increase based on Net Income adj. development

Pay-out ratio of 30-40% (2011: ~31%)

No special dividend planned

Cash Impact: Med

**Probability:** Possible

#### 4) Share buy-back

Authorization for share buy-back in place (10%)

• Currently ~2% own treasury shares

Cash Impact: Med

**Probability:** Near term: Unlikely

Mid - long term: Possible



# EBIT adj. Head- and Tailwinds 2013

- IAE-upshare: € 250m\* revenues with mid high single digit EBIT margin
- New engines sales up in mid teens \*\*
- Spare parts up high single digit \*\*
- Commercial MRO up high single digit
- Military revenues flat
- R&D slightly down
- No FX impact (based on ø \$/€ 1,30 )

\*) € 100m revenues in 2012 \*\*) organic growth rates



# **Summary & Wrap up**

- MTU is on track to achieve € 6bn revenue target by 2020
- MTU's supply chain is well prepared to manage ramp up
- MTU continues to invest into GTF technology targeting further applications / thrust ranges
- MTU MRO is well positioned to profit from current market dynamics
- MTU's first priority for cash flow deployment is investing into profitable organic growth











# Thank you for your attention!