

# ANNUAL REPORT



# 2016

# ZEPPELIN AT A GLANCE

		2016	2015	2014	2013	2012
<b>SALES</b>						
Construction Equipment EU SBU	EURm	1,205	1,123	1,041	1,036	1,070
Construction Equipment CIS SBU	EURm	299	307	434	573	665
Rental SBU	EURm	363	373	348	290	288
Power Systems SBU	EURm	307	283	301	311	344
Plant Engineering SBU	EURm	262	328	266	299	282
Z Lab SBU	EURm	0	-	-	-	-
<b>Total for the Zeppelin Group <sup>1)</sup></b>	<b>EURm</b>	<b>2,362</b>	<b>2,328</b>	<b>2,301</b>	<b>2,434</b>	<b>2,550</b>
<b>EMPLOYEES (AVERAGE FOR THE YEAR; INCLUDING TRAINEES)</b>						
Construction Equipment EU SBU		2,594	2,679	2,616	2,661	2,687
Construction Equipment CIS SBU		1,605	1,662	1,810	1,733	1,491
Rental SBU		1,236	1,238	1,254	1,048	1,052
Power Systems SBU		793	788	776	773	750
Plant Engineering SBU		1,332	1,376	1,373	1,381	1,302
Z Lab SBU		22	-	-	-	-
<b>Total for the Zeppelin Group <sup>1)</sup></b>		<b>7,646</b>	<b>7,801</b>	<b>7,882</b>	<b>7,648</b>	<b>7,332</b>
<b>FIXED ASSETS</b>						
Additions	EURm	170.2	184.7	157.3	118.2	160.4
Changes in consolidated companies	EURm	0.0	-5.8	1.5	0.1	-3.2
Depreciation	EURm	90.9	88.5	80.1	72.2	73.2
	% of additions	53	48	51	61	46
Thereof, rental assets						
Additions	EURm	109.0	133.0	108.9	63.4	102.9
Changes in consolidated companies	EURm	0.0	-	-	-	0.1
Depreciation	EURm	50.1	46.1	41.1	38.2	41.8
<b>RESULT OF ORDINARY ACTIVITIES</b>	EURm	<b>88.5</b>	<b>84.2</b>	<b>74.5</b>	<b>67.6</b>	<b>98.4</b>
<b>NET GROUP INCOME</b>	EURm	<b>59.1</b>	<b>56.1</b>	<b>45.8</b>	<b>42.7</b>	<b>68.7</b>
<b>NET CASH FLOW</b>	EURm	<b>179.1</b>	<b>181.4</b>	<b>132.8</b>	<b>122.5</b>	<b>152.0</b>
<b>EQUITY</b>	EURm	<b>633.4</b>	<b>566.3</b>	<b>522.8</b>	<b>513.9</b>	<b>507.8</b>
Thereof,						
Subscribed capital	EURm	100.0	100.0	100.0	100.0	100.0
Capital reserves	EURm	60.0	60.0	60.0	60.0	60.0
Retained earnings	EURm	468.7	404.0	362.0	353.5	337.8
Minority interests	EURm	4.7	2.3	0.8	0.5	10.1

<sup>1)</sup> incl. Zeppelin GmbH  
SBU: Strategic Business Unit

# CONTENTS

Management Board .....	4	Strategic Business Units	
Management Board Report .....	5	Construction Equipment EU .....	34
Supervisory Board .....	11	Construction Equipment CIS .....	36
Supervisory Board Report .....	12	Rental .....	38
Zeppelin Worldwide .....	16	Power Systems .....	40
Overview of the Zeppelin Group .....	18	Plant Engineering .....	42
Corporate Culture .....	22	Group Management Report .....	46
Superlative bauma .....	24	Group Financial Statements	
Digital Transformation .....	26	Group Balance Sheet .....	78
Growing with Zeppelin .....	28	Group Income Statement .....	80
Workforce Figures .....	30	Group Cash Flow Statement .....	81
		Statement of Changes in the Group's Fixed Assets	82
		Statement of Changes in Group Equity .....	84
		Notes to the Group Financial Statements .....	86
		Auditor's Statement .....	113
		About this Publication .....	114



# MANAGEMENT BOARD



Peter  
**Gerstmann**

**Chairman of the Management Board of Zeppelin GmbH / Labor Director (since May 12, 2016)**

Compliance (since May 12, 2016), Group Development, IT, Digital Business, HR, Auditing, Corporate Communications

Responsible for the Plant Engineering, Power Systems and Z Lab strategic business units

MBA

Member of the Management Board of Zeppelin GmbH since 2007 and Chairman since 2010



Michael  
**Heidemann**

**Vice Chairman of the Management Board of Zeppelin GmbH**

Sales, Marketing, Service

Responsible for the Construction Equipment EU, Construction Equipment CIS and Rental strategic business units

Industrial Manager

Member of the Management Board of Zeppelin GmbH since 2000 and Vice Chairman of the Management Board of Zeppelin GmbH since 2010

Also a member of the Management Board of Zeppelin Baumaschinen GmbH since 1999, and Chairman of the Management Board of Zeppelin Baumaschinen GmbH since 2008



Christian  
**Dummler**

**Member of the Management Board of Zeppelin GmbH / CFO**

Finances, Controlling, Real Estate Management, Legal Affairs (since May 12, 2016)

Certified Banking Specialist

Member of the Management Board of Zeppelin GmbH since 2011

Jürgen-Philipp  
**Knepper**

**Member of the Management Board (until May 12, 2016)**

HR (Labor Director), Legal Affairs, Compliance Lawyer  
Member of the Management Board of Zeppelin GmbH since 2008

# MANAGEMENT BOARD REPORT



## **Dear Customers, Partners, Employees, and Readers,**

2016 was another highly successful year for the Zeppelin Group. Our sales volume increased year-on-year to EUR 2.36 billion (2015: EUR 2.33 billion). A total of 7,646 employees, including trainees, worked for Zeppelin at 190 sites across the world. For the third year in succession, the situation in Russia and Ukraine posed challenges. Once again we rose to those challenges by taking appropriate steps. The market for construction machinery in Germany grew by 22% due to numerous infrastructure measures and large-scale housing construction projects. In 2016, the market was stable in the Czech Republic and Slovakia, while there was a slight upturn in Austria. The rental market for construction machinery and equipment also benefited from that positive environment. The situations on the markets for engines differed. While there was little growth in the oil and gas, marine, and diesel locomotive segments, the markets for energy and original machine equipment grew. Growth on our plant engineering markets was largely driven by the USA and Asia. However, willingness to invest was very limited in all countries that are dependent on oil revenues.

## **Construction Equipment EU**

In 2016, we were again able to increase our share of the construction machine markets in Europe. We set records in terms of visitor numbers and sales at bauma in Munich, the industry's largest and most important trade fair worldwide. We sold over 2,666 new and used construction machines and engines in the run-up to and during the event, with a total value of EUR 318 million. Our partner Caterpillar heralded the new era of smart iron at the trade fair. The focus was on our solutions involving digital construction machine engineering of SITECH, CAT Connect, CAT Grade Control, our customer portal, and assistance systems. However, 2016 did not just revolve around bauma. Zeppelin was also delighted to celebrate three anniversaries in 2016, namely its 50th, 40th and 25th anniversaries in Cologne, Oberhausen and Dresden respectively.

### **Construction Equipment CIS**

The market for construction machinery in our sales territories of Eastern Europe and Asia again declined slightly in 2016. We managed to build on our market position despite the continuing geopolitical conflicts, especially on the Russian market. The cooperation with SAME DEUTZ-FAHR in Russia, which began in 2015, was extended in 2016. The partnership provides us with further access to the Russian market for agricultural machinery and allows us to strengthen our market position in the agriculture sector. A key success for the business unit was the signing of a bilateral agreement between China and Belarus that specifies the construction and overhaul of highways in Belarus. In the scope of the related tender, our subsidiary PRIME Machinery was awarded a contract for the supply of 40 SEM construction machines. The Construction Equipment CIS business unit also celebrated two anniversaries, namely Zeppelin's 20th anniversary in Ukraine and Zeppelin's 15th anniversary in Uzbekistan, Turkmenistan and Tajikistan. The new company headquarters of Zeppelin Russia and Prime Machinery was officially opened in Moscow in April 2016. By the end of 2017, a new sales and services branch will be established in Saint Petersburg at a site with an area exceeding 40,000 square meters.

### **Rental**

bauma 2016 also proved highly successful for the Rental business unit, which presented its unique

expertise in the industry as a provider of solutions for the full process chain of construction and maintenance projects. The business unit also achieved milestones in terms of Group-wide digitalization by establishing the first online rental service with direct booking on the market. In addition, online solutions were showcased at a virtual construction site by presenting the various phases of a construction project. Thanks to the use of state-of-the-art radio frequency identification (RFID) technology, the paper-based stock-keeping of rented equipment and relevant applications has been digitalized.

The establishment of Fast Rent GmbH also underlines the dynamic development of the business unit. Fast Rent provides high-quality, standardized rental equipment that can be rented 24/7 via an online platform using e-payment. In addition, the Rental business unit acquired the rental segment of STAPLER-RENT 2000 GmbH, and on January 1, 2017, acquired Limes Mobil GmbH. Those two acquisitions enabled Zeppelin to extend its product range considerably.

### **Power Systems**

In the marine segment, the Power Systems business unit acquired a large number of orders for drive units and auxiliary power units for cruise liners. Following the acquisition of sales rights for gas engines from the Mannheim production site of Caterpillar Energy Solutions (formerly MWM), it also succeeded in



supplying the first engines for combined heat and power (CHP) plants to various customers in Germany. That significantly extends the performance range of the supplied systems and allows the business unit to tap into new market segments. The business unit implemented a noteworthy project in cooperation with an external engineering partner. In the Czech Republic, a total of five Cat G3616 compressor groups were designed, supplied and commissioned. The expansion of the Achim site near Bremen was completed in 2016. In recent years, some EUR 31 million has been invested in a state-of-the-art high-performance engine test bench, production halls and warehouses, and a large office building with its own training center.

### **Plant Engineering**

Despite the limited willingness to invest of our customers that are dependent on oil revenues in the Middle East and in South America, the order situation of the Plant Engineering business unit was satisfactory. The business unit had a noteworthy sales success in Thailand, where it succeeded in securing an order for one of the country's largest industrial groups, involving use of a special technology for the hydraulic conveying of plastics. In addition, two major orders in the polyolefin manufacturing segment were secured in Russia. Since those are for the same project, they represent the largest single plant engineering order to date.

The food processing plants segment was repositioned strategically and had some key successes in terms of securing orders. At the world's largest trade fair for the plastics industry, „K“ in Düsseldorf, the business unit presented digitally-controlled components and process solutions for the manufacturing and processing of plastics. Silo production was discontinued at the Belgian facility in Genk due to the concentration of silo production at the site in Friedrichshafen. The Zeppelin Systems Benelux N. V. subsidiary is being continued as a sales and services company. A key investment was made in a new laser cutting system to replace the existing system and enhance the technology used at the Rödermark site.

The Plant Engineering business unit marked two anniversaries in 2016 – we celebrated the 40th anniversary of our company in Brazil and the 10th anniversary of our engineering team in Freital, which specializes in innovative solutions for complex bulk materials.

### **Digital Transformation**

The Group stepped up its digitalization efforts in 2016. We focused on the digital expansion of existing business models so that, over time, our customers will be able to order or access an increasing number of products and services online. One milestone in 2016 was the establishment of our sixth strategic business unit, Z Lab, which is dedicated solely to the development and expansion of new digital business models.



A digital version of our staff magazine, Z INTERN, is now available in addition to the print version. We have also overhauled our web presence at [www.zepelin.com](http://www.zepelin.com), and are now presenting our diverse range of products and services on our uniform global website, which has a modern design and was specifically designed for the mobile digital world. In the course of all existing and future projects, our task is to assist employees who are affected by the digital transformation and to generate individual solutions for the various departments within our business units. In addition to training and instruction in the new technologies and digital business models, we believe in providing extensive information and communication.

### Caterpillar

2016 was a difficult year for our partner Caterpillar. Caterpillar took restructuring and cost reduction steps at the end of 2015 in response to the continuing low global demand on its key mining and energy (oil and gas) markets. That situation is exacerbated by weaker growth on the local core markets of China and South America and the geopolitical conflicts in Russia and the Middle East. Production and staff capacity will subsequently be adjusted and its product range will be reviewed. However, high expenditure on research and development was not cut in order to ensure the company's future competitiveness. We are confident that the restructuring will strengthen Caterpillar and enable it to further improve its global market position. There were also changes in the senior management of

Caterpillar. Chairman and CEO Doug Oberhelman will retire in March 2017. In January 2017, Jim Umpleby, who was previously Board Member in charge of Transport and Energy at Caterpillar, took over as CEO. Dave Calhoun will become Chairman of the Board of Directors.

### Values and Leadership

The Z IDEA idea management system was launched in 2016. This digitalized process enables Zeppelin employees to directly contribute, comment on and assess ideas, as well as track the results. The introduction of the system followed from our regular employee opinion survey.

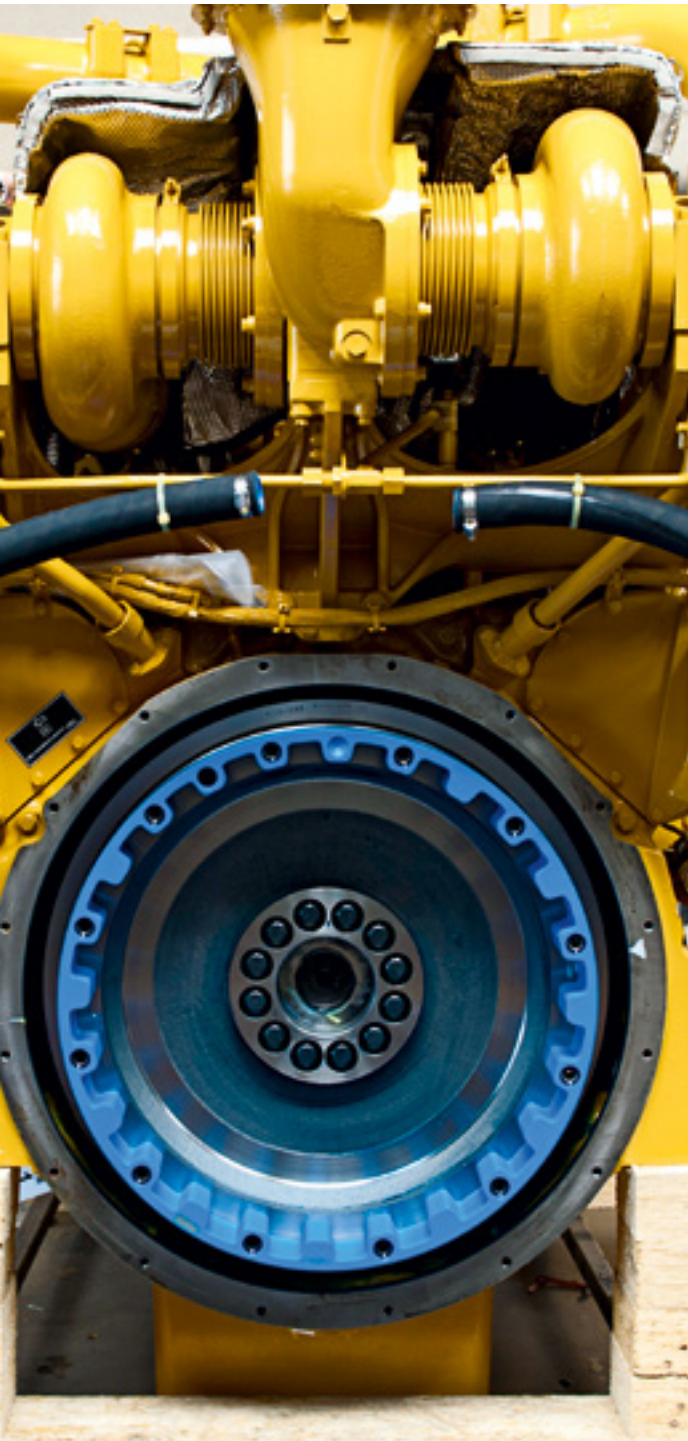
Thanks to the Group-wide implementation of the applicant management system TalentLink, we have greatly simplified the application process for applicants. Suitable candidates can be quickly identified and recruited for a career at Zeppelin. The interdisciplinary „Cultural Dialog“ project was carried out at the Power Systems business unit for the first time in 2016. In the scope of the project, we reviewed the process and functional reliability of the non-financial fields of corporate culture, strategy, risk management and organization.

### Sustainability and Compliance

The public is more and more focused on sustainability, and both customers and business partners are increasingly requiring compliance with certain







standards. The successful initial certification of our energy management system according to the DIN EN ISO 50001 standard in Germany and Austria is a further step towards becoming a sustainable company. This certification commits Zeppelin GmbH to making a sustainable and genuine contribution to energy efficiency, and thereby to environmental protection. Our accession to the UN Global Compact in 2016, underlines our firm commitment to human rights and doing business in a sustainable manner. Together with the Konstanz Institute for Corporate Governance (KICG) at the University of Konstanz, we carried out additional compliance workshops for the extended management team.

### **Finance**

An important step towards positioning the company successfully with international finance partners is the planned transition to the International Financial Reporting Standards (IFRS) and the cost-of-sales method. The aim is to manage the Group's companies according to uniform financial principles, to present business transactions in a comparable manner and to thereby improve the quality of financial reporting. We plan to perform our Group financial reporting in accordance with IFRS and the cost-of-sales method for the first time in 2018.

As part of the current rating process, Creditreform Rating AG upgraded the Group's credit rating to A- in 2016, with a stable outlook. This means the Group has once again achieved a rating in the „A“ range for the first time since 2013. In the 2016 financial year, we also managed to decrease our net debt considerably.



## Investments

At the Achim site near Bremen, the expansion of warehouse, production and office capacity – including the engine test bench – was completed. The total cost of this investment was around EUR 31 million. EUR 5.8 million was invested in Group-wide SAP implementation and the acquisition of SAP licenses. We invested EUR 1.5 million, EUR 3.4 million, EUR 4.2 million and EUR 2.5 million in Dresden, Esslingen, Ost-rava (Czech Republic) and at our Oberhausen branch respectively, covering the construction and acquisition of land for further expansion of our infrastructure. In addition, an investment of EUR 15.4 million was made to modernize our fleet. Including investments in the rental fleet, the total investment volume in the 2016 financial year was EUR 230.1 million.

## Outlook

We are cautiously optimistic about the future. The new president in the USA, the latent euro crisis, the UK's departure from the EU and imminent elections in the key countries of the European Union are decisive factors whose impact on our business areas remains to be seen. We forecast that trends will differ on the markets served by the Group. The prices of oil and raw materials remain at a low, though slightly improved, level. We currently perceive few growth stimuli for the plant engineering markets in China, the Middle East, Russia and South America. Nor are we expecting significant growth stimuli in the marine segment and the oil and gas applications segment. Owing to increased investments in infrastructure and a generally dynamic construction industry, we are expecting a continuation of the upturn on the market for construction machinery in Central Europe, which we expect to also result in an upturn in sales. The sanctions imposed by the USA and the EU against Russia remain in place, so there is little prospect of growth on the markets for construction and mining machinery. In addition, we are anticipating slight growth on the markets for the rental of construction machinery and equipment and flexible solutions for construction site management and logistics. We continue to benefit from the energy transition and are anticipating a positive sales trend in energy applications, as well as in the field of industrial engines. The high project volume for plastics manufacturing systems reinforces our forecast of an upturn in

orders. We expect demand for processing systems in the plastics, rubber, and foodstuffs sectors to be stable. We have started 2017 with our highest ever order level, which provides a strong basis for the year ahead.

The planned investments in the development of the new Z Lab business unit, the digital transformation of existing business models and in SAP will have a negative impact on our net income in the coming financial year. However, such steps are strategically necessary and will reinforce our competitiveness and ensure we are fit for the future in the long term.

On behalf of the Management Board of Zeppelin GmbH, I wish to thank our customers for their faith in us. I also wish to thank our employees for their incredible commitment, our works councils for their continuing support, and the supervisory boards and shareholders for their great trust in us. Our promise to customers remains „We Create Solutions“.

On behalf of the Management Board



Peter Gerstmann  
Chairman of the Management Board  
of Zeppelin GmbH



# SUPERVISORY BOARD

The Supervisory Board, constituted in accordance with Article 7 of the German Codetermination Act (Mitbestimmungsgesetz), comprises the following members:

## SHAREHOLDER REPRESENTATIVES

### **Andreas Brand**

Chairman, Mayor of the City of Friedrichshafen

### **Dipl.-Ing. Werner Baier**

Chairman of the Supervisory Board of Webasto SE

### **Dr. Reinhold Festge**

Partner in HAVER & BOECKER OHG

### **Dr. Werner Pöhlmann**

Lawyer, Tax Adviser, Certified Public Accountant

### **Univ.-Prof. Dr.-Ing. Dr.-Ing. E. h. Dr. h. c.**

#### **Dieter Spath**

Head of the Institute for Ergonomics and Technology Management at the University of Stuttgart, Head of the Fraunhofer Institute for Industrial Engineering, Stuttgart

### **Univ.-Prof. Dr. Dr. h. c. mult. Horst Wildemann**

Chair for Corporate Management, Logistics and Production at Technische Universität München (TUM)

## EMPLOYEE REPRESENTATIVES

### **Heribert Hierholzer**

Vice Chairman, Production Foreman and Chairman of the General Employee Council of Zeppelin Systems GmbH

### **Thomas Mann (since May 1, 2016)**

Head of Time Management and HR Officer, Zeppelin Baumaschinen GmbH

### **Manfred Enger (until April 30, 2016)**

Service Technician, Zeppelin Baumaschinen GmbH

### **Roswita Feineis**

Head of Personnel at Zeppelin Baumaschinen GmbH, Authorized Officer of Zeppelin GmbH, Management Representative

### **Marita Weber (since May 1, 2016)**

1st Authorized Representative of the Offenbach Chapter of the IG Metall Trade Union

### **Ludwig Maier (until April 30, 2016)**

Head of the Economics Section of the German Trade Union Confederation (DGB), Bavarian Chapter

### **Ralph Misselwitz**

Senior Field Service Representative, Chairman of the General Employee Council of Zeppelin Baumaschinen GmbH, Chairman of the Group Employee Council of Zeppelin GmbH

### **Vincenzo Savarino**

1st Authorized Representative of the Friedrichshafen-Upper Swabia and Singen Chapters of the IG Metall Trade Union



# SUPERVISORY BOARD REPORT



In the 2016 financial year, the Supervisory Board performed all its duties pursuant to the law, the articles of incorporation and the rules of procedure with great care. The work of the Management Board was regularly supervised. The Supervisory Board provided assistance and advice with respect to the strategic development of the Group and a range of key issues. In addition, the Chairman and Vice Chairman of the Supervisory Board were also informed in detail about current developments and relevant events during regular talks with the management outside of the board meetings. All members of the Supervisory Board were informed promptly and extensively on a monthly basis about the performance of the Zeppelin Group.

The reporting and advice focused on continuous development of the Zeppelin Group, the effects of changes at Caterpillar on the company, the continuation and implementation of the digitalization strategy in the context of technological change, and strategic acquisition projects. The consultations also extended to key Group projects in the fields of HR and finance, as well as changes to the members of the Management Board of Zeppelin GmbH.

The Supervisory Board met four times (three ordinary meetings and one extraordinary meeting) to monitor and scrutinize the company's development and performance and the activities of the Management Board, on the basis of documents, reports and presentations on the company's strategy, plans, profitability, assets, and finances, as well as quarterly risk and compliance reports. The corporate, investment and financial plans for 2017, with forecasts for 2018 and 2019, were discussed in detail. In addition, two decisions were brought by the Supervisory Board by writing in lieu of a meeting. Furthermore, a closed meeting on strategy was held with the top management of the Zeppelin Group.

Despite the market environment remaining difficult in the CIS sales territories in some respects, 2016 was a very successful year for the Zeppelin Group in both strategic and operative terms.

The bauma trade fair in April 2016, at which Zeppelin achieved a sales record, and the establishment of our sixth strategic business unit, Z Lab — which combines all activities for the development of new digital business models and is responsible for furthering and enhancing them — were of particular importance.

Following detailed consideration and consultation with the Management Board, decisions were made on a number of projects and measures that required the approval of the Supervisory Board. The main topics were four acquisition projects, capital measures at Group companies, the changeover of the Group's

financial reporting to the International Financial Reporting Standards (IFRS) and the cost-of-sales method in 2018, company law changes within the Group and financial and investment planning for the 2017 financial year.

The Supervisory Board also made decisions concerning the appointment and re-appointment of managing directors at affiliated companies based on relevant recommendations of the HR committee. The HR committee held four meetings to discuss key issues of corporate development and corporate strategy, as well as underlying questions, HR matters and succession planning. Owing to the departure of Mr. Jürgen-Philipp Knepper from the Management Board of Zeppelin GmbH on May 12, 2016, the allocation of responsibilities within the Management Board was revised and a decision was made on a relevant schedule of responsibilities.

The Supervisory Board discussed strategies and measures for the integration of recent acquisitions, the development of new business areas, employee recruitment and professional development, the development of the Group-wide financial, risk and compliance management system, and the status of the Zeppelin Group's key strategic projects, including the results of the 2016 Group strategy process.

The work of the Supervisory Board in general and its scrutiny of the Management Board in particular did not give rise to any complaints. Cooperation both within the Supervisory Board itself and between the Supervisory Board and the Management Board is open, responsible and constructive.

The financial statements of Zeppelin GmbH and the Group financial statements for the year ending December 31, 2016, and the relevant management report were audited by PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft (PwC), which issued an unqualified auditor's statement. The Supervisory Board studied the documents extensively and examined them itself. The audit reports were provided to all members of the Supervisory Board in a timely manner. In due time before





the Supervisory Board's accounts review meeting, PwC and members of the Supervisory Board met twice to discuss the details, focal points and findings of the year-end audits. During the accounts review meeting of the Supervisory Board on April 6, 2017, PwC explained the key results of the audit, which were discussed in detail. The Supervisory Board did not raise any objections. It approved the results of the audit and thereby approved the financial statements of Zeppelin GmbH and the Group financial statements. The financial statements are thereby adopted. The Supervisory Board approved the Management Board's proposal concerning the appropriation of profit.

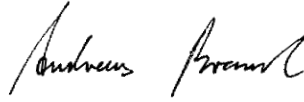
Following the end of the standard term of the employee representatives on the Supervisory Board, new elections were held in 2016. In addition to Mr. Manfred Enger, who had been a member for many years, Mr. Ludwig Meier also left the committee in April 2016. The Supervisory Board wishes to thank the members who have left for all their hard work and welcomes Ms. Marita Weber and Mr. Thomas Mann to the Supervisory Board. The constituent meeting of the Supervisory Board was held on May 12, 2016.

The Supervisory Board wishes to thank the Management Board, the employee representatives and all Zeppelin employees worldwide for their great

commitment. Their hard work enabled the continued success of the Zeppelin Group in 2016.

Friedrichshafen, April 6, 2017

On behalf of the Supervisory Board



Andreas Brand  
Chairman



# ZEPPELIN WORLDWIDE



## **Construction Equipment EU**

Austria / Czech Republic /  
Germany / Poland<sup>1</sup> / Slovakia

## **Construction Equipment CIS**

Armenia / Belarus / Northwest,  
Central and Southwest Russia /  
Tajikistan / Turkmenistan /  
Ukraine / Uzbekistan

## **Rental**

Austria / Germany /  
Czech Republic / Slovakia

A total of 7,646 employees at 190 sites in 35 countries help customers to increase their competitiveness by means of our extensive portfolio of products and services.





### **Power Systems**

Armenia / Austria / Azerbaijan<sup>3</sup> /  
Belarus / Bulgaria<sup>2/3</sup> /  
Czech Republic / Cyprus<sup>2/3</sup> /  
Georgia<sup>3</sup> / Germany /  
Hungary<sup>2/3</sup> / Kazakhstan<sup>2/3</sup> /  
Kyrgyzstan<sup>3</sup> / Moldavia<sup>3</sup> /  
Mongolia<sup>3</sup> / Poland<sup>2/3</sup> /  
Romania<sup>2/3</sup> / Russia<sup>2</sup> / Slovakia /  
Switzerland<sup>2/3</sup> / Tajikistan /  
Turkmenistan / Ukraine /  
Uzbekistan

### **Plant Engineering**

Australia / Belgium / Brazil /  
China / France / Germany /  
India / Italy / Russia /  
Saudi Arabia / Singapore /  
South Korea / UK / USA

### **Z Lab**

Germany

<sup>1</sup> Hyster forklifts only

<sup>2</sup> MaK engines only

<sup>3</sup> Sales and services segment only

# OVERVIEW OF THE ZEPPELIN GROUP



Construction Equipment EU



Power Systems



Construction Equipment CIS



Plant Engineering



Rental



Z Lab

The Zeppelin Group has 190 sites in 35 countries. The company provides solutions for the following areas: construction machinery, mining machinery, agricultural machinery, rental machinery, construction logistics, construction site management, drive, propulsion, traction and energy, engineering, and plant engineering. Zeppelin generated a sales volume of EUR 2.36 billion in the 2016 financial year, a total of 7,646 employees (including trainees) having contributed to this success.

Group-wide collaboration at Zeppelin involves a management holding company and six strategic business units, namely Construction Equipment EU, Construction Equipment CIS, Rental, Power Systems, Plant

Engineering, and Z Lab. That structure makes it possible to centralize operations and gear our business models to the various markets and customers. The Group's management holding company is Zeppelin GmbH. The company is legally domiciled in Friedrichshafen, with its headquarters located in Garching near Munich.

The Zeppelin Group is a foundation-owned company. Its roots can be traced back to the establishment of the Zeppelin Foundation by Count Zeppelin in 1908. The Zeppelin Foundation continues to own a direct stake in Zeppelin GmbH, as well as an indirect stake via Luftschiffbau Zeppelin GmbH.

## We Create Solutions

Zeppelin is noted for its high solutions competence and excellent service offering. Our promise to customers is „We Create Solutions“. Our diverse portfolio of innovative products and services, as well as Group-wide collaboration across borders and across business units, allows us to serve as a one-stop shop for solutions. Working with Zeppelin, customers can shape their business successfully and increase their competitiveness.

That means each individual and the Zeppelin staff as a whole are responsible for implementing our mission statement. We act across departments and countries in the interests of our customers.

We plan, shape, repair, calculate, analyze, manufacture, process and advise. We provide tailored, well designed and reliable products and services for every customer.

We find a lasting solution to every customer requirement. This increases customer satisfaction and ensures our success.

## The GPS Strategy

The company's success is based on the GPS strategy, which stands for growth, performance, and stability.



Growth refers to the continuous growth of the Group. Based on established business models and new, forward-looking business areas, the company's range of services is constantly being expanded in order to ensure its competitiveness.



Performance stands for the outstanding achievements of Zeppelin employees. They recognize their customer's needs, use their skills in a targeted way, and offer perfectly tailored solutions.



Stability refers to the long-term stability of the Group. Weighing up opportunities and risks during decision-making processes creates an environment that offers long-term stability, thereby ensuring the company's future competitiveness.

The goals of continuous growth, outstanding performance, and lasting stability point the way ahead for the Group.

**We**

**Create**

**Solutions**

**Growth**

Continuous growth

**Performance**

Outstanding achievements

**Stability**

Long-term stability

The **Construction Equipment CIS** business unit is successfully positioned in Eastern Europe and Central Asia. Its portfolio includes Caterpillar construction machines, special equipment for surface and underground mining, and large or special equipment for mines and quarries and the oil and gas industry. It also extends to agricultural and forestry machinery of leading international manufacturers. The extensive product range is rounded off by fleet management and machine control systems for improving work processes and enhancing efficiency. The business unit is leading the way with its Component Rebuild Centers for overhauling components used in mining.

**Sales and servicing of construction and agricultural machinery**



**Sales and servicing of construction machines**

The **Construction Equipment EU** business unit is a leader in Europe for sales and servicing of construction machines. Its portfolio includes over 200 different types of machine from market leader Caterpillar. It provides customers with powerful earthmoving, excavation, demolition, recycling, and road construction equipment, as well as offering gardening and landscaping, agricultural, and industrial machinery. The product range is rounded off by special equipment for surface and underground mining, and fleet management and machine control systems. A dense network of branches with a central spare parts warehouse ensures customers receive fast responses and quick delivery. The general overhaul of used construction machines also offers a cost-effective and resource-conserving alternative to buying new.



**Rental and project solutions for construction and industry**

The **Rental** business unit offers tailored rental and project solutions for customers from the construction, industrial, plant engineering, skilled trade, public, gardening and landscaping, and events sectors. It is one of the leading rental service providers and a specialist in logistics planning and management of construction and maintenance projects, and supports customers with a broad rental program for machines and equipment, fleet solutions, construction logistics, as well as temporary space and infrastructure solutions. The business unit also plans and implements barriers and traffic safety measures, and offers power supply concepts, inspection services and training.



### New digital business models

The **Z Lab** business unit aims to use digital innovations to develop new business models for the construction industry and related industries. To do so, Z Lab combines the industry expertise of the Zeppelin Group with the digital expertise of start-up employees from outside the industry at its site in Berlin. In an agile environment, it works on innovative solutions for construction industry customers to design a more efficient construction site of the future with enhanced connectivity and a greater degree of automation. The focus is on business customers and their current and future challenges. One of Z Lab's first achievements is klickrent GmbH, a manufacturer-independent platform that enables the rental of equipment including construction equipment, construction machines and materials handling equipment.



### Development and production of plants, components, and systems

The **Plant Engineering** business unit specializes in developing and manufacturing components and systems for the handling of high-quality bulk materials. The systems are used worldwide in the chemical, plastics, rubber, tire, and food industries. The business unit supports customers every step of the way, from project development, engineering, production and site installation through to commissioning and after-sales service. In addition, it offers quality services to the aerospace and automotive industries. Customers can work with Zeppelin experts in test centers to examine new formulations and raw material mixtures.



### Drive, propulsion, traction, and energy systems

The **Power Systems** business unit sells and provides services for drive, propulsion, traction, and energy systems based on Caterpillar engines of the Cat, MaK and EMD brands. The business unit is a leading provider of solutions for industrial and marine applications, rail vehicles, the oil and gas industry, and power generation. From mobile and stationary energy systems for power generation and complete installation in plants and buildings through to turnkey CHP plants, it provides drive solutions based on diesel, gas and dual-fuel engines, as well as propellers, complete drive systems and other relevant systems. These are used in industry, agriculture, seagoing and inland waterway vessels, in rail transport, and for petroleum and natural gas production. Its portfolio also includes system components, complete modules, and turnkey solutions for treating ballast water.

# WE LIVE OUR VALUES

The corporate culture of the Zeppelin Group is shaped by its identity as a foundation-owned company and its history. The establishment of Luftschiffbau Zeppelin GmbH and the Zeppelin Foundation in 1908 paved the way for today's Zeppelin Group. The activities of Count Zeppelin in the early 20th century and the values he embodies still influence the company today. That Zeppelin system of values is underpinned by the integrity and excellence of our employees.

At the heart of this Zeppelin system of values are ten „Grafensätze“. They form a link between the Group's current corporate culture and its unique company history and the values actively embodied by Count Zeppelin, such as the ability to work in a team and willingness to learn. Our „Grafensätze“ are the principles we follow in dealing responsibly with our colleagues, customers, service providers and partners, and a yardstick for the day-to-day activities of all Zeppelin employees. We live our values.

# INTEGRITY

As ambassadors for our culture, our employees epitomize values such as fairness, respect and transparency with respect to compliance, and put those values into practice in their day-to-day work.



Grafen overcome boundaries



Grafen move your heart



Grafen stay on course



Grafen get others on board



Grafen receive support



Grafen leave their footprint



Grafen attract Grafen



Grafen fail successfully



Grafen tip their hats



Grafen make you think

# EXCELLENCE

As reliable, dynamic partners, our employees recognize the needs of our customers and, with their wide-ranging knowledge of our products and services, are able to deliver outstanding solutions.

# SUPERLATIVE BAUMA

In 2016, the Zeppelin Group set a new record at bauma, the world's leading trade fair for construction machinery, construction materials machinery, mining machinery, construction vehicles and construction equipment. Over 2,666 new and used construction machines and engines were sold in the run-up to and during the event, with a total value of EUR 318 million. The Zeppelin Group was represented by 700 employees from its Construction Equipment EU, Construction Equipment CIS, Rental, and Power Systems business units. Its stand at the trade fair focused on trailblazing innovations in the field of digital construction machine engineering.

The Construction Equipment EU business unit set a new bauma record. Visitors had the chance to experience digital technologies to lower operating costs such as Cat Connect technologies. New assistance systems for tracked excavators and bulldozers, for instance, were brought to life for visitors by means of a Cat 323FL, Cat D6K2 and virtual reality glasses. Compact and standard machines were particularly in demand, with not only new and used machines, but also entire fleets being sold. A contract for a Cat 6015B was concluded at the trade fair. The 135-metric-ton excavator was the largest of the more than 60 exhibits at the trade fair booth. There was also great interest in the newly developed two-way excavator that can be used on both rails and roads. During the development work, Zeppelin and Caterpillar took into consideration the particular requirements of customers in Germany.

In the underground mining segment, we secured a contract to repair a Gleithobel plow system. The business unit also impressed visitors to the trade fair with its Cat Certified Rebuild service program. A Cat D8T dozer with 16,000 operating hours was so impressively overhauled at bauma, that another repair contract was secured for five dumper trucks, with the option of a sixth.

The Construction Equipment CIS business unit was also highly successful. Since the last bauma in 2013, the market has declined by around 75% in the relevant sales territories of the CIS. Despite difficult

market conditions, the business unit was very successful in securing contracts in the countries that it serves, especially in Russia, and managed to sell 123 new and used machines at bauma. Two major package deals should be highlighted, namely one with a value of USD 4.8 million in the region surrounding Saint Petersburg and another with a value of USD 6 million that was concluded with a large mining customer in Armenia. In Ukraine, a master agreement with a total value of USD 19 million was concluded for overhauling machines and supplying spare parts, including for the drive mechanism of a Cat 6060 excavator weighing 600 metric tons.

In the scope of bauma, the business unit also extended its cooperation agreement with Trimble Navigation Systems in Russia to the territory extending to the Urals, providing coverage of up to 70% there. In addition, a sales agreement was concluded for underground mining machines and for agricultural swivel loaders and telehandlers, which have attractive potential in the CIS countries, especially in the livestock segment, which is subsidized in Russia.

With more than 24,000 visitors to its stand and a sales volume of EUR 1.5 million, the Rental business unit also set a new bauma record. The business unit also presented the subsidiary Zeppelin Streif Baulogistik for the first time and showcased its solutions, which are unique in the industry, for the full process chain of construction and maintenance projects. The latest, fuel-efficient and environmentally-friendly technology from the ecoRent rental program was showcased, such as the Cat 906M wheel loader, the Cat 311F LRR mini excavator, the Cat 313F L GC tracked excavator, a mobile energy storage unit, and







**2,666** new and used construction machines and engines were sold



The value totaled EUR **318.2** million



Some **580,000** trade fair visitors from **200** countries attended



the XAHS 317 high-pressure compressor that meets the EU's IIIB emissions standard. The diverse offering in the rental segment is unique in the industry and set the business unit apart at bauma.

The business unit also set standards with its innovative online solutions. It presented its wide range of services on the stand by means of a digital construction site. Visitors had the opportunity to experience virtually the construction site phases of planning, construction site installation, groundworks, construction above ground, interior work, and commissioning, and learn about the business unit's services. The start-up klickrent was likewise present at bauma and provided information about the sharing platform by means of iPads and other mobile devices. The considerable interest reinforced the subsidiary's decision to press ahead with the digitalization of existing sales channels.

The Power Systems business unit showcased the latest engines and complete drive trains for construction, industry and agricultural engineering. The newly developed drive trains with powerful Caterpillar engines are offered exclusively by the business unit as ready-to-use plug and play solutions. At the well-attended stand, the business unit and Caterpillar provided information about the current emissions standard IV, and the upcoming standard V. As a supplier, the business unit collaborates with engine manufacturers to offer a variety of solutions for structural and industrial engineering, as well as for mobile and stationary applications. The service team provided information about tailored inspection and maintenance plans for prevention and early detection to ensure the reliable operation of construction, industrial and agricultural machinery.

# DIGITAL TRANSFORMATION AT ZEPPELIN

” The digital transformation has enormous potential. Measures to digitalize our business are therefore an important strategic step. Established products may be completely driven out of the market in next to no time by disruptive technologies and innovations. To ensure Zeppelin’s future growth and long-term success, we need to invest now in the digitalization of our business models. We aim to generate half of our business from digital business models and channels by 2025.”

**Peter Gerstmann, Chairman of the Management Board of Zeppelin GmbH**



Progressive digitalization is of key strategic importance for the Zeppelin Group. Various measures were taken in 2016 with the aim of exploiting digitalization potential to expand our range of products and services.

### **Establishment of a New Business Unit**

In 2016, the Zeppelin Group established a new strategic business unit called „Z Lab“. New digital business models that are being developed to supplement our existing models are being brought together in this business unit. The focus is on spare parts, used machines and services. The start-up klickrent, a subsidiary of the Zeppelin Group and a sharing platform for construction machinery, was spun off from the Rental business unit and incorporated into the new business unit.

### **Digital Transformation of Existing Business Models**

All the Zeppelin Group's existing business models will be progressively digitalized over the next three years, providing such measures are rational and commercially viable. This will enable customers to manage their transactions with Zeppelin in an entirely digital form. The digitalization will start with the Construction Equipment EU, Construction Equipment CIS and Rental business units, together with the standard business transactions of the Power Systems business unit. The portfolio of these business units comprises numerous standardized processes, mass products and

repeat services, which means that available potential can rapidly be leveraged for the benefit of the customer. In 2016, the Construction Equipment EU business unit presented not only improvements to its online customer portal, but also an online configurator. Using a configurator similar to that offered by car makers, customers can configure simple construction machines themselves. The Rental business unit is the first supplier on the market to now offer a considerable proportion of its fleet for rental by means of a fully online process.

Digitalization will greatly facilitate the handling of current processes and will create the resources for more consulting-intensive business models. New digital business models are being established in parallel with our analog business models.

To improve the marketing of products and services by developing a strong online presence, Zeppelin is centralizing its Group-wide e-marketing activities. Centrally coordinated e-marketing activities are intended to generate considerably more contact with customers and reinforce customer loyalty.

In total, the Zeppelin Group will invest an amount in the mid-double-digit million range in the digitalization of new and existing business models and assisting employees in dealing with the transformation.

---

**”** *We aim to enable our existing customers and new business partners to get in contact with us at any time by digitalizing our current business. This will enable us to tap into new markets, meet customer requirements more swiftly and respond more flexibly. Our digital offering will perfectly complement our existing business model, rather than replace it. Customers can decide for themselves whether to buy or rent our products online or to benefit from the expertise of our consultants in person. Simple business transactions will largely be performed digitally in future in order to provide us with more time for customized solutions. We will thus be able to strengthen our relationship with customers on a lasting basis and build on our leading market position.”*

**Michael Heidemann, Vice Chairman of the Management Board of Zeppelin GmbH**

---

# GROWING WITH ZEPPELIN

The Zeppelin Group's motto as an employer is „Growing with Zeppelin“. Employees develop together with the company and benefit from its international presence and diverse Group-wide career opportunities.

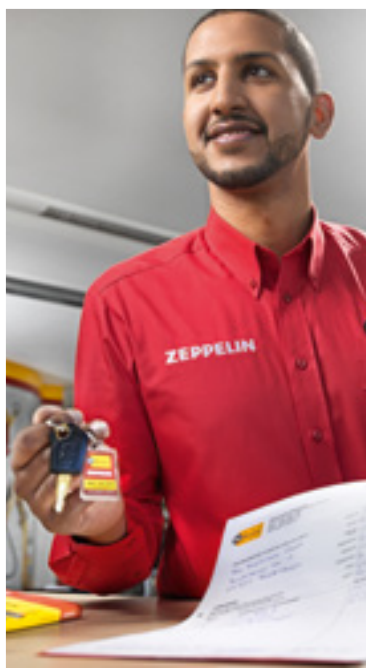
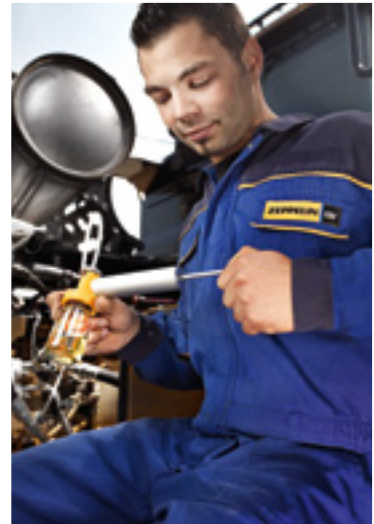
In 2016, a range of initiatives were taken and continued to increase Zeppelin's attractiveness as an employer. One priority is the improved compatibility of work life and family life. In 2015, Zeppelin GmbH was awarded the prestigious „berufundfamilie“ work and family quality mark by berufundfamilie Service GmbH. The patrons of the audit are the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, and the Federal Ministry for Economic Affairs and Energy. The appraisal considers measures that are already in place to support employees, such as flexible working hours and additional employee benefits. The audit will be extended to the German companies of the Group by the end of 2017 in order to reinforce the life-phase-driven HR approach at Zeppelin.

A further strategic focus of HR work is talent management and the associated development and retention of high-performing and high-potential employees. The aim is for key positions to be filled from within the company where possible. A central platform for internal succession planning was developed in 2016 for this purpose.

Further steps to increase Zeppelin's attractiveness as an employer consisted of preparations for the next employee opinion survey, establishment of the Zeppelin Network for Women (Z NOW) to encourage female skilled staff and managers, and the introduction of a digital applicant management system.

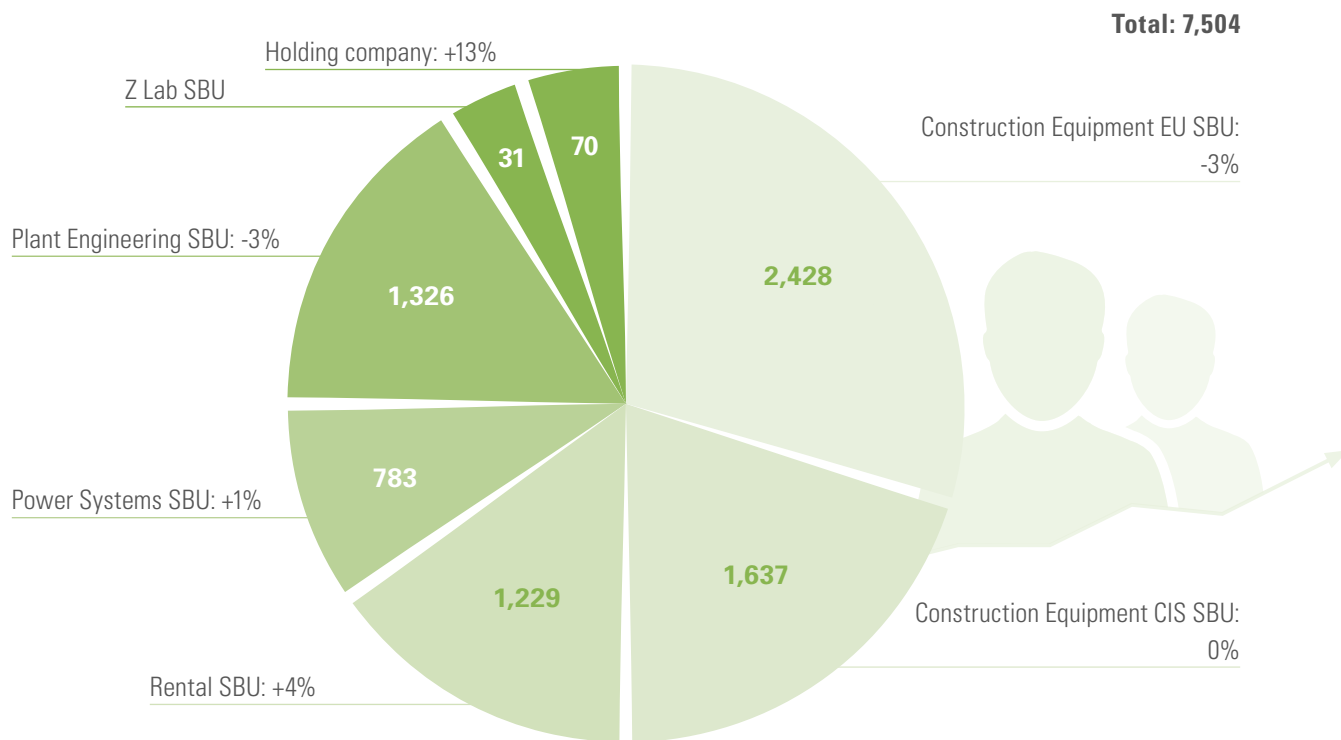
Zeppelin is also intensively addressing the effects of the digital transformation on the working environment. The aim is to assist employees and empower them to be successful in the digital world of work too. This includes extension of skills profiles, expectation analyses and targeted training for the relevant fields of work.





# WORKFORCE FIGURES

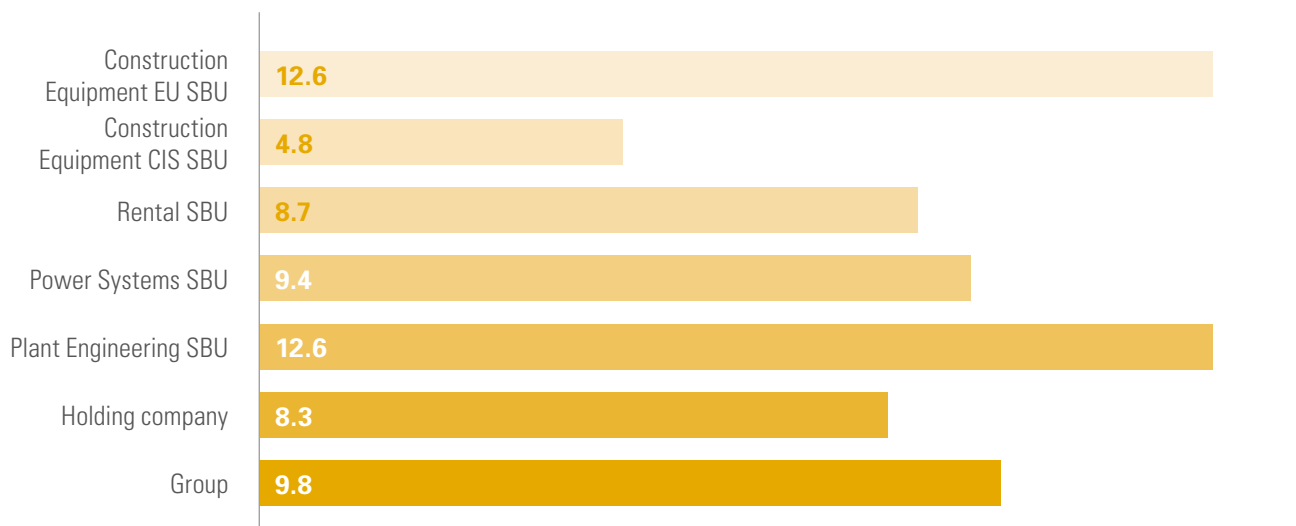
**Number of employees** (headcount, excluding trainees)\*



SBU = Strategic Business Unit

\*Percentage change compared to 2015

**Average length of service with the company** (in years)



As at December 31, 2016

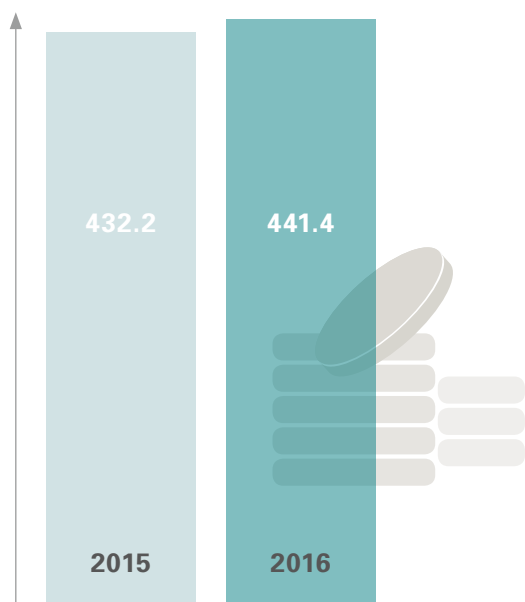
### Health rate (in percentage terms) **2016**

Construction Equipment EU SBU	96.1
Construction Equipment CIS SBU	99.5
Rental SBU	96.7
Power Systems SBU	96.5
Plant Engineering SBU	96.4
Holding company	97.4
Group	97.1

### Age structure (in percentage terms)

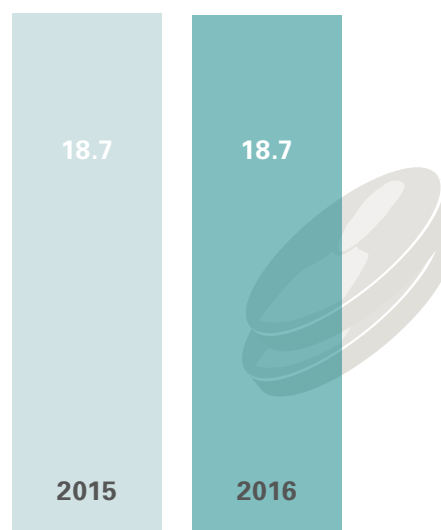
Years	Construction Equipment EU SBU	Construction Equipment CIS SBU	Rental SBU	Power Systems SBU	Plant Engineering SBU	Z Lab SBU	Holding company	Group
<= 25	8	3	5	4	6	3		5
26–30	10	20	12	9	11	42	10	13
31–35	12	28	14	18	14	32	17	17
36–40	11	22	15	17	11	10	10	15
41–45	11	14	11	13	9	6	24	12
46–50	16	8	15	15	15	6	14	14
51–55	16	4	15	13	15	0	9	13
56–60	11	2	8	8	13	0	9	9
60 >	4	1	3	3	6	0	7	4
<b>Average age</b>	<b>43.0</b>	<b>36.7</b>	<b>42.0</b>	<b>42.2</b>	<b>43.6</b>	<b>32.6</b>	<b>43.6</b>	<b>41.4</b>

### Personnel costs (in EURm)

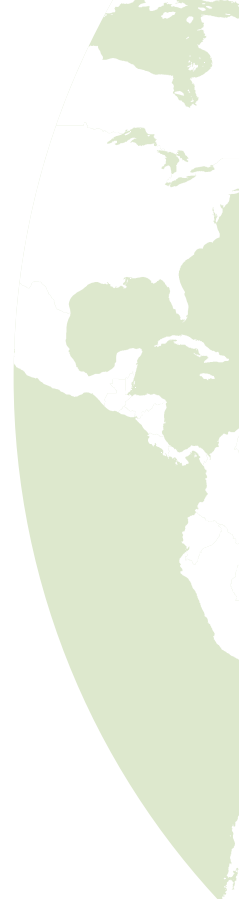


### Personnel costs ratio

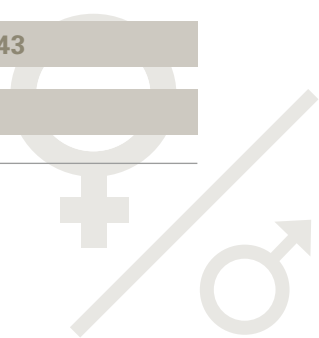
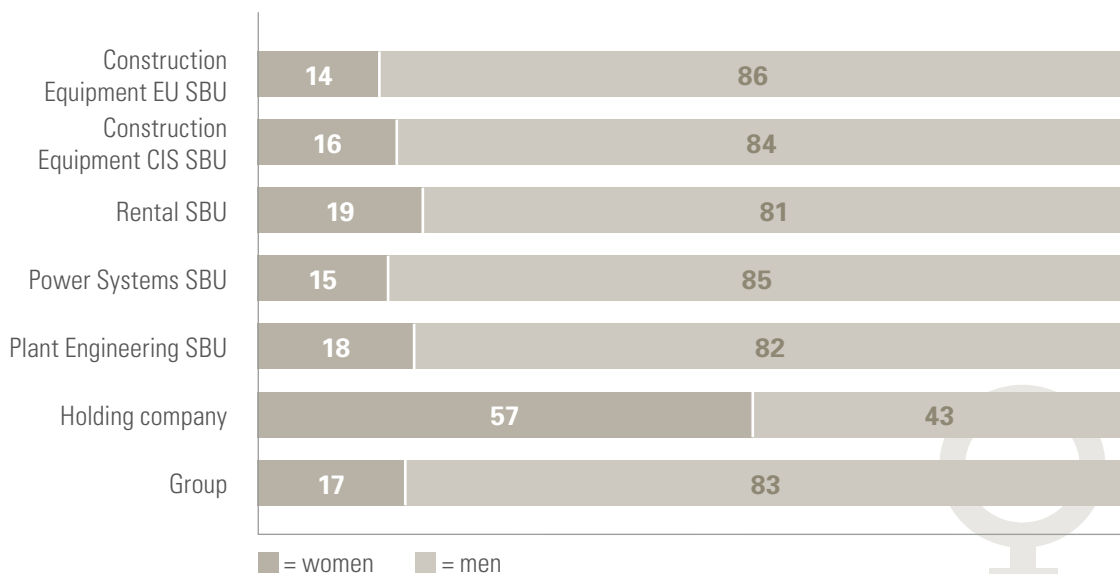
(as a percentage of total turnover and operating revenue)



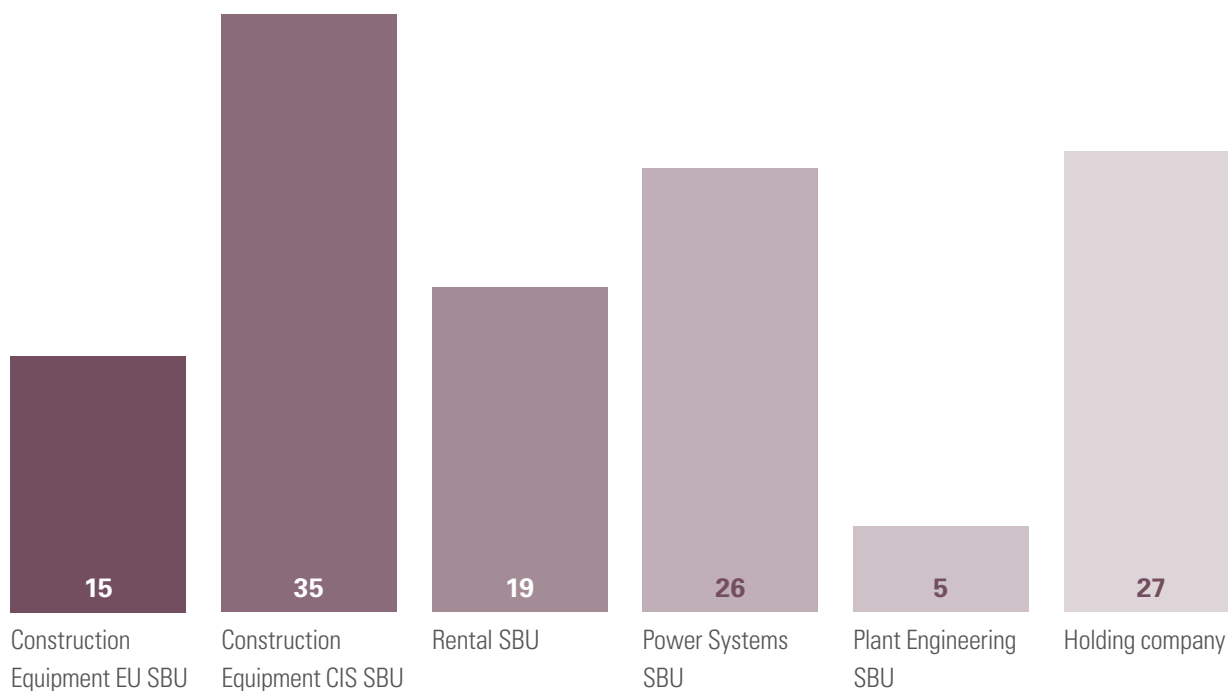
# WORKFORCE FIGURES



## Proportion of women and men (in percentage terms)

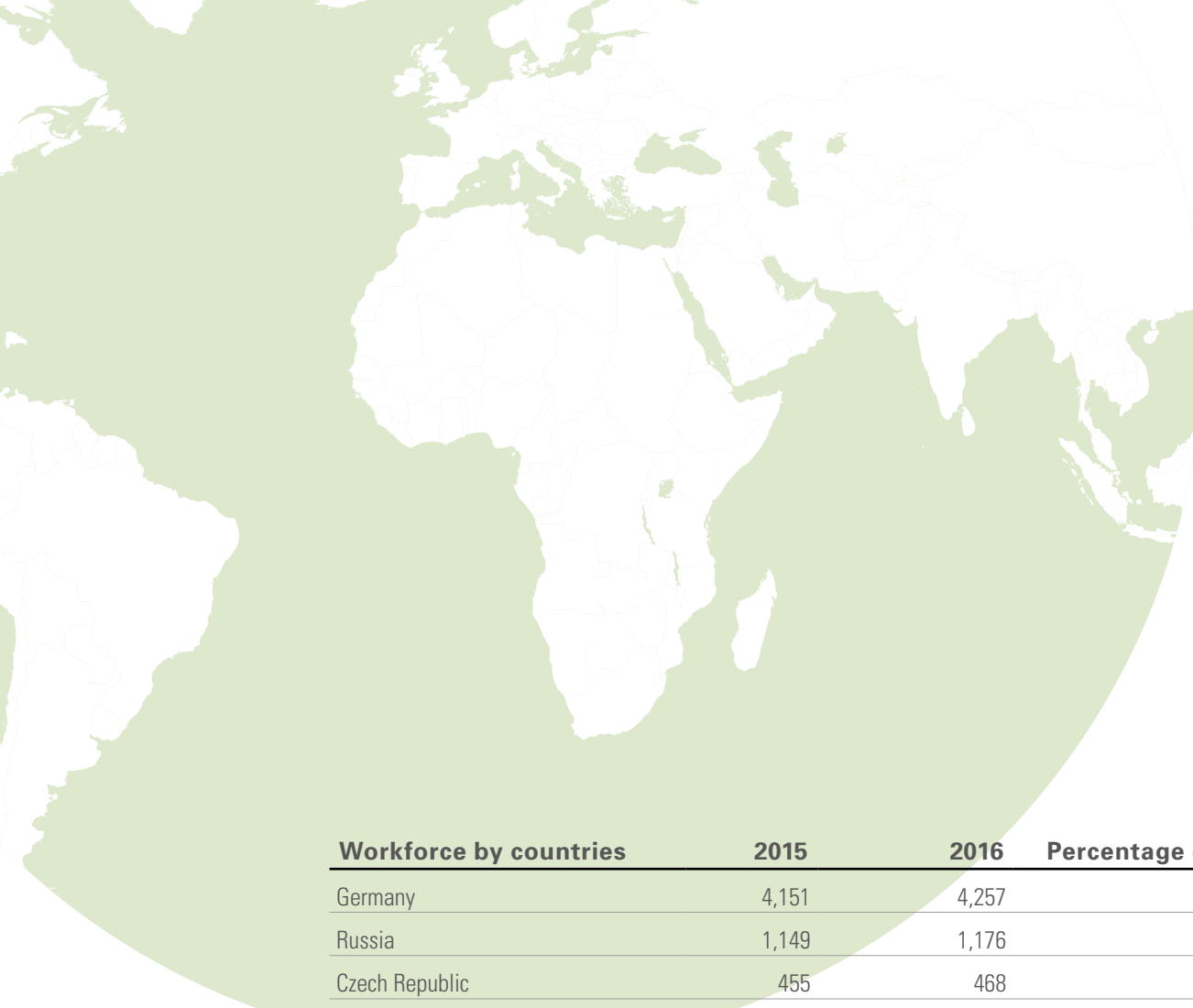


## Proportion of women at the top management level (in percentage terms)



As at December 31, 2016





<b>Workforce by countries</b>	<b>2015</b>	<b>2016</b>	<b>Percentage change</b>
Germany	4,151	4,257	+3
Russia	1,149	1,176	+2
Czech Republic	455	468	+3
Ukraine	381	385	+1
Austria	247	248	0
Brazil	158	132	-16
Slovakia	119	128	+8
Poland	226	124	-45
Armenia	115	105	-9
USA	82	82	0
China	64	62	-3
India	54	60	+11
Saudi Arabia	57	55	-4
Belarus	52	47	-10
Turkmenistan	53	45	-15
UK	31	30	-3
Uzbekistan	35	27	-23
Switzerland	18	18	0
France	13	15	+15
Belgium	40	12	-70
Singapore	9	9	0
Tajikistan	9	8	-11
Italy	6	5	-17
South Korea	7	5	-29
Australia	1	1	0

# CONSTRUCTION EQUIPMENT EU

---

” The 2016 financial year was anything but ordinary. The Construction Equipment EU business unit, which achieved a sales record at bauma, secured a large number of orders and sold more new Caterpillar construction machines than ever before in its history. We also succeeded in continuing our digitalization strategy in the context of the technological transformation. Customers increasingly have the opportunity to get in touch with us via a wide range of channels, either in person or digitally.”

**Michael Heidemann, Head of the Construction Equipment EU strategic business unit**

---

## Review of 2016

The Construction Equipment EU strategic business unit saw an extremely successful fiscal year in 2016. It further built on its leading market position and the population of machines requiring technical support was increased. The bauma trade fair, which had a very positive impact on the order situation in Germany, contributed significantly to the excellent business performance. At the world's leading trade fair for construction machinery, the business unit and its partner Caterpillar presented trailblazing product and service innovations. bauma made clear just how ready the industry is to invest, and just how far the industry needs to go in terms of updating technologies to meet today's standards.

Overall, the business unit benefited from the positive economic situation in Germany in 2016. The construction industry, which recorded growth in all segments, constituted the most important customer group. The market for construction machines grew slightly in Austria, but remains at a low level. Construction output fell in the Czech Republic, but the construction machine market remained stable. The market in Slovakia stabilized slightly.

The sales volume from new machines was considerably higher than in 2015, thanks in particular to the companies in Germany and Austria. However, the used machine segment was not quite able to maintain the high level of the previous year. We managed

to considerably increase our sales volume from spare parts and after-sales service in the construction machine segment.

The strategic focus in 2016 was on enhanced efficiency and digitalization. Smart machine control systems and driver assistance systems have long been increasing the productivity of customers. Given that Industry 4.0 will also result in changes to the construction machinery business, the business unit continued development of its digitally-based sales processes, such as its digital customer portal, which is geared to the needs of customers. The portal can be used to order spare parts around the clock and analyze up-to-date information on the construction machines used by the customer. Customers are responding positively to the online offering; around a third of all spare parts were sold online in Germany in 2016. A construction machine configurator was developed for key product groups to allow customers to configure their desired machine online.

In 2016, the business unit invested in its network of branches in Germany and the Czech Republic. In addition, we pressed ahead with implementation of the SAP IT system to harmonize processes in the four core countries served by the business unit. The project is progressing according to plan. The Cologne, Oberhausen, and Dresden branches celebrated their 50th, 40th and 25th anniversaries respectively.





**WORKFORCE**  
year's average,  
including trainees  
2015: 2,679  
2016: 2,594

**SHARE OF  
GROUP SALES**

**51.0%**

## Facts and Figures

**SALES IN  
EURM**

2015:  
1,123

2016:  
1,205

## Outlook for 2017

The business climate on the markets served by the business unit is expected to remain positive and stable in 2017. The Ifo Business Climate Index for trade and industry in Germany rose further at the end of 2016. Based on the improved outlook and the planned investments of the German government in infrastructure and construction, we expect the order situation to remain healthy in Germany. Despite the decline in construction output, the market in the Czech Republic is expected to be stable. The mood in the construction industry in Slovakia is positive, so results are expected to be similar in 2017 to in 2016. Economic improvement is expected in Austria. With its wide range of solutions, state-of-the-art technologies and excellent market position, the Construction Equipment EU business unit will benefit from that positive environment and continue to grow. Good order levels and high utilization of service capacity are to be expected in all segments.

bauma 2016 sent the clear message that customers are seeking strong partners that are fit for the digital transformation. In order to build on its position as market leader, the business unit will press ahead with

digitalization in 2017. In parallel with the analog and established construction machine business model, sales processes will be enhanced and additional sales opportunities will be created. The machine configurator will be extended to include further product groups. In addition, employees need to be successfully assisted in meeting the challenges of the digital transformation.

One focal area will be expansion of the sale of spare parts, which increased by 13% in Germany in 2016. The aim is to increase our share of the spare parts market considerably by 2020. Another focus will be on further development of activities for auxiliary agricultural machines. We aim to further drive sales of construction and industrial machines to the agriculture sector by means of independent agriculture machinery dealers.

In order to continue to impress customers with its solutions and extensive services, the business unit will make further investments in the modernization and expansion of its network of branches. Implementation of SAP is proceeding according to schedule.

# CONSTRUCTION EQUIPMENT CIS

---

” *The Construction Equipment CIS business unit achieved a highly impressive, stable result given the very difficult market environment prevailing in the CIS countries that it serves. Our employees, who were quick, professional and focused, played a key part in that. Together we were able to make the most of the opportunities of each market cycle for the benefit of our customers and partners.*”

**Frank Janas, Head of the Construction Equipment CIS strategic business unit**

---

## Review of 2016

The Construction Equipment CIS strategic business unit faced a very difficult economic environment for the third year in succession. The geopolitical tensions between Russia and Ukraine, the resulting sanctions imposed by the EU and the USA, and the weakening of the Russian currency continued to have negative effects on business. Nevertheless, the performance of the business unit was stable at a low level.

As in 2015, the Russian construction industry was troubled owing to the country's poor economic situation. The sales volume from new machines decreased significantly owing to deterioration of the housing construction situation and the already high machine population on the market. The mining segment performed well, by contrast. In Ukraine, the construction machine market stabilized. The sales volume from machinery increased in comparison with 2015, while the mining industry shrank.

The difficulties of the Russian economy also had a negative impact of demand for construction and construction machinery in Armenia, Belarus, and the Central Asian countries. Owing to lack of investments in those countries, local construction machine customers were increasingly reluctant to make orders. Demand was also impacted negatively by depreciation of those countries' currencies.

Despite the difficult situation on the new machines market, the performance of the after-sales service and spare parts segment was stable overall owing to the high machine population and targeted investments. The agricultural machines segment also performed well. Its acquisition of sales and after-sales service rights for agricultural machinery of the manufacturer SAME DEUTZ-FAHR provided the business unit with further access to the Russian market in 2015. It successfully expanded its activities in 2016. The segment also performed well in Ukraine. The partnership with the agricultural machinery manufacturer AGCO was extended to include a new sales territory.

Irrespective of the total decline in market volume in 2016, the Construction Equipment CIS business unit increased its market share in comparison with 2015.

In June 2016, the business unit celebrated its 20th anniversary in Ukraine and its 15th anniversary in Uzbekistan, Turkmenistan and Tajikistan. In order to ensure the greatest possible proximity to customers and underline the importance of the Russian market, the business unit moved into new company headquarters in Moscow. In addition, the construction of a new sales, services and logistics center for all business areas in Northwest Russia was continued in Saint Petersburg.





## WORKFORCE

year's average,  
including trainees

2015: 1,662

2016: 1,605

## Facts and Figures

SHARE OF  
GROUP SALES

12.7%

2015:  
307

2016:  
299

SALES IN EURM

## Outlook for 2017

Following the sharp decrease in economic output in 2015, the core markets of the business unit stabilized in 2016. Slight macroeconomic improvement is expected in 2017 in Russia and Ukraine, which are core markets for the business unit, providing oil prices remain stable and geopolitical tensions do not worsen again.

Thanks to the implementation of key projects in the mining sector, the business unit is also anticipating growth in Armenia. The markets in Central Asia and Belarus are expected to provide few growth stimuli. The lack of structural adjustments and low prices of fossil fuels are preventing the emergence of a functioning market and the transition to sustainable economic growth in those countries.

Depending on the support of the EU and further structural reforms, Ukraine has the potential for economic improvement. The forecast is also positive for the agriculture, forestry and mining segments, owing to investments that were postponed in recent years, the development of new mining sites, and attractive opportunities for profit. In addition, the record harvest in Russia in 2016 and clear indications of the positive development of the agricultural industry in Russia and Ukraine suggest that significant investments will be made in 2017.

As in recent years, the expansion of our spare parts and service business will remain the key driver of profitability in 2017. We are also continuing to focus on projects with the potential to lower the costs of the business unit considerably and with a lasting impact.

# RENTAL

---

” *The Rental strategic business unit performed very well in 2016. We managed to increase our growth in all product segments on a lasting basis and also record growth in the new business areas of construction logistics, energy and security. The latter in particular is a very welcome development and confirms that we were right to expand our range of products and services in recent years. Thanks to the implementation of an online rental service, we also lend momentum to the market and took an important step towards the future competitiveness of our company and connectivity with customers. Our aim for 2017 is to enable our customers and employees to experience digitalization.*

**Wolfgang Hahnenberg, Head of the Rental strategic business unit**

---

## Review of 2016

The Rental strategic business unit achieved its best ever net income in 2016, thanks in particular to excellent profitability in Germany. The rental market in Austria was subdued. In the Czech Republic and Slovakia, net income was in line with partially lowered expectations, but remained at a high level.

The business unit was extremely successful at bauma. It set new trade fair records thanks to more than 24,000 trade fair visitors, and numerous valuable contacts and orders. The business unit showcased its solutions for the full process chain of construction and maintenance projects. The range of services was presented by means of a digital construction site and the various phases of a construction project. The trade fair underlined the strong market position that the strategic business unit has obtained thanks to its wide range of services.

The business unit established Fast Rent GmbH on June 30, 2016. That marked an important step towards diversifying its offering on the German rental market. The subsidiary is geared to small and ultra-small enterprises in the construction, interior work and skilled trade segments. Rental is now much simpler thanks to standardized products and processes, as well as an online platform that enables electronic payment. As part of its growth strategy, the business unit acquired the rental segment of STAPLER-RENT 2000 GmbH with effect from December 1, 2016. The acquisition has increased expertise with respect to the rental of telehandlers and extended the product

range by around 500 machines. A cooperation agreement was concluded with Jungheinrich in the field of industrial truck rentals in Germany. The cooperation extends to the whole range of Jungheinrich's forklifts. This provides the Rental business unit with access to premium forklifts and warehouse equipment, and enables it to respond even more flexibly to customer needs.

Digitization of our business model and extension of traditional service and value-added processes were among our main priorities in 2016. The business unit is one of the first rental companies to develop the possibility for machinery and equipment to be rented online. The business unit also set new standards with the first web-based access control system for construction sites. The Zeppelin InSite 3.0 online solution enables a transparent and efficient access process at construction sites.

Internally, the business unit focused on the standardization of its processes to reduce costs, lower the workload of employees and increase efficiency. For instance, automated stock-keeping with electronic check-in and check-out of equipment, and real-time recording by means of RFID, a technology for identification of items using electromagnetic waves, were implemented. klickrent, the online market place for the rental of machinery, was spun off from the Rental business unit and integrated with the new Z Lab business unit.





SHARE OF  
GROUP SALES

15.4%

**WORKFORCE**  
year's average,  
including trainees  
2015: 1,238  
2016: 1,236

**Facts  
and  
Figures**

2015:  
373

2016:  
363

SALES IN  
EURM

## Outlook for 2017

Despite a risky global environment, the Rental business unit is expecting an upturn on the rental market in 2017. The German construction industry is growing and continuing its upturn across all construction sectors. The positive trend of the Austrian construction industry will continue, while stable market growth is forecast in Slovakia owing to expected major infrastructure projects. The Czech construction industry is expected to recover, as long as suspended EU construction investments are continued in 2017.

Digitalization will continue to play a pivotal role in 2017. The Rental business unit will work on enhancement of its digital services, enabling it to assist customers with the rental process even more effectively and faster thanks to new functions. The next steps are the implementation of online contract management and direct connectivity with customer ERP systems. In addition, the implementation of electronic billing and

uniform project costing software is planned. Internally, the business unit will continue to deal intensively with the organizational and cultural challenges of the digital transformation and will develop programs to train and enhance the skills of employees.

In addition to organic growth, the business unit is planning further acquisitions in 2017 to strengthen its market position. Limes GmbH, a traffic safety company, for example, was acquired on January 1, 2017. The rapid integration of the acquired companies is a key factor in terms of exploiting the relevant potential and is another priority topic. In the first half of 2017, the merger of Zeppelin Rental GmbH & Co. KG and Zeppelin Streif Baulogistik GmbH was completed, marking the last step in the successful integration of the project service – which was acquired in 2014 – of the Streif Baulogistik subsidiary.

# POWER SYSTEMS

---

” Despite a slight increase in sales volume, net income was slightly down on the 2015 level. Overall, 2016 was a good year with a high order level for the subsequent years. However, the margins in the new engines and services segments came under further pressure. We welcome the fact that our positioning as a provider of all-in-one systems is increasingly being recognized on the market, as is indicated by increasing demand for our comprehensive system solutions, especially in the marine and energy segments.”

**Volker Poßögel, Head of the Power Systems strategic business unit**

---

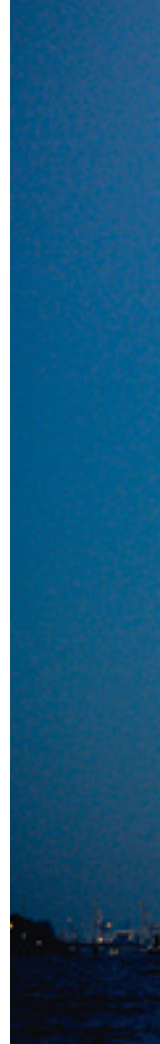
## Review of 2016

The market environment of the Power Systems strategic business unit differed considerably by country and segment in 2016. As in 2015, demand for flexible energy solutions such as high-efficiency CHP plants was very high in Germany. The trend for decentralized energy supply in the industrial and municipal sectors continues. In the Czech Republic and Slovakia, there was an increased project volume in the mid-performance range of gas engines. The company in Germany acted as a center of excellence for the subsidiaries.

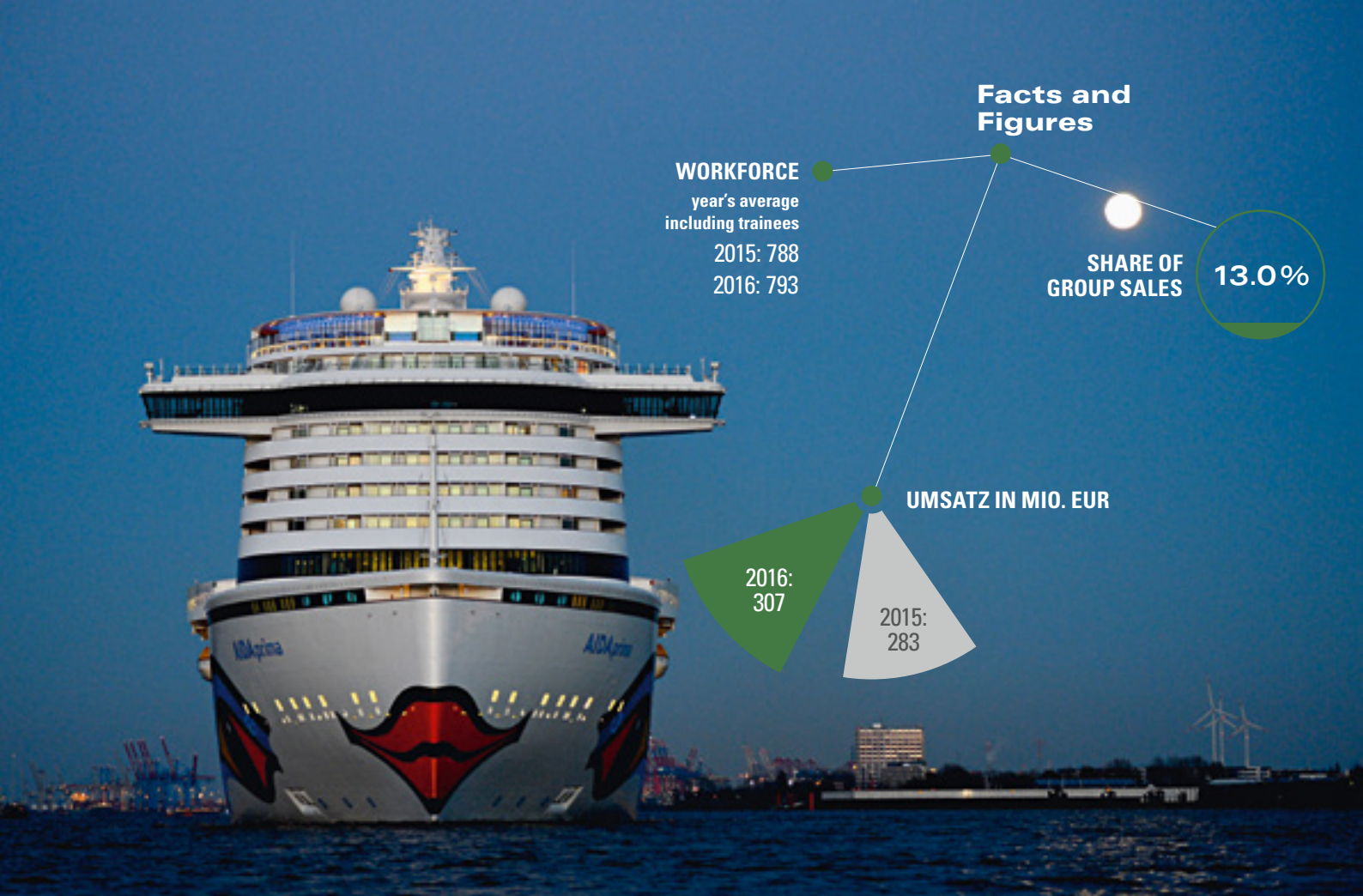
Orders were secured in the field of standby power supply systems and critical power applications in Germany and Russia. Based on experiences with back-up power at nuclear power plants in the Czech Republic, similar projects were pursued in Ukraine and Hungary. As a result of the lowered oil price, the market for oil and gas applications has been at a very low level for several years. Nevertheless, thanks to the excellent cooperation between the companies in Germany and Turkmenistan, we managed to secure a major project involving equipping an oil platform with generators. The industrial engines market, which is highly influenced by exports, grew. Some large German manufacturers of agricultural and construction machinery benefited more than average from the market growth. Based on the tightening of emissions requirements in 2019 and the provision of new Cat engines that meet the V standard, plans have already been made with major German original

equipment manufacturers (OEMs) on equipping future product lines. In addition to industrial engines, we increasingly offered drivetrain solutions, i.e., package solutions consisting of an engine and transmission, to meet the growing demand for all-in-one solutions. In the marine segment, the business unit acquired a large number of orders for complete drive units and auxiliary power units for cruise liners. Overall, however, global ship construction remained at a low level. The performance of the locomotive engines sector fell short of expectations. The OEM market in Germany and the Czech Republic experienced a downturn. The market for re-motorization and new engines was very subdued in the CIS countries. Thanks to its considerable expertise in the locomotive engines segment in Germany, the business unit qualified as a supplier for projects in other European companies. Ninety-four power packs were supplied to a French rail technology manufacturer for the Swiss Federal Railways (SBB).

In the CIS countries, our business performance was negatively impacted by lack of financing, the low prices of raw materials, the trend for localization of products and the sanctions imposed by the USA and the EU. Nevertheless, the business unit was able to successfully develop projects for OEMs in the agriculture sector and in the gas compression segment. Decentralized energy supply using natural gas and biogas further increased in importance.







## Facts and Figures

### WORKFORCE

year's average  
including trainees

2015: 788

2016: 793

SHARE OF  
GROUP SALES

13.0%

### UMSATZ IN MIO. EUR

2016:  
307

2015:  
283

## Outlook for 2017

Based on the high demand for drive, propulsion, traction, and energy systems, the Power Systems business unit is cautiously optimistic about the future overall. There is increasing demand for all-in-one solutions involving drive, propulsion, traction, and energy systems. In the marine segment there is also growing demand for environmentally friendly dual-fuel drives, propellers and ballast water systems. This development is being driven by the market segments of gas and diesel engines for electricity and power generation as well as marine and industrial applications.

In the marine segment, the Power Systems business unit succeeded in positioning itself effectively on the market for cruise liners in 2016, so healthy order levels continue to be expected in both the new engines and service segments. The rail vehicles segment was stable at a low level. The environment of the oil and gas segment is expected to be slightly more positive. At the international level, initial major projects in Eastern Europe in the industrial and oil and gas segments are contributing to an optimistic forecast. Positive developments are also expected in Russia owing to several projects in the fields of gas compression and CHP plants.

In 2017, the business unit will extend its portfolio to include further versions of efficient gas engines from the Caterpillar production site in Mannheim. The range also includes propellers and control systems from Caterpillar Propulsion. Customers will benefit in future especially from the control system developed by Zeppelin for CHP plants and the new test bench in Achim. In 2017, the business unit will again focus on drive, propulsion, traction, and energy systems involving gas engines. The topics of CHP plants and liquefied natural gas (LNG) drives are dominant in the marine segment of the market. Digital plant and fleet management will be another priority.

The Achim site near Bremen has been expanded considerably in recent years. Around EUR 30 million has been invested in a state-of-the-art, high-performance test bench, production halls and warehouses, and a large office building with its own training center. The development of the business unit as a supplier of systems and complete plants, is also progressing internationally in all segments. The services, engineering and construction segments will be further expanded for that purpose in 2017.

# PLANT ENGINEERING

---

” Overall, the Plant Engineering business unit performed well in 2016. As a business unit with a global presence, our constant task is to respond to changes in market needs by providing product innovations and integrated solutions. We want to provide our customers with excellent value, and support and assist their projects as their reliable partner. We see change as presenting challenges and opportunities. The organizational ability to change not only demonstrably increases our profitability, but also provides customers with tailored solutions. The positive order level in 2016, as an indicator of customer approval, confirms that we have taken the right approach, including with respect to Industry 4.0.”

**Axel Kiefer, Head of the Plant Engineering strategic business unit**

---

## Review of 2016

The Plant Engineering strategic business unit succeeded in continuing the upward trend of 2015 in 2016. The significant increase in net income despite sales being under target and lower than in the previous year underlines the fact that stability has clearly been regained. There was a clear shift in orders towards the German parent company.

Relatively few project contracts were awarded on the market for polyolefin plants (plants for plastics production). The market environment was therefore highly competitive. As a result of the sharp decrease in project volume, the order level in the USA and China decreased considerably. The healthy order situation at the start of the financial year played a significant part in the satisfactory utilization of capacity and the resulting improvement in net income.

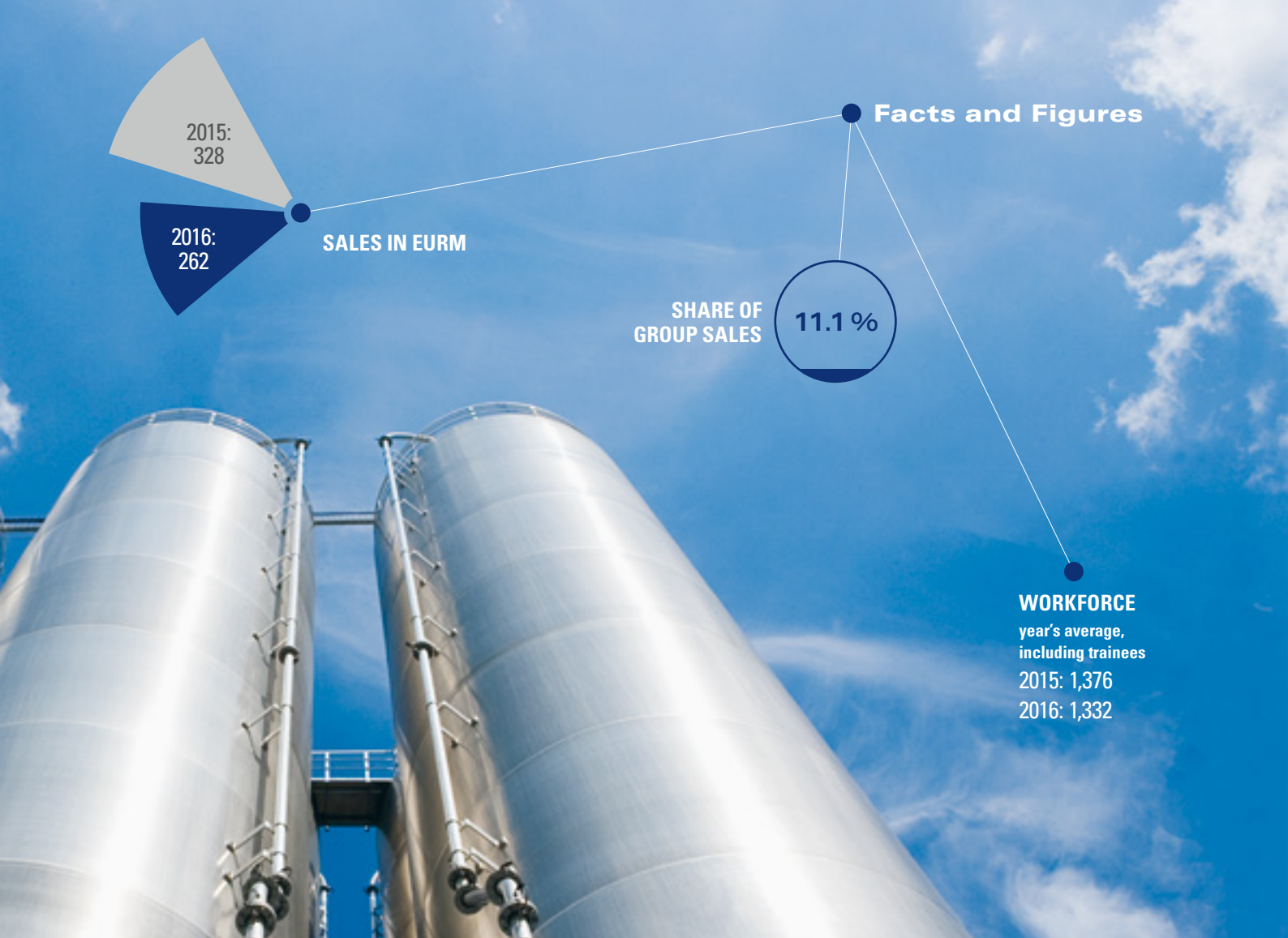
Expectations for the financial year were far exceeded in the plastic and rubber plants segment (processing plants for the plastics, rubber and tire industry) in terms of orders secured, sales volume and profitability. That also marked an improvement in comparison with 2015.

The food processing plants segment performed significantly under target. In addition to organizational adjustments, measures were taken for improved development of the market and project execution. As a result, the order level was significantly increased in comparison to the first half of the year by focusing and stepping up sales activities in the second half of the year.

Overall, the silos, components and services segments performed according to plan, at the same level as in 2015. While the targets were not fully reached in the components and services segments, the targets were exceeded in the silos segment thanks to a higher order level.

Silo production was discontinued at the Belgian facility in Genk due to the concentration of silo production at the site in Friedrichshafen. The Belgian Zeppelin Systems Benelux N. V. subsidiary will remain active as a services and sales company.





## Facts and Figures

2015:  
328

2016:  
262

**SALES IN EURM**

**SHARE OF  
GROUP SALES**

**11.1 %**

**WORKFORCE**

year's average,  
including trainees

2015: 1,376

2016: 1,332

## Outlook for 2017

Market volumes are expected to remain at the high level of 2016 in the 2017 financial year. Accordingly, the business unit continues to expect stable and healthy markets in its three main segments of plastics production, plastics and rubber processing, and food processing. In the medium term, a volume increase is to be expected thanks to tapping into new market segments and further increasing profitability due to implementation of efficiency projects. Markets will adapt even more dynamically in the future to current developments so the business unit has set itself the aim of adjusting its organizational structure faster in response to regional changes. The aim is to reinforce and expand the global Zeppelin network.

The development of key raw material prices, effects of international trouble spots and the results of political developments may significantly dampen the economic forecasts and ultimately influence the awarding of key project contracts. However, the current project and order situation provides grounds for optimism.

In 2017, the Plant Engineering business unit will respond to current topics such as environmental protection and Industry 4.0 by adapting its product range. For example, recycling will play an important role. The trend for increasingly smart components will lead to greater customer loyalty and enable all-in-one solutions, from development through to after-sales service. The business unit is making targeted preparations for that. The strategic focus of the Plant Engineering business unit in 2017 will be on expanding its market share and increasing its profitability. In order to pursue and attain those goals in the long term, we need more cost-effective production along the whole value chain, the development of new future-proof technologies and adjustment of our business models to new customer requirements. Key strategic fields of action were defined in view of the Group-wide strategy for the period until 2025. In addition to stepping up international collaboration between the Zeppelin companies, the business unit will focus in 2017 on the expansion of process engineering components and prioritize digitalization.

# 20



# 16



## GROUP MANAGEMENT REPORT AND GROUP FINANCIAL STATEMENTS

# GROUP MANAGEMENT REPORT FOR THE 2016 FISCAL YEAR

## A. Business Activities of Zeppelin GmbH and the Group

The following management report is the consolidated management report and Group Management Report for Zeppelin GmbH. It presents the business performance of the Group and Zeppelin GmbH, including the results for the fiscal year from January 1 to December 31, 2016 as well as the position of the Group and Zeppelin GmbH as at December 31, 2016.

### Corporate Purpose of Zeppelin GmbH

The corporate purpose of Zeppelin GmbH comprises the holding of participations in companies with a net carrying amount of EUR 432.3m (previous year: EUR 410.8m), the management of land, buildings and technical equipment and their rental, particularly to affiliated companies (net carrying amount December 31, 2016: EUR 110.0m, previous year: EUR 115.7m) and the financing of affiliated companies. At the end of 2015, 67 people were employed (previous year: 58).

The shareholding structure of Zeppelin GmbH remained unchanged in 2015. Luftschiffbau Zeppelin GmbH holds 96.25 % and Zeppelin-Stiftung in Verwaltung der Stadt Friedrichshafen (foundation managed by the City of Friedrichshafen) holds 3.75 % of the subscribed capital of Zeppelin GmbH of EUR 100.0m.

The Supervisory Board consists of 12 members, who represent the shareholders and the employees in equal numbers in accordance with Section 7 of the German Codetermination Act.

### Strategic Business Units of the Zeppelin Group

The Zeppelin Group is operationally and strategically managed in five strategic business units (SBUs). This organizational structure ensures its ability to focus on individual markets, customer groups, and product segments while managing activities across multiple countries and companies. The SBUs are divided into Construction Equipment EU, Construction Equipment CIS, Rental, Power Systems, Plant Engineering, and Z Lab. The latter business unit was established in fiscal 2016 in order to develop new digital business models and combine activities in this area. Zeppelin's business activities include sales and servicing of Caterpillar construction machines, mining equipment, components, and diesel and gas engines, MaK marine engines, and agricultural and forestry equipment of the AGCO, Ponsse and DEUTZ-FAHR brands. In Germany and various countries of Central and Eastern Europe and Central Asia, Zeppelin is the sales partner of Caterpillar Inc. headquartered in Peoria, Illinois (USA). The other brands are sold in Central and Eastern European countries. The Rental business unit rents out construction machines as well as a wide range of construction equipment, space systems, construction site and traffic guidance systems, aerial work platforms and lifts, and vehicles. It also offers an extensive

range of services.

The activities of the Plant Engineering business unit involve developing, implementing, and selling systems for producing and processing high-quality bulk materials for plastics, rubber and tires, food, and chemicals. Zeppelin is the world market leader in the handling of high-quality bulk materials.

## **B. Business Report**

### **1. Economic Conditions**

2016 was shaped by a number of international conflicts, such as the war in Syria and the refugee crisis in Europe as well as the ongoing conflict between Russia and Ukraine. The UK's decision to leave the European Union and the presidential elections in the US have caused general uncertainty. Despite these factors, the global economy performed relatively well. Global economic output increased in 2016 by 3.1% year-on-year, and growth in the euro area was 1.7% (previous year 1.5%). At 1.7%, growth in Germany was also higher than the previous year (1.5%). The Russian economy stabilized over the course of the year following a sharp decline that persisted through spring 2016, ending the year with a drop in economic output of 0.8%, much better than the previous year (-3.7%). Ukraine ended its deep recession from the previous year, when GDP declined by 9.1%, posting modest growth of 1.5% in 2016. In the Czech Republic, growth slowed to 2.5% (previous year: 3.9%), while growth accelerated slightly in Slovakia (3.4%; previous year: 3.2%).<sup>1</sup> In Poland, year-on-year growth slowed somewhat to 3.1% (previous year: 3.5%). China grew by 6.6% in 2016 (previous year: 6.8%) and India by 7.6% (previous year: 7.5%). The Brazilian economy remains mired in a deep recession, with growth still negative at -3.3% (previous year: -1.0%). In the US, growth was down sharply at 1.6% (previous year: 3.1%).

The European Central Bank (ECB) expanded its accommodative monetary policy again and held its key rate in the euro area at a record low of 0% at the end of December 2016. The bond purchasing program will continue at least until December 2017 and by March 2017 monthly bond purchases should reach EUR 80 billion, with this figure falling to EUR 60 billion in April 2017. In the US, the headline rate was increased slightly to 0.75%, starting the process of monetary and interest rate policy normalization. The focus of the new US government with respect to economic and security policy remains to be seen.

---

<sup>1</sup> Cf. IMF World Economic Outlook Update, October 2016

The main foreign currencies for the Zeppelin Group are the U.S. dollar (USD), the Russian ruble (RUB), and the Ukrainian hryvnia (UAH). The U.S. dollar started 2016 at an exchange rate of 1.09 USD/EUR and, following a further drop in the value of the euro, it closed the year at 1.04 USD/EUR. The RUB/EUR exchange rate began the year at 78.50 and, following the continuous appreciation of the Russian ruble, it ended 2016 at 63.86 RUB/EUR. The exchange rate of the Ukrainian hryvnia fell from 25.54 UAH/EUR at the start of 2016 to 27.29 UAH/EUR at the end of the year.

## 2. Market Development

The development of the Zeppelin Group's key markets presented a mixed picture during the year under review:

The construction industry in Germany was marked by greater economic momentum in fiscal 2016. The average order backlog in the construction industry in December 2016 was 3.5 months (previous year: 2.8 months). The business climate in the main construction trades improved for the ninth time in a row in 2016 and is now at a record level. In the first 11 months of 2016, the total revenue of all businesses in the main construction trades increased by 6.8% over the previous year. According to estimates by the Ifo Institute, construction investments rose in 2016 by 3% compared to the previous year. This is mainly because of residential construction, which posted growth of 4%. Investments in public civil engineering and commercial civil engineering increased by 0.8% in 2016. Investments in structural engineering also rose considerably during the fiscal year, by 2.5% in both the commercial and the public sector.

Following a very successful start to the year and a successful "bauma 2016" trade fair, the German construction machine market saw strong growth over the rest of the year. A total of 31,569 units (previous year: 26,406) units were sold in Germany in fiscal 2016. The market value is estimated to be nearly EUR 2.2b (previous year: EUR 1.9b). Growth of the overall market (retail and rental) was 19.6% in 2016. Development was very successful in both the rental segment (first-time rental of new machines by rental companies), which saw an increase of 22.0%, and the retail market (end customers business), which saw an increase of 18.4%. At 67/33, the retail/rental split is now near the previous year level (previous year: 68/32). With a total of 4,574 units (retail), Zeppelin sold 931 more new machines in fiscal 2016 than in 2015, thus further expanding its leading market position.

The economic assessment of the Austrian construction industry was at an all-time high in December 2016. The index providing an assessment of its current situation rose to 18.2 points in December. The market for new construction machines in Austria fell slightly to 1,665 units (previous year: 1,745 units), but Zeppelin maintained its market share at the same level as the previous year. In the Czech Republic, construction fell by 2.3% in real terms in November 2016 compared to the previous year. Civil engineering increased by 8.0%, while structural engineering fell by 17.7%. In Slovakia, construction continued to



deteriorate in November 2016, falling by 11.1% year-on-year. Structural engineering declined by 9.1% and civil engineering by 12.2%. The market for new construction machines posted slight growth in 2016 in both the Czech Republic (2,350 units; previous year: 2,328<sup>2</sup>) and Slovakia (743 units; previous year: 710<sup>2</sup>). Zeppelin expanded its leading market position further in both countries.

The CIS countries continue to face a difficult market environment. The conflict between Russia and Ukraine is ongoing, with Western sanctions imposed against Russia, and the prices of oil and other commodities are at a relatively low level. The construction industry decreased by a total of 4.3% in Russia in 2016, while Ukraine once again posted growth, with an increase of 5.0%. The volume of the Ukrainian mining industry fell slightly in 2016, decreasing by 0.5%. In line with the general economic situation in the countries of the CIS, the market for new construction machines fell in Ukraine, Armenia and Tajikistan. The drop in Russia was 8.0%. Despite the difficult environment, Zeppelin expanded its market share slightly in the CIS countries.

The rental market in Germany, which is relevant for Zeppelin, posted slight growth of around 2% in 2016. Modest growth is also forecast for Austria. In the Czech Republic, the rental market normalized following a very dynamic year in 2015. Growth also slowed in Slovakia compared to the previous year.

The German market for diesel locomotives once again remained at a very low level in fiscal 2016. Nevertheless, Zeppelin was able to utilize its capacity well with existing orders in the area of specialized rail vehicles and series locomotives. Market growth in the energy sector remains strong thanks to Germany's energy transition. In the area of combined heat and power plants, there continues to be a lot of project activity. The development of the global shipping markets was mixed in 2016. Demand in the cargo ship market and in the offshore area remained stagnant, while demand for cruise ships continued to be positive. German shipping companies are still struggling with overcapacity, low cargo rates and a lack of financing. The market for oil and gas applications fell further as a result of low oil prices.

---

<sup>2</sup> Previous year figure adjusted; prior year for the period from January through September 2015.

Through November 2016, German mechanical engineering and plant engineering posted a slight decline of 1% in order entries compared to the previous year. Nevertheless, by the end of the year there was once again significant growth both domestically and abroad – in particular, in the euro area. As in the previous year, the development of the German chemical industry was somewhat mixed in 2016. Despite a difficult global economic environment, investments, capacity utilization and employment were stable. While production, adjusted for pharmaceuticals, was stagnant, sales fell by 3% as a result of declining producer prices. Sales at German manufacturers of plastics and rubber machines rose by 2% in 2016. Manufacturers of food processing and packaging machines posted an increase in order entries of 10% in the first seven months of 2016. This was mainly because of much higher incoming orders in February as a result of several major projects.

### **3. Development of the Zeppelin Group's Business**

#### **Development of Revenues and Orders**

Fiscal 2016 was a very successful year for Zeppelin. Despite the continuing challenging market conditions, the Zeppelin Group increased both its revenues and its earnings year-on-year in 2016.

Group revenues rose by EUR 33.2m, or 1.4%, to EUR 2.362b (previous year: EUR 2.328b). The share of revenue from foreign companies fell slightly to 41.2% (previous year: 43.9%).

The strategic business units of the Zeppelin Group that rent, sell, and service construction machines and engines saw their revenues increase in fiscal 2016 by EUR 88.0m, or 4.2%. In particular, revenues rose in the Construction Equipment EU business unit (up EUR 88.2m, or +7.3%) and the Power Systems business unit (up by EUR 24.6m, or +8.7%). Revenues decreased in the Plant Engineering business unit by EUR 65.7m (-20.1%), the Rental business unit by EUR 10.1m (-2.7%), and the Construction Equipment CIS business unit by EUR 8.6m (-2.8 %).

## Revenues by Strategic Business Unit

BREAKDOWN OF GROUP REVENUES (EURM)	2016	2015	CHANGE (%)
Construction Equipment EU SBU	1,205	1,123	7
Construction Equipment CIS SBU	299	307	-3
Rental SBU	363	373	-3
Power Systems SBU	307	283	9
Plant Engineering SBU	262	328	-20
SBU Z Lab	0	0	-
<b>Zeppelin GmbH Group (consolidated)</b>	<b>2,362</b>	<b>2,328</b>	<b>1</b>

In the 2016 fiscal year, a total of 15,502 machines and engines were sold, corresponding to an increase of 960 units or 7% year on year. Sales of new construction machines rose by 1,734 units (29%), while the number of used machines sold fell by 294 units (-6%), forklifts by 393 units (-30%) and engines by 133 units (-6%).

Order entries for all Group companies rose over the previous year (EUR 2.3b) to EUR 2.5b. At EUR 647.9m at year-end, the order backlog is also above the previous year (EUR 497.1m). Of this, EUR 271.4m is in the Plant Engineering business unit (previous year: EUR 226.8m).

## Workforce

At the end of fiscal 2016, personnel capacities were at the same level as the previous year. As at December 31, 2016, the Group employed 7,697 employees, of which 324 were trainees (previous year: 7,713/304). In the Construction Equipment EU and Plant Engineering business units, personnel capacities fell by 62 and 50, respectively, while they rose in the Rental and Power Systems business units by 37 and 22, respectively. At the end of 2016, the foreign companies of the Zeppelin Group had 3,260 employees, corresponding to 42.4% of the overall workforce (previous year: 43.8%).

Since 2015, Zeppelin GmbH has born the “berufundfamilie” quality mark, which is issued by berufundfamilie Service GmbH. In fiscal 2016, the decision was made to roll the 2017 “berufundfamilie” audit out to all German Group companies.

## Employees by Strategic Business Units

AT END OF YEAR	2016	2015	CHANGE (%)
Construction Equipment EU SBU	2,387	2,467	-3
Construction Equipment CIS SBU	1,623	1,627	0
Rental SBU	1,197	1,168	3
Power Systems SBU	785	763	3
Plant Engineering SBU	1,283	1,326	-3
SBU Z Lab	31	0	-
Trainees in the Group	324	304	7
<b>Zeppelin GmbH Group <sup>1)</sup></b>	<b>7,697</b>	<b>7,713</b>	<b>0</b>
Germany	4,437	4,335	2
Overseas	3,260	3,379	-4

<sup>1)</sup> incl. Zeppelin GmbH

## Information about the Quota for Women

In accordance with the "Equal Participation of Women and Men in Leadership Positions in the Private and Public Sector Act", Zeppelin GmbH has set targets for increasing the proportion of women on the Supervisory Board, on the Management Board and at the senior management level. Because of its holding function, there is only one management level below the Management Board at Zeppelin GmbH.<sup>3</sup> The target quota of women on the Supervisory Board is 8.33 %, the target for the Management Board remains unchanged at 0 %, and the target for the department manager level is 25 %. The target quotas are based on the contractual periods that extend beyond the reporting date June 30, 2017

## Important Activities During the Year Under Review

Organizing and managing the Zeppelin Group on the basis of strategic business units is the best way to respond to the growing differentiation of international markets and the steadily increasing demands of customers. The management organization of the business units is defined in terms of structure and personnel, and the Zeppelin Group-level management process is institutionalized in a clearly identified Group Management Board. The strategy meeting in September 2016 was dedicated to the key question: "Where will Zeppelin be in 2025?" The meeting focused on the issues of market leadership, technology and digital transformation. The meeting saw the genesis of the "We are Zeppelin" initiative, which is intended to improve collaboration and networking among the business units.

<sup>3</sup> The senior management level involves Zeppelin GmbH division managers.

The navigation tools that were defined for measuring achievement of the objectives as part of the GPS strategy (growth, performance and stability) remain unchanged. Zeppelin also continued to align its strategic focus closely and successfully with Caterpillar's "sow, cultivate, harvest" strategy in 2016. Zeppelin was a key contributor to the design of Caterpillar's global "Across the Table" initiative, whose fundamental rules and conditions for collaboration with retailers were set down back in 1926. The aim of the initiative is improved marketing and cooperation between Caterpillar and retailers in the interest of customers.

At the end of 2015, Caterpillar initiated restructuring measures and measures to reduce costs in order to take account of the difficult market environment at present as well as changed conditions. In the area of sales and service, a new organizational structure was set up, replacing the previous three regions with two: America and Europe on the one hand, and Asia-Pacific, Africa, the Middle East and Eurasia (CIS) on the other. The goal is to reduce operating costs by around 1.5 billion US dollars annually. Activities in Northern Ireland will be reorganized by closing a plant and merging sites. The Gosselies production location in Belgium, which mainly manufactures tracked excavators and medium-sized wheel loaders, will also be closed. In total, headcount will be reduced by more than 10,000. The largest reduction in headcount occurred in 2015; however, additional positions will be eliminated by 2018 through planned plant closures. Zeppelin anticipates that it will benefit from the new, leaner Caterpillar organization as well as new and innovative products.

At the same time, there will soon be changes to top management at Caterpillar. Current Chairman and CEO Doug Oberhelman will retire in March 2017. In January 2017, he handed over his post as CEO to Jim Umpleby, who was previously responsible for the Transport and Energy business area as a member of the Board of Directors. The role of Chairman of the Board of Directors will be assumed by Dave Calhoun.

At the Supervisory Board meeting on March 23, 2016, it was decided to convert the Zeppelin Group's accounting to IFRS (International Financial Reporting Standards). The Group Financial Statements will be prepared on the basis of IFRS for the first time on December 31, 2018. At the same time, the cost of sales method will be introduced for the Group Financial Statements. The projects started in April 2016 with corresponding kick-off events and they are now being implemented as scheduled.

The idea management program Z IDEA was launched on June 1, 2016, initially in Germany. The program allows employees to offer their ideas regarding procedures, products and solutions, occupational safety and environmental protection in a completely digital and transparent process. The idea management program will gradually be rolled out Group-wide and is based on the results of an employee opinion survey conducted in 2013.

In order to make a long-term and authentic contribution to environmental protection, Zeppelin GmbH decided in 2016 to introduce an energy management system based on DIN EN ISO 50001 and to have it certified. The certification process was completed successfully with the issuance of the certificate on December 19, 2016. The certificate is valid for three years and will be monitored on an annual basis by external auditors.

As the largest construction machine trade fair in the world, “bauma 2016” was the focus of the **Construction Equipment EU business unit**. With 2,666 units sold and total revenues of EUR 318 million, Zeppelin set a new sales record and beat the previous record set in 2013 at the trade fair, the leading trade fair for construction and building material machines, construction vehicles and equipment, and mining equipment. Of this total, the Construction Equipment EU business unit alone generated sales of new and used machines of EUR 292 million. The focus of the trade fair presence was innovation related to digital construction machine technology, which was presented to customers and business partners through virtual reality glasses, among other things. The high-performance product portfolio, which won customers over with its innovative technologies in the areas of fuel efficiency and productivity, was expanded to include the Underground Mining division for the first time. Zeppelin’s excellent advisory and service expertise was reflected at the trade fair in the established Cat Certified Rebuild and Cat Certified User programs.

In addition to “bauma”, the Construction Equipment EU business unit also successfully exhibited at the “EuroTier” trade fair in Hanover, the “Central Agricultural Festival” in Munich and “DeLuTa” in Bremen. The business unit also wowed customers with new and used compact Caterpillar machines, particularly in the wheel loader and mini-excavator segment, at the “GaLaBau” in Nuremberg and with solutions for economical and environmentally-friendly construction site development at “Nordbau” in Neumünster.

The rapidly growing digitalization of the economy and society is also increasingly apparent in the Construction Equipment EU business unit as well. In 2016, a planning tool for service employees in the field and in the office was implemented that structures resource planning and order processing much more efficiently.

Another area of technological progress is the first driver assistance system for Caterpillar tracked excavators. This new technology for semi-automatic bucket and boom control prevents unnecessary excess excavation of material and increases productivity as a result of the higher working speed. Another innovative product is the Zeppelin test rig for variator transmissions for XE series Caterpillar wheel loaders. This is the only test rig for the powerful XE drive in all of Europe, making it a USP for the Construction Equipment EU business unit.

The excellent collaboration with Caterpillar one again earned a number of awards in 2016. For example, as a sign of its quality, reliability and customer loyalty, Zeppelin Austria and Caterpillar were named “Business Superbrand Austria 2015-2016” by the independent Superbrands organization.

The **Construction Equipment CIS business unit** continued construction of its branch office in St. Petersburg during the year under review. Civil engineering work will begin in spring 2017. In total, Zeppelin will invest upwards of EUR 17.5m in the new location, which will also be used by the Power Systems business unit.

In addition, the business unit moved into its new head office in Green Wood Park in Moscow in spring 2016 and its new Krasnodar branch in summer 2016. The collaboration started with SAME DEUTZ-FAHR in 2015 in the agricultural machines sector in Russia was expanded steadily in 2016.

In Ukraine, the nearly total takeover of PJSC Ukrucukorteploizolyaciya laid the foundation for the establishment of a head office for that country. The company owns property in the greater Kiev region.

An important success for the business unit was the signing of an international agreement between China and Belarus that strengthens the construction and repair of highways in Belarus. As part of the related tender, Zeppelin received the contract for delivery of 40 SEM brand construction machines.

The largest individual order in the history of the Zeppelin Group was negotiated and concluded in the Armenia sales territory at the beginning of 2017. Mining equipment worth 65 million US dollars will be supplied to Lydian International and its subsidiary Lydian Armenia. Caterpillar machines will be used for the Amulsar project, a gold mine around 170 km south of the Armenian capital, Yerevan. This major order represents a milestone in the positioning of Zeppelin and Caterpillar in the Armenian market.

The **Rental business unit** furthered its collaboration with various product divisions in fiscal 2016 and optimized these in an effort to create added value at construction sites. For example, “construction logistics” and “electrical and energy” offer important opportunities for gaining access to customers for subsequent rentals and vice versa. This is done as part of an international partnership that also takes account of the central rental fleet available for Germany, Austria, the Czech Republic and Slovakia.

The online rental platform, which was introduced in 2016, offers registered customers in Germany the opportunity to book rentals online for the first time. With a view to the digitalization of its business models, the Rental business unit has laid the foundation for the future in this area as well. At the same time, this is supported by the technologies and processes that have already been implemented in the area of electronic inventory management and the dynamic pricing system, which allow us to achieve maximum availability and an attractive pricing structure – the key rental criteria for customers.

In May 2016, Fast Rent GmbH was established as a second brand with up to ten locations in North Rhine-Westphalia, focusing on rentals to small and micro-businesses in the gardening and landscaping, construction, development, refurbishment, renovation, and modernization segment with a standardized product portfolio. Lean transaction processes and a strong online focus combined with a target group-oriented offering of products and services appeal to a number of new customers.

In addition, the business unit took over the rental business of STAPLER-RENT 2000 GmbH with a rental fleet of around 500 machines, with a focus on telehandlers and industrial trucks, as of December 1, 2016. The business will be continued at three locations in Feldgeding near Munich, Bietigheim and Alpen (North Rhine-Westphalia) with a total of 33 employees, strengthening our competence in the rental of conveyor systems considerably.

In addition to organic growth, the Rental business unit also plans to make further acquisitions in 2017 to strengthen its market position. Limes Mobil AG, a traffic safety company based in Dorsten (North Rhine-Westphalia) was acquired as of January 1, 2017.

The market environment for the **Power Systems business unit** remains mixed. Continuing the trend from the previous year, demand for flexible energy solutions, such as highly efficient combined heat and power plants (CHP plants), was very positive in Germany. The trend toward decentralized power supplies for industry and municipalities continued. In the Czech Republic and Slovakia, there was increased project activity in the medium power range of gas engines. The Power Systems business unit in Germany functioned as a center of competence within the business unit.

In the area of emergency backup systems and critical power applications, orders were concluded in Germany and Russia. Similar projects were developed in Ukraine and Hungary on the basis of the experience gained in backup power systems at nuclear power plants in the Czech Republic,

The market for oil and gas applications is weak as a result of persistently low oil prices. However, the companies in Germany and Turkmenistan, working in close collaboration, managed to win a major project to provide generators for an oil platform.

The market for industrial engines, which is heavily influenced by exports, developed positively. Some large German manufacturers of agricultural and construction machinery saw above-average benefits from market growth. Based on tighter emission standards in 2019 and the availability of the new Caterpillar V series engines, the provision of future series was planned and prepared with major German original equipment manufacturers (OEM). In addition to industrial engines, drive train solutions and engine and transmission packages were offered to a greater extent in order to boost the range of applications and better meet increasing demand for complete solutions.

In the Marine segment, the Power Systems business unit posted high order entries for cruise ships. In contrast, overall global shipbuilding remained at a low level.



The diesel locomotive engine business remained below expectations. The OEM market in Germany and the Czech Republic was down, and the remotorization and new construction market in the countries of the CIS remained very restrained. Based on its high level of expertise in the locomotive engine business, the business unit qualified as a supplier for projects in other European countries.

The Zeppelin Power Systems location in Achim near Bremen has been expanded over the past several years. The expansion concluded with the commissioning of the new engine test bench in 2016. A total of around EUR 30 million has been invested in a state-of-the-art high-performance test facility, production halls, warehouses, and a new office building with its own training center. The expansion of the business unit as a complete systems provider in all segments will be continued.

The **Plant Engineering business unit** continued the positive upward trend from previous years in fiscal 2016. The significant increase in earnings despite lower sales underscores the progress made in the realignment of the business unit, which is also revealed by the very good figures for order entries in 2016.

The market in the Polyolefine Plants business area (plastics manufacturing equipment) was characterized by relatively few project awards. As a result, the market environment was very competitive. Order entries were down sharply in the US and China because of much lower demand. The good order backlog at the beginning of the fiscal year contributed substantially to the good utilization rate and thus the positive development of earnings.

Order entries, sales, and earnings in the Plastic & Rubber Plants business area (production equipment for the plastic, rubber and tire industry) were well above expectations. The development was also positive compared to the previous year.

The Food area fell short of its objectives. In addition to organizational adjustments, measures were initiated to improve marketing and order processing. The effectiveness of the focus and strengthening of sales activities was revealed in the second half of the year. Order entries rose sharply over the first six months of the year.

As part of the efforts to concentrate silo production at the Friedrichshafen location, production was suspended at Genk in Belgium in the first quarter of 2016. Following the structural adjustments that were implemented, Zeppelin Systems Benelux will continue as a service and sales company as the same location.

The strategic objective of developing new digital business models and bundling the related activities within the Group was carried out with the establishment of the new sixth **business unit, Z Lab**. The business unit develops cross-manufacturer digital business models that offer optimal complements to current business models, but which can also replace them to a certain extent. Startup Klickrent GmbH, which was established in 2014 and which operates a marketplace for renting and leasing a broad range of equipment based on the sharing economy model, will assume the role of lead company in the new business unit.

## 4. Results of Operations, Financial Position, Net Assets of the Zeppelin Group

The Zeppelin Group mainly judges its performance by means of three indicators: revenues, earnings before tax, and return on capital employed (ROCE).

Its overall operating performance rose by 2.3% year on year. The balance sheet total was up by 6.2%, mainly as a result of the increase in property, plant and equipment and financial assets as well as cash and cash equivalents. The equity ratio is 44.9% and also rose over the previous year (42.7%).

### Results of Operations

With revenues up by 1.4% (EUR 2.362b; previous year: EUR 2.328b) and a positive change in inventories (EUR 2.1m; previous year: EUR -17.1m), the overall operating performance increased to EUR 2.365b (previous year: EUR 2.312b). Other operating income amounted to EUR 84.5m and is EUR 4.7m, or 5.2%, lower than in the previous year (EUR 89.2m). This is due to lower currency exchange gains and returns of replacement parts, along with higher refunds and credits. If the Accounting Directive Implementation Act had been applied, revenues in the previous year would have been EUR 2.34b and other operating income EUR 99.9m.

The cost of materials rose at nearly the same rate as total operating performance, increasing by 2.4%, to EUR 1.630b (previous year: EUR 1.592b), as a result of which the material cost ratio is unchanged at 68.9% of the total operating performance (previous year: 68.9%). As a result, the gross profit<sup>4</sup> increased by EUR 14.7m (2.0%) to EUR 734.6m (previous year: EUR 719.8m).

Personnel expenses were EUR 441.4m, an increase of EUR 9.2m, or 2.1%, over the previous year (EUR 432.2m). Despite slightly lower personnel capacities, this is due to higher variable compensation components and general way and salary increases. The personnel expense ratio as a share of the total operating performance is unchanged at 18.7% (previous year: 18.7%).

Depreciation of intangible assets and property, plant, and equipment fell by EUR 3.5m to EUR 39.0m compared to the previous year (EUR 42.4m). The depreciation of tangible assets for rentals (rental fleet) increased to EUR 50.1m (previous year: EUR 46.1m). It is included in the cost of materials.

At EUR 230.7m, other operating expenses are at about the same level as the previous year (EUR 230.5m). Operating costs were EUR 53.3m, administrative expenses EUR 51.6m, sales-related costs EUR 59.5m, fleet costs EUR 21.4m, and additional staff costs EUR 11.4m.

---

<sup>4</sup> Revenues + changes in inventory and other own work capitalized / the cost of materials

The financial result improved by EUR 0.3m to EUR -19.5m (previous year: EUR -19.8m). The net interest result amounted to EUR -18.4m, EUR 1.9m less than the EUR -20.3m for the previous year. The primary reasons for this were lower interest expenses from interest rate swaps and the syndicated credit facility from Zeppelin GmbH. Investment earnings fell by EUR 2.3m to EUR -1.8m (previous year: EUR 0.6m), mainly as a result of the depreciation of shares in Energyst B.V. Earnings from associated companies were EUR 0.7m and relate to CZ LOKO a.s.f

The Group's earnings from operations before tax rose to EUR 85.9m (previous year: EUR 81.2m). The net operating margin amounted to 3.6% (previous year: 3.5%). The return on equity<sup>5</sup> before taxes amounted to 14.3% (previous year: 14.9%), while the total return on assets<sup>6</sup> was 7.8% (previous year: 8.0%). The ROCE<sup>7</sup> was 8.2% (previous year: 8.0%).

After deducting taxes on income and earnings of EUR 26.7m (previous year: EUR 25.0m), net income of EUR 59.1m (previous year: EUR 56.1m) was generated in the 2016 fiscal year. The 2016 tax ratio amounted to 31.1% (previous year: 30.9%).

## Result of Ordinary Operations by Strategic Business Units

BREAKDOWN OF GROUP RESULT IN EURK	2016	2015	CHANGE (%)
Construction Equipment EU SBU	42,573	40,212	6
Construction Equipment CIS SBU	21,819	28,624	-24
Rental SBU	23,467	13,683	72
Power Systems SBU	19,459	19,657	-1
Plant Engineering SBU	7,818	1,620	383
SBU Z Lab	-2,690	0	-
<b>Zeppelin GmbH Group (consolidated)</b>	<b>88,537</b>	<b>84,166</b>	<b>5</b>
Thereof, foreign companies	46,923	54,702	-14

## Financial Position

The financial demands on the Zeppelin Group are defined by long-term fixed assets (including a large rental fleet), which account for around 38% of net assets, and other stocks and receivables needed in order to trade in construction equipment and other high-value capital goods, which have relatively high turnover.

<sup>5</sup> Earnings before tax / (equity in previous year + equity in year under review) / 2

<sup>6</sup> (Earnings before tax + interest expenses) / (balance sheet total of previous year + balance sheet total of year under review) / 2

<sup>7</sup> Earnings before taxes and interest (working capital + fixed assets + off-balance assets [in each case, the average of the last four quarters])

Taking account of positive currency translation differences of EUR 7.4m, which improved largely as a result of changes in the exchange rates for the Russian ruble and the US dollar compared to the previous year (EUR -4.9m), the Zeppelin Group equity increased by EUR 67.1m to EUR 633.4m in fiscal 2016 (previous year: EUR 566.3m). With net assets rising by 6.2% to EUR 1.41b, the equity ratio increased to 44.9% (previous year: 42.7%). As of the balance sheet date, the total long-term assets amounted to EUR 989.6m (previous year: EUR 973.9m) – comprising equity (EUR 633.4m), pension accruals (EUR 106.2m) and other long-term provisions (EUR 21.8m) as well as liabilities to banks and institutional investors due to be liquidated in more than one year (EUR 228.2m) – and thus exceeded the fixed assets and the portion of current assets that are tied up on a long-term basis, which together amounted to EUR 553.1m (previous year: EUR 499.3m) by EUR 436.5m (previous year: EUR 474.6m). They therefore also covered 116.0% of the Zeppelin Group's inventories. The increase in long-term assets is due to the increase in equity (EUR +67.1m) and the simultaneous reduction in liabilities to banks and institutional investors with a future benefit exceeding one year (EUR -50.9m) as a result of the maturity of bonded loans in 2017.

The short-term provisions and liabilities as of December 31, 2016 amounted to EUR 411.5m (previous year: EUR 345.2m), up EUR 66.2m. They mostly consist of trade liabilities amounting to EUR 82.3m (previous year: EUR 60.8m), liabilities to banks amounting to EUR 72.9m (previous year: EUR 36.9m), tax and other provisions of EUR 168.8m (previous year: EUR 168.7m) as well as down payments received and other liabilities of EUR 87.5m (previous year: EUR 78.9m). Short-term liabilities to banks rose by EUR 36.0m (in part due to the maturity of bonded loans) and trade liabilities increased by EUR 21.5m over the previous year.

At the end of 2016, a syndicated credit facility that was originally taken out in 2011 and extended early in 2015 was available to the Zeppelin Group as a major financing instrument. The term of the syndicated credit facility is five years, plus an option to extend it by one year on two occasions (5+1+1 term). The syndicated credit facility is available for cash drawdowns (EUR 375m) and for providing guarantees (EUR 125m). As of the end of 2016, EUR 203.5m (including EUR 99.1m for guarantees), or 40.7% (previous year: 40.6 %) had been utilized. In addition, at the end of 2016 the Zeppelin Group had additional bank credit lines of up to EUR 57m, of which it utilized EUR 8.3m. An ABS (asset-backed securities) program with EUR 25m in funding and current Group cash and cash equivalents continue to be available as other sources of financing.

Furthermore, the Zeppelin Group finances itself over the long term through the issuance of bonded loans. At year-end, the total volume of outstanding bonded loans was EUR 186.5m. The Group again adhered to the financial covenants that were agreed and determined on the basis of its financial data in connection with the syndicated credit facility and bonded loans in 2016. In August 2016, Creditreform Rating AG increased the rating of the Zeppelin Group from "BBB+" to "A-" with a stable outlook. The positive assessment by the rating agency is based on the Group's market position, its financial strength, the development of its key financial ratios and the future-oriented nature of Zeppelin's operational business.

The companies of the Construction Equipment EU, Construction Equipment CIS and Power Systems business units continued to have access to extensive credit facilities at Caterpillar Financial Services and other sales financing and leasing companies in order to finance sales in Germany and abroad. In addition, it also uses asset leasing to finance vehicles as well as IT hardware and software, but the trend is expected to decrease. The extensive investments in the rental fleets in fiscal 2016 were financed from current cash flow and debt recognized in the balance sheet.

The additions to the Group's assets of EUR 170.2m (including EUR 109.0m in rental assets) were offset by depreciation of EUR 90.9m in the year under review (of which EUR 50.1m were on the rental fleet, contained in material expenses), which thus covered 53.4% of the capital expenditures made (previous year: 47.9%). The total investments fell, mainly as a result of the decrease in rental assets (EUR -24.0m) by EUR 14.5m.

### Development of Group Investments (on-balance sheet)

EURK	2016	2015	2014	2013	2012
Intangible assets	9,889	16,712	14,886	14,461	14,302
Property, plant and equipment	149,127	167,290	139,475	99,580	145,628
Land and buildings	11,073	5,841	4,632	6,927	7,740
Plant, machinery and operating and business equipment	19,495	15,039	15,120	20,767	24,688
Rental assets	108,969	132,966	108,929	63,405	102,862
Down payments made and assets under construction	9,591	13,444	10,794	8,481	10,338
Financial assets	11,190	743	2,900	4,167	510
<b>Total investments <sup>1)</sup></b>	<b>170,207</b>	<b>184,745</b>	<b>157,261</b>	<b>118,208</b>	<b>160,440</b>
<sup>1)</sup> Additionally: changes to the group of consolidated companies	0	-5,829	1,471	76	-3,225

The net cash flow of the Zeppelin Group fell by EUR 2.3m, or 1.3%, compared with the previous year to EUR 179.1m (previous year: EUR 181.4m). The cash flow ratio<sup>8</sup> was 7.6% of revenues (previous year: 7.8%).

## Net Assets

The net assets of the Zeppelin Group increased in the 2016 fiscal year by EUR 82.7m (6.2%) to EUR 1.41b (previous year: EUR 1.33b). This was because of the increase in fixed assets of EUR 42.9m (previous year: EUR 49.8m) and cash and cash equivalents of EUR 44.1m (previous year: EUR 4.1m). Receivables and other assets rose by EUR 16.3m, while inventories fell by EUR 18.7 (previous year: EUR 21.6m).

The asset structure of the Group Balance Sheet changed compared to the previous year as follows: The share of fixed assets (EUR 535.5m) rose to 38.0% from 37.1%. At the same time, the share of inventories (EUR 376.3m) fell to 26.7% (previous year: 29.8%) and the share of receivables, prepaid expenses and deferred income and other assets (EUR 327.2m) fell to 23.2% (previous year: 23.6%). The share of cash and cash equivalents rose to 12.1% (previous year: 9.5%) .

## Breakdown of Group Assets, Equity and Liabilities

	ASSETS IN 2015	ASSETS IN 2016	EQUITY AND LIABILITIES IN 2015	EQUITY AND LIABILITIES IN 2016	
<b>Net assets (EURm)</b>	<b>1,327</b>	<b>1,410</b>	<b>1,327</b>	<b>1,410</b>	
Intangible assets, property, plant and equipment, investments	37.1%	38.0%	42.7%	44.9%	Equity
Inventories	29.8%	26.7%	8.2%	7.5%	Pension provisions
Receivables, prepaid expenses and deferred income, other assets	23.6%	23.2%	23.0%	18.2%	Other long-term provisions and liabilities
Cash and cash equivalents	9.5%	12.1%	26.1%	29.3%	Short-term provisions and liabilities

<sup>8</sup> Net cash flow/revenues

At 1.7 p.a., the capital turnover is slightly below the previous year (1.8 p.a.). The calculated collection period for trade receivables increased as of the balance sheet date to 44 days (previous year: 42 days).

Apart from the balance sheet assets, the companies of the Zeppelin Group leased assets (motor pool, computer hardware and software) and machines for the rental fleet for a total of EUR 217.7m (previous year: EUR 212.9m), of which EUR 183.1m (previous year: EUR 179.1m) was from rental fleets.

### **Comparison of Current Situation with Forecast**

Revenues increased slightly in fiscal 2016 compared to the forecast from the previous year, due in particular to the Rental and Construction Equipment EU business units. Earnings before taxes as of December 31, 2016, rose sharply over last year's forecast. The main contribution here came from the Construction Equipment EU business unit. The Construction Equipment CIS, Rental, and Power Systems business units also posted much better earnings than what had been forecast, while the Power Systems business unit was unable to achieve the expected earnings before taxes. The ROCE was slightly higher than forecast.

The net income of Zeppelin GmbH was EUR 58.4m higher than last year's forecast. This is mainly due to higher income from investments and profit transfer agreements.

## **5. Results of Operations, Financial Position, Net Assets of Zeppelin GmbH**

### **Results of Operations**

In 2016, Zeppelin GmbH's revenues increased by EUR 1.3m to EUR 25.8m (previous year: EUR 24.5m). This was mainly due to an increase of EUR 0.6m in revenues from leases for properties and buildings within the Group (EUR 16.9m) and an increase in services of EUR 0.4m (EUR 6.8m).

Other operating income amounted to EUR 2.2m, rising by EUR 1.2m compared with the previous year (EUR 1.1m). The revision of the BilRUG resulted in an effect of EUR 0.5m. Cost allocations (EUR 0.5m) rose by EUR 0.4m and the reversal of provisions and accruals increased by EUR 0.3m (EUR 0.9m).

Investment earnings are EUR 60.0m (previous year: EUR 54.3m), up EUR 5.7m. This is mainly due to higher dividend distributions and earnings from profit transfers.

At EUR 16.7, personnel expenses rose over the previous year (EUR 13.5m), mainly as a result of greater personnel capacities, higher variable compensation components, general



increases in wages and salaries, and personnel changes.

Amortization of intangible assets and depreciation of property, plant and equipment came to EUR 6.6m, slightly below the level from the previous year (EUR 6.9m).

Other operating expenses in the amount of EUR 13.7m rose by EUR 0.1m compared to the previous year (EUR 13.6m). Administrative costs (EUR 4.2m) rose as a result of higher advisory costs of EUR 0.9m and other expenses increased by EUR 0.9 (EUR 3.7m) as a result of various services. Neutral expenses (EUR 1.8m) rose by EUR 0.3m as a result of higher losses on disposals of property, plant and equipment and additional staff costs (EUR 0.4m) increased as well, up by EUR 0.3m because of an increase in temporary help. In contrast, operating costs (EUR 1.9m; previous year: EUR 4.3m) fell as a result of the reclassification of maintenance and repair costs for buildings and IT costs included in the cost of materials fell by EUR 2.4m. Sales costs amounted to EUR 1.5m (previous year: EUR 1.4m).

The net interest result – excluding income from loans classified as fixed financial assets – amounted to EUR -8.8m in 2016 and improved by EUR 1.2m on the previous year. This is mainly due to lower interest expenses from interest rate swaps as well as the syndicated credit facility.

Earnings before tax increased to EUR 67.1m (previous year: EUR 64.0m), which is attributable, among other things, to higher income from profit transfers and income from investments.

The net income is EUR 58.4m (previous year: EUR 55.5m). This figures includes taxes on income and earnings of EUR 8.7m (previous year: EUR 8.6m).

A regular dividend of EUR 7.0m and a special dividend of EUR 3.0m for the 2016 fiscal year will be proposed to the shareholders, with the remaining profits that are not retained of EUR 330.9m being carried forward to new account.

## Financial Position

The financial strategy is derived from the corporate purpose of Zeppelin GmbH (the holding of participations, rental of land, buildings and technical equipment owned by the company to affiliated companies and the financing of the Group). The long-term commitment of funds to property, plant and equipment and financial assets (67.4 % of assets) should correlate as far as possible with matching financing on the liabilities side of the balance sheet. Here, the creation of equity from retained profits is an important source of funding.

The equity of Zeppelin GmbH has increased to EUR 542.2m (previous year: EUR 490.8m) because of the net income for the year and amounts to 61.4% of net assets (previous year: 56.9%). The long-term funds come to EUR 212.2m (24.0% of net assets) and consist of

accruals for pensions (EUR 32.6m), liabilities to banks (EUR 179.5m)<sup>9</sup> as well as other liabilities (EUR 0.1m). Current funds consist of liabilities to banks (EUR 68.7m)<sup>10</sup>, trade liabilities (EUR 3.0m), liabilities to affiliated companies (EUR 33.6m, mainly from investing affiliated companies' funds and cash-pooling) as well as other liabilities (EUR 13.1m).

Zeppelin GmbH invested EUR 34.7m in fiscal 2016 (previous year: EUR 16.1m). Of this figure, EUR 9.4m was attributable to property, plant and equipment and EUR 23.0m to financial assets. Write-downs amounted to EUR 8.2m (previous year: EUR 6.9m). Of this amount, EUR 1.5m was for a write-down on an investment.

### **Net Assets**

The assets of Zeppelin GmbH mainly consist of participations amounting to EUR 432.3m (previous year: EUR 410.8m) as well as land, buildings and assets under construction of EUR 109.3m (previous year: EUR 114.9m). These assets therefore account for 61.4% (previous year: 60.9%) of net assets, which have increased to EUR 882.5m (previous year: EUR 863.1m). Receivables from affiliated companies fell by EUR 34.2m to EUR 151.5m (previous year: EUR 185.7m). At the same time, credit balances at banks rose by EUR 35.7m to EUR 128.8m. The long-term assets of EUR 597.7m (previous year: EUR 580.0m) were matched by long-term liabilities of 754.4m (previous year: 801.0m) as of December 31, 2016. The latter mainly consist of equity, accruals for pensions and long-term liabilities. Long-term asset coverage fell from 138.1% to 126.2%, mainly as a result of the maturity in 2017 of bonded loans in the amount of EUR 67.0m.

Investment in property, plant and equipment amounted to EUR 9.4m (previous year: EUR 10.8m). Of this amount, EUR 9.2m (previous year: EUR 10.6m) related to land, buildings, equipment and assets under construction, which are rented to investment companies. This mainly involves investments in properties and buildings that are leased to Zeppelin Rental GmbH & Co. KG and Zeppelin Baumaschine GmbH.

---

<sup>9</sup> This figure includes EUR 119.5 in bonded loans, of which EUR 59.5m was subscribed by institutional investors.

<sup>10</sup> This figure includes EUR 67.0m in bonded loans.

## C. Opportunity and Risk Report

### 1. Risk Report

#### General Aspects

As an internationally active corporate group, Zeppelin is exposed to various risks. In particular, macroeconomic and industry-specific risks, performance-related, personnel-related and financial risks must be taken into account. The risks presented below apply equally to Zeppelin GmbH and the Zeppelin Group.

#### Macroeconomic and Industry-Specific Risks

Because of the broad range of countries, industries and business models in which the Zeppelin Group is active, the macroeconomic and industry-specific risks are broadly distributed.

Zeppelin is one of the largest dealers selling Caterpillar construction and mining equipment as well as engines. Although the dealership agreement between Caterpillar and Zeppelin can be terminated at relatively short notice, no substantial risk is seen here because of the extremely successful partnership between the two companies for more than 60 years. Zeppelin is also the market leader in leasing a broad array of construction machines and equipment, including complementary products and services in the relevant markets. In its target industries, including construction, energy, and shipping, there is some risk of defaults on receivables, which is countered by effective receivables and credit management. Appropriate account is taken of existing currency risks through currency hedging activities and proactive currency management.

Most of the markets served by the Plant Engineering business unit are outside Germany. Since acquiring the Reimelt-Henschel Group in 2009, Zeppelin has increased its activities in global food production markets, which are less subject to cyclical fluctuations. In order to reduce its risks from defaults on receivables, the Group concludes agreements regarding down payments and interim payments as well as collateral. In order to protect itself against economic and political risks, the Group takes advantage of German government-backed trade export credit guarantees.

#### Performance-Related Risks

Caterpillar's delivery capacity and ability to deliver on time is the main risk to performance. Zeppelin and Caterpillar work together to continuously increase availability, for example, by making logistical improvements, maintaining inventories in interim storage facilities, and preconfiguring machines. In order to ensure delivery, it also maintains sufficient inventories to balance out delivery bottlenecks and delays.

The risks are further minimized through international collaboration and management by

strategic business units and inventory optimization.

### **Personnel Risks**

Increasing the visibility and attractiveness of Zeppelin as a potential employer continued to be the focus in fiscal 2016. To this end, the Group's career site was thoroughly revised to make it more appealing in terms of both content and design. The Group also launched Talent Link, a candidate management system, in all German Group companies as well as at Zeppelin Österreich GmbH. This meant that processes were standardized and the external image was made more transparent and more attractive.

At "bauma 2016", the most important trade fair for the Group, the Zeppelin Group presented itself as a multifaceted employer. As part of the "Think Big!" initiative, students and managers interested in the Group learned more about Zeppelin as an employer. The students learned more about technical careers in the "Werkstatt live" presentation and had the opportunity to speak with Zeppelin Group trainees. The visit by Federal Minister for Economic Affairs Sigmar Gabriel to the Zeppelin training booth is particularly worth noting.

Once again in 2016, top performers and individuals with potential received targeted support through a total of four Group-wide development programs, networking with one another across SBUs and national borders. Junior staff received support as part of technical and commercial training programs as well as the dual education program.

The first Group-wide works council day was held in October 2016. A total of 64 members of the works councils from all strategic business units in Germany and Austria were invited to meet with the Chairman of the Management Board and the Labor Director of Zeppelin GmbH as well as the heads of Group HR and Group HR Development to discuss strategically important HR-related issues and provide direct feedback on various topics.

Z IDEA, the new idea management system, gives Zeppelin employees the opportunity to submit ideas as well as to make comments on them, evaluate them and follow the results of ideas that have been submitted directly via a digital process. The implementation of the system is one result of the employee opinion surveys that are conducted regularly.

Digital change is leading to major changes in the world of work – in terms of work activities, collaboration and employee management. Initiatives to ensure improved information and communication have been launched to support employees with these changes and make them active participants in the process.

### **Financial Risks**

Financial risks are limited by, among other things, maintaining a solid capital base and through long-term Group financing. In 2016, the Zeppelin Group's equity ratio was 44.9% (previous year: 42.7%). In addition, Zeppelin GmbH and its German subsidiaries also have access to long-term financing from pension accruals in the amount of EUR 106.2m.

The Zeppelin Group's financial leeway at any time is also primarily ensured by the syndicated credit facility that was set up in 2011 and then extended early in 2015. This syndicated credit facility has a maximum term until 2022. In addition, in order to diversify its outside sources of capital, the Group issues bonded loans and makes use of sales financing via several specialized institutions, and an ABS (asset-backed securities) program. Extensive credit facilities are also available for sale-and-leaseback transactions, especially for financing the rental fleet.

At EUR 226.5m, the proportion of long-term liabilities to banks and institutional investors in the Zeppelin Group fell to 75.6% (previous year: 88.3%) in relation to total liabilities and to 16.1% (previous year: 20.9%), mainly as a result of the maturity of bonded loans in 2017 (EUR 67.0m in bond loans are due within one year as of December 31, 2016). All drawdowns under the syndicated credit facility are classified as long-term.

In accordance with the Zeppelin Group's financial strategy of hedging a large share of its average financial liabilities against interest rate risks, the Zeppelin Group makes use of interest rate swaps. Zeppelin GmbH took advantage of the historically low interest rate environment, concluding interest rate hedges that begin in 2017 and 2018 for future drawdowns under the syndicated credit facility as well as for future bonded loans. These hedges expire in 2023, 2024 and 2025. These transactions provide the Group with long-term protection against the risk that rates will rise again. The Zeppelin Group's business activities in emerging markets and developing countries expose it to currency risks. To contain them, cash flows in other currencies from individual transactions or projects are hedged with currency forwards and futures. In addition, the Zeppelin Group limits currency risks by financing its subsidiaries in emerging economies and developing countries in local currencies and by employing sophisticated asset management techniques. For monitoring currency risks, the Zeppelin Group operates a value-at-risk limit system that is integrated in the Group-wide treasury management system and continuously monitored with action areas being highlighted. Consistent risk management and the lower volatility of the Russian ruble and Ukrainian hrywnja once again reduced foreign currency losses significantly in 2016. Additional information regarding interest rate changes and currency risks is included in Section VI. of the Notes to the Group Financial Statements.

At EUR 3.2, or 0.14% of revenues, the default rate by external customers for all Group companies was below the figure for the previous year, which was EUR 7.6m, or 0.33% of revenues. This was influenced by a few large insolvencies. The low figure of 0.14% of revenues confirms the success of the measures in the area of credit checks and claims management. Corresponding risks were also prevented by collaborating extensively with sales financing companies and securing down payments from customers for projects and plants.

To protect itself against the financial consequences of large liability risks and substantial damages when it bears limited risks, the Group takes out insurance policies. Special attention is paid to claims management and the related prevention of claims through precautionary measures. Within the scope of an international insurance management

system, coverage is continually monitored and adjusted as required. In addition, insurance coverage is centrally coordinated and managed for the entire Group. The real estate investments in Russia underway in St. Petersburg were insured against political risks by obtaining German government-backed guarantees for direct investments in other countries.

## **Risk Management System**

As a global company, the Zeppelin Group is exposed to various risks. The Zeppelin Group counters these risks and meets the applicable operational, market-related and legal requirements with a comprehensive risk management system. Risk management is an integral part of the Group's business and decision-making processes and serves to identify, quantify, and report risks at an early stage. The goal is to counter the risks that have been identified and to avoid risks that jeopardize the survival of the Group.

The key feature of the risk management system is an in-depth planning and reporting system, the aim of which is to ensure that all risks are identified. All managers are involved in the identification, analysis and evaluation of risks. Countermeasures to avoid or reduce risks are initiated as needed.

The quarterly reporting system comprises the assessment of the identified risks according to their magnitude and likelihood of occurrence based on 12 risk categories and documents the countermeasures taken and their effectiveness over time.

An ad-hoc risk reporting process ensures that adequate measures are initiated in a timely manner if material risks occur. In addition, the established Risk Panel ensures that all risks are monitored and the appropriate measures taken.

At Zeppelin, country-specific risks are evaluated on the basis of established country risk reports. The management team and risk manager in every country in which Zeppelin is active have access to a report with information about economic, political and business area-specific risks. This information also serves as the basis for controlling and the initiation of adequate measures to avoid risks.

In 2016, the Group auditing department conducted several standard audits. These audits were primarily carried out in the Group's operating companies Zeppelin Baumaschinen GmbH (two audits), Zeppelin Rental Österreich GmbH & Co. KG, BIS Inspection Service GmbH and Zeppelin GmbH (three audits). There were also seven follow-up audits at Zeppelin Baumaschinen GmbH, Zeppelin SK s.r.o., Zeppelin Systems GmbH, Zeppelin Rental Österreich GmbH & Co. KG and Zeppelin GmbH as well as additional fraud and compliance checks. Under the supervision of the Group auditing department, the "Kulturdialog" interdisciplinary project was launched in the Power Systems business unit in fiscal 2016. The project involves an examination of the business unit's non-financial areas – strategy, risk management, organization and culture.

## Assessment of Risk Categories

The above-mentioned risk types are contained in the following four risk categories:

- Asset risks (inventories / stocks, receivables, risks to the rental fleet)
- Currency risks (currency transaction and translation risks)
- Contractual risks (risks of breach of contract, warranty risks, risks in connection with agreements with financing companies, so-called rental purchase options)
- Financial risks (order backlog risks, sales risks, fiscal risks, market-related earning risks, other risks)

A matrix is used to assess risks in terms of their probability of occurrence and their potential impacts on earnings. The definitions used are explained below.

## Definitions

### Degrees of Impact

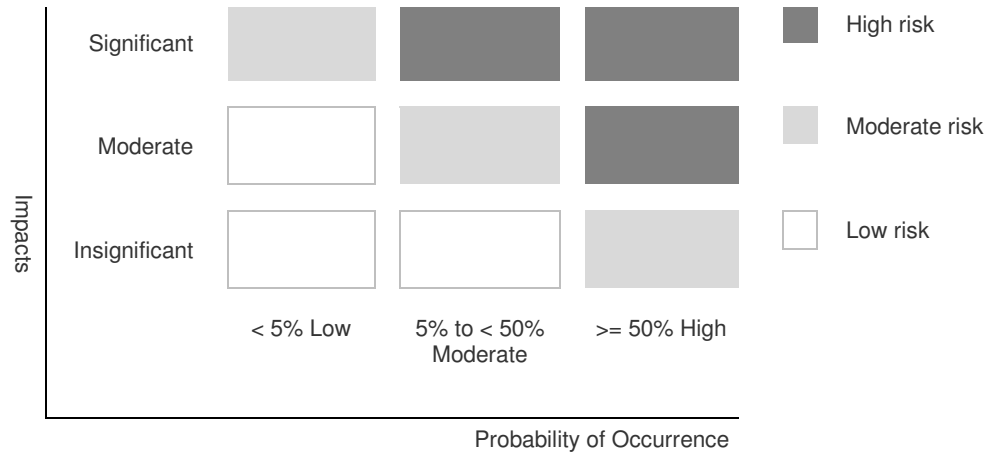
DEGREE OF IMPACT	DEFINITION OF IMPACT
Insignificant	Only insignificant, limited negative impacts on the earnings situation (net losses < EUR 10m <sup>1)</sup> )
Moderate	Some negative impacts on the earnings situation (net losses >= EUR 10m and < EUR 20m <sup>1)</sup> )
Significant	Considerable negative impacts on the earnings situation (net losses < EUR 20m <sup>1)</sup> )

<sup>1)</sup> Per risk category

### Probability of Occurrence

PROBABILITY OF OCCURRENCE	Description
< 5%	Low
5% to < 50%	Moderate
>= 50%	High

### Evaluation Matrix





## Relative Importance of Risk Categories

RISK CATEGORY	RISK OF OCCURRING	IMPACT ON EARNINGS <sup>1)</sup>	RISK ASSESSMENT
Asset risks	Moderate	Insignificant	Low
Currency risks	N/A	Insignificant	Low/moderate
Contractual risks	Low	Insignificant	Low
Financial Risks	Moderate	Insignificant	Low

<sup>1)</sup> Per risk category

## Overall Assessment of the Risk Situation

The risk management system that has been implemented is an integral component of the business processes and ensures that control mechanisms and measures to avoid and reduce risk are effective.

The Group's management controlling department and risk panel continuously monitor the risk reporting system and take steps to keep improving the quality of risk management, which is checked and assessed by the auditor each year to ensure that it is being properly and effectively practiced.

No risks that could endanger the continued existence of Zeppelin GmbH or its subsidiaries existed during the year under review, nor are any such risks now discernible for the future.

## 2. Opportunities

Actively searching for and taking advantage of opportunities while simultaneously weighing the associated risks is a key task of entrepreneurial activity and thus also of the management of Zeppelin GmbH and all its subsidiaries. The goal is to strengthen and further expand Zeppelin's position as one of the leading and outstandingly successful providers of forward-looking solutions in the areas of construction equipment, rentals, construction logistics, drives and energy, plant engineering and new digital business models across Zeppelin's competencies.

Exclusive rights to sell and service capital goods from major and market-leading, suppliers enable Zeppelin to tap potential in the relevant markets even more effectively. Predominantly nationwide sales and service organizations in those countries, very well trained, motivated, and loyal managers and staff, and a stable long-term financial base will enable Zeppelin, in combination with a high level of innovation, to continue to take advantage of these opportunities in the future as well.

Zeppelin acquired additional properties, buildings, machines, and employees in the established Ostrava (Czech Republic) location from Caterpillar in 2016. This resulted in a significant expansion of the service portfolio for underground mining as well as the Group's other business units, which will enable us to continuously expand business relationships with customers and increase the value chain within the Group. The competence center established by Zeppelin in 2013 will continue to push forward with the consistent expansion of the operational business in surface and underground mining equipment. An international team is driving the integration of the area and marketing forward. The competence center will permit the know-how of mining experts to be concentrated and developed within the company to strengthen Zeppelin's position in surface and underground mining.

With the acquisition of the rental business from STAPLER-RENT 2000 GmbH, the Rental business unit expanded its product offering by around 500 forklifts, rough-terrain and telescopic forklifts as well as warehouse equipment in 2016. STAPLER-RENT 2000 GmbH brings a strong team with existing customer contacts that will provide Zeppelin Rental with further access to local customers in the area of conveyor systems and in the industrial and event services segment.

All existing business models at the Zeppelin Group will also gradually be digitalized over the next three years. Customers will thus be able to process their transactions with Zeppelin completely digitally. Digitalization will make it much easier to handle current processes and will create the resources for more consulting-intensive businesses. In the future, the two models – digital and analog – will work hand in hand to ensure the success of Zeppelin as a company. In total, the Zeppelin Group will invest a mid-double-digit million euro amount in the digitization of new and existing business models over the next five years.

### **3. Compliance**

Compliance at Zeppelin is based on the conviction that social responsibility, observance of the law, and ethical conduct are essential for long-term business success. Complying with legal requirements, official regulations, and internal corporate guidelines is a key part of Zeppelin's management and corporate culture. The Zeppelin Group joined the UN Global Compact in 2016 underscoring its clear commitment to human rights and sustainable corporate management.

The Zeppelin Group's code of conduct is the cornerstone of its compliance program. Employees can contact the internal compliance organization via the Zeppelin Intranet or a special email address. Alternatively, external lawyers also act as contacts. Regular compliance training is supplemented with a multilingual compliance e-learning program. Individual compliance workshops have been conducted for an expanded group of managers in collaboration with the Konstanz Institute of Corporate Governance (KICG) at Konstanz University.

The Zeppelin Group's compliance program was strengthened further by expanding compliance management within the strategic business units. The compliance officers and employees responsible for implementing the program receive special training on an ongoing basis to train and qualify them for their roles. The compliance officers responsible for the strategic business units have been certified for this position.

## D. Forecast

According to the assessment of the International Monetary Fund, the global economy should see GDP growth of 3.4% in 2017. GDP growth of 1.5% is expected in the euro area and 1.4% in Germany, with both figures slightly below their 2016 levels. In the US, GDP is forecast to grow by 2.2%. In Russia, GDP is expected to grow slightly again by 1.1% in 2017. The sanctions imposed by the US and the European Union against Russia and the corresponding response remain unchanged. The economy in Ukraine has stabilized to such an extent that GDP growth of 2.5% is expected in 2017. Economic growth in the Czech Republic and Slovakia is expected to be 2.7% and 3.3%, respectively, in 2017.<sup>11</sup>

Global economic performance in 2017 will be affected by, among other things, the future economic and foreign policy of the new US Administration. The ongoing financial and sovereign debt crisis in Europe as well as the departure of the UK from the European Union (Brexit) are other major factors. Important elections are to be held in France in April and in Germany in September this year, which could also result in changed circumstances. Prices for oil and commodities remain at low levels.

The development of Zeppelin's core markets will vary in 2017. According to the Ifo business survey, the German construction trades are very confident going into 2017. The survey results regarding the business outlook for the next six months are at a record level. The Verband Deutscher Maschinen- und Anlagenbau (VDMA) and most construction equipment dealers expect the market to remain at a very high level in 2017. Sales of construction equipment are expected to be high and good utilization of services and the rental fleet is anticipated. Growth of around 1.9% is forecast for the rental market in Germany in 2017 by the European Rental Association. Expectations for the construction machine market in Austria are at about the same level as in 2016 and are primarily driven by impending replacement investments. The rental market in Austria will likely grow by around 3.9% in 2017, mainly in the area of conveyor systems, including structural engineering cranes. The Czech Republic is expected to see only a small increase in construction, while the forecast for the construction industry in Slovakia is continued modest growth. The rental market in both countries continues to offer growth potential. The construction industry in Russia should continue to see slight growth in 2017. It is anticipated that the sale of new construction equipment will also pick up again in 2017. Further growth of the construction industry is also expected in Ukraine, with a simultaneous slight decline in sales of new

---

<sup>11</sup> Cf. IMF World Economic Outlook Update, October 2016

construction equipment.

No major momentum is expected in the Marine and Oil and Gas segments in 2017. Continued growth is also anticipated in the energy sector over the next year.

Stable demand for production equipment in the areas of plastic, rubber and food is forecast for the Plant Engineering business unit in 2017. However, there is no discernible growth momentum in the relevant markets of China, the Middle East, Russia, and South America.

The planned investments in the establishment of the new Z Lab business unit, the digital transformation of the current business models, and SAP will have a negative impact on results over the next three years. However, these steps are strategically necessary and will strengthen our competitiveness over the long term and ensure our future viability. In addition, the planning assumptions and scenarios for fiscal 2017 also take sufficient account of risk aspects for potential and foreseeable negative factors.

As a result, the Zeppelin Group is planning for a sharp decline in earnings before taxes in fiscal 2017 with revenue at the same level as the previous year. The return on capital employed (ROCE) is forecast to be slightly lower than the figure for the year before. Because of the aforementioned uncertainties, the profit planning for Zeppelin GmbH, which anticipates that the net profit will be down sharply, is correspondingly restrained.

By the end of 2017, personnel capacities, including trainees, should increase to just under 8,000. The investment plan for 2017 includes EUR 88.6m in measures (excluding rental fleets). Another EUR 145.8m is to be invested in rental fleets.

Expenses for the establishment of the new Z Lab business unit and the transformation of the current business models will have a corresponding impact on earnings.

## **E. Proposed allocation of profits**

The Management Board proposes distributing a regular dividend of EUR 7.0m and, with a view to the very good economic performance of the Group, a special dividend of EUR 3.0m for fiscal 2016 from the net retained profits of Zeppelin GmbH of EUR 340.9m and carrying EUR 330.9m forward to new account.

Friedrichshafen, February 28, 2017

The Management Board of Zeppelin GmbH

Peter Gerstmann

Michael Heidemann

Christian Dummler

# GROUP BALANCE SHEET AS OF DECEMBER 31, 2016

ASSETS EURK	Dec. 31, 2016	Dec. 31, 2015
<b>A. Fixed Assets</b>		
I. Intangible assets		
1. Purchased industrial and intellectual property, similar rights and assets, and licenses for rights of these kinds	10,598	6,717
2. Goodwill	13,682	23,768
3. Down payments made	2,324	959
	<b>26,604</b>	<b>31,443</b>
II. Property, plant and equipment		
1. Land, land rights, and buildings, including buildings on third-party land	191,199	180,463
2. Plant and machinery	20,892	14,389
3. Other operating and business equipment, furniture, and fixtures	35,392	32,183
4. Rental assets	219,341	196,118
5. Down payments made and assets under construction	12,981	17,861
	<b>479,805</b>	<b>441,014</b>
III. Financial assets		
1. Investments in affiliated companies	12,373	11,688
2. Loans to affiliated companies	229	229
3. Investments in associated companies	13,753	0
4. Participations	1,586	8,005
5. Securities held as fixed assets	934	19
6. Other loans	214	246
	<b>29,090</b>	<b>20,186</b>
	<b>535,499</b>	<b>492,643</b>
<b>B. Current Assets</b>		
I. Inventories		
1. Raw materials, consumables and supplies	22,811	18,994
2. Work in progress	76,253	84,954
3. Finished goods and merchandise	340,911	347,602
4. Down payments made	53,349	27,524
5. Down payments received on orders	-117,001	-84,009
	<b>376,323</b>	<b>395,064</b>
II. Receivables and Other Assets		
1. Trade receivables	283,844	267,205
2. Receivables from affiliated companies	460	863
3. Receivables from companies with which a participation relationship exists	2,700	2,713
4. Other assets	29,904	29,846
	<b>316,908</b>	<b>300,627</b>
III. Cash on hand, bank balances, checks	170,615	126,525
	<b>863,846</b>	<b>822,216</b>
<b>C. Deferred Income</b>	7,961	9,451
<b>D. Deferred Tax Assets</b>	738	1,049
<b>E. Net Plan Assets for Post-Employment Benefits</b>	1,565	1,559
	<b>1,409,610</b>	<b>1,326,919</b>

<b>LIABILITIES EURK</b>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>A. Equity</b>		
I. Subscribed capital	100,000	100,000
II. Capital reserves	60,000	60,000
III. Revenue reserves		
1. Reserve for shares of a controlling company	11,276	11,276
2. Other revenue reserves	457,395	392,731
	468,671	404,007
IV. Minority interests	4,687	2,293
	<b>633,357</b>	<b>566,300</b>
<b>B. Provisions</b>		
1. Accruals for pensions and other post-employment benefits	106,176	108,328
2. Tax provisions	5,708	8,676
3. Other provisions	184,894	180,763
	<b>296,777</b>	<b>297,767</b>
<b>C. Liabilities</b>		
1. Liabilities to banks	299,425	314,259
2. Down payments received on orders	29,185	24,528
3. Trade payables	82,515	60,795
4. Liabilities to affiliated companies	4	0
5. Other liabilities	59,768	55,493
	<b>470,897</b>	<b>455,076</b>
<b>D. Deferred Income</b>	1,664	1,390
<b>E. Deferred Tax Liabilities</b>	6,914	6,386
	<b>1,409,610</b>	<b>1,326,919</b>

# GROUP INCOME STATEMENT FOR THE 2016 FISCAL YEAR

EURK	Jan. 1, 2016 to Dec. 31, 2016	Jan. 1, 2015 to Dec. 31, 2015
1. Revenues	2,361,534	2,328,378
2. Increase (+) / decrease (-) in finished goods and work in progress	2,101	-17,090
3. Other own work capitalized	1,044	295
4. Other operating income	84,511	89,192
	<b>2,449,190</b>	<b>2,400,775</b>
5. Cost of materials		
a) Cost of raw materials, consumables, supplies, and purchased merchandise	1,482,230	1,446,012
b) Cost of purchased services	147,882	145,734
	<b>1,630,112</b>	<b>1,591,745</b>
6. Personnel expenses		
a) Wages and salaries	369,811	355,727
b) Social security and other benefits	67,404	67,114
c) Pension costs	4,187	9,349
	<b>441,402</b>	<b>432,190</b>
7. Amortization, depreciation, and write-downs of intangible assets and property, plant, and equipment	38,972	42,434
8. Other operating costs	230,661	230,479
	<b>108,043</b>	<b>103,927</b>
9. Income from participations	0	557
10. Income from associated companies	704	0
11. Income from other securities and loans classified as fixed financial assets	5	9
12. Other interest and similar income	3,014	3,189
13. Write-downs on financial assets and securities held as current assets	1,787	0
14. Interest and similar expenses	21,442	23,516
	<b>88,537</b>	<b>84,166</b>
15. Income taxes	26,730	25,043
<b>16. Earnings after taxes</b>	<b>61,808</b>	<b>59,124</b>
17. Other taxes	2,676	3,011
<b>18. Net Group income</b>	<b>59,131</b>	<b>56,113</b>
19. Income attributable to minority interests	2,064	1,792
<b>20. Group share of income for the year</b>	<b>57,067</b>	<b>54,321</b>
21. Allocation to Group's revenue reserves	-57,067	-54,321



# GROUP CASH FLOW STATEMENT FOR 2016

EURK	2016	2015	CHANGE
Net income/loss	59,131	56,113	3,018
Income taxes	26,730	25,043	1,687
Earnings before income taxes	85,861	81,156	4,705
<b>BALANCE OF WRITE-DOWNS (+)/WRITE-UPS (-)</b>			
Intangible assets	14,122	15,971	-1,848
Property, plant, and equipment excluding rented-out construction machinery	24,850	26,463	-1,613
Rented-out construction machinery (fixed and current assets)	60,289	52,760	7,529
Financial assets	1,787	0	1,787
Change in pension accruals (+ increase / - decrease)	-2,132	3,576	-5,707
Change in long-term provisions (+ increase / - decrease)	1,073	2,259	-1,186
Unrealized currency exchange losses (+) / gains (-)	157	1,123	-966
Interest expenses (+) / interest income (-)	18,423	20,318	-1,895
Other participation income (-)	0	-557	558
Other non-cash expenses (+) / income (-)	4,395	3,786	609
<b>Gross cash flow</b>	<b>208,826</b>	<b>206,854</b>	<b>1,972</b>
Income taxes paid	-29,698	-25,414	-4,283
<b>Net cash flow</b>	<b>179,128</b>	<b>181,440</b>	<b>-2,312</b>
Loss (+) / gain (-) resulting from disposals of fixed assets	-980	1,291	-2,271
Decrease (+) / increase (-) in inventories	8,414	24,208	-15,794
Decrease (+) / increase (-) in trade receivables	-16,639	-5,996	-10,643
Increase (-) / decrease (+) in other receivables and assets	635	-6,750	7,385
Decrease (+) / increase (-) in trade payables and other liabilities	34,358	-48,206	82,564
<b>= Cash flow from operating activities</b>	<b>204,916</b>	<b>145,987</b>	<b>58,929</b>
<b>PAYMENTS (-) FOR INVESTMENTS IN</b>			
Intangible assets	-9,415	-16,712	
Property, plant, and equipment excluding rental assets	-40,158	-34,324	
Rental assets (balance of payments received for disposals/payments for investments)	-73,842	-97,303	
Financial assets	-2,312	-743	
<b>PAYMENTS (-) RECEIVED (+) FOR DISPOSALS OF</b>			
Intangible assets	652	279	
Property, plant, and equipment excluding rental assets	3,957	2,525	
Financial assets	496	416	
Interest received (+)	3,019	3,198	
Dividends received (+)	0	557	
<b>= Cash flow from investing activities</b>	<b>-117,603</b>	<b>-142,106</b>	
Dividends	-7,000	-7,000	
Dividends / payments to minority interests	-1,517	-907	
Proceeds (+) from long-term borrowing	16,122	73,310	
Proceeds (+) / repayment (-) of short-term financial liabilities	-30,970	-43,314	
Change in loan receivables / liabilities from / to affiliated companies	487	512	
Interest paid (-)	-20,732	-23,580	
<b>= Cash flow from financing activities</b>	<b>-43,610</b>	<b>-979</b>	
Change in cash and cash equivalents	43,703	2,903	
Cash and cash equivalents at start of fiscal year	126,496	122,379	
Consolidation group-related changes in cash and cash equivalents	-3	2,708	
Exchange rate-related changes in cash and cash equivalents	376	-1,494	
<b>= Cash and cash equivalents at end of fiscal year</b>	<b>170,572</b>	<b>126,496</b>	

# STATEMENT OF CHANGES IN GROUP'S FIXED ASSETS IN FISCAL 2016

ACQUISITION AND PRODUCTION COSTS							
EURK	1/1/2016	Currency differences	Additions	Disposals	Disposals from consolidation group	Reclassifications	12/31/2016
<b>I. INTANGIBLE ASSETS</b>							
1. Purchased industrial and intellectual property, similar rights and assets, and licenses for rights of these kinds	42,947	1,029	6,700	-1,533	-15	794	49,923
2. Goodwill	74,460	-11	882	-652		177	74,856
3. Down payments made	960		2,307			-942	2,325
	<b>118,367</b>	<b>1,019</b>	<b>9,889</b>	<b>-2,185</b>	<b>-15</b>	<b>29</b>	<b>127,103</b>
<b>II. PROPERTY, PLANT AND EQUIPMENT</b>							
1. Land, land rights, and buildings, including buildings on third-party land	316,463	1,139	11,073	-2,076		9,572	336,170
2. Plant and machinery	56,287	1,229	4,987	-867	-1	4,354	65,989
3. Other operating and business equipment, furniture, and fixtures	118,476	3,157	14,508	-7,513		379	129,006
4. Rental assets	313,422	-375	108,969	-67,516		92	354,592
5. Down payments made and assets under construction	17,928	666	9,591	-685		-14,426	13,075
	<b>822,576</b>	<b>5,817</b>	<b>149,127</b>	<b>-78,657</b>	<b>-1</b>	<b>-29</b>	<b>898,833</b>
<b>III. FINANCIAL ASSETS</b>							
1. Investments in affiliated companies	12,147		939	-24	12		13,074
2. Loans to affiliated companies	4,280						4,280
3. Investments in associated companies		2	9,304	-426		4,873	13,753
4. Participations	20,690	-2				-4,873	15,816
5. Securities held as fixed assets	19		921			-5	934
6. Other loans	246		25	-56			214
	<b>37,381</b>		<b>11,190</b>	<b>-506</b>	<b>12</b>	<b>-5</b>	<b>48,072</b>
	<b>978,324</b>	<b>6,836</b>	<b>170,207</b>	<b>-81,349</b>	<b>-5</b>	<b>-5</b>	<b>1,074,008</b>

<sup>1)</sup> Settled against expenses for materials

DEPRECIATIONS						APPRECIATIONS	NET BOOK VALUES		
1/1/2016	Currency differences	Additions	Disposals	Disposals from consolidation group	Reclassifications	12/31/2016	12/31/2016	12/31/2016	Dec. 31, 2015
36,230	1,012	3,630	-1,532	-14	-2	39,325		10,598	6,717
50,692	-10	10,492				61,174		13,682	23,768
1						1		2,324	959
<b>86,924</b>	<b>1,002</b>	<b>14,122</b>	<b>-1,532</b>	<b>-14</b>	<b>-2</b>	<b>100,500</b>		<b>26,604</b>	<b>31,443</b>
136,000	461	9,854	-1,276		-68	144,972		191,199	180,463
41,898	888	3,003	-688	-1	-3	45,097		20,892	14,389
86,293	2,195	11,966	-6,872		32	93,614		35,392	32,183
117,304	-328	50,103 <sup>1)</sup>	-31,729		41	135,251	141	219,341	196,118
67		26				94		12,981	17,861
<b>381,562</b>	<b>3,217</b>	<b>74,953</b>	<b>-40,565</b>	<b>-1</b>	<b>2</b>	<b>419,027</b>	<b>141</b>	<b>479,805</b>	<b>441,014</b>
458		243				701		12,373	11,688
4,051						4,051		229	229
								13,753	
12,685		1,544				14,229		1,586	8,005
								934	19
								214	246
<b>17,195</b>		<b>1,787</b>				<b>18,982</b>		<b>29,090</b>	<b>20,186</b>
<b>485,681</b>	<b>4,218</b>	<b>90,862</b>	<b>-42,096</b>	<b>-16</b>		<b>538,509</b>	<b>141</b>	<b>535,499</b>	<b>492,643</b>

# STATEMENT OF CHANGES IN GROUP EQUITY 2016

PARENT COMPANY			
EURK	SUBSCRIBED CAPITAL	CAPITAL RESERVES	CONSOLIDATED EQUITY
Jan. 1, 2015	100,000	60,000	417,880
Dividend payments			-7,000
First-time consolidation			
Other changes			
	<b>100,000</b>	<b>60,000</b>	<b>410,881</b>
Net Group income			54,321
Other Group results			
<b>Total Group result</b>			<b>54,321</b>
<b>Dec. 31, 2015</b>	<b>100,000</b>	<b>60,000</b>	<b>465,201</b>
1/1/2016	100,000	60,000	465,201
Dividend payments			-7,000
First-time consolidation			8,600
Other changes			-407
	<b>100,000</b>	<b>60,000</b>	<b>466,394</b>
Net Group income			57,067
Other Group results			
<b>Total Group result</b>			<b>57,067</b>
<b>12/31/2016</b>	<b>100,000</b>	<b>60,000</b>	<b>523,462</b>

<sup>1)</sup> The reported sum includes EUR 29,354k (previous year: 28,395k) of goodwill from capital consolidation.

			MINORITY INTERESTS			GROUP EQUITY
OTHER ACCUMULATED GROUP RESULTS		EQUITY	MINORITY CAPITAL	OTHER ACCUMULATED GROUP RESULTS	EQUITY	
ADJUSTMENTS FROM FOREIGN CURRENCY TRANSLATION	OTHER NEUTRAL TRANSACTIONS			ADJUSTMENTS FROM FOREIGN CURRENCY TRANSLATION		
-41,702	-14,182	521,997	478	319	797	522,795
		-7,000	-7		-7	-7,007
	-436	-436				-436
			-264		-264	-264
<b>-41,702</b>	<b>-14,617</b>	<b>514,562</b>	<b>207</b>	<b>319</b>	<b>526</b>	<b>515,088</b>
		54,321	1,792		1,792	56,113
-4,876		-4,876		-26	-26	-4,902
<b>-4,876</b>		<b>49,445</b>	<b>1,792</b>	<b>-26</b>	<b>1,767</b>	<b>51,212</b>
<b>-46,578</b>	<b>-14,617</b>	<b>564,007</b>	<b>2,000</b>	<b>293</b>	<b>2,293</b>	<b>566,300</b>
-46,578	-14,617	564,007	2,000	293	2,293	566,300
		-7,000	-9		-9	-7,009
	-978	7,622				7,622
		-407	348	69	417	10
<b>-46,577</b>	<b>-15,595</b>	<b>564,222</b>	<b>2,338</b>	<b>363</b>	<b>2,701</b>	<b>566,923</b>
		57,067	2,064		2,064	59,131
7,381		7,381		-78	-78	7,303
<b>7,381</b>		<b>64,449</b>	<b>2,064</b>	<b>-78</b>	<b>1,986</b>	<b>66,434</b>
<b>-39,196</b>	<b>-15,595<sup>1)</sup></b>	<b>628,671</b>	<b>4,402</b>	<b>284</b>	<b>4,687</b>	<b>633,357</b>

# NOTES TO THE GROUP FINANCIAL STATEMENTS FOR THE 2016 FISCAL YEAR

## I. General

These Group financial statements have been prepared in accordance with Sections 290 ff. of the German Commercial Code (HGB), as amended by the Accounting Directive Implementation Act (Bilanzrichtlinie-Umsetzungsgesetzes, or BilRUG). The previous year figures are shown before application of the BilRUG. The figures in the Group financial statements are stated in thousands of euros (EURk).

The Group income statement is presented using the “nature of expense” method.

For greater clarity, these Group financial statements include notes indicating when figures are also included in other items, as well as detailed breakdowns.

Zeppelin GmbH, as the parent company domiciled in Friedrichshafen, is entered in Commercial Register B of the District Court of Ulm under number HRB 630217.

## II. Accounting and Valuation Methods

The financial statements of Zeppelin GmbH and the other included companies have been prepared according to consistent accounting and valuation principles.

Acquired intangible assets and property, plant, and equipment are recognized at cost and, when depreciable, reduced by scheduled and, where necessary, unscheduled amortization and depreciation.

The customary useful life of intangible assets is generally assumed to be between three and five years. Amortization of the goodwill resulting from initial consolidation through December 31, 2009 is recorded on a straight-line basis over a period of five or 10 years. On the date (January 1, 2010) of the transition to the German Accounting Law Modernization Act (BilMoG), all goodwill had a remaining useful life of less than five years. Goodwill acquired since January 1, 2010 has been amortized in principle on a straight-line basis over a period of five years. The customary useful life of five years is based on an estimate of the returns on income over time on the basis of the identified components of goodwill. In particular, these represent customer bases and the expertise (employees, processes) that must be acquired. The income potential of these components is expected to be exhausted over a period of five years.

Property, plant, and equipment have been reduced in value by systematically depreciating them based on their expected useful lives. The scheduled depreciations are based on the following useful lives:

Land and buildings:	10 to 50 years
Plant and machinery:	3 to 15 years
Other operating and business equipment, furniture, and fixtures:	3 to 10 years

Low-value assets with a net individual value of up to EUR 410.00 are fully depreciated, i.e. entered as expenses, in their year of acquisition, while assuming that they were immediately disposed of. Individual assets with a net value of more than EUR 410.00 are capitalized in their year of acquisition and depreciated over their expected useful lives.

The recognized assets designated for rental (rental fleet) are depreciated using the straight-line method over their expected useful lives. Total depreciations of EUR 50,103k (previous year: EUR 46,081k) are included in the cost of materials.

Down payments made are recognized at their nominal value.

Shares in nonconsolidated affiliated companies and subsidiaries are recognized at cost value or their market value if lower.

Loans and securities classified as fixed assets are recognized at cost value. Required depreciations are made to their lower market values as of the balance sheet date.

Raw materials, consumables, supplies, and merchandise included in the inventories are measured at cost value or the net achievable price if lower. Work in progress and finished goods are measured at production cost, while taking into account a proportional share of material and product overheads and depreciation as well as directly attributable material, labor, and special costs. Adequate write-downs have been applied to account for loss-free valuation and market-ability risks. Interest on borrowed capital and general administrative costs have not been capitalized.

Adequate impairments have been recorded to account for all identifiable inventory risks associated with longer-than-average storage, reduced marketability, or lower replacements costs. Payments made and received are measured at their nominal value.

Wherever possible, down payments received are deducted up to the amount of the loss on inventories.

Receivables and other assets are recognized at their nominal values. Sufficient specific and general bad debt allowances have been made to account for existing default risks.

Cash and cash equivalents are recognized at their nominal value on the balance sheet date.

Payments made before the balance sheet date are recognized as prepaid expenses,

provided they represent an expenditure for a particular period of time after this date.

Equity is recognized in the balance sheet at nominal value.

Under the generally accepted German accounting principles, accruals for pensions and other post-employment benefits are determined in accordance with the projected unit credit method using the "2005 G mortality tables" by Prof. Dr. Klaus Heubeck. In 2016, the average market interest rate for the previous ten financial years (previous year: average market interest rate for the previous seven financial years) was applied for discounting. The average market interest rate for a remaining term of 15 years is 4.00% (based on 10-year average) (previous year: not applied) and 3.22% (based on a 7-year average) (previous year: 3.89%), respectively, in accordance with the German Regulation on Discounting of Provisions (Rückstellungsabzinsungsverordnung, or RückAbzinsV). Expected salary and wage increases of 2.5% and expected pension increases of 1.0 % have been taken into account. A fluctuation of 0% was taken into account. The change in the interest rate results in a positive effect on earnings of EUR 1,127k, which is reported in the pension costs. The difference between the amount based on the average market interest rate over the past ten financial years and the amount based on the average market interest rate over the past seven financial years to be recognized in accordance with Section 253, para.6 HGB is EUR 8,626k.

Provisions for taxes and other purposes account for all contingent liabilities and potential losses from pending transactions. They are recognized at the settlement values dictated by good business sense, taking account of expected price and cost increases. Provisions due to be liquidated in more than one year have been discounted at the average market interest rate. The average rate has been calculated on the basis of the seven years prior to the remaining term of each obligation.

Provisions for obligations arising from phased early retirement programs have been formed in accordance with the block model. An actuarial interest rate of 1.58% was applied for discounting in accordance with the German Regulation on Discounting of Provisions. Expected wage increases of 2.5% were taken into account. Provisions for semi-retirement were formed for semi-retirement agreements that had already been concluded as at the balance sheet date as well as for future agreements. These provisions include supplementary amounts as well as performance obligations accrued through the balance sheet date.

Assets that are intended exclusively for meeting pension or comparable long-term post-employment obligations and are exempt from attachment by all other creditors (plan assets in the sense of Section 246, para. 2, sentence 2 of the German Commercial Code) have been netted against provisions at their fair values. Pension obligations were paid into a pension trust (CTA) within the framework of an asset purchase agreement. The pension trust was measured at fair value and netted against the pension accruals.

The valuation of the provisions for anniversaries was carried out on the basis of the



projected unit credit method using the “2005 G mortality tables”. An average market interest rate of 3.22% (previous year: 3.89%) has been applied as the flat discount rate for a remaining term of 15 years in accordance with the German Regulation on Discounting of Provisions. Expected salary and wage increases of 2.5% and an increase in the contribution limit of 2.0% have been taken into account. A fluctuation of 0% was taken into account.

Liabilities are recorded at their settlement amount.

Deferred income items are recognized for income before the balance sheet date, provided they represent earnings for a particular period of time after this date.

For calculating taxes deferred because of temporary or differences between the book values of assets, liabilities, deferred income, and prepaid expenses in accordance with commercial law and their tax valuations, or to tax losses carried forward, the amounts of the tax burden or relief are valued at the company-specific tax rates on the date when the differences are eliminated and are not discounted. Differences based on consolidation entries in accordance with Sections 300 to 307 of the German Commercial Code are also taken into account, but differences for the initial recognition of goodwill or negative goodwill from capital consolidation are not considered. Deferred tax assets and liabilities are not offset against one other. Deferred taxes resulting from differences in the annual financial statements of consolidated companies are not capitalized, in accordance with the relevant disclosure option.

Where hedging relationships are designated in accordance with Section 254 of the German Commercial Code, the following accounting and valuation principles are applied: economic hedges are accounted for by designating hedging relationships. In cases in which it is possible to use either the “net hedge presentation method”, in which the offsetting changes in value from the hedged risk are not accounted for, or the “gross hedge presentation method”, in which the offsetting changes in value from the hedged risk of both the hedged item and the hedging instrument are accounted for, the net hedge presentation method is used. The offsetting positive and negative changes in value are recognized without affecting the income statement. If no hedging relationships can be designated, derivatives are measured at fair value based on market prices. If a fair value is negative, it will be taken into account as a special provision; in accordance with the prudence principle, positive fair values may not be recognized.

The realization of revenues for the provision of services or delivery of goods.

### III. Consolidation Group

The group of consolidated companies comprises – in addition to Zeppelin GmbH – 13 (previous year: 12) German and 32 (previous year: 33) foreign subsidiaries. As in the previous year, no figures at all are given for two included companies pursuant to Section 313, para. 3, sentence 1 of the German Commercial Code.

The consolidation group comprises the following companies:

COMPANY NAME AND LOCATION	OWNERSHIP SHARE IN % <sup>1)</sup>
Zeppelin GmbH, Friedrichshafen	- <sup>2)</sup>
Zeppelin Immobilien Russland OOO, Moscow, Russia	100.0
Zeppelin Baumaschinen GmbH, Garching near Munich	100.0
AT Baumaschinentechnik Beteiligungs GmbH, Munich	100.0
Zeppelin Struktur GmbH, Garching near Munich	100.0
Zeppelin Österreich GmbH, Fischamend near Vienna, Austria	100.0
Zeppelin Rental Österreich GmbH & Co. KG, Fischamend near Vienna, Austria	100.0
Zeppelin Rental Österreich GmbH, Fischamend near Vienna, Austria	100.0
Zeppelin CZ s.r.o., Modletice near Prague, Czech Republic	100.0
Zeppelin SK s.r.o., Banska Bystrica/Slovak Republic	100.0
Zeppelin Polska Sp. z o.o., Warsaw, Poland	100.0
Zeppelin International AG, Steinhausen, Switzerland	100.0
Zeppelin Russland OOO, Moscow, Russia	100.0
PRIME Machinery OOO, Moscow, Russia	100.0
Zeppelin Ukraine TOV, Kiev, Ukraine	100.0
Zeppelin Turkmenistan JV, Ashgabat, Turkmenistan	100.0
Zeppelin Central Asia Machinery OOO, Tashkent/Uzbekistan	100.0
Zeppelin Tadschikistan OOO, Dushanbe, Tajikistan	100.0
Zeppelin Belarus OOO, Minsk, Belarus	100.0
Zeppelin Armenien OOO, Abovyan, Armenia	100.0
Zeppelin Ukraine Technologies TOV, Donezk, Ukraine	100.0
Zeppelin Rental GmbH & Co. KG, Garching near Munich	100.0
Zeppelin Rental Verwaltungs GmbH, Garching near Munich	100.0 <sup>3)</sup>
Zeppelin Streif Baulogistik GmbH, Friedrichshafen	100.0
Zeppelin Streif Baulogistik Österreich GmbH, Himberg near Vienna, Austria	100.0
BIS Inspection Service GmbH, Hamburg	100.0
Klickrent GmbH, Berlin	100.0
Fast Rent GmbH, Friedrichshafen	100.0
Zeppelin Power Systems GmbH & Co. KG:	100.0

Zeppelin Power Systems Verwaltungs GmbH, Hamburg	100.0 <sup>3)</sup>
Zeppelin Power Systems Russland OOO, Moscow, Russia	100.0
Zeppelin Systems GmbH, Friedrichshafen	100.0
Zeppelin Systems France S.A.R.L., Vénissieux Cedex, France	100.0
Zeppelin Systems USA Inc., Odessa, Florida, USA	100.0
Zeppelin Systems Korea Corporation, Gyeonggi-do, Korea	100.0
Zeppelin Systems Benelux N.V., Genk, Belgium	100.0
Zeppelin Systems Italy S.r.l., Milan, Italy	90.0
Zeppelin Systems UK Limited, Nottingham, United Kingdom	100.0
DIMA service for plant engineering s r.o., Bratislava, Slovak Republic	100.0
Zeppelin Systems Latin America Equipamentos Industriais Ltda., São Paulo, Brazil	100.0
Zeppelin Systems China (Beijing) Co. Ltd., Beijing, China	100.0
Zeppelin Systems China (Shanghai) Co. Ltd., Shanghai, China	60.0
Zeppelin Systems India Pvt. Ltd., Vadodara, India	100.0
Zeppelin Systems Singapore Pte. Ltd., Singapore	100.0
Zeppelin Systems Gulf Co. Ltd., Al Jubail, Saudi Arabia	100.0

<sup>1)</sup> Directly and indirectly owned

<sup>2)</sup> Parent company

<sup>3)</sup> Fully liable partner in a partnership

Fast Rent GmbH was included in the consolidation group for the first time during the year under review. Zeppelin Logistics Sp. z o.o. was removed from the consolidation group in 2016 because the company will be liquidated in fiscal 2017.

Three (previous year: three) German and four (previous year: four) foreign companies with only a small business volume were not included in the Group financial statements pursuant to Section 296, para. 2 of the German Commercial Code. Overall, they are of negligible importance for meeting the requirement to present a true and fair picture of the Group's net assets, financial position, and operating results. The information required by Section 313, para. 2, no. 4 of the German Commercial Code is given in the table below. The information on two (previous year: two) unconsolidated companies has been completely omitted in accordance with Section 313, para. 3, sentence 1 of the German Commercial Code.

COMPANY NAME AND LOCATION	OWNERSHIP SHARE	EQUITY	RESULT FOR YEAR
	IN % <sup>1)</sup>	EURK	EURK
Zeppelin Logistics Sp. z o.o., Warsaw, Poland	100.0	34	-1
PJSC „Ukrckorteploizolyaciya” (UCTI), Vishneve, Ukraine	98.0	689	-26
Fehmarnbelt Solution Services A/S, Greve, Denmark	50.0	1,346	0 <sup>2)</sup>
SkySails Holding GmbH & Co. KG, Hamburg	1.45	639	-3 <sup>3)</sup>
Zeppelin SkySails Sales & Service GmbH & Co. KG, Hamburg	75.04	25	-75 <sup>4)</sup>
Zeppelin SkySails Sales & Service Verwaltungs GmbH, Hamburg	67.0	33	1 <sup>4)</sup>
Reimelt Ltda., São Paulo/Brazil	90.0	-439	-1 <sup>5)</sup>

<sup>1)</sup> Directly and indirectly owned

<sup>2)</sup> Company is not operational yet; no annual financial statement was prepared as at Dec. 31, 2016.

<sup>3)</sup> Annual financial statement for the year ending on Dec. 31, 2014

<sup>4)</sup> Annual financial statement for the year ending on Dec. 31, 2015

<sup>5)</sup> Company has ceased operations.

Hyster Körös Spedit Kft. was sold during the fiscal year. Reimelt UK Ltd. was liquidated in 2016. Zeppelin International AG acquired 98.0% of the shares in PJSC “Ukrckorteploizolyaciya” (UCTI) in Ukraine. Because of the negligible size of the company it was not included in the consolidation group.

### Investments in associated companies

The shares in CZ LOKO a.s. were included in consolidation group at equity for the first time in fiscal 2016, with the value of the shares as at the balance sheet date recognized as the proportionate equity, increased or decreased in line with the proportionate results. The difference between the investment book value and the proportionate equity is EUR 8,878k.

COMPANY NAME AND LOCATION	OWNERSHIP SHARE	EQUITY	RESULT FOR YEAR
	IN % <sup>1)</sup>	EURK <sup>2)</sup>	EURK <sup>2)</sup>
CZ LOKO a.s., Česká Třebová/Czech Republic	49.0	27,851	1,256

<sup>1)</sup> Indirect

<sup>2)</sup> Fiscal year from Oct. 1, 2015 to Sept. 30, 2016

## Participations

COMPANY NAME AND LOCATION	OWNERSHIP SHARE	EQUITY	RESULT FOR YEAR
	IN % <sup>1)</sup>	EURK <sup>2)</sup>	EURK <sup>2)</sup>
Energyst B.V., Breda/Netherlands	4.5	72,308	123

<sup>1)</sup> Direct

<sup>2)</sup> Annual financial statement for the year ending on Dec. 31, 2015

## IV. Consolidation Principles

Until December 31, 2000, business agglomerations were consolidated using the book value method (Section 301, para. 1, sentence 2 of the German Commercial Code (old version)) as of the date of acquisition or the date of a subsidiary's initial consolidation. A Brazilian subsidiary that was included in the Group financial statements for the first time in the 1998 fiscal year was consolidated using the revaluation method as of its date of acquisition (Section 301, para. 1, sentence 2 of the German Commercial Code) in order to take advantage of this method, which was already part of the generally accepted German accounting principles for preparing financial statements, for consolidation purposes as well.

Acquisitions made since January 1, 2001 have been consolidated using the revaluation method as of the date of acquisition.

If, in connection with the initial consolidation of a subsidiary according to the book value method, the acquisition cost exceeded the fair value of the net assets acquired, this was allocated to individual assets of the subsidiary that were worth more than their book values as stated in its financial statements. Any remaining discrepancy or, when applying the revaluation method, excess of acquisition cost over fair value of net assets acquired was treated as goodwill and amortized pursuant to Section 309, para. 1, sentence 1 of the German Commercial Code (old version) or offset against the Group's revenue reserves.

Minority interests in equity and net income are accounted for in the balance sheet under "minority interests" and in the income statement under "income attributable to minority interests." The amount disclosed in the income statement under "income attributable to minority interests" amounting to EUR 2,064k (previous year: EUR 1,792k) is the result of attributing profits or losses to two minority shareholders.

The other revenue reserves contain the accumulated results of the companies included in the Group financial statements, to the extent that they were not distributed, as well as consolidation entries affecting income. They also contain accumulated currency translation differences and, when exercising the option provided by Section 309, para. 1, sentence 3 of the German Commercial Code (old version), goodwill that has been offset without affecting the operating result and/or negative sums resulting from profit retention in connection with

capital consolidations that are allocated to other revenue reserves, also without affecting the operating result.

The share of profits attributable to shareholders of Zeppelin GmbH in 2016 was allocated to other revenue reserves.

Receivables and liabilities between consolidated companies were eliminated in the course of consolidating their intercompany balances. Differences were recognized partly directly in the income statement and partly directly in equity.

Income and expenses between consolidated companies were offset against each other or reclassified.

Intercompany profits from inventories were eliminated.

## **V. Currency Translation**

All assets and liabilities denominated in foreign currencies have been translated at the mean spot exchange rate on the balance sheet date. For assets and liabilities due in more than one year, the realization principle (Section 298, para. 1 in conjunction with Section 252, para. 1, no. 4, clause 2 of the German Commercial Code) and the historical cost principle (Section 298, para. 1 in conjunction with Section 253, para. 1, sentence 1 of the German Commercial Code) were applied.

The assets and liabilities in the annual financial statements that are denominated in foreign currencies, with the exception of equity (subscribed capital, reserves, and profit carried forward at historical rates), have been translated into euros at the mean spot exchange rate on the balance sheet date. The items in the income statement have been translated into euros at the average exchange rate. The resulting translation difference is reported in Group equity in the reserves under the heading "adjustment items from currency translation."

## VI. Notes to the Group Balance Sheet

### Fixed Assets

The development of the individual fixed asset items is presented separately in the “Statement of Changes in the Group’s Fixed Assets.”

The intangible assets mainly consist of software, licenses and similar rights, and goodwill and similar assets. An unscheduled depreciation of the goodwill of Zeppelin Systems Gulf Co. Ltd. was carried out during the year under review.

As a consequence of eliminating the old version of Section 308, para. 3 from the German Commercial code, it has been necessary to reverse transfers of special items containing a share of reserves and special depreciations made in earlier years under the German Law on Development Areas (Fördergebietsgesetz). This required an additional EUR 469k to be depreciated in 2016. The associated adjustments to the book values of property, plant, and equipment result in additional write-downs of EUR 3,819k in subsequent years.

The shares in affiliated companies include shares in a controlling company, Luftschiffbau Zeppelin GmbH, Friedrichshafen, worth EUR 11,276k. A decontrol agreement was concluded with Luftschiffbau Zeppelin GmbH, Friedrichshafen, on November 7, 2011. The shares correspond to 10% of the subscribed capital of EUR 35,000k.

The participations include shares in one German company and two foreign companies.

### Receivables and Other Assets

The breakdown of assets due to mature in more than one year is as follows:

<b>12/31/2016</b>	<b>TIME TO MATURITY &gt; 1 YEAR</b>	<b>TOTAL</b>
	<b>EURK</b>	<b>EURK</b>
Trade receivables	14,303	283,844
Receivables from affiliated companies	0	460
Receivables from companies with which a participation relationship exists	0	2,700
Other assets	3,252	29,904
	<b>17,554</b>	<b>316,908</b>

<b>Dec. 31, 2015</b>	<b>TIME TO MATURITY &gt; 1 YEAR</b>	<b>TOTAL</b>
	<b>EURK</b>	<b>EURK</b>
Trade receivables	4,381	267,205
Receivables from affiliated companies	0	863
Receivables from companies with which a participation relationship exists	0	2,713
Other assets	2,236	29,846
	<b>6,617</b>	<b>300,627</b>

The receivables from affiliated companies include EUR 9k (previous year: EUR 0) of receivables from the controlling company. The receivables from affiliated companies include trade receivables of (EUR 316k; previous year: EUR 231k) as well as loan receivables (EUR 144k; previous year: EUR 632k). The receivables from companies with which a participation relationship exists are comprised, as in the previous year, exclusively of trade receivables.

### Deferred Income

The prepaid expenses include costs from eight (previous year: seven) bonded loans amounting to a total of EUR 192k (previous year: EUR 277k) that were placed in the years 2007 through 2009, 2012 and 2015. The costs are being depreciated according to plan over the term of the loans. Also recorded are arrangement and participation fees amounting to EUR 959k (previous year: EUR 1,669k) that were paid when concluding the syndicated credit facility in 2011 and when extending it through July 31, 2020, as well as prepayments for guarantees (EUR 1,876k), services (EUR 1,026k) and pensions (EUR 922k).

### Deferred Tax Assets

Deferred tax assets from consolidation entries are recognized. They are valued at average tax rates of 10 % and 29 %, respectively.

### Net Plan Assets for Post-Employment Benefits

For the fiscal year under review, obligations for phased early retirement programs were netted against assets that are designated exclusively for settling these obligations and are exempt from attachment by all other creditors (plan assets in the sense of Section 246, para. 2, sentence 2 of the German Commercial Code) pursuant to Section 298, para. 1 in



conjunction with Section 246, para. 2, sentence 2 of the German Commercial Code. The netting resulted in an excess of plan assets of EUR 133k.

Pension obligations of Zeppelin Streif Baulogistik GmbH were assumed within the framework of an asset purchase agreement and were satisfied through a non-recurring payment of EUR 3,046k by the vendor and paid into a pension trust (CTA). After deducting fees, this pension trust was measured at EUR 2,230k as at December 31, 2016. It exceeds the pension accruals, which were measured at EUR 799k as at December 31, 2016, by EUR 1,432k, resulting in an excess of plan assets.

As part of a carve-out, provisions and the plan assets of the relevant employees were transferred on a pro-rata basis from Zeppelin Streif Baulogistik GmbH to Zeppelin Rental GmbH & Co. KG (EUR 74k). The fund acquisition costs are EUR 112k. The fair value of the fund at year-end was EUR 107k. On December 31, 2016, pension accruals were netted against pension obligations, resulting in a settlement value of EUR 138k according to the actuarial report. Because the obligations exceed the fund's value, the excess amount of EUR 31k was recognized on the liability side.

In total, the excess of plan assets in fiscal 2016 amounts to EUR 1,565k (previous year: EUR 1,559k).

Netting figures according to Section 298, para. 1 in conjunction with Section 246, para. 2, sentence 2 of the German Commercial Code:

	EURK
Settlement value of netted liabilities	799
Acquisition cost of assets	3,046
Fair value of assets	2,230
Netted expenses	0
Netted income	0

## Equity

The reserve for shares of a controlling company concerns Zeppelin GmbH's participation in Luftschiffbau Zeppelin GmbH, Friedrichshafen. The other revenue reserves include the revenue reserves and net results of the affiliated companies belonging to the Group, as well as those of the parent company. The equity also includes amounts from offsetting other consolidation entries. The development of the individual Group equity items is presented separately in the "Statement of Changes in Group Equity." As of Saturday, December 31, 2016, EUR 340,903k were available for distribution to the parent company's shareholders (net retained profits of the parent company).

## Accruals for Pensions and Other Post-Employment Benefits as well as Other Provisions

The other provisions are mainly for personnel costs (EUR 66,740k; previous year: EUR 64,527k), warranty obligations (EUR 23,821k; previous year: EUR 24,355k), outstanding invoices (EUR 52,345k; previous year: EUR 52,167k), potential losses from pending transactions (EUR 10,366k; previous year: EUR 7,342k), and obligations in connection with full-service contracts (EUR 11,776k; previous year: EUR 11,757k).

Information about netting of plan assets and pension obligations in accordance with Section 298, para. 1 in conjunction with Section 246, para. 2, sentence 2 of the German Commercial Code:

	EURK
Settlement value of netted liabilities	5,831
Acquisition cost of assets	4,964
Fair value of assets	4,964
Netted expenses	0
Netted income	61

Information about netting of plan assets and phased early retirement programs in accordance with Section 298, para. 1 in conjunction with Section 246, para. 2, sentence 2 of the German Commercial Code:

	EURK
Settlement value of netted liabilities	1,471
Acquisition cost of assets	651
Fair value of assets	651
Netted expenses	0
Netted income	0

## Tax provisions

In the fiscal year under review, tax provisions amounted to EUR 5,708k (previous year: EUR 8,676k).

## Liabilities

Grouped by the time remaining until they come due, the breakdown of liabilities is as follows:

Dec. 31, 2016	TIME REMAINING			TOTAL EURK
	<1 YEAR EURK	>1 YEAR EURK	OF WHICH >5 YEARS EURK	
Liabilities to banks <sup>1)</sup>	5,922	107,002	0	112,925
Liabilities from issuing bonded loans <sup>1)</sup>	67,000	119,500	85,000	186,500
Down payments received on orders	29,185	0	0	29,185
Trade payables	82,283	233	0	82,515
Liabilities to affiliated companies	4	0	0	4
Other liabilities	58,274	1,494	0	59,768
	<b>242,668</b>	<b>228,229</b>	<b>85,000</b>	<b>470,897</b>

Dec. 31, 2015	TIME REMAINING			TOTAL EURK
	<1 YEAR EURK	>1 YEAR <sup>2)</sup> EURK	OF WHICH >5 YEARS EURK	
Liabilities to banks <sup>1)</sup>	36,879	90,881	0	127,759
Liabilities from issuing bonded loans <sup>1)</sup>	0	186,500	97,500	186,500
Down payments received on orders	24,528	0	0	24,528
Trade payables	60,795	0	0	60,795
Liabilities to affiliated companies	0	0	0	0
Liabilities to companies with which a participation relationship exists	0	0	0	0
Other liabilities	54,333	1,160	0	55,493
	<b>176,536</b>	<b>278,541</b>	<b>97,500</b>	<b>455,076</b>

<sup>1)</sup> The two items are combined in the balance sheet under "liabilities to banks".

<sup>2)</sup> Presentation in previous adjusted in accordance with BilRUG

As in the previous year, the “liabilities from issuing bonded loans” includes EUR 5,000k to the shareholder.

The “liabilities to affiliated companies” include EUR 4k (previous year: EUR 0) to the shareholder.

Of the “other liabilities”, EUR 27,145 (previous year: EUR 27,538k) are for taxes and EUR 1,995k (previous year: EUR 1,786k) for social security.

### Deferred Income

Deferred income mainly concerns marketing services as well as other prepayments.

### Deferred Tax Liabilities

Of these, EUR 2,518k (previous year: EUR 2,996k) consists of deferred taxes pursuant to Section 274, para. 1 of the German Commercial Code (deferred tax liabilities from separate financial statements) and EUR 4,396k (previous year: EUR 3,390k) of deferred tax liabilities from consolidation entries. They have been determined by applying average income tax rates of 10 % and 29 %, respectively.

The following table shows the changes in deferred tax assets and deferred tax liabilities over the course of the fiscal year and the deferred tax assets and deferred tax liabilities at the end of the fiscal year in accordance with Section 285, no. 30 of the German Commercial Code, as amended by the BilRUG:

	2016	2015	Change
	EURK	EURK	EURK
Deferred Tax Assets	738	1,049	-310
Deferred Tax Liabilities	6,914	6,386	528

The change in deferred tax assets is the result of the elimination of intercompany profit. Deferred tax liabilities mainly involve write-downs and depreciations carried out as part of the consolidation and the valuation of inventories and the depreciation of tangible assets.

## Derivative Financial Instruments and Hedging Relationships

### Currency Hedges

The Zeppelin Group's business activities expose it to currency exchange risks. Its policy is to limit or eliminate these risks by carrying out hedging transactions. Most of the required hedging activities are centrally performed or coordinated by the Group treasury department, which is part of Zeppelin GmbH.

To hedge exchange rate risks in connection with assets and liabilities denominated in foreign currencies as well as contractual agreements (known as firm commitments) that were previously not included in the balance sheet, the company concludes forward exchange contracts and swaps. They are individually assigned their fair values as of the balance sheet date. The forward exchange contracts and swaps together with the underlying transactions form micro-hedging relationships.

The transactions in the hedging relationships are subject to the same risk. It is therefore expected that the offsetting changes in value of the underlying and hedging transactions will be almost completely offset in the future for each hedged risk. The prospective effectiveness of the instrument is determined using the "critical terms match" method. In doing so, we ensure that the value-determining factors (nominal value, term, currency) match for the underlying transaction and the hedging instrument. The individual hedging relationships are therefore always classified as effective for the entire hedging period. The same holds when retroactively determining past effectiveness, because all value-determining factors are consistent between the transactions and the hedging instrument. In these cases, no discrepancies of relevance for accounting purposes can arise in the hedging relationships.

Overview of the forward exchange contracts and swaps that form hedging relationships with assets, liabilities and fixed contractual agreements denominated in foreign currencies:

	CURRENCY	NOMINAL IN EURK/	FAIR VALUES IN EURK		MAXIMUM
		DERIVATIVE	POSITIVE	NEGATIVE	MATURITY
Foreign exchange purchase	USD/EUR	826	10	-	February 2017
	JPY/CNY	158	1	-	July 2017
Foreign exchange sale	USD/EUR	12,684	11	-453	June 2019
<b>Total</b>		<b>13,668</b>	<b>22</b>	<b>-453</b>	

The assets, liabilities and fixed contractual agreements denominated in foreign currency designated as underlying transactions have been included in the hedging relationships in the same amount.

As of the balance sheet date, the amount of the risks hedged using the hedging relationships from the deferred depreciation of the assets or the expected favorable changes in cash flows is EUR 22k, and the amount from the deferred appreciation of liabilities in foreign currency or the expected unfavorable changes in cash flows of future liabilities is EUR 453k.

In addition to the forward exchange contracts and swaps included in the hedging relationships, the Zeppelin Group also uses forward exchange contracts and swaps to hedge against Group-internal fixed contractual agreements denominated in foreign currencies. Forward exchange contracts and swaps are also used to hedge against future transactions in the local currency of subsidiaries. In this connection, the repayments of intercompany financing provided by the Group treasury department or assets received from Group companies in their local currency will be hedged by Group treasury department using derivatives. In these cases, the underlying transaction is omitted at Group level as a result of the consolidation of intercompany balances.

In addition, foreign exchange risks in connection with assets and liabilities denominated in EUR are hedged within the Zeppelin Group at the level of subsidiaries that maintain their balance sheets in foreign currencies. In doing so, the Zeppelin Group is not exposed to foreign currency risk, as a result of which the underlying transaction is also omitted at the Group level.

The following overview contains information in accordance with Section 285, no. 19 of the German Commercial Code for derivatives that are not presented in the hedging relationships:

	CURRENCY	NOMINAL IN EURK/	FAIR VALUES IN EURK	
		DERIVATIVE	POSITIVE	NEGATIVE
Foreign exchange purchase	USD/EUR	1,107	1	-
Foreign exchange sale	CZK/EUR	13,523	4	-
	PLN/EUR	4,080	-	-14
	RUB/EUR	2,533	-	-728
	USD/EUR	8,724	42	-138
<b>Total</b>		<b>29,967</b>	<b>47</b>	<b>-880</b>

The market values of these forward exchange contracts and swaps were determined on the basis of market information available on the balance sheet date, i.e., on the basis of discounted, future expectations of cash flows. In doing so, the applicable market interest rates were used for the remaining term of the financial instruments.

The book value of the forward exchange contracts and swaps with a negative market value of EUR 880k is included in "other provisions".

## Hedging Relationships for Interest Rate Swaps

Because of its external financing, Zeppelin GmbH is subject to risks associated with fluctuating interest rates. The objective of the Zeppelin GmbH risk strategy is to hedge the risk of fluctuating interest rates for some two-thirds of the planned Group financial liabilities for a period of five years. To this end, the treasury department concludes interest rate swaps (payer, receiver, and base rate swaps). Each interest rate swap and the underlying transaction together constitute a hedging relationship. The underlying transactions involve existing and diversified as well as anticipated bank loans and bonded loans with variable and fixed interest rates. In general, there is a variable-rate liability and a payer rate swap; in some cases there is also a base rate swap. In some cases, there is also a fixed-rate liability with a receiver swap.

INTEREST RATE HEDGING TRANSACTIONS	CURRENCY	NOMINAL IN EURK	FAIR VALUES IN EURK		MAXIMUM
			POSITIVE	NEGATIVE	MATURITY
Payer and base rate swaps	(EURM)	265,000	-	-12,672	June 2025
Receiver interest rate swaps	(EURM)	25,000	1,336	-	August 2022
		<b>290,000</b>	<b>1,336</b>	<b>-12,672</b>	

The loans designated as underlying transactions were included in the hedging relationships in the same amount.

As of the balance sheet date, the amount of the risks hedged using the hedging relationships from the expected unfavorable changes in cash flows of future interest payments is EUR 1,336k, and the amount from the expected favorable changes in cash flows of future interest payments is EUR -12,672k.

The prospective effectiveness of the instrument is determined using the “critical terms match” method. In doing so, we ensure that the value-determining factors (nominal value, term, currency) match for the underlying transaction and the hedging instrument. The individual hedging relationships are therefore always classified as effective for the entire hedging period. The same holds when retroactively determining past effectiveness, because all value-determining factors are consistent between the transactions and the hedging instrument. In these cases, no discrepancies of relevance for accounting purposes can arise in the hedging relationships.

The transactions in the hedging relationships are subject to the same risk. It is therefore expected that the offsetting changes in value of the underlying and hedging transactions will be almost completely offset in the future for each hedged risk.

## VII. Notes to the Income Statement

Revenues were recognized in fiscal 2016 in line with the redefinition of Section 277, para. 1 of the German Commercial Code, as amended by the BilRUG, and are broken down into the following categories:

EURk	2016	2015
Earthmoving equipment (new)	763,751	652,598
Earthmoving equipment (used)	246,421	271,122
Rental business	183,485	174,327
Forklifts, including rentals	41,366	50,500
Power systems, including rentals	168,995	143,467
Agricultural machines, including rentals	16,711	11,568
Production plants	59,133	100,007
Processing plants and mixers	83,144	86,689
Systems for the food industry and liquids handling	63,487	77,724
Components, construction site equipment incl. rentals	49,324	47,740
Spare parts	399,987	420,349
Aftersales service	241,010	248,793
Other <sup>1)</sup>	44,352	43,321
Zeppelin GmbH	367	171
	<b>2,361,534</b>	<b>2,328,378</b>

<sup>1)</sup> Thereof sales at Zeppelin Rental GmbH & Co. KG EUR 18,855k (previous year: EUR 21,019k) and Zeppelin Streif Baulogistik GmbH EUR 8,685k (previous year: EUR 8,909k) as well as loan BilRUG EUR 4,979k (previous year: EUR 147k)

Revenues in Germany accounted for 58.8% (previous year: 56.1%) and revenues in other countries for 41.2% (previous year: 43.9%) of the total.

If the BilRUG had been applied, revenue in the previous year would have amounted to EUR 2,343,943k.



**Other operating income** includes the following significant items:

Income from the reversal of provisions and accruals, book gains from the disposal of fixed assets, gains from sale-and-leaseback transactions, reversal of valuation allowances, cost refunds, currency exchange gains, insurance compensation payments and compensation for damages.

Other operating income also includes income related to other periods amounting to EUR 24,837k (previous year: EUR 24,198k), mainly from the reversal of provisions and accruals.

It also includes income from currency translations pursuant to Section 256a of the German Commercial Code amounting to EUR 3,211k (previous year: EUR 6,243k).

If the BilRUG had been applied, other operating income in the previous year would have amounted to EUR 99,918k.

The **cost of materials** would have amounted to EUR 1,607,133k if the BilRUG had been applied in the previous year.

**Other operating expenses** primarily consist of administrative expenses, operating, sales and distribution costs, additions to write-downs for receivables, bad debts, currency exchange losses, and donations. This item also includes expenses for currency translation pursuant to Section 256a of the German Commercial Code amounting to EUR 3,368k (previous year: EUR 7,366k). Expenses related to other periods are EUR 5,036k (previous year: EUR 10,291k). There were higher bad debts in the previous year as a result of several customer insolvencies in 2015.

If the BilRUG had been applied, other operating expenses in the previous year would have amounted to EUR 241,382k.

**Income from participations** includes EUR 0 from affiliated companies (previous year: EUR 73k).

Income from associated companies amounts to EUR 704k and is the result of the initial at-equity consolidation of CZ LOKO a.s. in fiscal 2016.

None of the **income from other securities and loans classified as fixed financial assets** is from affiliated companies.

Affiliated companies account for EUR 53k (previous year: EUR 60k) of **other interest and similar income**. The interest income includes EUR 46k (previous year: EUR 33k) on the discounting of provisions.

The **write-downs on financial assets and securities held as current assets** amount to EUR 1,544k for the depreciation of shares in Energyst B.V.

Affiliated companies account for EUR 108k (previous year: EUR 87k) of **interest and similar expenses**. Interest expenses include accrued interest on provisions of EUR 4,175k (previous year: EUR 4,858k).

The **income taxes** include deferred tax expenses of EUR 673k (previous year: EUR 1,750k). For calculating the deferred taxes for the German companies, the corporate income tax rate of 15.0 % applicable since January 1, 2008 has been applied. Factoring in the solidarity surcharge (5.5%) and trade tax (average multiplier of 384%), the average income tax rate during the fiscal year is 29.27% (previous year: 29.09%).

The tax reconciliation statement reconciling the differences between expected and reported income tax expense comprises the following:

	2016	2015
	EURK	EURK
Earnings before taxes	85,861	81,156
Expected tax rate	29.27%	29.09%
<b>Expected income tax expense</b>	<b>25,127</b>	<b>23,608</b>
Tax effects from different tax rates	-12,569	-7,203
Tax rebates / expenses from previous years	183	218
Tax effects from adjustments of the commercial balance sheet to the tax balance sheet	1,578	1,313
Tax effects from non-deductible operating expenses, losses or losses carried forward	5,458	4,870
Tax effects from tax-neutral Group entries	6,650	4,673
Change in deferred taxes	-301	-2,325
Other tax effects	605	-112
<b>Reported income tax expense</b>	<b>26,730</b>	<b>25,043</b>

## VIII. Notes on the Group Cash Flow Statement

The Group cash flow statement shows how the Group's cash and cash equivalents changed over the course of the fiscal year as a result of inflows and outflows. Cash flows are distinguished depending on whether they result from operating activities or investing and financing activities.

The cash and cash equivalents shown in the cash flow statement comprise all of the liquid assets disclosed in the Group balance sheet, i.e., cash on hand, checks, and bank balances as well as bank liabilities with a remaining term of less than three months from the date of acquisition.

Cash flows from investing and financing activities are recorded on a payment basis. By contrast, cash flow from operating activities is derived indirectly from the Group's net income for the year.

The base value in the cash flow statement is translated to the Group's net income for the year as follows:

	<b>EURK</b>
Result before income tax	85,861
Income taxes	26,730
	<b>59,131</b>

The total interest received in fiscal 2016 was EUR 3,019k (previous year: EUR 3,198k), and the total interest paid amounted to EUR 20,732 (previous year: EUR 23,580k). The net interest result therefore amounted to EUR -17,713k (previous year: EUR -20,382k). The difference with the interest expenses is the result of the delimitation of the costs of the syndicated loan (upfront fee) over the term.

## IX. Notes and Other Information

### Contingent Liabilities and Other Financial Commitments

	2016	2015
	EURK	EURK
<b>1. GUARANTEES AND OTHER COMMITMENTS</b>		
Credit sale and acceptance liabilities	0	131
Guarantees	69,494	62,933
	<b>69,494</b>	<b>63,064</b>
<b>2. FINANCIAL COMMITMENTS</b>		
Rental and leasing commitments		
Due in 2017	53,905	61,011
Due between 2018 and 2021	53,578	45,743
Due after 2022	3,749	4,201
Purchase commitments from investments	64,654	90,431
Repurchase agreements	149,979	142,302
Shared commitments	40,472	60,144
Commitments to make donations	7,500	7,500
Other commitments	0	187
	<b>373,838</b>	<b>411,519</b>

In addition to the warranty obligations of subsidiaries that cannot be recognized as liabilities, the guarantees include other types of guarantees that were assumed in favor of banks for certain subsidiaries and for which the guaranteeing banks may submit a claim to Zeppelin GmbH. The risk of claims being made against these guarantees is considered to be low, owing to the healthy asset, financial, and revenue situation of the subsidiaries concerned.

The repurchase obligations are contractually agreed pre-emptive tender rights of leasing companies mainly for construction equipment from sale-and-leaseback agreements to finance the rental fleet of Zeppelin Rental GmbH & Co. KG. The repurchase of rental fleet assets is a component of Zeppelin's business model and an essential basis of the Zeppelin Group's successful business involving second-hand machines.

The shared commitment obligations are to sales financing companies and relate to the residual obligations of customers of Zeppelin Baumaschinen GmbH from existing financing agreements, particularly for construction equipment on the balance sheet date. These residual obligations are matched by the market values of the construction equipment for which finance was provided of approximately EUR 38.2m (previous year: 56.6m). The risks from shared commitment obligations are classified as low in the vast majority of cases.

## **Off-Balance-Sheet Transactions**

### **Sale-and-Leaseback Transactions**

It is standard practice in Zeppelin's industry to refinance rental business operations by concluding sale-and-lease-back agreements for movable assets (rental assets). In 2016, this practice freed up total liquid assets of EUR 84,231k (previous year: EUR 17,173k). Since lease payments will encumber existing lines of credit in the future, this can negatively affect the Group's liquidity when the cash inflows of the rental business fluctuate due to slumps in demand, late payments, or increased default rates. In 2016, sale-and-leaseback agreements generated an operating result of EUR 2,197k (previous year: EUR 1,018k).

### **Factoring**

Receivables for new and used machinery are sold to finance sales in the short term. Factoring is an integral part of the range of financing measures available to manufacturing and trading companies. It takes the form of asset-backed financing involving the sale of a portfolio of receivables. The selling company continues to administer the receivables in return for an appropriate fee. The receivables sold are no longer reported in the Group's financial statements.

The total volume of receivables sold for asset-backed financing amounted to EUR 9.2m as of Saturday, December 31, 2016 (previous year: EUR 9.7m).

The resulting earlier influx of liquidity gives the Group greater latitude. At the same time, the improved liquidity situation improves its credit standing and the ratings it receives from rating agencies.

## Audit Fees

The breakdown of the audit fees is as follows:

	2016	2015
	EURK	EURK
Statutory audit	475	468
Other services	1,496	363
	<b>1,971</b>	<b>831</b>

The item “statutory audit” comprises the fees for auditing the annual and Group financial statements of Zeppelin GmbH and the separate annual financial statements of the Group’s German companies included in the Group financial statements, as well as for reviewing the reporting packages of several included foreign companies of the Group. The auditing fee for the Zeppelin Group amounts to a total of EUR 1,052k (previous year: EUR 1,039k).

The item “other services” comprises the fees for Zeppelin GmbH and the Group’s German companies that are included in the Group financial statements. The increase over the previous year is mainly the result of consultancy services in connection with the conversion of Group accounting to IFRS (International Financial Reporting Standards) as well as the introduction of the cost of sales procedure.

## Personnel

The Zeppelin Group’s average numbers of employees during the year were:

	2016	2015
Sales, marketing	1,410 <sup>1)</sup>	1,553
Machine operators	27	147
Service employees (spare parts and aftersales)	3,482	3,391
Engineering, order processing, materials management, logistics	776	759
Production, assembly, QM	630	652
Administration	1,031	1,021
Trainees and apprentices	290	278
	<b>7,646</b>	<b>7,801</b>

<sup>1)</sup> The change is mainly the result of the reclassification of employees at a Group company in fiscal 2015.

## Remuneration of Governing Bodies

In the 2016 fiscal year, Zeppelin GmbH awarded the following sums to its governing bodies in accordance with Section 314, para. 1, no. 6 of the German Commercial Code:

2016	EURK
Total remuneration for members of the Management Board.	3,116
Total remuneration for members of the Supervisory Board	484
Pension benefits for former members of the Management Board	466
Amount of pension provision for former members of the Management Board	8,135

Information about payments to a former managing director has been omitted, as the information would make it possible to determine the personal identity of the managing director who left.

## Other Notes

Zeppelin GmbH prepares (Sub-)Group Financial Statements, which must be submitted to the Federal Gazette. These Sub-Group Financial Statements are included in the Sub-Group Financial Statements for Luftschiffbau Zeppelin GmbH, Friedrichshafen. The latter must also be submitted to the Federal Gazette.

The following five subsidiaries do not publish their annual financial statements in exercise of Section 264, para. 3 and Section 264b of the German Commercial Code:

Zeppelin Baumaschinen GmbH, Garching near Munich,  
 Zeppelin Systems GmbH, Friedrichshafen,  
 Zeppelin Power Systems GmbH & Co. KG, Hamburg,  
 Zeppelin Rental GmbH & Co. KG, Garching near Munich, and  
 Zeppelin Streif Baulogistik GmbH, Friedrichshafen

Zeppelin Streif Baulogistik GmbH also does not prepare notes to the financial statement or a management report in exercise of Section 264, para. 3 of the German Commercial Code.

## **X. Events Subsequent to the Balance Sheet Date**

At the end of January 2017, the Construction Equipment CIS business unit in Armenia received the largest individual order in the history of the Zeppelin Group. Zeppelin will supply mining equipment worth 65 million US dollars to Lydian International and its subsidiary Lydian Armenia. Caterpillar machines will be used for the Amulsar project, a gold mine around 170 km south of the Armenian capital, Yerevan. This order represents a milestone in the positioning of Zeppelin and Caterpillar in the Armenian market.

Zeppelin Rental GmbH & Co. KG acquired 100% of the shares in Limes Mobil GmbH retroactively as of January 1, 2017. As part of the acquisition, the Rental strategic business unit will acquire 37 employees, strengthening its competitive position in the site and traffic guidance sector. Limes Mobil GmbH, which has locations in Berlin and the North Rhine-Westphalian city of Dorsten, has successfully been active on the market since 1997 and offers its customers professional site and traffic guidance. With the purchase, the Rental business unit has expanded its presence and range in North Rhine-Westphalia, where high investments in infrastructure are expected over the next several years.

Otherwise, no significant events occurred after the conclusion of the 2016 fiscal year that would have had a major impact on or jeopardized the Zeppelin Group's situation.

Friedrichshafen, February 28, 2017

The Management Board of Zeppelin GmbH

Peter Gerstmann

Michael Heidemann

Christian Dummler



# AUDITOR'S STATEMENT

We have audited the consolidated financial statements prepared by Zeppelin GmbH, Friedrichshafen – comprising the balance sheet, the income statement, the notes to the financial statements, the cash flow statement, and the statement of changes in equity – and the Group management report for the fiscal year from January 1 to December 31, 2016. It is the responsibility of the Company's managing directors to prepare the consolidated financial statements and management report in accordance with German commercial regulations. Our task is to submit an assessment of the consolidated financial statements and management report based on our audit. We have conducted our audit of the consolidated financial statements in accordance with Section 317 of the German Commercial Code and the generally accepted German principles for properly auditing financial statements as formulated by the Institute of Public Auditors in Germany (IDW). Those principles require us to plan and perform the audit in such a way as to detect with reasonable assurance any errors or violations that materially impinge upon how the consolidated financial statements and management report present the net assets, financial position, or operating results in consideration of the principles of proper accounting. In determining the audit procedure, we applied our knowledge of the Group's business activities and the economic and legal context in which it operates as well as expectations regarding possible errors. Within the scope of the audit, we evaluated the effectiveness of the internal system for monitoring the accounting and the evidence supporting the disclosures in the consolidated financial statements and the management report, for the most part by performing random checks. We also assessed the annual financial statements of the consolidated companies, how they were selected for consolidation, the accounting and consolidation principles applied, significant decisions made by the managing directors, and the overall presentation of the consolidated financial statements and management report. We are of the opinion that our audit provides a sufficiently sound basis for our evaluation.

Our audit has not revealed any grounds for criticism.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with the legal requirements and provide a faithful picture of the Group's assets, financial position, and earnings in accordance with the principles of proper accounting. The management report is consistent with the consolidated financial statements, complies with statutory requirements and overall accurately depicts the Group's position as well as its future opportunities and risks.

Munich, February 28, 2017

PricewaterhouseCoopers  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft

Petra Justenhoven  
German Public Auditor

Klaus Schuster  
German Public Auditor

# ABOUT THIS PUBLICATION

## **Zeppelin GmbH**

### Headquarters

Graf-Zeppelin-Platz 1  
85748 Garching near Munich, Germany  
Phone +49 89 320 00 - 0  
Fax +49 89 320 00 - 482

### Company Seat

Graf-Zeppelin-Platz 1  
88045 Friedrichshafen, Germany  
Phone +49 7541 202 - 02  
Fax +49 7541 202 - 1210

zeppelin@zeppelin.com  
www.zeppelin.com

### Corporate Communications

Phone +49 89 320 00 - 440  
Fax: +49 89 320 00 - 7 440  
E-mail: presse@zeppelin.com

For annual reports and further information about Zeppelin, please see our website [www.zeppelin.com](http://www.zeppelin.com).

This annual report was published in April 2017. It is also available in German.

### Agency

Söllner Communications AG, Munich, Germany

### Picture credits

Reiner Freese: Page 14 above



## **Zeppelin GmbH**

Headquarters

Graf-Zeppelin-Platz 1

85748 Garching near Munich, Germany

Phone +49 89 320 00 - 0

Fax +49 89 320 00 - 482

Company Seat

Graf-Zeppelin-Platz 1

88045 Friedrichshafen, Germany

Phone +49 7541 202 - 02

Fax +49 7541 202 - 1210

[zeppelin@zeppelin.com](mailto:zeppelin@zeppelin.com)

[www.zeppelin.com](http://www.zeppelin.com)