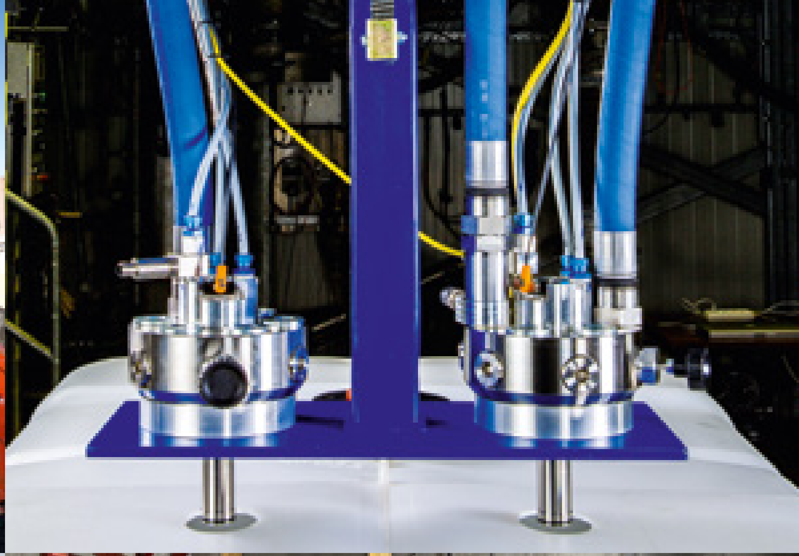
ANNUAL REPORT 2019

ZEPPELIN®
WE CREATE SOLUTIONS




AT A GLANCE

	IFRS			HGB	
	2019	2018	2017	2017	2016
REVENUE					
Construction Equipment EU SBU	1,470	1,315	1,210	1,308	1,205
Construction Equipment CIS SBU	500	482	412	430	299
Rental SBU	509	473	410	410	363
Power Systems SBU	392	360	341	351	307
Plant Engineering SBU	332	348	323	326	262
Z Lab SBU	4	1	0	0	–
Total for the Zeppelin Group [1]	3,118	2,897	2,622	2,751	2,362
EMPLOYEES (average for the year (FTEs) including trainees)					
Construction Equipment EU SBU	2,914	2,775	2,687	2,687	2,594
Construction Equipment CIS SBU	1,872	1,792	1,673	1,673	1,605
Rental SBU	1,647	1,487	1,336	1,336	1,236
Power Systems SBU	897	849	823	823	793
Plant Engineering SBU	1,529	1,468	1,366	1,366	1,332
Z Lab SBU	83	57	39	39	22
Total for the Zeppelin Group [2]	9,748	8,502	8,004	8,004	7,646
FIXED ASSETS [3]					
Additions	466.9	356.4	373.3	236.9	170.2
Changes in consolidated companies	74.7	4.8	0.0	0.0	0.0
Depreciation	213.7	192.9	181.6	103.6	90.9
in % of additions	46	54	49	44	53
of which rental assets					
• Additions	333.3	263.8	283.8	169.5	109.0
• Changes in consolidated companies	1.7	0.3	0.0	0.0	0.0
• Depreciation	144.9	132.5	125.3	60.1	50.1
NET PROFIT OR LOSS BEFORE TAX	133.7	130.8	97.7	93.5	85.9
NET GROUP INCOME	92.4	90.0	63.0	57.6	59.1
CASH FLOW	235.2 [4]	203.3 [4]	152.3 [4]	195.5 [5]	179.1 [5]
EQUITY	845.4	771.4	696.4	674.4	633.4
of which					
• subscribed capital	100.0	100.0	100.0	100.0	100.0
• Capital reserves	60.0	60.0	60.0	60.0	60.0
• Retained earnings	688.3	614.8	536.7	468.7	404.0
• Accumulated other comprehensive income	-12.8	-10.8	-6.3	–	–
• Shares held by non-controlling shareholders	9.9	7.3	6.0	5.7	4.7

SBU: Stategic business unit
[1] including Zeppelin GmbH and effects due to consolidation
[2] including Zeppelin GmbH and 709 employees as well as 8 trainees from the acquisitions in Sweden and Denmark who joined on 31 Dec 2019.
[3] Financial assets, investments accounted for using the equity method, intangible assets, and property, plant and equipment. Numbers of 2018 adjusted.
[4] Cash flow from operating activities (IFRS). Definition adjusted.
[5] Net cashflow (pursuant to the provisions of the German Commercial Code (Handelsgesetzbuch, "HGB")

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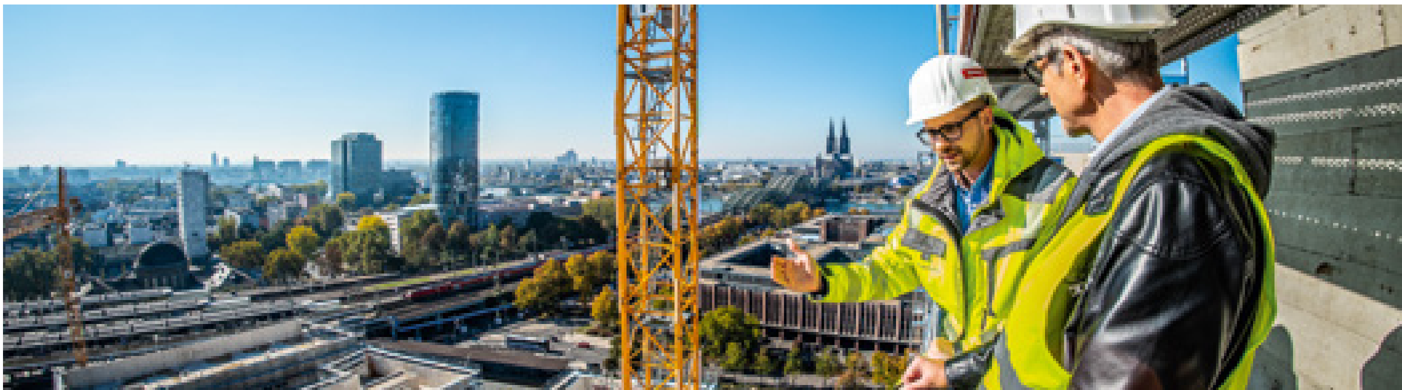


THE GROUP MANAGEMENT BOARD

PETER GERSTMANN

Chairman of the Management Board of Zeppelin GmbH

- Compliance, Group Development, IT, Digital Business, Auditing, and Corporate Communications
- Plant Engineering and Power Systems 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, and Service
- Construction Equipment EU, Construction Equipment Nordics, 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

CHRISTIAN DUMMLER

Managing Director of Zeppelin GmbH / CFO

- Finances, Controlling, Real Estate Management, Legal
- Certified Banking Specialist
- Member of the Management Board of Zeppelin GmbH since 2011

ALEXANDRA MEBUS

Managing Director of Zeppelin GmbH / Labor Director

- HR and HR Development
- Master of Business Administration, Graduate Diploma in Social Education
- Member of the Management Board of Zeppelin GmbH since 2018

MANAGEMENT BOARD REPORT

PETER GERSTMANN
Chairman of the Management Board of Zeppelin GmbH

**Dear customers,
partners,
employees,
and readers,**

The Zeppelin Group can once again look back on a highly successful fiscal year. Revenue of EUR 3.1 billion and a net profit before taxes of EUR 134 million represent a 2% rise on the previous year's figures. Thanks to a generally benign and robust business environment and good market positioning, all strategic business units (SBUs) were able to record a positive result.

EXPANSION OF DISTRIBUTION AND SERVICE TERRITORY INTO NORTHERN EUROPE

Effective from December 31, 2019, the Zeppelin Group took over responsibility for the distribution and service of Caterpillar products in Denmark, Greenland, and Sweden. It also took over servicing and distribution of MaK engines in Estonia, Latvia, Lithuania, Finland, Iceland, and the Faroe Islands. In taking on these sales activities in Northern Europe, Zeppelin grew to more than 10,000 employees, with additional revenue potential for 2020 of around EUR 350 million. Logistics synergies and decades of experience as a Caterpillar dealer put Zeppelin in a prime position to develop the additional markets. The new unit has been added to the existing Group structure as the Construction Equipment Nordics strategic business unit, and is led by an experienced Group manager.

NEW ORGANIZATIONAL STRUCTURES FOR NEW CHALLENGES

In order to provide the best possible support to all strategic business units in their digitization activities, we have set up the Zeppelin Digit strategic management center. This cross-functional unit brings together IT, innovation, digitization, and the current Z Lab strategic business unit activities. Z Lab GmbH will continue to exist within Zeppelin Digit, and will also continue to develop new digital business models for construction and industry.

CONSTRUCTION EQUIPMENT EU STRATEGIC BUSINESS UNIT

The Construction Equipment EU strategic business unit has been able to strengthen its leading position in the German, Austrian, Czech, and Slovak markets, and to increase its revenue and net profit compared with the figures recorded for the previous year. This positive trend is due to an extremely favorable business climate in the construction industry and to sales success at the world's leading trade fair for construction equipment, bauma, which was held in Munich in April 2019. The ever-growing installation and utilization of equipment in the SBU's sales territories meant that service capacities were optimally used, and that the Service division also saw gratifying growth.

Together with our partner company Caterpillar, we offered customers an impressive product and service portfolio, and were able to launch more new products than ever before. Growing digitization is also evident in the construction equipment sector, with many new innovations emerging such as a new app for fleet management. This app enables customers to manage mixed fleets within a single system, and to gain access to operational hours, location, and diagnostic codes directly from their smartphone.

CONSTRUCTION EQUIPMENT CIS STRATEGIC BUSINESS UNIT

The Construction Equipment CIS strategic business unit increased its sales volume in the 2019 fiscal year and built on the previous year's very good result. Systematic growth in the spare parts and customer service business produced a significant increase on the previous year's figure. The mining business in Russia, Ukraine, and Uzbekistan has seen a recovery, and made a significant contribution to a positive sales trend and high order backlog.

Zeppelin remains fully committed to the markets in the CIS region, as demonstrated by the opening of a new branch in St. Petersburg, which coincided with the 20-year anniversary of our arrival in Russia.

RENTAL STRATEGIC BUSINESS UNIT

All markets relevant to the Rental strategic business unit – Germany, Austria, Czech Republic, and Slovakia – recorded growth. The SBU benefited disproportionately from this growth, and ended the fiscal year with far higher revenue and net profit compared with the previous year, passing the EUR 500 million mark for the first time. An impressive volume of orders secured at bauma 2019 fueled this extremely encouraging trend.

The integration of Baustellen-Verkehrs-Technik GmbH, acquired back in 2018, was completed with the successful merger with Zeppelin Rental GmbH in 2019. Zeppelin greatly enhanced its solutions competence in traffic safety and transport technology by acquiring the Luther Group. This acquisition added portable barriers for highways and digital traffic guidance systems to our portfolio, and put us in a position to offer virtually any traffic telemetry solution from a single source.

POWER SYSTEMS STRATEGIC BUSINESS UNIT

This time, the companies outside of Germany made a particularly significant contribution to earnings for the Power Systems strategic business unit. For example, both Belarus and Czech Republic experienced particular order success in the area of new engine sales. The gradual expansion of aftersales and operational services has led to an increase in sales for the fourth year in a row.

Continued high demand for alternative drive systems using hybrid and LNG energy for ferries, cruise ships, and special purpose vessels, helped secure several important orders as well as future sales arising from maintenance contracts. In the context of increasing requirements, our expertise in the field of ballast water treatment systems has boosted demand and led to multiple welcome orders.

Demand also remained high in the power generation segment and for large installations for data centers and combined heat and power (CHP) plants. We secured a number of major contracts and, among other things, oversaw the construction of a CHP plant in Ramstein. The conclusion of an associated long-term service contract underscores our overall expertise.

PLANT ENGINEERING STRATEGIC BUSINESS UNIT

The 2019 fiscal year was shaped by different development trends in the various market segments for the Plant Engineering strategic business unit. While sales were slightly lower, overall earnings improved. With generally more challenging global conditions in terms of economic policy, as well as a weakening economy in the chemicals sector and uncertainties within the automotive industry, a negative effect on business in individual segments and regions was evident. Nevertheless, the strategic business unit again successfully increased its order entry figures in the 2019 fiscal year. Demand was particularly strong from China, which saw the strongest market in the plastics production systems sector thanks to a number of large-scale projects.

A new friction stir welding plant was opened at the Friedrichshafen site; this innovative technology allows for faster and more cost-efficient production of warehouse components such as silos and containers.

DIGITIZATION

We have further expanded our digital offerings for our customers. This expansion ranges from the launch of new software for fleet management to the general market launch of the zamics, klickrent and klickcheck products, which customers can use to simplify their internal processes or as an independent platform for leasing and renting machinery and equipment.

The Zeppelin Digit strategic management center has helped us create the conditions for more effective use of our Group-wide IT and digitization resources. A uniform software platform and shared data management form the basis for Group-wide

optimization of our processes and IT systems. The launch of SAP software in our company in Austria has enabled us to lay the foundation for rolling out the software at scale, into the larger corporate entities of the Construction Equipment EU strategic business unit.

ZEPPELIN AS AN EMPLOYER

The continual qualification of our employees forms the basis for Zeppelin's success. We offer the best possible conditions to ensure that every employee can continue to develop. We have prioritized these very topics with our People 2025 strategy. For every SBU, we are defining conditions for the workplace of the future, as well as the necessary employee development measures. As part of this process, we are focusing particularly closely on the job profile of a service technician, since this is a core component of the success of the Zeppelin business model. Our Z Match employee recommendation program has now been established as a significant recruitment channel. Completely new perspectives are also opening up for career entrants at Zeppelin, with the Z NEXT trainee program, launched in the last year, supporting a total of five trainees in various divisions of the company.

Our Group projects in the area of Human Resources continue to be implemented in order to further enhance our attractiveness as an employer and to improve employee satisfaction. Since the company received its certification following the berufundfamilie audit in March 2018, we have been working on implementing measures that will help improve work-life balance. We established the Z NOW network (Zeppelin Network of Women) back in 2016 to support the careers of our female specialist and managerial staff. The introduction of uniform regulations for mobile working and the piloting of offerings in the area of health management represent specific milestones that we have achieved. We were able to facilitate company bike leasing under attractive conditions for employees, just in time for the start of spring. The advisory services provided by our famPLUS family service continue to be well received.

COMPLIANCE

In order to further optimize our Compliance organization, we have put in place the Zeppelin Trust Line digital whistleblower system, which can be used to confidentially and anonymously report legal and ethical violations .

SOCIAL AND CORPORATE RESPONSIBILITY

As a foundation-owned company, Zeppelin is active on various levels and in various regions for scientific, cultural and charitable purposes. For example, at the bauma trade fair

we once again made a significant donation to the Home from Home organization for street children in Africa. As part of our efforts to support young talents in the technical sector, we have awarded various prizes via the JUST! youth foundation. Zeppelin built a daycare center on some unused land in Quickborn near Hamburg, handing it over to the supporting organization in May 2019 and leasing it on a long-term basis.

INTEGRATED MANAGEMENT SYSTEM AND CERTIFICATIONS

We lived up to our responsibilities in terms of sustainability by rolling out an integrated management system, as well as with the initial certification of our environmental management system and certification of the occupational health and safety management system based on a uniform standard for all German subsidiaries. In addition, we introduced the quality management system within the holding company and expanded the ISO 50001 certification that we hold for our energy management system to Austria as well as our companies in the Czech Republic, both of which were certified for the first time.

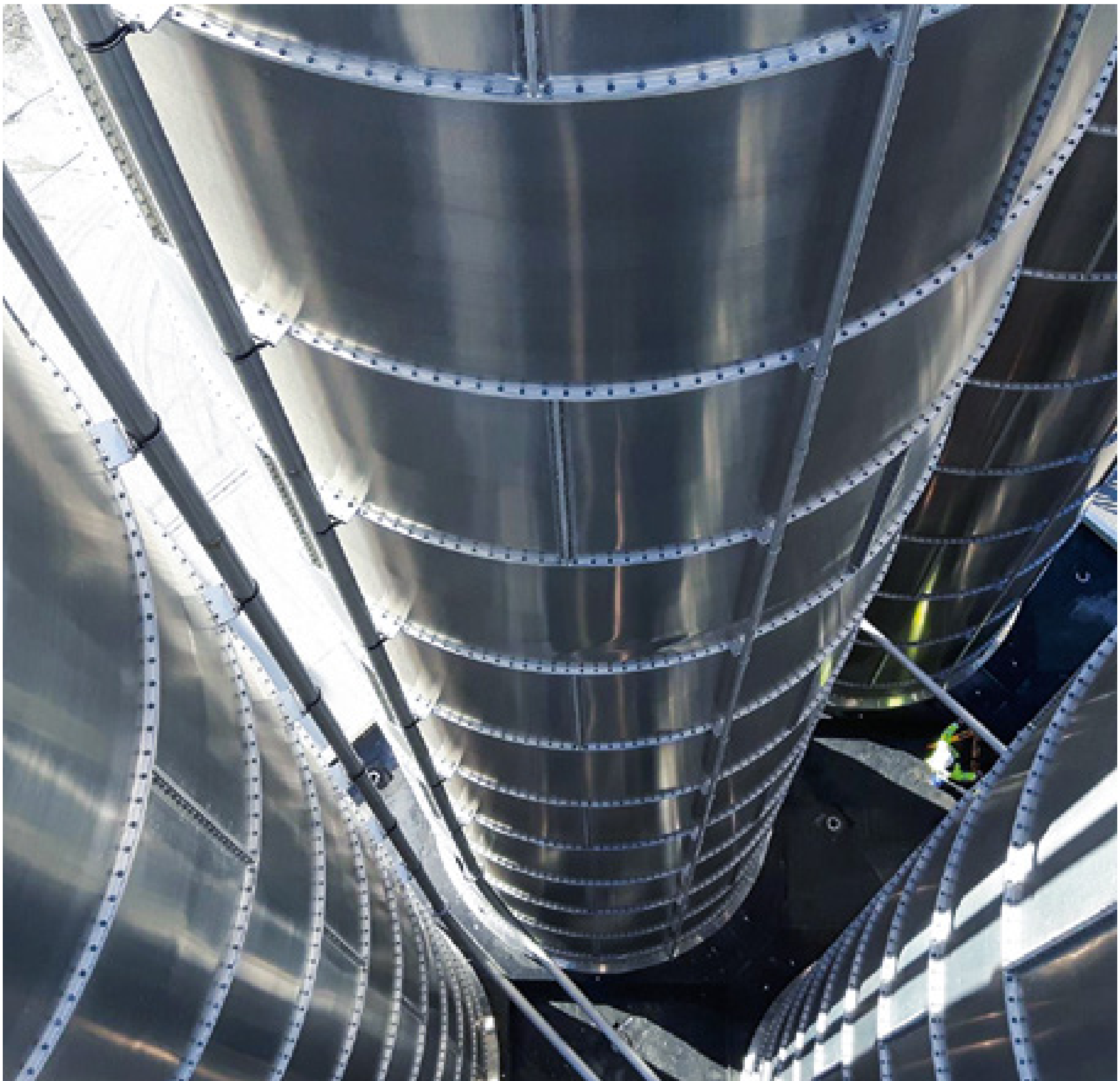
FINANCE

In its annual assessment of the Zeppelin Group, Creditreform Rating AG again increased its evaluated rating for Zeppelin, taking us from "A-" to the current "A", once again with a stable outlook. In doing this, the independent rating agency reaffirms the Zeppelin Group's creditworthiness, with a rating that is significantly above average for the industry and overall economy.

In 2019, the Zeppelin Group increased and extended its existing consortium loan agreement and issued new promissory note loans to secure the financing of our distribution and service territories in Northern Europe, and in order to provide general further funding for growth. As a foundation-owned company, we consider it important that the consortium loan was issued in the form of a Green Loan, meaning that our attainment of specific sustainability goals – in this case energy-saving goals in particular – will positively or negatively impact on the interest rate we pay.

INVESTMENTS

The majority of investment went towards the acquisition of necessary economic assets – such as property, buildings, machinery and technical systems as well as stock and contracts – from Dutch corporate group Pon, for the new distribution and service territories in Northern Europe. We also invested in expanding our traffic guidance systems division through the acquisition of the Luther Group. Further investment was used for the construction of our branches in Saudi Arabia, St. Petersburg in Russia and Linz in Austria. Our existing rental fleets were routinely renewed and expanded and the SAP project was also pushed forward. The total investment volume for 2019 was EUR 369 million, including inorganic growth.



OUTLOOK

For 2020, we will not see the originally forcasted revival of the economy. Apart from the ongoing trade disputes and sanctions as well as uncertainty around Brexit arrangements, the covid-19 pandemic has led to a world-wide economic crisis whose impacts are not fully predictable right now. The massive decline of the oil price and the conflict between Russia and Saudia Arabia hit our core markets. Despite the gloomy general economic prospects, the Zeppelin Group sees a chance for a stable development for the current fiscal year. The stable construction industry and additional investment in the public infrastructure in Germany may cushion the negative impacts caused by the covid-19 pandemic and the oil price crisis.

We will concentrate on maintaining our position as market leader and further expanding our service business in our existing business areas.

The challenge for the coming year will be in integrating the new companies and distribution and service territories in Northern Europe. These will allow for further sales growth in 2020, although certain stress factors are also to be expected in terms of earnings. In addition to developing and strengthening our existing portfolio of machinery and services, we will also build up our compact machinery, construction equipment and conveying technology rental business, as well as expanding our network of sites.

We will strengthen our involvement in Ukraine by constructing a new head office in Kiev.

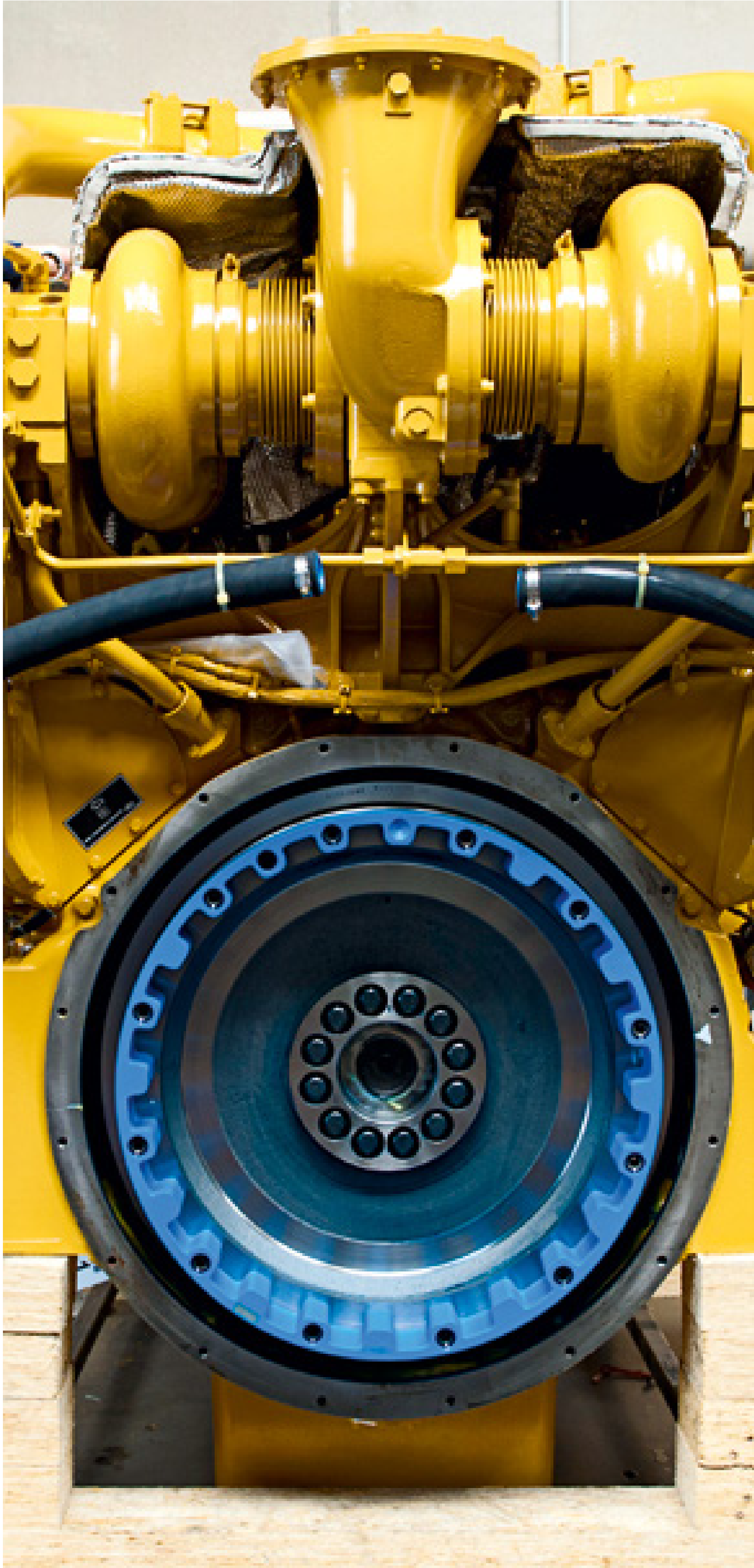
We will optimize internal processes by rolling out the SAP system to the German Construction Equipment organization. We will increase transparency for our employees and Human Resources by rolling out Human Capital Management software (HCM solution).

We will respond to the particular challenges connected to societal change by establishing our new Corporate Social Responsibility (CSR) and Diversity business management units.

On behalf of the Management Board of Zeppelin GmbH, I would like thank our customers for their confidence in our solutions. Without you, our success simply would not be possible. I would also like to express my particular gratitude to our employees for their passionate commitment and loyalty. Our thanks also to the works councils for their support, and our shareholders and Supervisory Boards for their trust.

On behalf of the Management Board

Peter Gerstmann
Chairman of the Management Board of Zeppelin GmbH



THE SUPERVISORY BOARD

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

SHAREHOLDER REPRESENTATIVES

Andreas Brand
Chairman, Mayor of the City of Friedrichshafen

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 Institut für Arbeitswissenschaft und Technologiemanagement (Institute for Human Factors and Technology Management) at the University of Stuttgart,
Head of the Institut für Arbeitswirtschaft und Organisation (Institute of Industrial Engineering) at the Fraunhofer Institute Stuttgart,
President of acatech, the German Academy of Science and Engineering

Prof. Dr. Yasmin Mei-Yee Weiß
Professor at the Nuremberg Institute of Technology, Member of the Advisory Board on External Economic Relations of the Federal Ministry for Economic Affairs and Energy,
Member of the Advisory Board of BLG Logistics Group

Univ.-Prof. Dr. Dr. h.c. mult. Horst Wildemann
Chair for Corporate Management, Logistics and Production at the Technical University of Munich

EMPLOYEE REPRESENTATIVES

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

Roswita Feineis
Head of Compensation & Benefits Department of Zeppelin GmbH, Management Representative

Thomas Mann
Head of Time Management and HR Officer at Zeppelin Baumaschinen GmbH

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

Marita Weber
Primary Authorized Representative of the Offenbach Chapter of the IG Metall Trade Union

SUPERVISORY BOARD REPORT

ANDREAS BRAND
Lord Mayor of the City of Friedrichshafen and Chairman of the Supervisory Board of Zeppelin GmbH

The 2019 fiscal year was very successful for the Zeppelin Group, characterized by strong growth in both orders and sales, and significant investment in Group infrastructure, acquisitions, and digitization. Welcome progress was made in the implementation of the 2025 strategy and the attainment of targets. The markets relevant for Zeppelin recorded further significant growth in some areas, or otherwise continued at a high level.

The Supervisory Board continuously monitored the work of the Management Board and supported and advised it in its management responsibility, the strategic development of the company, and on a number of important individual issues. In 2019, the Supervisory Board again performed all its duties with great care and pursuant to the law, the articles of incorporation, and the rules of procedure. In addition, the Chairman of the Management Board also updated the Chairman of the Supervisory Board outside board meetings on current developments and material processes. All members of the Supervisory Board were promptly and extensively informed on a monthly basis about the performance of the Zeppelin Group. The prime objective is to ensure long-term successful development of the Zeppelin Group in collaboration with the Management Board. The Supervisory Board and the Management Board work together in a way that is always open, responsible, and constructive.

Reporting and advice was focused on the strategic development of the Zeppelin Group, key Group-wide projects, the opening-up of additional growth fields including through the acquisition of additional distribution and service territories for Caterpillar Inc., Peoria IL/USA, and associated acquisition projects / establishment of companies. The organizational change to the Group structure, additional strategic acquisition projects, and the revised form of the organizational chart for the Management Board of Zeppelin GmbH were also dealt with.

The Supervisory Board monitored and scrutinized the development and performance of the company and the activities of the Management Board by way of three ordinary meetings and two extraordinary meetings on the basis of documents, reports and presentations regarding the company's strategy, planning, acquisition and investment projects, financial performance, financial position and cash flows, as well as the quarterly risk, compliance and data protection report, the Group Auditing department's report and reporting related to the integration of acquisitions. The corporate, investment and financial plans for 2020 were discussed in detail, along with forecasts for 2021 and 2022.

Following detailed consideration and consultation with the Management Board, decisions that required the approval of the Supervisory Board were made on a number of projects and measures. In the main these were acquisition projects, the financial and investment plans for the 2020 fiscal year, and the revised form of the organizational chart for the Management Board of Zeppelin GmbH.

The Supervisory Board confirmed Mr. Peter Gerstmann as Chairman of the Management Board of Zeppelin GmbH, and he was reappointed Managing Director of Zeppelin GmbH in the extraordinary Supervisory Board meeting on January 14, 2019.

Resolutions were also passed 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, and also to look at the role of the audit committee.

The Supervisory Board advised on strategies and measures for the development and expansion of new business areas, employee recruitment and training, the development of the Group's finance, risk and compliance management system, and the status of other important strategic projects. The Supervisory Board additionally agreed to the creation of the new Management Board departments of Diversity & Inclusion and Corporate Social Responsibility. The activities of the Supervisory Board and in particular its monitoring of the Management Board did not give rise to any complaints.

The financial statements of Zeppelin GmbH prepared pursuant to the provisions of the German Commercial Code (Handelsgesetzbuch, "HGB") and the Group Financial Statements prepared in accordance with the basic principles of the IFRS pursuant to Section 315e HGB for the year ending December 31, 2019, and the relevant management reports, were audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC), who issued an unqualified Auditor's Statement. The Supervisory Board engaged with the documents in detail and also reviewed them itself. The audit reports were provided to all members of the Supervisory Board in a timely manner for this purpose. In due time before the Supervisory Board's accounts review meeting, PwC and members of the Supervisory Board met twice to discuss the details, key points, and findings of the year-end audits. During the accounts review meeting of the Supervisory Board on April 2, 2020, PwC explained the key results of the audit, which were discussed in detail in the presence of PwC. 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 were thereby adopted.

The Supervisory Board approved the Management Board's proposal concerning the appropriation of profit and recommended to the shareholders that they also approve this.

The Supervisory Board thanks the Management Board, the employee representatives, and all employees worldwide for their fantastic work and extraordinary commitment during the 2019 fiscal year.

Friedrichshafen, April 2, 2020

On behalf of the Supervisory Board

Andreas Brand

Andreas Brand
Chairman


CAT

ZEPPELIN WORLDWIDE

Around 10,000 employees at over 220 sites in 43 countries and regions help customers to increase their competitiveness by means of an extensive portfolio of products and services.

CONSTRUCTION EQUIPMENT

Armenia
Austria
Belarus
Czech Republic
Denmark
Faroe Islands
Germany
Greenland
Poland [1]
Russia (some areas)
Slovak Republic
Sweden
Tajikistan
Turkmenistan
Ukraine
Uzbekistan

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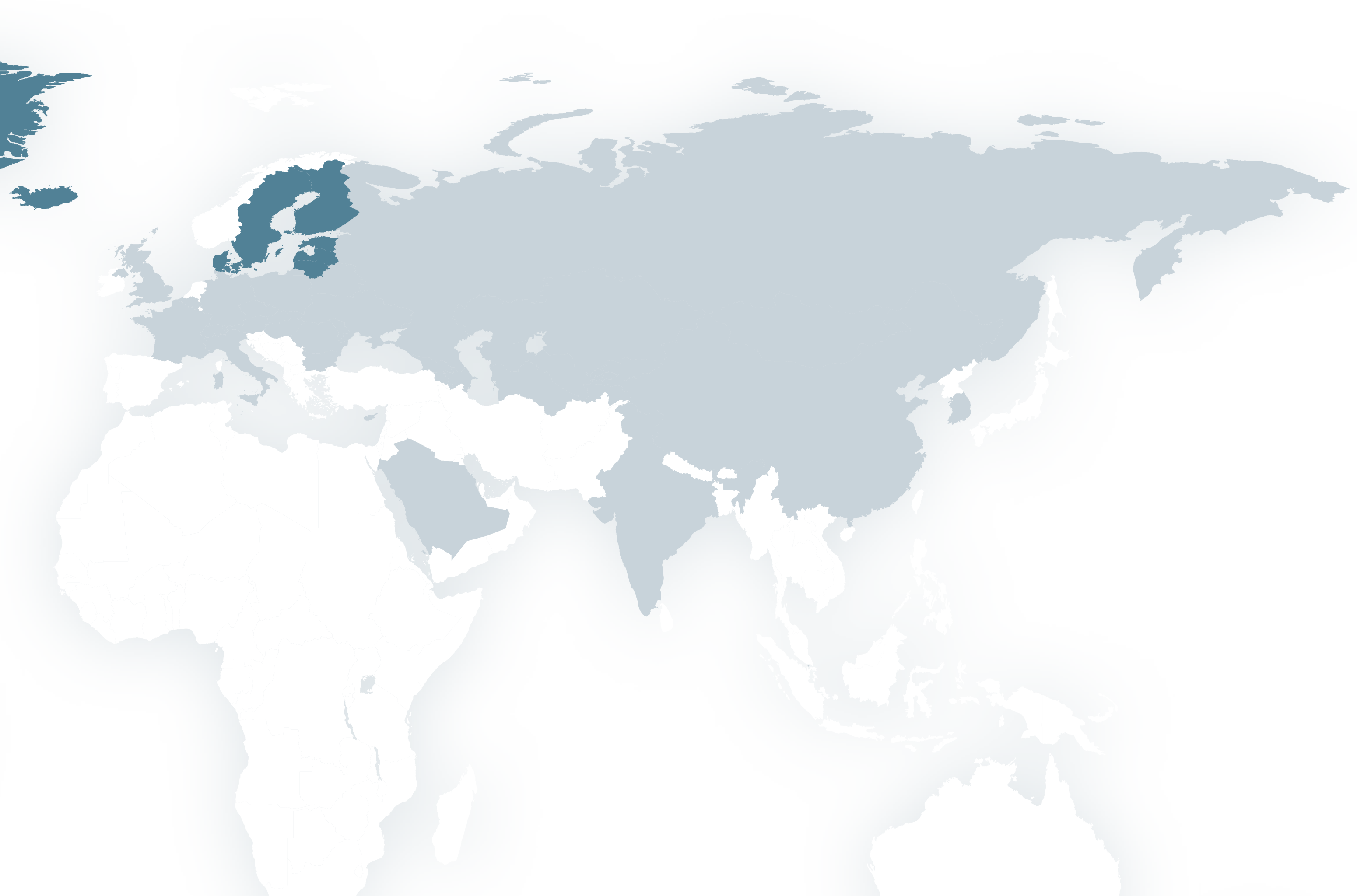
[1] Only Hyster forklifts / Manitou conveyor systems / Grove Automotive
[2] distribution and service territories only for MaK engines
[3] Distribution and service territories for MaK engines; for Cat engines only central, northwestern and southern Russia



RENTAL STRATEGIC BUSINESS UNIT

Austria
Czech Republic
Germany
Slovak Republic
Sweden

POWER SYSTEMS STRATEGIC BUSINESS UNIT

Austria / Armenia / Azerbaijan [2] / Belarus / Bulgaria [2] / Cyprus / Czech Republic / **Denmark** / **Estonia** [2] / **Faroe Islands** [2] / **Finland** [2] / Germany / Georgia [2] / **Greenland** / Hungary [2] / **Iceland** [2] / Kazakhstan [2] / Kyrgyzstan [2] / **Latvia** [2] / **Lithuania** [2] / Moldova [2] / Mongolia [2] / Poland [2] / Romania [2] / Russia [3] / Slovak Republic / **Sweden** / Switzerland [2] / Tajikistan / Turkmenistan / Ukraine / Uzbekistan

PLANT ENGINEERING STRATEGIC BUSINESS UNIT

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

■ Distribution and service territories since January 1, 2020

GROUP OVERVIEW

THE ZEPPELIN GROUP – A FOUNDATION-OWNED COMPANY

Its roots can be traced back to the establishment of the Zeppelin Foundation by Ferdinand Graf von Zeppelin in 1908. The Zeppelin Foundation still owns a direct stake in Zeppelin GmbH, as well as an indirect stake via Luftschiffbau Zeppelin GmbH.

LUFTSCHIFFBAU ZEPPELIN GMBH

in Friedrichshafen
Management Board: Jörg Bischof, Thomas Brandt

90 %

96,25 %

10 %

ZEPPELIN GMBH

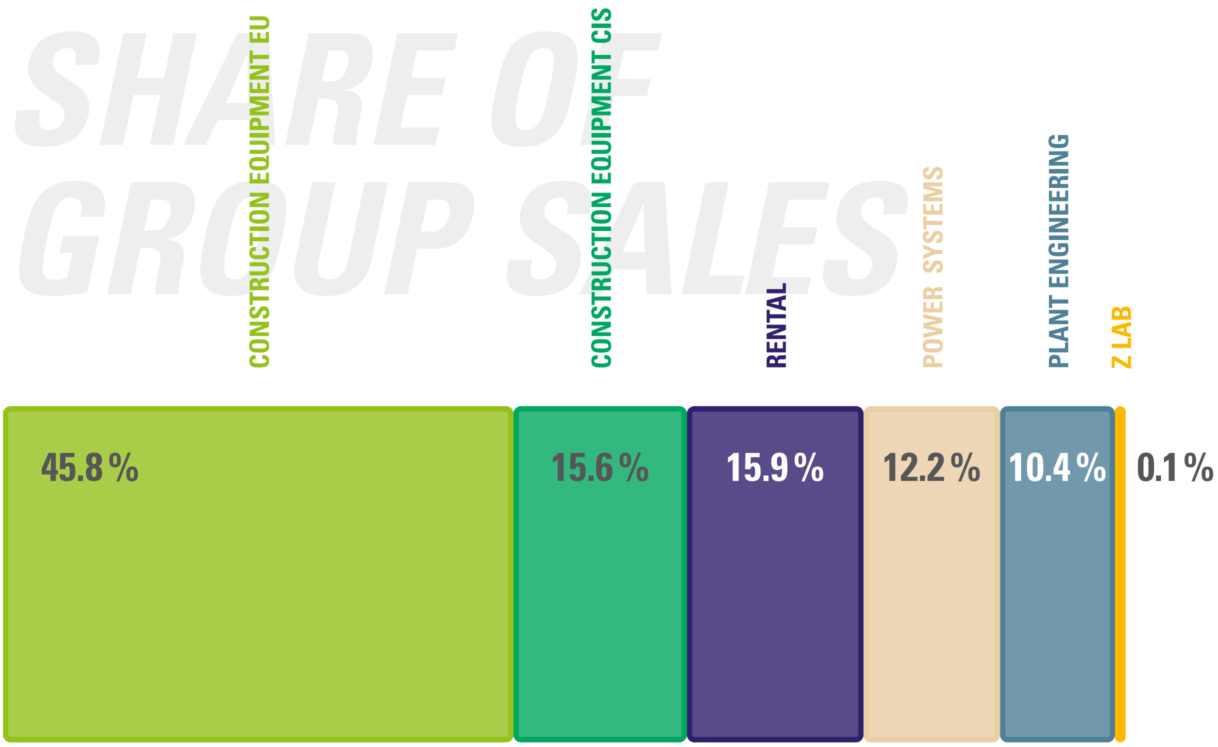
in Friedrichshafen / Garching
Management Board: Peter Gerstmann (Chairman),
Michael Heidemann (Vice Chairman),
Christian Dummler (CFO),
Alexandra Mebus (Labor Director)

ZEPPELIN FOUNDATION

under the administration of the City of Friedrichshafen

3,75 %

The Zeppelin Group offers solutions in the areas of the construction industry, drive systems and energy, as well as engineering and plant engineering; it is active in **in 43 countries and regions** across more than **220 sites worldwide.** There are around **10,000 employees** working in a management holding company with six strategic business units, and a strategic management center:Construction Equipment EU, Construction Equipment Nordics, Construction Equipment CIS (distribution and service of construction, mining and agricultural machines), Rental (rental and project solutions for the construction and industry sectors), Power Systems (drive, propulsion, traction and energy systems), Plant Engineering (engineering and plant engineering). In the 2019 fiscal year, the Group achieved **sales of EUR 3.1 billion**. Zeppelin GmbH is the Group holding company. It is legally domiciled in Friedrichshafen and has its head office in Garching bei München.



BEST BAUMA EVER

3,550
new and used machines sold

195
stand tours for 3,160 visitors

461,800,000
sales in euros

22
new product presentations

620,000 VISITORS
from 200 countries

100,000
donations to Home from Home in euros

bauma 2019 once again justified its reputation as the world's leading trade fair for construction machines, building material and mining machinery, construction vehicles and construction equipment, and was the place to be for representatives from the industry. The fair set a new attendance record by welcoming 620,000 visitors from around 200 countries. It was also the Zeppelin Group's most successful fair ever, beating the record set in 2016. 3,550 used and new construction machines were sold before and during bauma, and sales of EUR 461.8 million were achieved. The Construction Equipment business in Germany, Austria, Czech Republic and Slovakia, as well as in the Commonwealth of Independent States (CIS) countries

that were formerly regions of the Soviet Union, contributed to this result.

Caterpillar and Zeppelin were a major draw for bauma visitors, and their shared stand in hall B6 and the open-air exhibition area attracted considerable crowds. Around 70 exhibits across all size categories reflected the advances made in construction equipment used for excavation, civil engineering, road construction, gardening and landscaping, demolition, recycling, and the extraction of raw materials. The presentation of more than 20 new products (more than at any previous bauma) highlighted trends which are shaping the construction site processes and workflows of the future, making them more efficient and cost-effective, and advancing the automation of construction projects. One key theme is digitization, and an example of the influence this is having can be seen in the networking of Caterpillar construction equipment. Remote diagnosis of machines and remote software updates reduce downtime of equipment and engines. A particular focus of attention was the new generation of mini-excavators for example, featuring a compact design that is proving popular on the market because space on construction sites is more likely to be a limiting factor.

It was not only about Sales; Zeppelin Service also impressed visitors. This was most eye-catchingly evident in the flawlessly overhauled 2008 Cat dumper truck on display, which had already seen 14,600 hours of service. It helped to secure the overhaul, as part of the Cat Certified Rebuild program, of a Cat demolition digger and a Cat pipelayer.

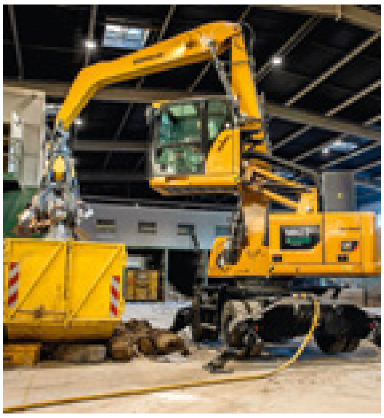
The Zeppelin Rental strategic business unit was in attendance, showcasing its machinery and equipment rental service together with its temporary infrastructure and building logistics expertise. Contracts were signed in respect of a wide range of orders and projects, from rental of machinery and equipment for a music festival, to numerous construction projects including construction of a pipeline. We received orders for several new building logistics projects, and saw high order entry in energy trading. Zeppelin also undertakes logistics planning projects and access control on construction sites on behalf of customers. Our company was even involved in putting on bauma itself, providing accessories such as working platforms, and supplying a number of exhibitors with stands from the modular room system portfolio. Interested visitors were also able to experience the entire Rental SBU portfolio in our "Infinity Room", in which three 270-degree LED screens immersed visitors in the fascinating 3D world of a construction site, and gave them an impressive overview of Zeppelin Rental's range of services.

Visitors to Zeppelin Power Systems discovered more about the latest EU emissions class V-compliant engines, as well as cutting-edge maintenance and repair options. With VR (virtual reality) glasses on, they were able to virtually explore installation projects and inspect engines at work. The same method was used to vividly convey the virtual planning and visualization processes in order to illustrate, for customers in the planning phase, potential optimizations in the installation and operation of a Cat engine.

For a long time, bauma has also functioned as a jobs fair where exhibitors like Zeppelin can attract new recruits. In the International Congress Center Munich (ICM), the Group had an exhibit presenting training and career development projects. As a foundation-owned company, Zeppelin combines business with social responsibility wherever possible, and with that in mind, not only were all proceeds from the Driver's Bar and a raffle of Caterpillar construction machine pictures donated to the Home from Home South African relief organization, but the Zeppelin Group also made a further donation to take the final amount from around EUR 45,000 to EUR 100,000.

The communications concept that Zeppelin Group used to report on bauma was also innovative, encompassing a specially created live blog, at www.wearebauma.com, that covered events at bauma for the benefit of all employees – whether they were attending the event or at one of the many sites worldwide – as well as interested members of the public. Background reports, videos, and photo reportage brought news from the fair to viewers, almost in real time. The Zeppelin Group was also able to simultaneously expand its presence on the LinkedIn, Twitter, Instagram, and Xing social media channels via the bauma blog, and picked up many new followers through its numerous activities on social media.

NEW PRODUCTS & SERVICES



ALTERNATIVE DRIVE SYSTEMS IN RECYCLING: MH22 AND MH24 ELECTRICAL HANDLING EXCAVATORS

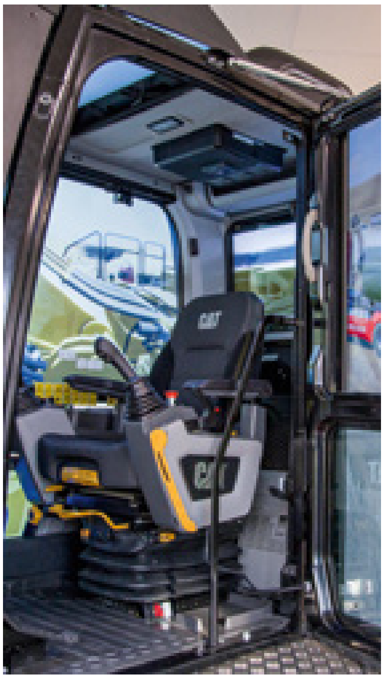
Customers are increasingly seeking alternative drive systems, and Zeppelin and Caterpillar are offering a wide range of solutions to meet this demand, such as electric excavators for material handling that are supplied via power cable, and mini-excavators as diesel-electric hybrid solutions. One particular example of this innovation can be seen in the MH22 and MH24 cable-powered electrical handling excavators, which have been developed exclusively for the German market in close collaboration between Zeppelin and Caterpillar. Both types are intended for high performance, predominantly in stationary use in halls, and both feature impressively fast cycle times while not producing exhaust emissions of any kind. These machines create hardly any waste heat and no flying sparks, as well as being significantly quieter in operation – all considerations that are of ever-increasing importance for companies in the recycling industry. The supplied trailing cable or an optionally available cable drum with cable length up to 73 meters also makes mobile use of the MH22 and MH24 possible. With no combustion engine, no fuel is consumed, which results in significantly reduced maintenance and repair costs and correspondingly low operating costs.

CAT MINI EXCAVATORS – A NEW GENERATION IN TWO TONNAGE CLASSES

The next generation of Cat mini excavators has been developed based on a platform strategy, and the top features include an air-conditioning system that is otherwise unusual in this class, and a completely new development in the form of joystick steering with cruise control. Five new models are available in the one- to two-metric-ton class; the 7- to 10-metric-ton class has also been expanded with five new types.

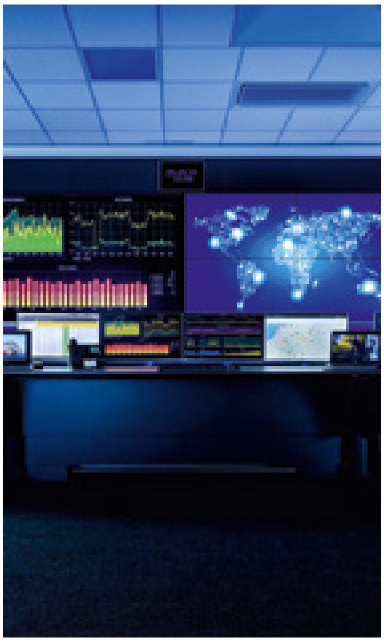
NEW DRIVE TECHNOLOGY FOR THE KNEADING PROCESS: THE NEW CODOS NT

Zeppelin Plant Engineering has already been engaged for some years in the refinement of systems and solutions for the food industry. With CODOS NT, Zeppelin has achieved a fundamental advance of the CODOS dough kneading system, and also combined it with raw material preparation. The new drive system offers significantly increased performance with reduced build size; it features lower energy consumption and reduced operating costs, and is also easier to maintain. Used in combination with the DymoMix dough pre-mixer – which has also been overhauled – the efficiency of dough production can be significantly improved overall.



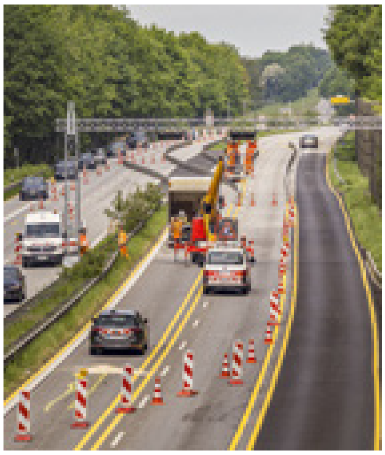
CONSTRUCTION EQUIPMENT SIMULATOR WITH FULL CAB

Together with the Hagedorn corporate group, Zeppelin has developed a special simulator for earthbreaking and demolition work. For the first time, machine drivers can train in a full cab reflecting working conditions on construction sites, with zero risk but under absolutely realistic conditions. While classic simulators are based in an open space, and use multiple screens to provide an abstracted view as from an excavator, this new simulator is actually based on the driver's cab of a CAT 323 tracked excavator. The key difference is motion platform technology that creates realistic movements for the driver in the cab, and is synchronized with the visual representations of construction site scenarios. The result is that drivers can experience the same vibrations and tilting in the simulator that they can expect in a real working scenario – as is familiar in flight simulator systems. For basic and advanced training purposes, various simulated earthmoving and demolition situations have been developed, ranging from loading a truck to lifting concrete paving slabs.



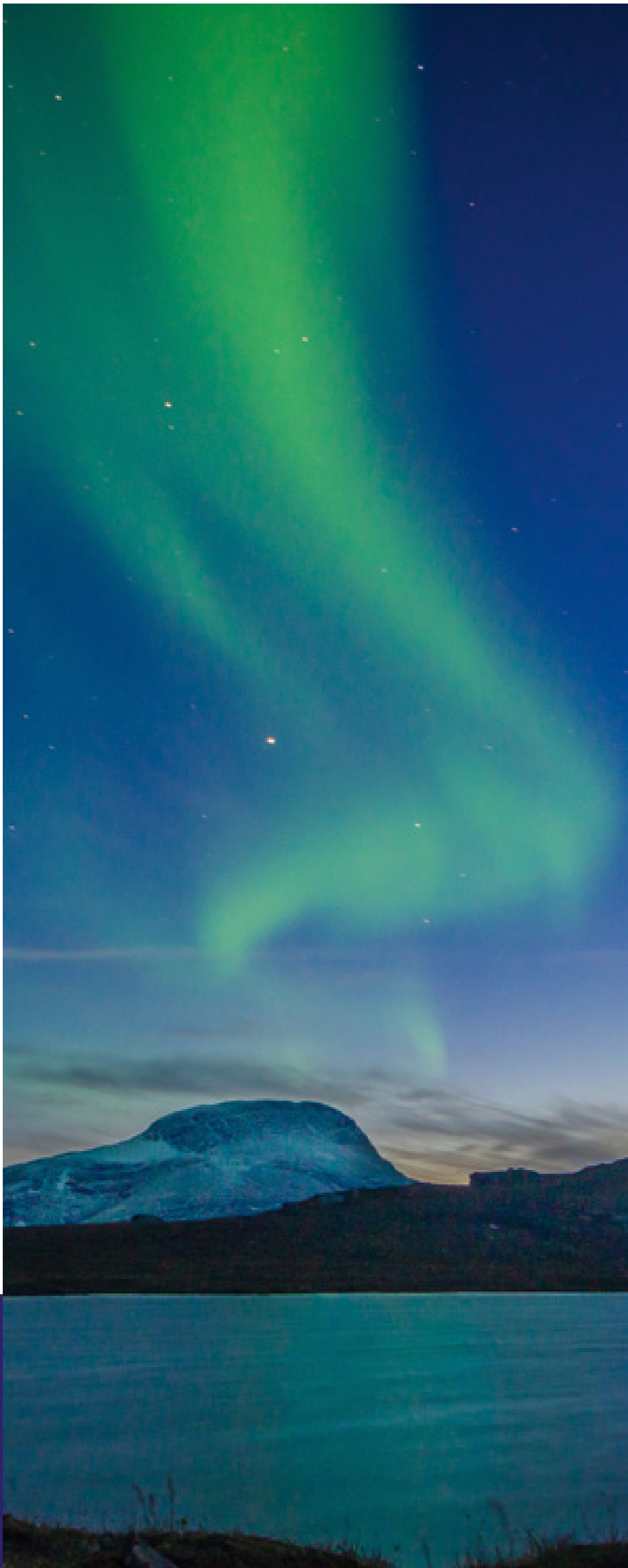
FLEET OPERATIONS CENTER (FOC): NEW PREDICTIVE MAINTENANCE SERVICES

With the new Fleet Operations Center (FOC) in Hamburg, Zeppelin Power Systems is further expanding its offering in the area of digital applications for customers, with predictive maintenance being a particular focus here. These procedures are based on using measured values and data recorded by sensors to proactively maintain machines and systems and guarantee their optimum availability and utilization. Engines and systems can be linked to a data platform developed specially by Zeppelin, on a non-manufacturer-specific basis, for the purpose of performing individual assessments of operating data. This enables early detection and intervention in the event of problems. Currently, data are brought together in the FOC from approximately 260 connected marine engines as well as spark plug monitoring for approximately 32 Cat engines that are used in combined heat and power plants (CHP plants). There are plans to extend the platform to include additional plants or for example locomotives in the future. Helpdesk employees provide first-level support for customers and Zeppelin service technicians.



THE FUTURE OF VEHICLE TELEMATICS

Properly applied vehicle telematics solutions for traffic management and information ensure reduced congestion, more safety on the roads, and greater environmental protection. The basis for an intelligent traffic system is the ability to collect, transfer, and process data. Zeppelin uses road signs with illuminated informational elements as a means of communication. The LED signs can be variably programmed and controlled depending on the situation. Sensors or cameras collect data and information and, after evaluation and processing, send corresponding information to the sign(s). Content is then automatically displayed on the signs in accordance with the programmed use case. An intelligent traffic congestion warning system from Zeppelin notifies car drivers of disruption only when it is actually occurring, for example. This is achieved using special radar sensors that measure the speed and density of traffic. If measurement of these two factors indicates congestion, the LED signs immediately activate to notify road users. Other potential uses for intelligent traffic system technologies include the monitoring of compliance with height and weight restrictions on bridge constructions, congestion warnings, signaling and information about hazards, and for marking diversions or variable traffic routing with lane signaling.



GROWING INTO NORTHERN EUROPE

EXPANSION OF DISTRIBUTION AND SERVICE TERRITORY INTO NORTHERN EUROPE

Very much in the spirit of its Growth, Performance and Stability GPS corporate strategy, the Zeppelin Group is further expanding its position as a leading distribution, service, and rental organization for construction equipment and engines in Europe. With effect from December 31, 2019, the Group took on responsibility for the distribution and service of Caterpillar and MaK products in Denmark, Greenland, and Sweden. Zeppelin also simultaneously took over Estonia-based Baltic Marine Contractors, and in so doing became responsible for distribution and service activities relating to MaK engines in Estonia, Latvia, Lithuania, Finland, Iceland, and the Faroe Islands. This represents the largest acquisition and associated expansion of Zeppelin's business activities in the history of the Group.

In Sweden, Denmark, and Greenland, the portfolio consists of Caterpillar construction and mining equipment, Rental, and Power Systems incorporating the MaK product range. Zeppelin has set itself the goal of expanding the machine population in the new territory and applying excellent service concepts to create enhanced customer benefits, and in this way the company intends to strengthen the spare parts and service business. Zeppelin's customers will also benefit from the planned expansion of services relating to the rental of construction equipment, machinery and temporary solutions for construction sites, and comprehensive concepts associated with used construction equipment.

Caterpillar Inc. granted Zeppelin the distribution and service rights in the additional territories in Northern Europe following a successful application process, and with reference to Zeppelin's performance in the existing distribution and service territories. This is a resounding acknowledgment, and demonstrates great confidence in Zeppelin's capabilities. Collaboration with Caterpillar as a trusted partner, combined with Zeppelin's experience in opening up international regions, creates a fantastic foundation for further growth. The Zeppelin and Caterpillar partnership has been in place since 1954, and the collaboration has been expanded to more and more countries and regions over the years.

Zeppelin has taken the new distribution and service territories over from Pon, the Dutch corporate group. Pon will continue to be the Cat dealer in the Netherlands, as well as in Norway, concentrating its resources and activity in these two markets. Following approval under anti-trust law, Pon's commercial assets – such as properties, buildings, machines, patents, contracts, etc. – were transferred to Zeppelin with effect from December 31, 2019. With the existing Pon employment contracts that were transferred at the same time, Zeppelin has brought on board approximately 800 new employees with its new distribution and service territories, meaning it has now grown to around 10,000 employees.

The strategic business units were also reconfigured in the process of this Zeppelin Group expansion. For the new distribution and service territories, construction and mining equipment business have been combined in a separate SBU called Construction Equipment Nordics. The new national subsidiaries, Zeppelin Sverige AB and Zeppelin Danmark A/S, will also include the Rental and Power Systems business segments under the management of the respective SBU. Management of the Construction Equipment Nordics SBU and the Management Board of the new national subsidiaries has been taken on by Mr. Volker Poßögel. He was previously responsible for the Power Systems SBU, a role he handed over to his successor Ralf Großhauser on November 1, 2019.

The integration phase started at the beginning of 2020. This involves the harmonization of processes and optimal adaptation to customer requirements of the product and service portfolio in the new distribution and service territories.

ZEPPELIN DIGIT

"With Zeppelin Digit, the goal is to create a harmonized customer experience in the digital world for all business areas of Zeppelin. Creating benefits for our partners is always our priority, and this development enables us to support our customers throughout their lifecycle, while also concluding additional business on digital channels."

Wolfgang Hahnenberg, Chief Digital Officer, Zeppelin Digit

ZEPPELIN DIGIT: STRATEGIC MANAGEMENT CENTER FOR DIGITAL CHALLENGES

With a view to reinforcing its position as it faces the challenges of the digital transformation in its markets, the Zeppelin Group has reconfigured its resources in the areas of IT, digitization, and innovation. The newly created Zeppelin Digit strategic management center is set to support all strategic business units in the future as a cross-area function, and it brings together expertise in the Zeppelin Group from the areas of IT, Data, Infrastructure, Security and Compliance. With Zeppelin Digit, the Group is putting in place a consistent IT landscape with an infrastructure that is standardized across all disciplines. A user-centric approach is central to all of its commercial activity. Innovative tools and methods will be harnessed to develop new products and services that resolve specific challenges that users face. It will facilitate collaboration across all SBUs and departments within the Zeppelin Group, on an interdisciplinary, transparent, and open basis, enabling and encouraging colleagues to work together more closely.

The former Z Lab strategic business unit was merged into Zeppelin Digit with effect from January 1, 2020. Zeppelin Lab GmbH continues to exist as a Group company within Zeppelin Digit; Wolfgang Hahnenberg has taken over the management of Zeppelin Digit as Chief Digital Officer.

Z Lab GmbH is an open innovation and founding center that has the objective of playing an active role in shaping the future of construction, logistics, and infrastructure, by means of a variety of collaborations; and of bringing innovative solutions (ventures) to market that are intended to make the construction industry more transparent, productive, sustainable, and safer.

At bauma 2019 the Zeppelin Group presented the newly founded klickparts, klickrent, klickcheck and zamics ventures to the public for the first time. These new digital developments went through extensive development and testing phases before reaching the status of competitive business models.

klickparts enables users to acquire construction equipment spare parts online from leading manufacturers. The platform offers a wide product range of around 60,000 high-quality spare parts and maintenance products from many premium manufacturers.

Users can use the klickrent portal to check the availability of construction equipment and to rent devices and machinery from various suppliers across Germany – very quickly and without needing to sign in.

klickcheck makes the documentation process for rental machine handovers more straightforward, both for the lender of the machines and the renter. Transparency is ensured by means of detailed checklists and a photo function for recording damage; all documents are conveniently stored in a single location and damage can be documented paperlessly.

zamics simplifies the administration of work tools. With this digital solution, users can view the status and location of small and medium-sized work tools at any time, enabling them to retain an overview of all their devices and ensure optimum utilization.

An additional venture is being presented at the beginning of 2020: A digital locking system for construction containers, which makes access control on construction sites more secure and straightforward. This new solution eliminates the need for time-consuming administration of keys. Z Lab is following its familiar, proven lean approach here. Initially the new solution will be tested in everyday work with selected customers in prototype form (minimum viable product or MVP), in order to optimize functionalities and ease of use before official market launch.

As a center of innovation, Z Lab is constantly in dialog with up-and-coming start-up founders. The new SPACE LAB program at the Berlin office provides workspaces that can be used for up to three months; founders can further develop their ideas here and also speak with experts. The new Proworking Program is aimed at young start-up teams and student prospective founders who are interested in the development of digital solutions for the construction industry.

In 2020, the Zeppelin Group will present itself at digitalBAU, a specialist trade fair for digital solutions in the construction industry, and looks forward to lively discussion with trade professionals there.

GROUP TOPICS FOR 2019

People 2025

The People 2025 project was created as a cross-SBU strategic focus for 2019. It has been devised in light of the fact that in Germany alone, more than 400 of our employees will retire by 2025, and more than 2,000 by 2035 – in other words, almost half the current workforce. Many of our new recruits are from "Generation Z" – in their early 20s – and what they expect and require of an attractive employer is very different from earlier generations. This requires us to make well-considered changes that become permanently established.

We are also conducting a sub-project entitled "Workplace of the Future", which aims to look in detail at the areas of Production, Sales, Service, and Administration. From smart glasses to high-tech office equipment: The workplace of the future will be shaped by the possibilities that digital interactivity offers, and this is what Zeppelin seeks to develop using targeted measures across all SBUs.

Another sub-project shines a light on the employee development programs that will become necessary. These should be built on a standardized platform, which

creates transparency with regard to the skills and qualifications held by employees and managers. With this platform, the company can target areas for developing individual employees – expanding their digital expertise, for example. The eventual aim is to introduce mobile, web-based training methods to supplement current classroom training.

A further sub-project focuses specifically on the job profile of a service technician, as this role is a key element for success in the Zeppelin business model. Workshops and interviews on the subject repeatedly came back to the issue of HR marketing as an area where there is scope for Zeppelin to improve. Education remains an important and productive recruiting channel for Zeppelin. The Group is increasing its involvement in school collaboration projects, but is also expanding its activities into sponsorship and events, as well as social media.

Group-wide SAP introduction

With the strategic decision to launch standard ERP (Enterprise Resource Planning) software platforms and uniform data management to optimize processes and IT systems Group-wide, Zeppelin has taken a major step towards securing the Group's future. SAP software is being gradually rolled out in the Zeppelin Group with the Z ONE SAP project. Following successful implementation of the software in the Construction Equipment CIS and Plant Engineering SBUs and in the Zeppelin holding company, the Construction Equipment EU strategic business unit launched the software in its Austrian Group company in June 2019, as a pilot project for our European trading companies. Group companies in Germany, Czech Republic, Slovakia will follow. The standardized platform will enable Group-wide requirements to be implemented more easily, more quickly, and more flexibly, sharpening and extending Zeppelin's competitive edge.

JUST!
Youth Foundation Award

In May 2019, the JUST! Zeppelin Youth Foundation presented awards to students and school pupils who showed outstanding promise. Exceptional school projects and academic work received awards under the declaration that "Zeppelin is the Future". The JUST! Zeppelin Youth Foundation was founded by Zeppelin GmbH and Luftschiffbau Zeppelin GmbH in 1990. Its aim is to support the education and training of young talent from the Friedrichshafen and Ravensburg-Weingarten region. Every two years the Foundation allocates sponsorship awards worth EUR 25,000 in total, recognizing outstanding work in natural sciences and engineering, economics, and social and cultural science. The prize winners on stage are presented with the JUST! award. For more information, visit www.just-zeppelin.com.

Committed to sport

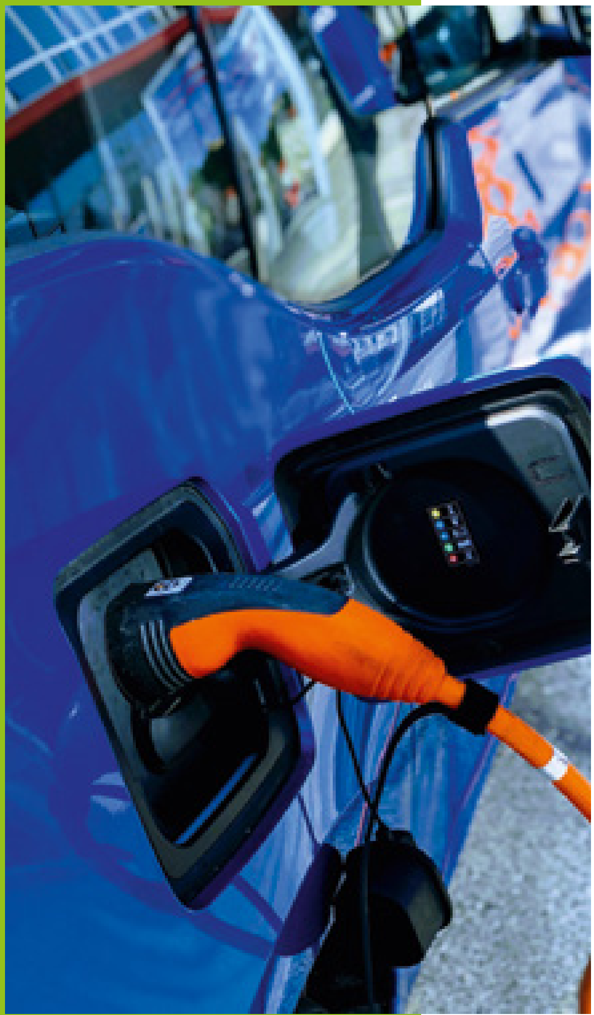
As a foundation-owned company, the Zeppelin Group has always taken a keen interest in its home region, and is involved in a number of charitable projects there. Sporting activities – team sports in particular – is an area of special interest to Zeppelin. For many years, the Group has supported volleyball, soccer, and badminton clubs at VfB Friedrichshafen, supplying stadium refurbishments or team kits, for example.

Home from Home

Zeppelin supports the Home from Home charitable organization, which focuses on creating a better future for orphans, HIV-positive children and neglected children in the townships outside Cape Town. The organization gives children the chance to grow up in a family environment where they can feel safe, loved and secure. Foster mothers ensure that they receive regular meals, have access to healthcare, and that they go to school and receive an education. It is now traditional for proceeds from the sale of food and drink at the Zeppelin Driver's Bar at bauma, as well as a raffle of construction machine images, to be donated to Home from Home, and at bauma 2019 this was more than doubled by Zeppelin. The organization was delighted to receive a total donation of EUR 100,000.

www.homefromhome-germany.org.

SUSTAINABILITY



As a future-focused company, sustainability for Zeppelin means making a genuine long-term contribution to the environment and society through the power of our corporate culture. Zeppelin considers the term sustainability to encompass social, economic, and ecological aspects, and strives to use resources without leaving lasting damage, in order to preserve them for future generations.

In 2016, Zeppelin GmbH voluntarily joined the UN Global Compact and committed to its ten principles spanning issues of human rights, labor, environment, and anti-corruption.

In order to be able to meaningfully describe this commitment and Zeppelin's progress in these areas, since 2016 non-financial key figures based on defined Key Performance Indicators (KPIs) have been recorded in the areas defined as essential, such as safety at work, compliance, data protection, energy management, environmental management, donations and sponsorship, and employee satisfaction. For each of these areas, Zeppelin stipulates demanding targets to ensure continuous improvement, agrees suitable measures for achieving those targets, monitors implementation, and reports on progress in its annual UN Global Compact report.

Alongside social and societal commitment, the responsible handling of resources and protection of the environment are key concerns for the Zeppelin Group. That is why Zeppelin is already working on the target of being a CO_2-neutral company by 2030. Measures targeting reduced energy consumption and reduced emissions have already been implemented to achieve this ambitious goal, including the installation of a photovoltaic plant at the Achim site, which is functioning as a pilot project for the commissioning of additional photovoltaic plants, and the gradual switchover to energy-efficient lighting (LEDs) that will continue over the coming years.

The cross-company integrated management system (IMS) that was introduced in Germany in 2019 supports Zeppelin in continuous improvement and the achievement of targets. Within the scope of initial certification of the IMS, both the initial certification of the environmental management system in accordance with ISO 14001 and the certification of the health and safety at work management system in accordance with ISO 45001 were completed in 2019. At the same time, the quality management system was recertified in accordance with ISO 9001 in the operational companies in which it has already been in place for many years, and certified for the first time in the holding company. The recertification of the energy management system in accordance with ISO 50001 for all subsidiaries in Germany and Austria was also confirmed in 2019, and the scope was extended to Czech Republic, where initial certification was obtained. These certifications are valid for a period of three years, with an external monitoring audit performed at selected sites each year by certification company GUTcert.

In the course of continuous improvement processes, Zeppelin is striving to expand the scope of its energy management system to additional countries, including Poland and the Slovak Republic in 2020, and the newly added sales territories of Sweden and Denmark in 2021.

Detailed and further information on the subject of sustainability at Zeppelin is available in the current UN Global Compact Communication on Progress report, and at www.zeppelin.com.

CONSTRUCTION EQUIPMENT EU

> ***"2019 was a record year for the Construction Equipment EU SBU – our customers were working at full capacity and could barely keep up with fulfilling orders. This resulted in a high willingness to invest, making bauma, the world's largest trade fair, a particular highlight. We hit record numbers not only for order entry but also in Service – our employees and workshops worked to their limits to deliver new equipment and to get them ready for use on construction sites. Over 40,000 existing Caterpillar machines belonging to our customers were also maintained and repaired on construction sites. Despite all the challenges of this workload, we are of course delighted about the good order situation in the construction industry and our increased market share."***
>
> ***Fred Cordes, Head of the Construction Equipment EU SBU***

REVIEW OF 2019

The Construction Equipment EU strategic business unit was again able to improve on its excellent result from the previous year, and showed itself to be the market leader in the German, Austrian, Czech, and Slovak markets. As the situation in the construction industry is still very good, strong figures for order entry and backlog were ensured, and these again significantly exceeded the levels achieved in the previous year; markets in Germany, Czech Republic, and Slovak Republic in particular were on a growth course. Despite a general slight market decline, the SBU in Poland was able to maintain sales of Manitou equipment and HYSTER products at the level of the previous year, and the development of aftersales revenue for Grove machines also saw clear positive growth.

Trade fair participation, for example at bauma 2019, Nordbau, and Agritechnica (the world's leading trade fair for agricultural technology), served as a platform for the SBU to present its entire range of innovative solutions and product innovations, and contributed significantly to sales and earnings. The trend towards more efficient and more environmentally friendly construction equipment has taken shape in the form of electrical drive systems for example, such as in the cable-powered MH22 and MH24 handling excavators, or the tracked excavator and wheel loader with electric drive (see page 26 of this document) demonstrated in prototype form at bauma.

The customer offering was also extended in the digital sector. Caterpillar and Zeppelin launched the first industry-wide application software for mobile devices, with a new app for fleet management that enables users to manage their fleets even while on the move. In addition, it makes relevant information such as the location and condition of the machines available at all times. Remote-monitored troubleshooting and system updates will also soon be available as standard for construction equipment; to provide this Zeppelin reads error messages using telematics data from the established fleet management system. Thanks to smart data analysis, construction machines can promptly notify operators of faults before they have expensive consequences. With www.baggerboerse.de, Zeppelin has created a new platform that enables users to quickly determine a value for their used construction machine, with no obligation to sell. 20 different categories are offered on a non-manufacturer-specific basis, subdivided by standard categories such as tonnage or bucket capacity.

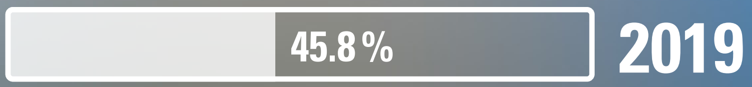
Zeppelin has received awards from Caterpillar for its performance in terms of distribution and service: The market launch of the new generation of Cat tracked excavators and the new wheel loader product series was as outstanding as the increased number of service contracts.

OUTLOOK FOR 2020

After weak economic growth in 2019, the economy is expected to perk up slightly in 2020. The construction industry's economic situation as far as it is important to Zeppelin continues to forecast growth, although with slightly easing dynamism. As such the Construction Equipment EU SBU expects a broadly stable situation. There is a considerable backlog: Public authorities have approved many infrastructure projects, and some of these are yet to enter the implementation stage. The investment bottleneck in the rail segment has eventually resulted in a multi-billion-euro investment program by Deutsche Bahn, and this now needs to be processed. In addition, there are measures in civil engineering aimed at driving forward the expansion of a 5G network with rapid internet connections and blanket coverage. Residential construction, which over recent years has been a key pillar of economic activity in the construction sector, will continue as such to a certain extent, not least due to the low interest rate policy. However, the construction industry is still also facing a few major challenges, in particular the increasingly apparent skills shortage. In addition, digitization must be more widely applied to increase productivity. Caterpillar is setting new standards in this respect, with new construction machines that are ever-more-strongly networked. In particular the new mini and tracked excavators, which represent a change in generation, have lifted work on construction sites to a new level. However, it is not predictable how much the Covid-19 pandemic will weigh on these expectations.

SALES in EUR million / in acc. with IFRS

SHARE of Group sales



EMPLOYEES as an average for the year, including trainees

PRIZES / AWARDS

Award from Caterpillar for the successful market launch of the new generation of Cat tracked excavators and the new wheel loader product range as well as for increasing the number of service contracts.

DISTRIBUTION AND SERVICING OF CONSTRUCTION EQUIPMENT IN THE EU

The Construction Equipment EU SBU is the Europe leader for the distribution and servicing of construction equipment. Its range of services includes over 200 different types of machine from market leader Caterpillar. The SBU provides customers with powerful earthmoving, excavation, demolition, recycling, and road construction equipment, and also offers machinery for gardening and landscaping, agricultural, and industrial use. The product range is rounded off with special equipment for surface and underground mining, plus fleet management and machine control systems. A dense branch network with central spare parts warehouses guarantees a fast response and quick delivery for customers. The general overhaul of used construction equipment also offers a cost-effective and resource-conserving alternative to buying new. There is a particular emphasis on all-round care for customers in the construction sector and the building materials industry, who are offered integrated solutions from seismographic soil examination to all-inclusive contracts.

AUSTRIA
CZECH REPUBLIC
GERMANY
POLAND*
SLOVAK REPUBLIC

* Only Hyster forklifts / Manitou conveyor systems / Grove Automotive

zeppelin.com/en/company/construction-equipment-central-europe.html

Link valid from 01.01.2020

ZEPPELIN CAT

CONSTRUCTION EQUIPMENT CIS

"Due to the rapidly changing opportunities and challenges in the markets of the CIS region, business for the Construction Equipment CIS SBU continues to be exciting. We expect that we will expand our market position further – assuming that the framework conditions are stable and do not deteriorate – in construction, mining, agriculture, and forestry equipment. With the significant increase in the product support business, we are deepening our customer relationships and as such securing an important, long-term factor for the stability of our business."

Frank Janas, Head of the Construction Equipment CIS SBU

REVIEW OF 2019

The Construction Equipment CIS strategic business unit again increased both sales and earnings in the 2019 fiscal year to slightly above the previous year. Growth was recorded both in new machine business and for customer services and spare parts. There were different trends apparent across the individual countries of the region. In Russia, there was almost no change in construction output and – because of investments made over the last two years – there were no gains in the construction equipment sector here. The situation in the Ukraine is similar. In Belarus, despite falling construction production, high growth was observed in the construction equipment sector, as result of which a flatter market is now expected.

In Armenia and Uzbekistan, the BIP was very positive, and the construction equipment sector benefited from increased construction output. Uzbekistan in particular recorded extraordinary growth in the construction equipment market, as a result of changing political conditions.

In the agriculture equipment segment in Ukraine, Zeppelin introduced the new Fendt IDEAL combine harvester together with the company AGCO; this was appealing to large-scale operations as the machine has been redeveloped from scratch, with the objective of rapid and efficient harvesting. In June 2019, the Zeppelin Group celebrated the opening of a new branch in St. Petersburg, as well as 20 years of the company in Russia. The company continues to make its commitment to the Russian market and CIS region clear, as demonstrated by its investment in cutting-edge service workshops, spare parts warehouses, and an office building. The opening of additional Zeppelin branches, in the southern part of Moscow and in Derhachi, Ukraine, emphasize this commitment.

OUTLOOK FOR 2020

Forecasts for the CIS markets that are relevant for Zeppelin are stable. Against the background of a consistent, not deteriorating political situation in the countries in the region, the Construction Equipment CIS SBU also expects good business development in 2020, supported by the framework conditions. In terms of sales of new construction equipment, a stable market is expected with volumes of around 15,000 new machines. However, fluctuating prices and falling demand for raw materials, driven by the trade conflict between the USA and China, may have a dampening influence on investments, particularly in the export-oriented mining industry. Furthermore, the rapidly spreading Covid-19 pandemic could have significant negative effects on the economic development

In Russia, the SBU expects high demand for fleet business transactions, as it is expected that large-scale state projects will be awarded. Based on the extensive infrastructure-related measures already announced, market growth of up to 2% is to be expected. The agricultural equipment business in the south of Russia is also seeing positive development, following the conclusion last year of a new dealer agreement for the Stavropol region, with AGCO. An expansion of sales territories is planned in the southern Russian region. Despite sanctions that have been negatively impacting the Russian economy for several years, as well as increasing protectionism, this SBU expects positive development in 2020. The new political situation in Ukraine also brings a change in terms of the investment climate. Many positive stimuli can be identified, which will also have an influence on the Zeppelin Group's business in Ukraine. The forthcoming land privatization will certainly boost agriculture in the medium term, and will also have a significantly positive effect on Zeppelin's agricultural equipment business in Ukraine. With the construction of the new Zeppelin Ukraine main branch in Kiev, Zeppelin is again demonstrating its strong commitment to a long-term presence in the CIS region.

In Central Asia, Uzbekistan is catching the eye of Western investors, with many new government programs indicating significant opening up. The Zeppelin team is working on various new mining projects which are made possible by advancing privatization.

After the investment bottleneck of the last few years, the mining industry is now seeing increasing demand for new equipment. The renewal of loading and transportation technology has begun, particularly in Russia and Uzbekistan. The SBU is also planning to continue the successful increase in market share in 2020, with Caterpillar mining technology for hard-rock applications.

The focus and central stability factor for the development of this SBU in the future will also continue to be spare parts and customer service business. The significant expansion of the spare parts business will be advanced in joint projects with Caterpillar and through the introduction of new services.

SALES in EUR million / in acc. with IFRS

SHARE of Group sales

EMPLOYEES as an average for the year, including trainees

ORDERS SECURED

Russia: Kovdor Mining Plant / EuroChem Group
Zeppelin delivered eleven 789D dump trucks to Kovdor Mining Plant, a company that is part of EuroChem Group, a market leader in the production of mineral fertilizers.

Belarus: Beltruboprovodstroy
Beltruboprovodstroy, the most prominent Belarusian company operating in the construction of high-pressure gas lines, oil pipelines, compressors, and gas distribution systems for example, has acquired several units of the PL 587 for pipelaying as well as various tracked excavators.

Uzbekistan: Navoi Mining & Metallurgical Combinat
The Zeppelin Group delivered dump trucks and special equipment for the extraction of raw materials with an order volume of over USD 20 million.

DISTRIBUTION AND SERVICING OF CONSTRUCTION AND AGRICULTURAL MACHINERY

The Construction Equipment CIS SBU is very well positioned in Eastern Europe and Central Asia. Its portfolio includes Caterpillar construction equipment, 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 equipment from leading international manufacturers. The extensive product range is rounded off with fleet management and machine control systems for improving work processes and enhancing efficiency. Zeppelin's Component Rebuild Centers lead the way when it comes to overhauling components used in mining.

ARMENIA
BELARUS
NORTHWEST, CENTRAL, AND SOUTHWEST RUSSIA
TAJIKISTAN
TURKMENISTAN
UKRAINE
UZBEKISTAN

zeppelin.com/en/company/**construction-equipment-eurasia**.html

Link valid from 01.01.2020

RENTAL

"We again achieved record figures and further expanded our business in all sectors. The best team in the industry achieved fantastic performance and showed that we have what it takes and that our portfolio means we are very well positioned on the market – which is evident both in a superb bauma trade fair performance and in daily contact with our customers. I see a great deal of future potential from the three pillars of our value proposition, and we must further unlock this in 2020."

Arne Severin, Head of the Rental strategic business unit

REVIEW OF 2019

The Rental SBU completed the fiscal year 2019 with great success, with sales and earnings both significantly above the figures for the previous year, and the revenue mark of EUR 500 million exceeded for the first time. All relevant markets – Germany, Austria, Czech Republic and Slovak Republic – recorded growth. Earnings were driven by the good situation in the construction industry. However, trade fair appearances such as those at bauma 2019, Nordbau, DeuSAT (the trade fair for traffic engineering for German road fitout companies), Deutscher Bautechnik-Tag (German structural engineering event), and school-building trade fairs also contributed to both sales and earnings.

The integration of Baustellen-Verkehrs-Technik GmbH, acquired back in 2018, was completed with the successful merger with Zeppelin Rental GmbH in 2019. With effect from January 1, 2019, Zeppelin acquired 100% of the shares in Luther Group. This significantly strengthens the Rental SBU's solutions competence in traffic safety and traffic engineering, as Luther Group is a leading provider in technology for traffic telematics solutions, LED signage, and mobile protective barrier systems, as well as assembly systems for transport facilities.

To provide customers with the latest low-emissions and high-performance technology, this SBU has invested for example in new-generation handling excavators and mini excavators from manufacturer partner Caterpillar. In the area of working platforms, hybrid and electrical equipment such as articulated telescopic platforms from manufacturer Genie and scissor lifts from Skyjack are new additions to its offering. The construction elevators portfolio has been expanded with the addition of equipment in the heavy-duty segment, and services in project business have also been expanded. Through a strategic partnership with supplier BauWatch, the range of construction site equipment services has been expanded with a camera-supported solution for construction site monitoring. Zeppelin is a pioneer in the use of BIM (Building Information Modeling) in relation to temporary-use fixtures. Its "digital twins" offering was further expanded in 2019. Various distribution cabinets are now also available for digital planning of construction projects.

Among other positive outcomes, the success of this strategic business unit is demonstrated in the processing of various major projects such as equipping the Rheinbrücke – a bridge on the A 40 – with a traffic system solution and the rental of working platforms and construction equipment for the expansion of the Vienna Metro. Its success was also reflected in awards received: Caterpillar honored the Rental SBU in the Operational Excellence category, and trade publication SOLID awarded the Rental SBU the title of "best construction service provider in Austria".

OUTLOOK FOR 2020

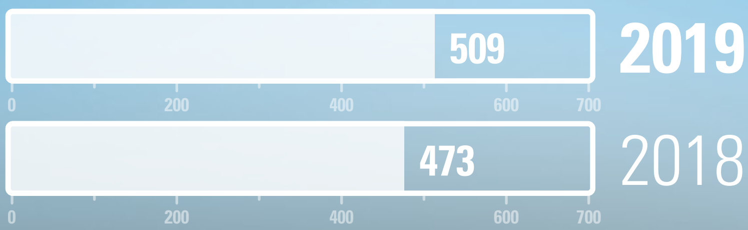
Despite an overall low level of economic dynamism as well as geopolitical uncertainty from international trade conflicts for example, the Rental SBU also assumes positive development in its markets in 2020. In Germany and Austria, construction activity is in full swing, and there is no let-up in demand for rental machines and construction-related services. In Czech Republic and Slovak Republic, the construction industry is again expecting slight growth in the rental market due to a positive market situation in the construction industry. For the time being, it is not predictable how the Covid-19 pandemic might dampen these prospects.

The Rental SBU will continue to drive forward the broad expansion of its integrated offering across all business segments. Its portfolio and processes are consistently aligned with customers' value drivers in order to offer maximum value creation. Integrating corporate group Luther HL, which was acquired in 2019, will play an important role in unlocking potential arising from this newly obtained expertise. Structured collaboration will be utilized to create the framework for servicing the market on a joint basis, and to ensure reciprocal knowledge transfer.

Another exciting challenge is formed by Zeppelin's market entry into Northern Europe and the associated establishment of rental activities in Sweden and Denmark. In the 2020 fiscal year, appropriate structures will be established and the first sites for the rental of compact machinery, construction equipment, and conveying systems will be opened.

Digital solutions that are fit for the future are and will remain crucially important to the Rental SBU. Based on a systematic identification and analysis of internal and external use scenarios, the Rental SBU develops user-centered services that optimize the customer and employee experience and result in even simpler, better design, and foster collaboration. The first customer ERP systems will be integrated in 2020, and additional customer interfaces are set to follow. In addition, the energy portal as well as online construction logistics tools will be further developed.

SALES in EUR million / in acc. with IFRS



SHARE of Group sales

EMPLOYEES as an average for the year, including trainees

PRIZES / AWARDS

Best construction service provider in Austria
Trade publication SOLID

Award from Caterpillar
for operational excellence

ORDERS SECURED

Rheinbrücke Neuenkampf traffic system on the A 40
Zeppelin supplied an intelligent weighing system that prevents overloaded lorries from crossing the Rheinbrücke bridge on the A 40, which is in a run-down condition. The components of this advanced traffic system solution are sensors that detect the individual axle loads as well as the total weight of vehicles, high-performance cameras, scanners, and variable LED messaging signs. The technology and equipment for the data center, as well as the staff on-site, are housed in containers from Zeppelin's rental fleet. Zeppelin was additionally responsible for health and safety, and also set up the power supply.

Construction logistics for a chemicals site
The SBU was awarded the contract for the management of construction logistics on a major chemicals site. A key challenge in this project was that construction had to take place throughout ongoing production. Zeppelin's responsibilities included the coordination and management of all supply and disposal logistics, equipping the construction site with a power supply, construction water, and container systems in the operator model, as well as traffic management on the worksite including a shuttle bus.

FROM RENTAL EQUIPMENT TO PROJECT SOLUTIONS

With tailored solutions in the fields of rental machines and equipment, temporary infrastructure and construction logistics, the Rental SBU offers a portfolio that is unique in its markets, and which ensures that its customers can work efficiently and reliably throughout their projects. Construction logistics includes the planning and coordination of all construction logistics processes, including access control, supply and disposal logistics, operator models and construction management. Temporary infrastructure ranges from site and traffic guidance, electrical construction site facilities and energy supply, to modular space solutions. In the machine and equipment rental division, quality products from the market leader Caterpillar and a range of other reputable manufacturers offer top-class efficiency and cost-effectiveness.

AUSTRIA
CZECH REPUBLIC
GERMANY
SLOVAK REPUBLIC
SWEDEN*

The Rental business will be established in Denmark from 2020 onward.

* from January 1, 2020

zeppelin.com/en/company/**rental**.html

ZEPPELIN CAT THE Rental STORE

POWER SYSTEMS

„We ended 2019 on an extremely positive note, with good earnings. I'm delighted that Ralf Großhauser, an experienced and expert successor from the mechanical engineering and industrial sector, has come on board with the Power Systems SBU. In addition to construction equipment and rental business, I myself will in future also be responsible for the Nordic countries of Denmark and Sweden, working closely with the new Power Systems CEO in this regard."

Volker Poßögel, Head of the Power Systems strategic business unit

REVIEW OF 2019

The Power Systems strategic business unit increased both sales and earnings in the 2019 fiscal year, to significantly exceed the previous year. The foreign subsidiaries made a key contribution to this excellent result, which was driven by Belarus and Czech Republic with very good development in the distribution of new engines, as well as Russia.

The continued high demand for alternative drive forms in the cruise liner, ferry and special-purpose ship sectors ensured a significant order backlog. There was a particular increase in demand for ballast water treatment systems. The inland navigation segment saw positive development with remotorization and new build business.

For rail vehicles, there was a continued trend toward electrification and hybrid locomotives in 2019. The Power Systems business unit successfully continued a series of dual-mode locomotives for an American customer, for example.

In the data center and combined heat and power (CHP) plants segment, demand developed positively; for example, Zeppelin was responsible for the construction of a new CHP plant in Ramstein, where it delivered the generator set including exhaust gas technology. An associated service contract for a period of ten years was also concluded.

In the oil and gas sector, business was stable at the previous year's level. The low oil price is not currently encouraging investment behavior in this segment.

The offering in the digital sector was also extended, with the successful launch of the online shop for Caterpillar spare parts – parts.cat.com. With the new Fleet Operations Center, additional, more detailed digital evaluation options were created for engines and systems that help customers to transparently visualize operating statuses and identify a need for maintenance on a preventive basis.

Ralf Großhauser took over the management of the Power Systems strategic business unit with effect from November 1, 2019. Volker Poßögel, who was previously the head of this business unit for many years, took on leadership of the new Construction Equipment Nordics strategic business unit.

OUTLOOK FOR 2020

Good capacity utilization in 2019 engine and service business, with an above-target order backlog means that this SBU can look to 2020 with positivity. The new engine sector will invest more in sustainable drives such as hybrid applications in the form of diesel battery systems or LNG (liquefied natural gas) systems, and is offering new solutions for industrial applications including the C2.2 and C3.6 level V small engines. The SBU expects positive stimulus also from the takeover of Baltic Marine Contractors and the associated expansion of the distribution and service territories for MaK engines into northeast Europe. The marketing of the test bench in Achim as a service to all machine and plant builders has been successfully started, and will be increased in 2020. Turbocharger activities have also been further expanded, and Zeppelin is the new official service partner for KBB turbochargers, meaning that it expects positive development in turbocharger service business.

The new business segments of data analysis and digital projects will mean expanded service contracts (Customer Value Agreements) in the future, with digital components added. In Hamburg, the Fleet Operations Center (FOC), a digital center for machine and application data in the field, has picked up pace and is expected to be fully occupied by mid-2020. With the FOC, this SBU is also further developing its predictive maintenance offering in particular.

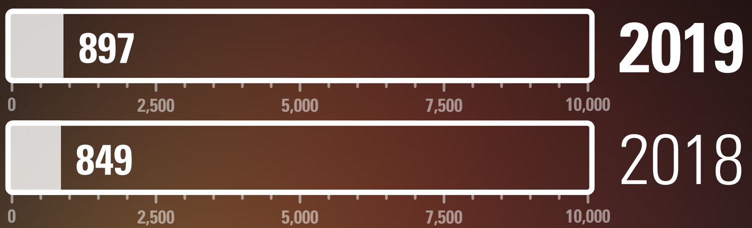
Additional focal points will continue to be Cat Repair Options, i.e. repair solutions that are coordinated precisely to the respective use conditions for the relevant customer, and online spare parts business.

Internally, new methods and approaches will be used to enhance efficiency and support agile working.

SALES in EUR million / in acc. with IFRS

SHARE of Group sales

EMPLOYEES as an average for the year, including trainees



PRIZES / AWARDS

AEO-F (Authorized Economic Operator) certification:
Certified companies receive specific concessions in the context of customs clearance, because they are considered particularly reliable and trustworthy. In practice it means that these companies can import and export goods more quickly. It additionally indicates that Zeppelin Power Systems is rated as particularly secure in terms of its supply chain. This makes it easier to transport goods into other countries (e.g. the USA).

ORDERS SECURED

Germany, Oberhausen combined heat and power plant
The Power Systems SBU has received the order to construct a combined heat and power plant with 9 MW of output from Energieversorgung Oberhausen AG (evo). This project, which will be realized in consortium with construction company Matthäi, comprises complete construction including the provision of generator sets, process engineering, and maintenance. The investment volume exceeds EUR 12 million.

DRIVE, PROPULSION, TRACTION AND ENERGY SYSTEMS

The Power Systems SBU portfolio provides distribution and services for drive, propulsion, traction, and energy systems based on Caterpillar engines from the Cat, MaK and EMD brands. The Power Systems business unit is a leading provider of systems for industrial and marine applications, rail vehicles, the oil and gas industry, and power generation. Complete system solutions and turnkey projects including plant and building installation are also on offer, alongside diesel, gas, and dual fuel engines. Turbocharger servicing and systems for ballast water treatment complete the portfolio. The SBU supports customers right from the initial idea, through project planning and development, to commissioning. When it comes to aftersales, we offer a comprehensive 24-hour service covering all maintenance and repair work, and including fast availability of spare parts anywhere in the world.

ARMENIA
AUSTRIA
AZERBAIJAN[1)]
BULGARIA[1)]
BELARUS
CYPRUS
CZECH REPUBLIC
DENMARK
ESTONIA[1), 2)]
FAROE ISLANDS[2)]
FINLAND[1), 2)]
GEORGIA[1)]
GERMANY
GREENLAND[2)]
HUNGARY[1)]
ICELAND[1), 2)]
KAZAKHSTAN[1)]
KYRGYZSTAN[1)]
LATVIA[1), 2)]
LITHUANIA[1), 2)]
MOLDOVA[1)]
MONGOLIA[1)]
POLAND[1)]
ROMANIA[1)]
RUSSIA[3)]
SLOVAK REPUBLIC
SWEDEN[2)]
SWITZERLAND[1)]
TAJIKISTAN
TURKMENISTAN
UKRAINE
UZBEKISTAN

[1)] distribution and service territories only for MaK engines
[2)] from January 1, 2020
[3)] distribution and service territories for MaK engines; Cat engines only central, northwestern and southern Russia

zeppelin.com/en/company/power-systems.html

ZEPPELIN Power Systems CAT

PLANT ENGINEERING

"We have once again been successful in increasing order entry in the 2019 fiscal year, despite an already perceptible regression in the investment climate. The international subsidiaries of the Plant Engineering SBU have also made significant contributions to this. For the first time, the total order entry for the subsidiaries is higher than for the parent company. We saw extraordinary success in plant sales, particularly in China. Because of this, we are starting the new 2020 fiscal year with confidence and a very good order backlog."

Alexander Wassermann, Head of the Plant Engineering strategic business unit

REVIEW OF 2019

The Plant Engineering SBU was subject to different development trends in the various product segments in the 2019 fiscal year. Overall, although sales were slightly lower, earnings have increased compared with the previous year. Generally complicated economic framework conditions, as well as the cooling economic situation in the chemicals sector and declining order situation in German machine construction all had a somewhat dampening effect on business in individual segments and regions.

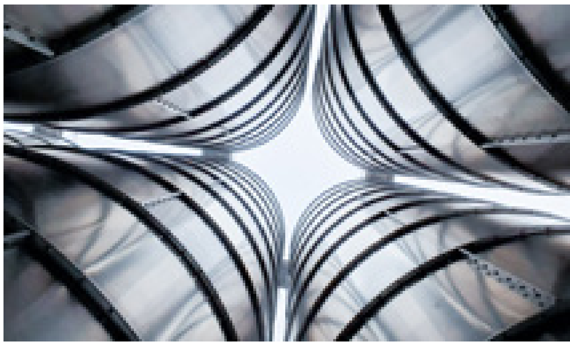
In the Polyolefin Plants segment (plants for the production of plastics), Asia continued to be the strongest market region, with various major projects. Positive market development was also recorded in India and the North American markets. In the business segment of Plastics, Mixing & Rubber Plants (processing plants for the plastics, rubber and tire industries), although a market fall was recorded after some very successful years with high growth rates in the rubber segment, it was possible to partially compensate for this with projects in the plastics segment. Nonetheless, Zeppelin secured orders with a total volume of over EUR 30 million for four new rubber plants in China, Thailand, India, and the USA. At K – the world's leading trade fair for the plastics and rubber industry – the Group presented its range of services to a wide range of trade professionals, which showed a high level of interest in investing. Success was also achieved in Compounding and Technical Plastics, and in the recycling, battery, paint and powdered paint markets. In Germany, the Plant Engineering SBU was awarded the contract to construct a logistics plant for the compounding of glass-fiber-reinforced polyamides, with an order volume of EUR 6 million. A market slowdown was identified for Food Processing Plants (plants for the baking industry) in particular in 2019. This was due to geopolitical tensions in individual markets, as well as market entry by new competitors, which negatively impacted margins. However, an increase in demand was recorded in the USA. The Silos and Components product areas, as well as the service and spare parts business (Key Components & Service) all participated positively in the respective markets. A new friction stir welding plant was put into operation at the Friedrichshafen site. This innovative technology enables silos to be manufactured more quickly and more cost-effectively; compared with traditional welding procedures, the process is up to three times faster and also does not require welding rods or protective gas.

With the procurement and dedication of new premises at sites in Saudi Arabia and Shanghai as well as the celebrations marking 30 years of Zeppelin in India, the Group has again confirmed its international orientation and willingness to invest.

There was a change at the top of the Plant Engineering strategic business unit that took effect from July 1, 2019, when Alexander Wassermann took over from Axel Kiefer as Head of the SBU.

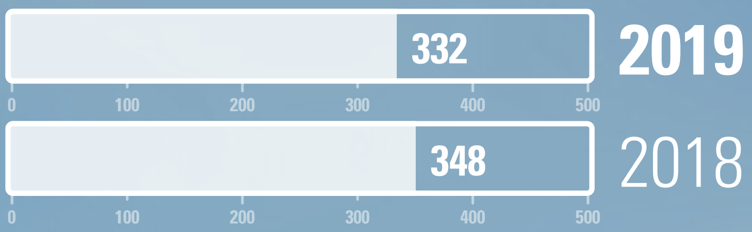
OUTLOOK FOR 2020

The expected economic framework conditions in 2020 will be considered rather critical for the investment climate in the markets relevant to the Plant Engineering SBU. Customs disputes, sanctions, the implementation of Brexit, but also foreseeable changes in the automotive industry all create uncertainty and make it more difficult to make decisions relating to new production plants. It is expected that some projects will be postponed or completely canceled. For the time being, it is not predictable how much the Covid-19 pandemic will additionally dampen the prospects. Despite the unclear economic outlook, expectations for the Plant Engineering SBU remain optimistic for the 2020 fiscal year. Its broad-based positioning in various markets such as plastics, rubber, chemicals, and foodstuffs will help weaknesses in individual sectors to be balanced out by growth potential in other areas. The global positioning of the Plant Engineering SBU will also contribute to utilizing opportunities in countries with growth potential. Good market development is expected in China and the USA in 2020; however good business development is also forecast for Russia and India. To maintain competitiveness and improve profitability, a quality and productivity initiative is planned for the 2020 fiscal year. The aim of this is to increase the efficiency and reliability of processes in engineering and in production across all companies in the SBU.



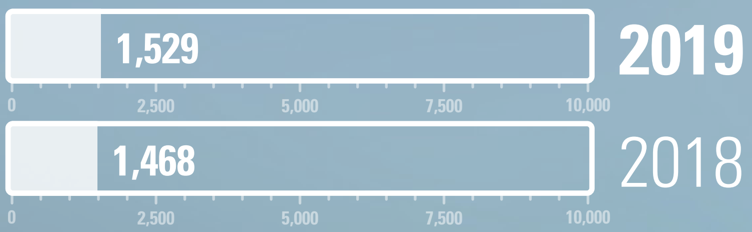
The completed stir welding plant means improved quality and more efficient production, which will be reflected with increased market opportunities in the silo business. Another important strategic goal in the 2020 fiscal year consists in expanding the product and service business. To increase customer benefit, the particular focus over the next few years will be in developing new service concepts, as we see significant potential here. Establishing digitization expertise continues to be a focus in the strategic further development of the Plant Engineering SBU. This applies both in respect of the digitization of internal processes and for the product development of digital solutions in the portfolio.

SALES in EUR million / in acc. with IFRS



SHARE of Group sales

EMPLOYEES as an average for the year, including trainees



PRIZES / AWARDS

Innovation Award Bakery China 2019, given by the China Association of Bakery and Confectionery Industry (CABCI). This prize honors innovation in the baking industry, and is given in three categories: Ingredients, packaging, and equipment. Zeppelin received an award in the equipment category for its innovative solutions for the food-processing industry.

ORDERS SECURED

Italy: Morato Pane – creation of a new line of toasting bread

Morato Pane is one of the major manufacturers of toasting bread and fresh baked goods in Italy. Zeppelin took over the entire dry ingredients handling process for the creation of a new line of toasting bread. The scope of the project included silos for flour, a small ingredients system, a collection container, a micro-dosing unit and the automation of the new system with an interface to the mixer, among other elements.

Korea: A major order for conveying systems

Zeppelin provided conveying systems to a customer of Toyo Engineering Korea, with an order volume of EUR 15.5 million.

Poland: Expansion of a system for the production of baked goods and toasting bread for a large-scale Polish bakery

Zeppelin brought in an additional CODOS CK-200 continuous kneader line for the production of baked goods and toasting bread to an already existing system (which had also been delivered by Zeppelin). The scope of delivery includes the expansion of the silo system, small and mid-sized ingredient preparation, and the preparation of all necessary liquid components; the scope of the order is over EUR 1.17 million.

ENGINEERING AND PLANT ENGINEERING

The Plant Engineering SBU specializes in the development, production and construction of components and systems for handling (storing, conveying, mixing, dosing and weighing) and managing high-quality bulk materials. The business unit supports customers every step of the way, from project development, engineering, production, automation, control technology, start-up, site installation and commissioning, through to aftersales service. The relevant industry sectors include manufacturers and distributors of plastics, rubber and tires, chemicals and foodstuffs. The Zeppelin Plant Engineering business unit conducts a wide variety of industrial-scale testing for these target groups in three technology centers in Germany. In addition, the Aviation & Industrial Service division provides technical services to the aerospace and automotive industries, the mechanical and plant engineering industry, rail technology, and medical technology sectors.

zeppelin.com/en/company/**plant-engineering**.html

ZEPPELIN®
WE CREATE SOLUTIONS

ACQUISITIONS

In the 2019 fiscal year, the Zeppelin Group acquired 100% of Luther Group and – with effect from December 31, 2019 – took on responsibility for the distribution and service of Caterpillar products in Denmark, Greenland and Sweden. In addition, Estonia, Latvia, Lithuania, Finland, Iceland and the Faroe Islands were added to the distribution and service territory for MaK engines.

ACQUISITION OF LUTHER GROUP, RENTAL SBU

Through the acquisition of 100% of shares in Luther Group, with business effect from January 1, 2019, Zeppelin significantly strengthened its solutions competence in traffic guidance systems and traffic technology. Luther Group, consisting of Luther HL GmbH & Co. KG and Meton GmbH, is a leading provider in technology for traffic telematics solutions, LED signage, and mobile protective barrier systems, as well as assembly systems for transport facilities. The acquisition included sites in Germany, the Slovak Republic and Czech Republic being taken on, and the business activities of the companies will continue under the current, recognized names.

EXPANSION OF THE DISTRIBUTION AND SERVICE TERRITORY INTO NORTHERN EUROPE

With effect from December 31, 2019, the Zeppelin Group has taken over responsibility as the Cat dealer in Sweden, Denmark and Greenland from Dutch corporate group Pon. The BMC (Baltic Marine Contractors) company was taken over at the same time, at which point Zeppelin became responsible for the distribution and service of MaK brand engines in Estonia, Latvia, Lithuania, Finland, Iceland, and the Faroe Islands. Further details about this are available on pages 28/29 of this annual report.

ANNIVERSARIES

Zeppelin had many reasons to celebrate in 2019: 65 years of partnership with Caterpillar and – yet again – the most successful bauma to date. New sites were opened in Esslingen, Saudi Arabia, Shanghai, Derhachi (Ukraine), St. Petersburg, the south of Moscow, and Astrakhan (Russia) – these are just a few examples. The Group company Zeppelin Rental marked 15 years of success. Many branches celebrated their long establishment, such as Rendsburg, which has been in existence for 25 years.

Of the various events, anniversaries and site openings that took place, the following are worthy of particular note.

RUSSIA

20 years of Zeppelin and the opening of a new branch in St. Petersburg

In 2019 the Zeppelin Group celebrated not only 20 years in Russia, but also the opening of a new branch in St. Petersburg. By investing in highly advanced service workshops, a spare parts warehouse and office building here, the company has clearly expressed its commitment to the Russian market. The branch in St. Petersburg is both Zeppelin's largest site in Russia and the key regional center serving the entire northwestern region of the Russian Federation. There are a number of industrial and mining companies established in the region, and they have a growing requirement for reliable and smooth-running machines. The Zeppelin Group invested a total of around EUR 17.5 million in the new company premises, which spans more than 40,000 m² in floor area and includes the regional central spare parts warehouse and a new office building, alongside high-tech service workshops for machines and engines; the site has created more than 150 jobs.

INDIA

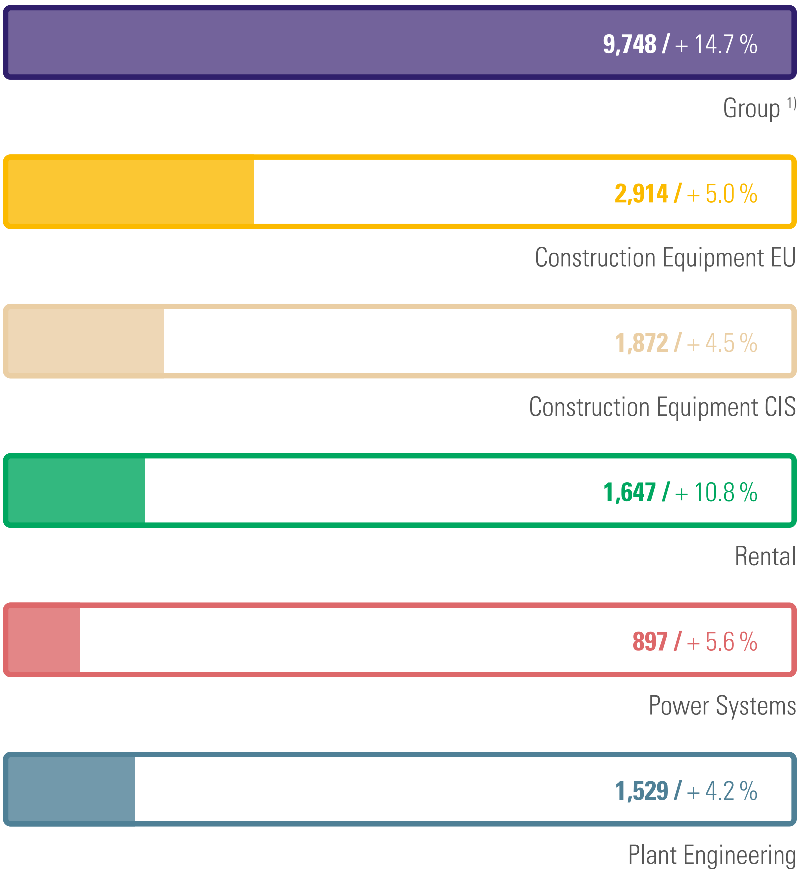
30 years of Zeppelin Systems and 20 years of Smart Controls

Zeppelin simultaneously celebrated two anniversaries in India: In 1989, current Group company Zeppelin Systems India Ltd. was founded as a joint venture in Mumbai, and it has been a 100%-owned subsidiary since 1999. The expertise it offers in plant and other engineering has been steadily expanded in that time. In 30 years, more than 45 plants and silos have been delivered, and well over 100 customers from a huge range of industries have benefited from engineering consultancy services. Smart Controls deliver valuable momentum and solutions in the area of digitization and process automation – and have been doing so for 20 years. The joint venture in Gwalior, in which Zeppelin holds a 60% stake, offers customers from a huge range of sectors – from the rubber and tire industry through textiles and the food industry – up-to-date IT solutions.

WORKFORCE FIGURES

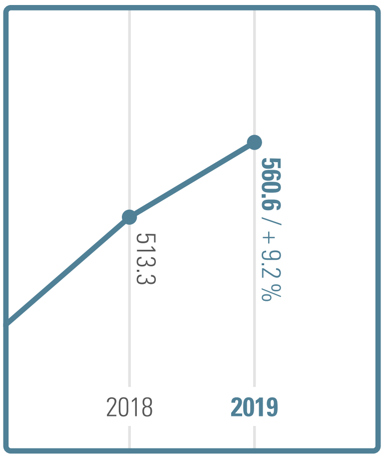
EMPLOYEES

average for the year including trainees

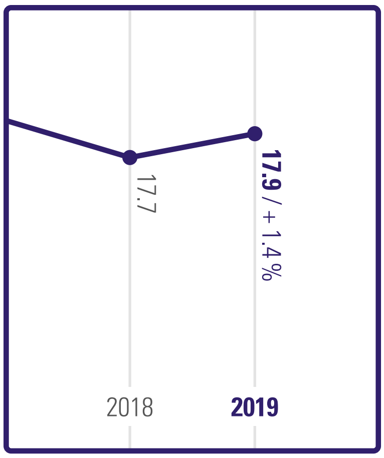


PERSONNEL EXPENSES

in millions of euros according to IFRS



Personnel expenses



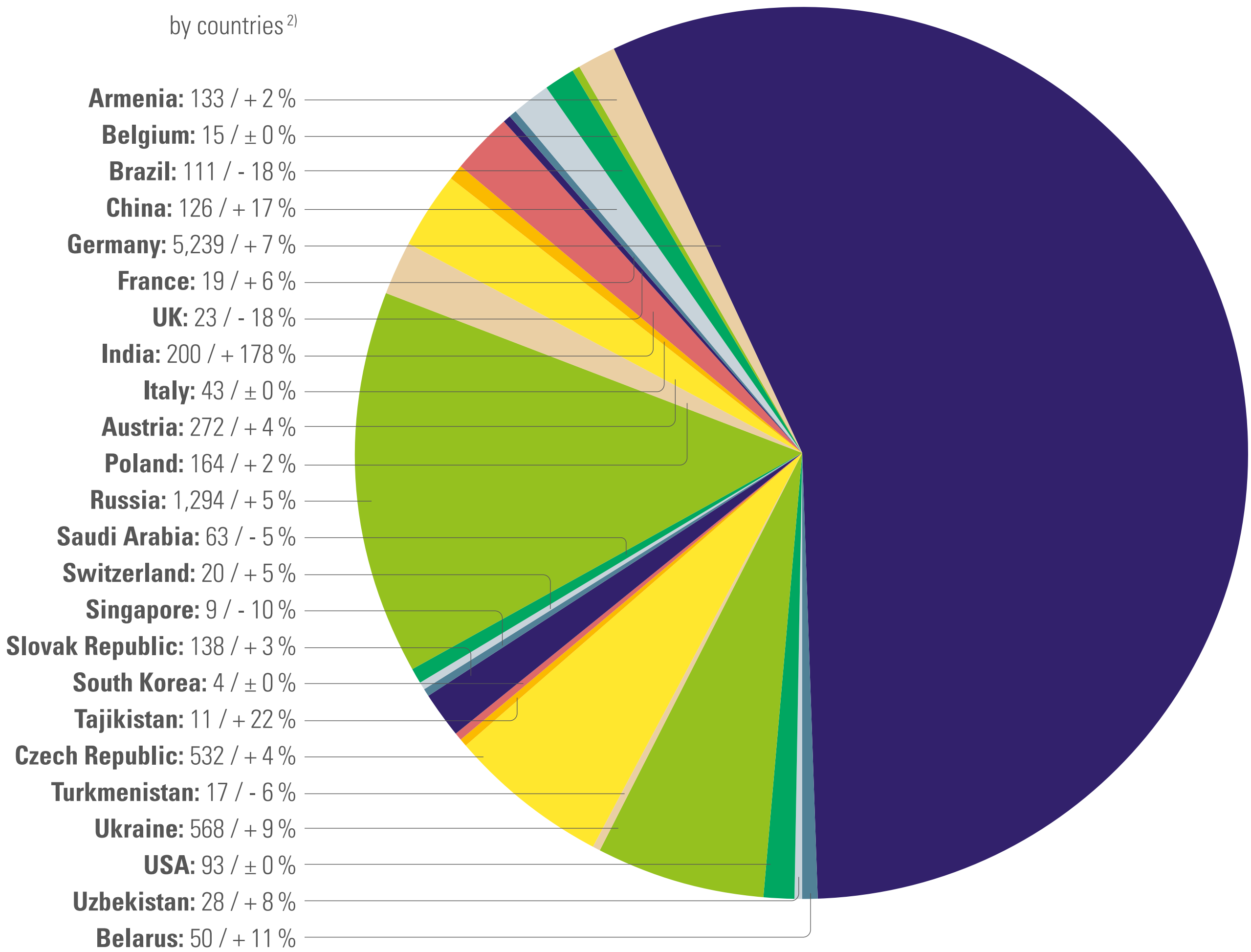
Personnel expense ratio in %

[1] including Zeppelin GmbH and Z Lab as well as 709 employees and 8 trainees from the acquisitions in Sweden and Denmark who joined on 31 Dec 2019.

HEALTH RATE
in %

Power Systems	96.4 %
Construction Equipment EU	95.8 %
Plant Engineering	96.7 %
Construction Equipment CIS	98.7 %
Holding company	97.7 %
Rental	95.0 %
Group total	96.5 %

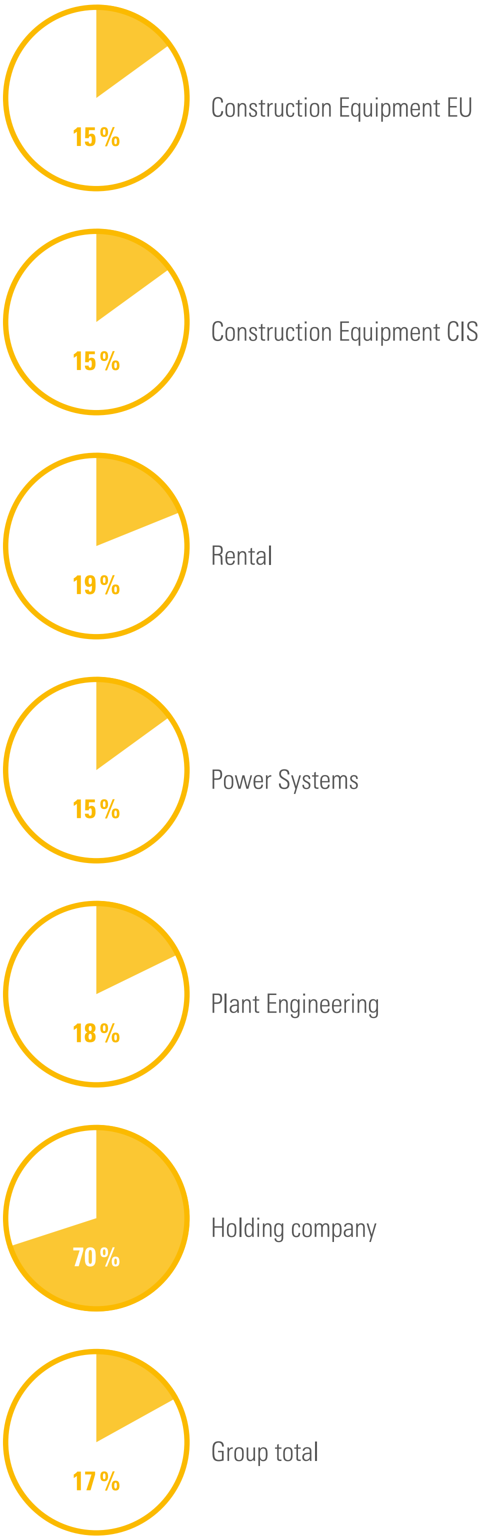
WORKFORCE
by countries [2)]



[2)] Based on headcount; plus 772 employees as well as 8 trainees from the acquisitions in Sweden and Denmark who joined on 31 Dec 2019.
Dated 12/31/2019, percentage change compared to 12/31/2018

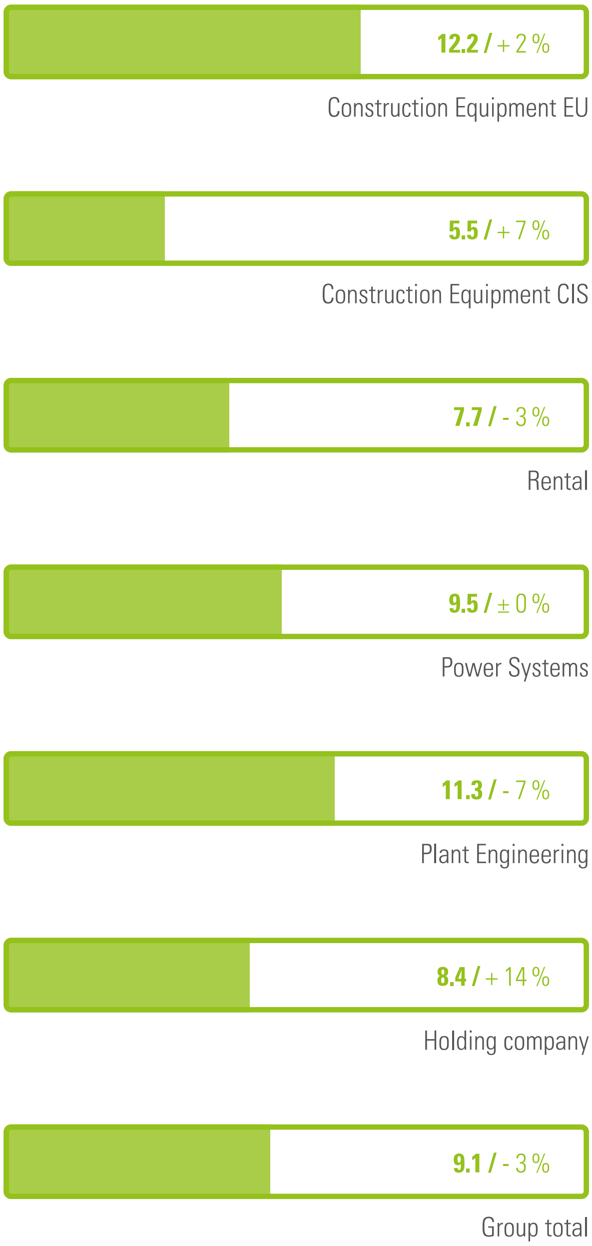
PROPORTION OF WOMEN EMPLOYEES

in %



AVERAGE PERIOD OF EMPLOYMENT WITH THE COMPANY

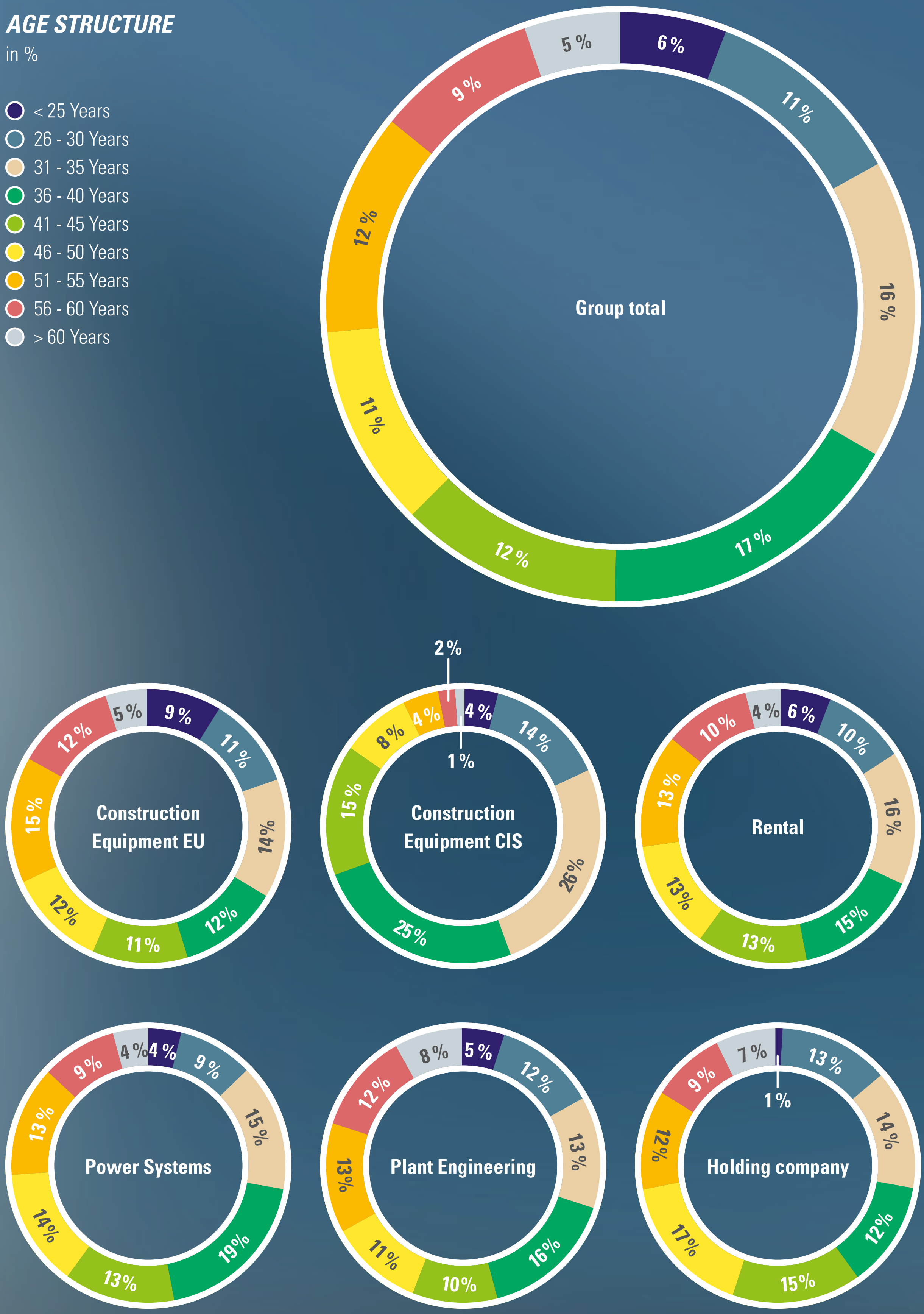
in years



Dated 12/31/2019, percentage change compared to 12/31/2018

AGE STRUCTURE

in %



Dated 12/31/2019, percentage change compared to 12/31/2018


CAT

GROUP MANAGEMENT REPORT & GROUP FINANCIAL STATEMENTS

CONSOLIDATED MANAGEMENT REPORT

OF ZEPPELIN GMBH AND THE GROUP FOR THE 2019 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 ("ZEP"). It presents the business performance of the Zeppelin Group ("Zeppelin" or "Group") and Zeppelin GmbH, including the results for the fiscal year from January 1 to December 31, 2019 as well as the situation of the Group and Zeppelin GmbH as at December 31, 2019.

The Group Management Report is based on the figures according to IFRS. The section of the report relating specifically to Zeppelin GmbH is based on figures according to the German Commercial Code (HGB).

BUSINESS PURPOSE OF ZEPPELIN GMBH

The purpose of the company is the acquisition, holding and sale of participations in companies which, in particular, focus on the manufacture, processing, sale, rental, servicing and financing of construction machines and site equipment, engines and generator sets of all kinds as well as complementary components and services and of containers and plants for the handling and processing of powdery, granular and liquid materials and related engineering services.

The purpose of the company is also the acquisition, sale, rental and leasing of land and buildings and related transactions.

The shareholding structure of Zeppelin GmbH remained unchanged in fiscal year 2019. Luftschiffbau Zeppelin GmbH holds 96.25% and Zeppelin Foundation in administration of the city of Friedrichshafen holds 3.75% of the subscribed capital of Zeppelin GmbH of EUR 100.0 million.

At the end of 2019, Zeppelin GmbH had 98 employees (previous year: 79). 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 Group is operationally and strategically managed in six 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 business activities of the Construction Equipment EU and CIS SBUs comprise the sale and servicing of Caterpillar construction machines, mining equipment, components and agricultural and forestry machinery under the AGCO/Fendt and Ponsse 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 sales territories of the other manufacturer partners are distributed across Central and Eastern European countries.

On December 31, 2019, Zeppelin took over the distribution and service organization for Caterpillar products in Sweden, Denmark, and Greenland as well as for MaK engines in other countries as a result of an acquisition. The activities will be integrated into the existing Rental and Power Systems SBUs on January 1, 2020, and a new SBU will be established for the construction equipment business.

The Power Systems SBU sells Caterpillar diesel and gas engines as well as MaK brand marine engines. It provides a wide range of engineering and other services for drive and power solutions.

The Rental SBU rents out construction machines as well as a wide range of construction equipment, modular room systems, site and traffic guidance systems, work platforms, forklifts and lifts, and vehicles. It also offers an extensive range of services.

The activities of the Plant Engineering business unit involve globally developing, producing, implementing, and selling systems for producing and processing high-quality bulk materials for plastics, rubber and tires, food, and fine chemicals.

The Z Lab business unit was established in 2016 in order to develop new digital business models and expedite the digitalization of existing business models. The Group's digitalization initiatives are pooled in this business unit.

RESEARCH AND DEVELOPMENT

The Group's research and development activities relate primarily to the digitalization of new and existing business models. Research and development costs in the reporting year amounted to EUR 5.1 million (previous year: EUR 6.0 million).

B BUSINESS REPORT

1 ECONOMIC CONDITIONS

MACROECONOMIC ENVIRONMENT

In 2019, the global economy was characterized by trade conflicts and geopolitical tensions. The trade dispute between China and the USA, the world's two largest economies, had a negative impact on the global economy. Mounting conflicts among the oil-producing countries of the Middle East also represented a further risk factor. In Europe, there was concern among Member States about the possible negative consequences of the withdrawal of the United Kingdom from the European Union without any agreement. As a result, there was a decline in the propensity to invest of many companies. The central banks' unchanged loose monetary policy was only able to counteract all this to a limited extent.[1]

Under these circumstances, the growth rate of global economic output in 2019 was lowered to 3.0% (previous year: 3.7%). With a forecast increase of 1.2%, the euro area remains far behind the global trend and also behind the previous year (2.0%). Being an export nation, the German economy was particularly affected, with only weak growth of 0.5% forecast (previous year: 1.9%). Growth prospects also declined for Austria with 1.6% (previous year: 2.8%) and the Czech Republic with 2.5% (previous year: 3.1%). Poland also shows a downward trend with growth of 4.0% (previous year: 4.4%) albeit at a comparatively high level. The Slovak Republic shows a decline to 2.6% (previous year: 3.9%). In line with the general trend, the Russian economy drops to 1.1% (previous year: 1.7%). With a growth forecast of 3.0% (previous year: 3.5%), Ukraine reflects the general global economy. The USA, with 2.4% (previous year: 2.9%), and Brazil, with 0.9% (previous year: 1.4%), are recording a lower economic forecast compared to the previous year. Even the dynamism of economic growth in China is declining compared to the previous year, with 6.1% (previous year: 6.6%). With 6.1% (previous year: 7.3%), the economy in India is also predicting falling growth.[2]

In 2019, the European Central Bank (ECB) kept its key interest rate (unchanged since March 2016) for the euro area at 0% p.a. The deposit rate, on the other hand, was further reduced in September 2019 from the previous -0.4% p.a. to -0.5% p.a. The ECB also resumed its suspended bond purchase program in November 2019. Therefore, there is no reason to expect a change of this loose interest rate policy in the present. In 2019, the US Federal Reserve (FED) decided its first interest rate cut since the global financial crisis of 2008. By the end of the year, the key interest rate was lowered three times in total, to a target corridor of 1.5 to 1.75% (previous year 2.25 to 2.50%).[3]

The main foreign currencies for the Group are the US dollar (USD), the Russian ruble (RUB), and the Ukrainian hryvnia (UAH). The US dollar started 2019 at an exchange rate of 1.15 USD/EUR and ended at 1.12 USD/EUR. At the beginning of 2019, the ruble was still quoted at 79.72 RUB/EUR and had appreciated to 69.96 RUB/EUR by the end of the year. The Ukrainian hryvnia appreciated from 31.57 UAH/EUR to 26.42 UAH/EUR during the year.

MARKET DEVELOPMENT

The development of the Group's key markets during the reporting year was as follows:

The ifo Business Climate Index for trade and industry rose from 95.1 points in November 2019 to 96.3 points in December 2019. In contrast, the index fell again in the construction industry. While the business situation is still assessed as very good, expectations fell to a five-year low. In a historical comparison, however, the survey results on future business performance are still at a good level.

The utilization rate of equipment capacities in the construction industry rose to 79.7% in December, at a similar level to the previous year (December 2018: 79.8%). The order backlogs did not change compared to the previous year and were stable at 4.1 months (average for the construction division: 4.2 months, average for the civil engineering division: 4.0 months). Companies were able to raise prices again somewhat more frequently than recently and expect further scope for price increases in the coming months.

The performance of the German construction machine market in 2019 exceeded all expectations. From January to December, the total market rose by 10.0% to 36,470 units, far outperforming a very successful 2018. In terms of value, the market volume amounted to almost EUR 3 billion (2018: circa EUR 2.7 billion). Both the retail and the rental market were able to contribute to market growth with increases of 11.0% and 7.5% respectively. As in the previous year, the retail/rental split was 72/28 in favor of the retail segment. The market for compact machines grew by 10.1%, while the market for standard and large machines grew by 9.9%.

Following an increase in the previous month, the index providing an assessment of the current situation of the Austrian construction industry remained almost unchanged in December (+0.2 points) and, at 27.7 points, is still in good shape, albeit significantly below the corresponding value for the previous year (December 2018: 34.3 points).

In the Czech Republic, November 2019 construction output increased by 4.5% in real terms compared with

[1] Handelsblatt "Handelskonflikte lähmen die Weltwirtschaft: IWF senkt erneut Wachstumsprognose" [*Trade conflicts paralyze global economy: IMF lowers growth forecast again*] dated July 23, 2019 and "Düstere Aussichten für die Weltwirtschaft: Wachstumsrate fällt" [*Bleak outlook for the global economy: growth rate falls*] dated September 19, 2019.

[2] IMF World Economic Outlook Database, October 2019.

[3] Tagesschau "EZB erhöht Strafzins für Banken" [*ECB increases penalty rate for banks*], dated September 12, 2019 and "Fed senkt Leitzins erneut" [*Fed lowers key interest rate again*] dated October 30, 2019.

the same month last year and by 1.2% compared with October. Building construction output in November rose by 5.3% year-on-year. Production in civil engineering rose by 2.7%.

In the Slovak Republic, construction activity experienced a downturn in November 2019: year-on-year domestic construction output fell by 11.2%. Production did increase by 1.3% in building construction but fell by a massive 30.0% in civil engineering. In the period from January to November 2019, construction output fell by 4.5% compared to the previous-year period.

In contrast to the good performance of the German construction machine industry, sales figures in the Austrian construction machine market fell in 2019: from January to November, 2,536 machines were brought to market here (excluding telehandlers), which corresponds to a fall of 4.9% (previous-year period: 2,668 units).

The construction machine market in the Czech Republic performed very well in 2019: the overall market rose to 2,379 units in the first eleven months, up from 2,047 units in the previous year (+16.2%).

In the Slovak Republic, the construction machine market also performed well between January and November 2019. The overall market (excluding telehandlers) was 668 units at the end of November (previous year: 601), equivalent to a rise of 11.1%.

In the 2019 fiscal year, the Construction Equipment CIS SBU was exposed to an overall positive but still difficult market environment. Some of the main factors in this market environment were the ongoing conflict between Russia and Ukraine, the continuation of Western sanctions against Russia, and volatile oil and commodity prices. Gross domestic product in Russia grew by 1.1% in real terms. The Ukrainian economy grew by 3.5% in 2019. In the other countries in which the Construction Equipment CIS SBU operates, gross domestic product growth in 2019 was in the range of 2.5 to 5.5%.

The national currencies in the Construction Equipment CIS SBU's largest markets – Russia and Ukraine – remained largely stable in 2019 and even appreciated in some cases, which had a negative impact on the SBU's spare parts margin. The construction industry in Russia grew by only 0.2% overall in 2019. In Ukraine, construction industry growth was 5.7%. The mining industry declined by 9.3% in 2019.

Despite the decelerated economic growth in the CIS countries in 2019, the market for new construction machines was largely positive in the territories served by the SBU.

For dealers and rental companies of construction machines and construction equipment in Germany, growth of 5.6% in 2019 represents the tenth consecutive year of growth. The rental market in Austria recorded growth of 7.2% in 2019. The growth rate for the European rental market reached 3.8%.

The Power Systems SBU operated in a largely positive market environment in 2019. Shipbuilding continued to develop unevenly worldwide. The high order entry and order backlog for LNG-powered cruise liners, ferries, and special ships was offset by the low order entry and order backlog for container and cargo ships worldwide. The trend in the locomotive business continues towards electrification and hybrid locomotives. The industrial engines market, which is highly influenced by exports, performed consistently in 2019. The heavily regulated market for combined heat and power plants is dynamic, but still highly competitive.

According to the German Mechanical Engineering Industry Association (VDMA), 2019 was disappointing overall for the German mechanical engineering industry. A year-on-year comparison reveals a real decline in orders of 9.0% from Germany and abroad for 2019 as a whole. The sales performance for the first eleven months showed a decline of 2.4%. Production volumes fell in the same proportion (-2.4%).

According to the German Chemical Industry Association (VCI) 2019 saw a "weak chemical economy in a difficult environment", which is particularly evident in a 5% decline in sales in Germany's third largest industry.

To November 2019, order entry for the food processing and packaging machinery sector was down 7.0% in real terms compared to the same period of the previous year.

2 Development of the Group's Business

Key IFRS figures for the Group

EUR million	2019	2018
Sales	3,118.5	2,896.9
Gross margin[4]	15.1%	15.2%
EBT	133.7	130.8
Return on Sales[5]	4.3%	4.5%
Return on Capital Employed, YE[6]	6.6%	7.6%

Both EBT and ROCE were negatively impacted by the acquisition effective December 31, 2019, as part of the expansion of distribution and service responsibility for Caterpillar.

Sales Development and Orders

Fiscal year 2019 was another very successful year for Zeppelin. Group sales rose by 7.6% to EUR 3,118.5 million (previous year: EUR 2,896.9 million).

The SBUs that rent, sell, and service construction machines and engines saw their sales increase in the 2019 fiscal year by EUR 240.3 million, or 9.1%. The increases in the Construction Equipment EU, Power Systems, and Rental SBUs are particularly worthy of special mention, with sales increases of up to 11.7%. In the Plant Engineering SBU, sales revenue fell by EUR 16.1 million, or 4.6%.

Sales by SBU

EUR million	2019	2018	Change %
Construction Equipment EU	1,469.5	1,315.1	11.7%
Construction Equipment CIS	499.7	482.5	3.6%
Rental	509.3	473.1	7.6%
Power Systems	392.2	359.6	9.1%
Plant Engineering	332.1	348.2	-4.6%
Z Lab	4.1	1.2	>100.0%
Group sales[7]	**3,118.5**	**2,896.9**	**7.6%**

In the 2019 fiscal year, a total of 16,693 machines, forklifts and engines were sold, corresponding to an increase of 4.6% year on year. While sales of new construction equipment and forklifts rose by 789 units (+10.7%) and 108 units (+30.7%) respectively, and sales of used machines rose by 310 units (7.6%), sales of new engines fell by 65 units (-2.3%). At 243 units, the machines and forklifts brought to market for the first time for rental purposes were below the previous year's high level (782 units).

Order entry for all group companies rose to EUR 3,307.2 million (previous year: EUR 2,981.2 million). At EUR 1,080.4 million at year-end, the order backlog is also above the previous year (EUR 891.7 million). This includes EUR 55.7 million from the acquisition made on December 31, 2019. The Plant Engineering SBU accounted for EUR 312.0 million (previous year: EUR 244.4 million).

Employees and Employee Development

Changes to the number of employees in the Group as of the reporting date, broken down by SBU, are presented below:

	12/31/2019	12/31/2018	Change %
Construction Equipment EU	2,722	2,617	4.0%
Construction Equipment CIS	1,895	1,804	5.1%
Rental	1,697	1,487	14.1%
Power Systems	892	848	5.2%
Plant Engineering	1,575	1,477	6.6%
Z Lab	91	65	38.8%
Trainees in the Group	369	324	13.9%
Group[8]	**10,048**	**8,700**	**15.5%**

At the end of 2019, the foreign companies of the Group had 4,809 employees (previous year: 3,670), corresponding to 47.9% of the overall workforce (previous year: 42.2%).

4 Gross margin = gross profit on sales / sales

5 Return on sales = profit before tax / sales

6 ROCE = EBIT / capital employed; capital employed = fixed assets + working capital

7 Incl. ZEP and consolidation effects

8 Incl. ZEP as well as 709 employees and eight trainees from the acquisitions in Sweden and Denmark.

Information about the Proportion of 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. As of the reporting date of December 31, 2019, 27.3% of the Supervisory Board was comprised of women (target: 8.3%), while the Management Board had 25% (target: 0%) and 38.5% of department managers were women (target: 25%). The proportion of women and the deadline for achieving the target proportion for the Supervisory Board and Management Board were adopted at the Supervisory Board meeting of March 22, 2018. No changes were made to the target quotas for the 2019 fiscal year.

3 Important Activities During the Year Under Review

New Sales Territories

As noted above, the Zeppelin Group continues to expand, and is developing its partnership with Caterpillar. On December 31, 2019, Zeppelin took over the distribution and service of machines and components by the US American construction machine manufacturer Caterpillar in Sweden, Denmark, and Greenland. The portfolio also includes drive, propulsion, traction, and energy systems as well as machinery and equipment rental. For MaK brand engines, the Zeppelin Group is also responsible for distribution and service of engines and power generators in the Baltic States (Estonia, Latvia, Lithuania) as well as Finland, Iceland, and the Faroe Islands in addition to Sweden, Denmark, and Greenland. The transaction has been approved by the European supervisory authorities. Zeppelin is pursuing a solid, long-term growth strategy and sees great potential in the new distribution and service territories. The machine population will be consistently expanded in these markets. The spare parts and service business will be strengthened with excellent service concepts. Another focus is on the development of a rental organization and the advancement of the used machines business.

Increase and Extension of syndicated loan

The syndicated credit facility, that was originally taken out in 2011, was extended prematurely and increased in December 2019. The term of the syndicated credit facility is five years and includes a prolongation option of one year on two occasions. As part of the extension and increase, HSBC withdrew from the existing syndicate for conditional reasons. The facility volume was increased from EUR 605 million to EUR 700 million. The volume is now divided equally among Zeppelin's five core banks. The new credit facility is available for cash drawdowns (EUR 500 million) and for providing guarantees (EUR 200 million).

SAP Project of the Construction Equipment EU SBU

Zeppelin is introducing SAP throughout the Group as part of the Z ONE SAP project. Construction Equipment EU is acting as pilot SBU.

In the middle of the year, after an intensive testing and training phase, the first step is the go-live of SAP at Zeppelin Österreich GmbH. One of the aims of introducing SAP in the Construction Equipment EU SBU is to improve cooperation between the individual countries and companies by harmonizing processes and systems, in order to build on the existing competitive advantage and ensure long-term future viability. After a stabilization phase, SAP will be rolled out in the other companies of the Construction Equipment EU SBU, initially at Zeppelin Baumaschinen GmbH in Germany.

Other Important Events for the SBUs

For the **Construction Equipment EU SBU**, fiscal year 2019 was strongly influenced by bauma, the world's largest and most important trade fair for construction machinery, which started in the second week of April. Once again, bauma set a record for visitors and sales. A total of 3,509 new and used construction machines were sold at the joint Caterpillar and Zeppelin stand representing sales of EUR 454 million, which is a new record for Zeppelin.

Under the slogan "Rewrite the Rules", Caterpillar and Zeppelin presented the latest innovations and trends in alternative drive systems and the networking of construction machines, as well as the new generation of machines in the mini and tracked excavator category. This new series of mini excavators with fuel-efficient diesel engines and intuitive controls provides customers with additional options. In addition to reducing operating costs while increasing performance, these developments also focus on driver comfort and safety.

The 64th NordBau trade fair in Neumuenster, the largest compact trade fair for the construction industry, was able to build on the success of bauma. With around EUR 16 million of sales of new and used machines and components, this is an indicator of a continued good order situation in the construction industry. The presentation of the cable-electrically powered CAT MH 24 material handler also demonstrated the consistent and focused development of alternative drives.

The development of digital business models and solutions remained the focus in 2019. The online portal Baggerboerse.de – developed in-house – quickly and easily provides a non-binding price for a used construction machine. Baggerboerse is therefore a first point of contact for the subsequent evaluation and sales process.

Caterpillar launched the first industry-wide application software for mobile devices with the introduction of a new app for fleet management. As a result, the ability to read, evaluate, and analyze relevant operating data for construction machines in terms of their performance and cost-effectiveness is now even more user-friendly. For efficient fleet management, it is possible to better control deployment of machines for the entire fleet, order spare parts and services more easily and promptly, and establish direct contact with Zeppelin directly from the place of operation. Ultimately this reduces costly machine downtime due to outstanding and necessary service work. Mixed fleets and older CAT construction machines can also be included in the fleet management system.

Another important anniversary was celebrated in 2019 in the Construction Equipment EU SBU. Phoenix Praha was founded exactly 50 years ago as an official Caterpillar dealer in the former Czechoslovakia. When the Czechoslovakian market opened up in 1989, Zeppelin acquired a majority shareholding and a short while later changed its name to Phoenix-Zeppelin. From then on, new service and sales centers were expanded across the country. Since 2013, the portfolio has been expanded to include distribution and service of mining equipment from CATERPILLAR GLOBAL MINING with further special solutions for use above and below ground. Today, 532 employees work for Zeppelin CZ at 14 sites, and the company is one of the market leaders in the sale and rental of construction machines, mining equipment, and power supply systems in the Czech Republic.

The **Construction Equipment CIS SBU** completed its construction works of the new branch in St. Petersburg in fiscal year 2019, and officially opened in May 2020. Zeppelin invested around EUR 17.5 million in the new site, which will be shared with the Power Systems SBU. A decision was also taken to build a new head office in Kiev, Ukraine. The project is scheduled for 2020/2021 with an investment volume of around EUR 9 million.

The **Rental SBU** closed the 2019 fiscal year very successfully. Caterpillar honored the Rental SBU in the Operational Excellence category, and trade publication SOLID awarded the Rental SBU the title of "best construction service provider in Austria".

Baustellen-Verkehrs-Technik GmbH (BVT) was merged with Zeppelin Rental GmbH with retroactive effect from January 1, 2019. The merger marked an important step in the successful integration of the company, acquired in 2018, and in the expansion of the site and traffic guidance division.

In the third quarter of 2019, 100% of the shares in Luther HL GmbH & Co. KG, METON GmbH and the affiliated foreign companies Levotec s.r.o. (Slovakia) and METON s.r.o. (Czech Republic) were acquired with retroactive effect to January 1, 2019. With over 100 employees at three sites, the Luther Group is a technology leader in the development and production of traffic telematics solutions, LED signage, and mobile crash barrier systems. This acquisition represents a further important step in the nationwide expansion of activities in the site and traffic guidance division.

The **Power Systems SBU** operated in a largely positive market environment in 2019. Demand for flexible energy solutions, such as highly efficient combined heat and power plants (CHP) grew steadily in Germany with an emphasis on large-scale and complete plants. In the Czech Republic, the Slovak Republic, Russia, and Ukraine, increased project activity was recorded in the area of combined heat and power plants based on natural gas and biogas. The company in Germany provided support as a Center of Excellence and has already developed modular plants and control systems for a large number of pilot projects. In the areas of standby power supply systems and critical power applications, Zeppelin continued to benefit from the trend towards progressive digitalization and the rising safety and redundancy requirements and the related expansion in emergency power supplies for data centers.

The oil and gas market stagnated due to the low oil price.

The industrial engines market, which is highly influenced by exports, performed consistently in 2019. From the second half of the year onwards, German industrial OEMs[9] acted more cautiously due to the worsening outlook. Sales of engines for less regulated markets and stage V engines were in line with plans. The OEM market also developed positively in the Czech Republic, Belarus, and Russia.

In the Marine division, the ongoing cruise boom with LNG engines led to dynamic demand and further engine packages with gas systems were invoiced. Demand for ballast water treatment systems also grew positively.

The trend in the locomotive business continued towards electrification and hybrid locomotives. New construction/repowering activities were limited to a few projects in Europe and the USA through German OEMs. Zeppelin Power Systems acted as a Center of Excellence for the SBU and for several Caterpillar dealers in Europe and the USA.

By expanding service sales and exploiting existing potential in connection with digitalization solutions, the service was able to generate sales in 2019 in excess of forecasts.

Increased market development, sales campaigns, and a clear focus on maintenance contracts made this success possible. The new digital business and product fields with online-supported service solutions, such as remote surveillance and monitoring, developed positively in the service business. There continues to be competitive pressure on margins in the service and spare parts business. Further projects were successfully implemented in cooperation with the MWB Marine Services GmbH joint venture founded in 2017.

Initiatives devised in conjunction with our manufacturer partner Caterpillar within the framework of the "Leadership Table" continued and, together with measures from

[9] Original Equipment Manufacturer.

the "Z1" project[10], were successfully refined. The Must-Win Battles, which are focused on the topic of digitalization, in particular "Technology Enabled Solutions", in order to be optimally prepared for changing market conditions, also recorded pleasing progress. The main focus was the data interface of new engines in the market. In the reporting year, an Operation Center was established in Hamburg to evaluate the data.

An additional Must-Win Battle "People" was added in order to meet the requirements of an attractive employer. At the same time, the first steps towards the introduction of SAP were taken in order to prepare for the necessary replacement of the existing ERP system Navision in the medium term.

The **Plant Engineering SBU** increased its stake in the Indian joint venture Smart Controls to 60%, effective as of April 1, 2019. The integration of Nuova Ciba S.p.a., acquired in the previous year, proceeded according to schedule. The company's Management Board was replaced at the end of 2019 as planned.

The new high-tech friction stir welding plant in Friedrichshafen started production in the second quarter of 2019. After a planned running-in phase, by year-end it had achieved significant progress in handling and efficiency. The machine produces segments for Bolt-Tec silos in three high-capacity shifts.

At the end of 2019, a decision was taken to merge the Group's quality and industrial services business segments into the Plant Engineering SBU. From 2020, services previously provided by BIS Inspection Service GmbH under the Rental SBU will be merged with the Zeppelin Industrial & Aviation division, which is part of Plant Engineering. To this end, BIS Inspection Service GmbH was sold to Zeppelin Systems GmbH and the company's Industrial & Aviation division was transferred to the company, renamed Zeppelin Aviation & Industrial Service GmbH.

In 2019, the Zeppelin Group pooled all general digital and IT matters in the "Zeppelin Digit" strategic management center, in order to drive and support digital transformation in the Zeppelin Group centrally, in addition to decentralized responsibility in the SBUs. Z Lab GmbH in Berlin remains part of Zeppelin Digit. It develops and scales digital innovations along the entire construction value chain in order to open up new, long-term business segments. Zeppelin Digit is also responsible for the central infrastructure for all SBUs and cross-business unit digital products such as the zeppelin.com website. Central initiatives to increase efficiency through digital processes, such as the introduction of Salesforce and SAP, also fall under the remit of Zeppelin Digit.

[10] The objective of the "Z1" project is essentially to achieve growth in attainable markets for all segments and countries.

4 Results of Operations, Financial Position, and Net Assets of the Group

Results of Operations

The condensed consolidated statement of profit and loss as of reporting date is as follows:

EUR million	2019	2018	Change	Change %
Sales	3,118.5	2,896.9	221.5	7.6%
Cost of sales	-2,647.1	-2,456.5	-190.6	7.8%
Gross profit on sales	471.4	440.4	31.0	7.0%
Selling expenses and general administrative expenses[11]	-345.1	-315.4	-29.7	9.4%
Other income and expenses[12]	25.5	19.9	5.7	28.5%
Profit before net financial result	151.9	144.9	6.9	4.8%
Net financial result	-18.2	-14.1	-4.1	28.9%
Net profit before tax	133.7	130.8	2.9	2.2%
Income taxes	-41.3	-40.8	-0.5	1.1%
Profit Net profit after tax[13]	92.4	90.0	2.4	2.7%

Group sales increased by 7.6% (EUR 3,118.5 million; previous year: EUR 2,896.9 million) thanks to the positive business performance. The Group recorded growth in all SBUs with the exception of Plant Engineering. Particularly noteworthy are the relative and absolute growth rates of the Construction Equipment EU, Power Systems, and Rental SBUs.

EUR million	2019	2018	Change %
Cost of materials	-2,157.3	-1,996.8	-8.0%
Personnel expenses	-341.0	-310.6	-9.8%
Depreciation	-48.7	-44.8	-8.7%
Other expenses	-100.2	-104.3	4.0%
Group cost of sales	**-2,647.1**	**-2,456.5**	**-7.8%**

In the same period, cost of sales increased by 7.8% to EUR 2,647.1 million. The increase was due in particular to the volume-related increase in the cost of materials. Gross profit on sales rose by 7.0% to EUR 471.4 million. Year-on-year, the gross margin was almost constant at 15.1% (previous year: 15.2%).

At EUR 345.1 million, selling expenses and general administrative costs were EUR 29.7 million higher than in the previous year. This is due in particular to higher personnel expenses and higher advertising and trade fair costs due to bauma.

At EUR 25.5 million, the balance of other income and expenses was higher than in the previous year (EUR 19.9 million), due in particular to an increase in exchange rate gains.

The net financial result went from EUR -14.1 million in the previous year to EUR -18.2 million in the reporting year. The interest result amounted to EUR -16.4 million, EUR 2.0 million less than the previous year's EUR -14.4 million. The primary reasons for this were higher interest expenses from bank loans and interest on additional tax payments. The other net financial result deteriorated by EUR 2.1 million to EUR -1.8 million (previous year: EUR 0.3 million), which is attributable in particular to exchange losses from currency derivatives.

11 including research and development expenses

12 including impairments on financial instruments and contract assets (net) as well as the result from companies accounted for using the equity method

13 including non-controlling interests

Changes to profit or loss before tax for the fiscal year, broken down into SBUs, are presented below:

EUR million	2019	2018	Change %
Construction Equipment EU	63.3	61.9	2.3%
Construction Equipment CIS	29.2	28.5	2.5%
Rental	50.6	43.0	17.5%
Power Systems	21.5	19.5	10.2%
Plant Engineering	-1.9	-3.5	-45.3%
Z Lab	-12.4	-9.8	27.0%
Consolidated net profit before tax[14]	**133.7**	**130.8**	**2.2%**

Consolidated net profit before tax increased to EUR 133.7 million (previous year: EUR 130.8 million). The return on sales fell slightly from 4.5% in the previous year to 4.3% in 2019 and was negatively affected by the acquisition completed on December 31, 2019. The return on equity[15] before tax was 16.5%; the comparable total return on capital[16] was 5.9%. The return on capital employed (ROCE) was 6.6% compared with 7.6% in the previous year, again largely due to the aforementioned acquisition.

Income tax expense was EUR 41.3 million (previous year: EUR 40.8 million). The tax rate for the year was 30.9% (previous year: 31.2%). Consolidated profit after tax was EUR 92.4 million. This exceeded the previous year's result by EUR 2.4 million.

[14] Including ZEP at EUR 95.9 million, the newly acquired companies in Sweden and Denmark at EUR -2.5 million and consolidation effects.

[15] Return on equity = profit before tax/ (equity in previous year + equity in year under review) / 2

[16] Total return on capital = profit before interest and tax / (balance sheet total of previous year + balance sheet total of reporting year) / 2

FINANCIAL POSITION

Capital Structure

Changes to the Group's **capital structure** are presented below:

LIABILITIES Proportion in % of balance sheet total	**2019** IFRS	**2018** IFRS
Balance sheet total in EUR million	**2,790**	**2,384**
Current liabilities		
Financial liabilities, trade payables, other liabilities	14.4%	14.0%
Contract liabilities	5.7%	5.0%
Employee benefits	3.5%	3.5%
Miscellaneous	5.5%	5.9%
Non-current liabilities		
Financial liabilities, trade payables, other liabilities	28.6%	27.7%
Contract liabilities	0.6%	0.6%
Employee benefits	6.2%	5.8%
Miscellaneous	5.1%	5.1%
Equity	30.3%	32.4%

Current liabilities as of December 31, 2019 were EUR 814.9 million, an increase of EUR 136.6 million. They consist primarily of financial liabilities (EUR 142.0 million; previous year: EUR 82.1 million), trade payables (EUR 133.3 million; previous year: EUR 133.1 million), other financial liabilities (EUR 126.3 million; previous year: EUR 118.7 million) and contract liabilities (EUR 160.3 million; previous year: EUR 119.3 million). The increase in financial liabilities was in particular the result of a EUR 30 million loan from ZEP, which has been fully repaid in the meantime. The increase in contract liabilities was mainly due to an increase in pre-payments received on orders and for acquisition-related reasons.

Non-current liabilities as of December 31, 2019 were EUR 1,130.0 million, an increase of EUR 196.0 million. They consist primarily of financial liabilities (EUR 633.2 million; previous year: EUR 512.1 million), other liabilities (EUR 165.5 million; previous year: EUR 148.3 million) and employee benefits (EUR 171.7 million; previous year: EUR 138.3 million). The increase in financial liabilities resulted from an acquisition-related increase in liabilities to financial institutions, and leasing liabilities. Employee benefits increased as a result of acquisitions and a further drop in interest rates. Other liabilities include an income tax liability of EUR 8.9 million, which was formed as a precautionary measure to cover risks arising from the current tax audit.

Equity increased by EUR 74.0 million to EUR 845.4 million in the financial year (taking into account negative currency translation differences of EUR 1.0 million; previous year EUR 8.7 million). The currency translation differences mainly resulted from exchange rate developments for the Russian ruble and US dollar. With the balance sheet total rising by 17.1% to EUR 2,790.4 million, the equity ratio[17] decreased to 30.3% (previous year: 32.4%), which is due in particular to acquisitions.

[17] Equity ratio = ratio of equity to total capital

The total non-current financial resources of EUR 1,975.4 million (previous year: EUR 1,705.3 million) exceed non-current assets by EUR 376.2 million (previous year: EUR 352.9 million), which corresponds to an asset coverage[18] of 123.5% (previous year: 126.1%). They therefore also cover 62.6% (previous year: 70.9%) of the inventories.

SIGNIFICANT FINANCING INSTRUMENTS

At the end of 2019, a syndicated credit facility that was originally taken out in 2011 and extended prematurely and increased in December 2019 was available to the Group as a significant financing instrument. The term of the syndicated credit facility is five years and includes a prolongation option of one year on two occasions. As part of the extension and increase, HSBC withdrew from the existing syndicate for conditional reasons. The facility volume was increased from EUR 605 million to EUR 700 million. The volume is now divided equally among the five core banks. The new credit facility is available for cash drawdowns (EUR 500 million) and for providing guarantees (EUR 200 million). As of the end of 2019, a total of EUR 256.8 million (including EUR 98.3 million for guarantees), or 36.7% (previous year: 43.8%) had been utilized. In addition, at the end of 2019 the Group had additional bank credit lines of around EUR 130 million, of which it had utilized EUR 47.5 million. At the end of 2019, ZEP also had USD bank loans equivalent to EUR 4.3 million to finance its operating business. In addition, the Group had cash and cash equivalents available.

Furthermore, the Group finances itself over the long term through the issuance of bonded loans. At the end of the year, the total outstanding volume was EUR 242.5 million. In August, two new bonded loans of EUR 20 million and EUR 60 million were issued (inter alia to replace two bonded loans of EUR 22 million, which expired in August 2019). 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 2019. In October 2019, Creditreform Rating AG upgraded the rating of the Group from "A-" to "A" with a stable outlook. The rating agency's positive assessment is based on stable and solid financial ratios, sufficient cash flows from operating activities, good capital market capabilities, prudent financial management, and Zeppelin's leading market position. The companies of the Construction Equipment EU, Construction Equipment CIS and Power Systems SBUs 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, asset leasing is used to finance vehicles as well as IT hardware and software. The extensive investments in the rental fleets in fiscal year 2019 were financed from current cash flow and debt recognized in the balance sheet as well as SLB transactions.

[18] Asset coverage = non-current financial resources / non-current assets

LIQUIDITY

The development of cash and cash equivalents at the end of the fiscal year is shown in the following condensed consolidated cash flow statement:

EUR million	2019	2018
Cash flow from operating activities	235.2	203.3
+ Cash flow from investing activities	-307.7	-190.6
+ Cash flow from financing activities	73.1	-36.2
= Changes in cash and cash equivalents	**0.6**	**-23.4**
+ Cash and cash equivalents at the beginning of the period	**67.2**	**91.2**
+ Foreign exchange rate differences in cash and cash equivalents	1.1	-0.6
= Cash and cash equivalents at the end of the period	**68.9**	**67.2**

In contrast to the previous year, investments in the rental fleet (RPO) were reported under cash flow from operating activities instead of cash flow from investing activities. This is done for purposes of better economic presentation, as the rental fleet is held for subletting and subsequent sale. The previous-year amount has been adjusted accordingly to improve comparability.

Cash and cash equivalents remained almost constant with a moderate increase of EUR 1.7 million compared with the previous year.

The negative cash flow from investing activities increased significantly in the 2019 fiscal year, due in particular to major investments in intangible assets (EUR -62.5 million, previous year EUR -18.1 million) and the rental fleet (EUR -193.8 million, previous year EUR -164.5 million). The investments in intangible assets are mainly related to acquisitions.

Cash flow from financing activities is characterized by the inclusion of non-current financial liabilities (EUR 80.0 million, previous year EUR 7.5 million) and the repayment of non-current financial liabilities (EUR -32.3 million, previous year EUR 0.0 million). This is due to the expansion of the credit facility, mainly as a result of acquisitions, and the net new borrowing from bonded loans. A further effect results from the decrease in payments for sale and leaseback liabilities (EUR -26.0 million, previous year EUR -75.0 million).

Cash flow from operating activities was positive, increasing by EUR 31.9 million compared with the previous year. This was mainly due to higher non-cash transactions, such as depreciation on the rental fleet, and interest expenses, as well as an acquisition-related increase in pension obligations.

INVESTMENTS

EUR million	2019	2018	Change %
Intangible assets	52.7	15.2	>100%
Land and buildings	30.3	18.8	61.2%
Operating and business equipment including technical equipment	63.3	41.1	54.2%
Investments in financial assets	29.1	0.2	>100%
Total investments excluding rental fleet	**175.4**	**75.3**	**>100%**
Investments in the rental fleet	193.8	164.5	17.8%
Total investments including rental fleet	**369.2**	**239.8**	**53.9%**

Investments in property, plant, and equipment and intangible assets amounting to EUR 369.2 million (including EUR 193.8 million in the rental fleet) were offset in the fiscal year by ordinary depreciation of EUR 144.4 million, which thus covered 39.1% of investments (adjusted previous year figure: 52.3%, since rental fleet RPO is not considered as an investment). The increase in investments compared to the previous year is mainly due to the acquisition of shares in the Luther Group (share deals) and the asset deals by Zeppelin Sverige AB and Zeppelin Denmark A/S.

NET ASSETS

Structurally, the Group's assets are broken down as follows:

ASSETS Proportion in % of balance sheet total	2019 IFRS	2018 IFRS
Balance sheet total in EUR million	2,790	2,384
Current assets		
Cash and cash equivalents	2.5%	2.8%
Financial assets, trade receivables	15.8%	16.2%
Contract assets	1.0%	1.4%
Inventories	21.5%	20.9%
Miscellaneous	1.9%	2.0%
Non-current assets		
Financial assets, trade receivables	1.5%	1.7%
Intangible assets; property, plant, and equipment	50.1%	49.1%
Miscellaneous	5.7%	6.0%

The balance sheet total of the Group increased in the 2019 fiscal year by EUR 406.7 million to EUR 2,790.4 million. This is attributable in particular to an increase in property, plant, and equipment (EUR 164.6 million), inventories (EUR 103.5 million), and trade receivables (EUR 51.7 million). In addition to organic growth, the acquisitions made in the 2019 fiscal year were further contributing factors.

At 1.2 p.a., capital turnover[19] was the same as the previous year (1.2 p.a.). At the end of 2019, the days of sales outstanding worsened as of the reporting date to 51 days (previous year: 48 days). Both key figures are negatively affected by the acquisition completed on December 31, 2019.

The rights of use to leased assets are also reported under property, plant, and equipment.

[19] Capital turnover = sales revenue / (previous-year balance sheet total + reporting year balance sheet total) / 2.

COMPARISON OF CURRENT SITUATION WITH FORECAST

The financial performance indicators used to manage the Group are sales revenue, profit or loss before tax, and ROCE.

EUR million	2019	2018	2019 Forecast
Sales	3,118.5	2,896.9	moderate decline
Net profit before tax	133.7	130.8	significant decline
ROCE	6.6%	7.6%	moderate decline

Sales and net profit before tax increased significantly or sharply compared to the forecast, which is attributable in particular to the very good development of the Construction Equipment EU, Power Systems, and Rental SBUs. Despite the acquisition at the end of 2019, ROCE was slightly above the forecast figure.

5 RESULTS OF OPERATIONS, FINANCIAL POSITION, NET ASSETS OF ZEPPELIN GMBH

RESULTS OF OPERATIONS

ZEP's sales increased by EUR 3.8 million to EUR 31.5 million in 2019 (previous year: EUR 27.7 million). This development was mainly due to the increase in sales from IT services rendered of EUR 2.3 million and other intra-Group sales of EUR 1.0 million.

Other income increased by EUR 0.7 million to EUR 3.7 million (previous year: EUR 3.0 million). This primarily consisted of the reversal of provisions amounting to EUR 1.9 million (previous year: EUR 1.9 million) and of charges passed on to affiliated companies amounting to EUR 1.5 million (previous year: EUR 0.6 million).

The income from participations was EUR 42.3 million (previous year: EUR 33.6 million) and increased by EUR 8.7 million, in particular due to higher dividend distributions from Zeppelin International AG, Switzerland. On the basis of profit and loss transfer agreements, a total of EUR 89.5 million (previous year: EUR 69.9 million) was received in the fiscal year 2019 as income from profit transfer and the recharging of taxes passed on to the tax group. This was offset by expenses from loss absorption amounting to EUR 21.4 million (previous year: EUR 20.0 million).

Personnel expenses rose by EUR 1.8 million year-on-year to EUR 17.9 million (previous year: EUR 16.1 million). Amortization of intangible assets and depreciation of property, plant, and equipment increased by EUR 0.3 million compared to the previous year (EUR 6.3 million; previous year: EUR 6.0 million).

Other operating expenses rose to EUR 19.6 million (previous year: EUR 14.7 million). This was due in particular to increased consultancy costs incurred in the course of acquisitions.

The interest result – excluding income from loans classified as fixed financial assets – amounted to EUR -0.8 million in the fiscal year, a decline of EUR 1.5 million compared to the previous year. This is mainly due to higher interest expenses from interest rate swaps. In addition, interest income from affiliated companies fell.

Net profit before tax rose sharply year-on-year to EUR 95.7 million (previous year: EUR 25.6 million), due mainly to higher income from participations and from profit pooling agreements, and the absence of impairment losses on financial assets.

Net profit after tax for the year was EUR 67.8 million (previous year: EUR 0.9 million). Income taxes amount to EUR 27.9 million (previous year: EUR 24.6 million).

FINANCIAL POSITION

The financial strategy is derived from the business purpose of ZEP (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 (58.9% 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.

ZEP's absolute equity rose to EUR 611.4 million (previous year: EUR 559.5 million) as a result of the strong increase in the net profit in the reporting year, and amounts to 55.2% of the balance sheet total (previous year: 58.7%). The long-term funds come to EUR 335.9 million (30.3% of the balance sheet total) and consist of pension provisions (EUR 33.4 million) and liabilities to banks (EUR 302.5 million).[20] Current funds include provisions (EUR 36.6 million), liabilities to banks (EUR 42.7 million), trade payables (EUR 3.5 million), liabilities to affiliates (EUR 59.6 million, mainly from investing affiliates' funds and cash-pooling), as well as other liabilities (EUR 17.5 million).

The fiscal year 2019 saw EUR 59.0 million (previous year: EUR 108.3 million) invested. Of this amount, EUR 53.0 million relates to capital increases for shares in affiliates, and EUR 3.8 million to advance payments made and assets under construction.

NET ASSETS

ZEP's assets consist primarily of investments of EUR 454.9 million (previous year: EUR 401.9 million), loans to affiliates of EUR 80.2 million (previous year: EUR 80.2 million) and land, buildings, and assets under construction of EUR 112.8 million (previous year: EUR 113.2 million). These assets thus correspond to 58.5% (previous year: 62.4%) of the balance sheet total, which rose to EUR 1,107.1 million (previous year: EUR 953.7 million). Receivables from affiliates rose by EUR 105.5 million to EUR 441.5 million (previous year: EUR 336.0 million). In the same period, credit balances at banks fell by EUR 6.2 million to EUR 8.7 million. Non-current assets of EUR 652.6 million (previous year: EUR 611.2 million) were offset by non-current liabilities of EUR 947.3 million (previous year: EUR 838.6 million) as of December 31, 2019. The latter mainly consist of equity, pension provisions, and non-current liabilities. Long-term asset coverage[21] increased from 137.2% to 145.2%, which is mainly due to an increased level of long-term bonded loans.

Investments in property, plant, and equipment amounted

[20] This figure includes EUR 242.5 million in bonded loans.

[21] (Equity + non-current outside capital) / non-current assets

to EUR 5.7 million (previous year: EUR 7.6 million). Of this amount, EUR 5.4 million (previous year: EUR 7.4 million) related to land, buildings, equipment, and assets under construction, which are rented to associates. This mainly involves investments in properties and buildings that are leased to Zeppelin Rental GmbH and Zeppelin Baumaschinen GmbH.

Comparison of Current Situation with Forecast

The main financial performance indicator for Zeppelin GmbH is the net profit or loss.

In the previous year, strong growth in net profit in accordance with IFRS was forecasted (adjusted for the special effect of the value allowance on investment book values in 2018), which was exceeded with net profit after tax in accordance with IFRS of EUR 69.1 million (forecast: EUR 44.9 million).

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 Group.

Macroeconomic and Industry-Specific Risks

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

Zeppelin is one of the largest worldwide 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.

The markets served by the Plant Engineering business unit are very diversified and include companies in the international rubber and tire industry, plastics producers and processors, and the food industry around the world. 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.

Growth and Transaction Risks

On December 31, 2019, additional responsibility was assumed for the distribution and service of Caterpillar products in Sweden, Denmark, and Greenland and for MaK products in Estonia, Latvia, Lithuania, Finland, Iceland, and the Faroe Islands. Our position as one of Caterpillar's largest and most successful distribution and service partners worldwide will be further strengthened as a result. Zeppelin will consistently expand the machine population in the new markets and strengthen the spare parts and service business with customer-focused service concepts. In addition, we emphasis on establishing a strong rental organization and promoting the used machines business.

However, an expansive company policy entails a certain inherent risk with regard to transition and integration of the new group companies or activities. Furthermore, there are also financial risks with regard to the purchase price paid and the investments necessary for such expansion – including in the context of future market development and adherence to schedule. The integration of around 750 new employees, and the harmonization of accounting and reporting are further examples of the challenges involved in the acquisition.

The risk has been and is minimized through intensive preparations, constant dialog, extensive training and education measures, the secondment of our own employees, a conservative financing structure, the use of external consultants and specialists, and through cultural training and respectful interaction.

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 Caterpillar's 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.

The epidemic of the novel Covid-19 virus, which is spreading worldwide, represents a potentially significant performance-related risk for the Zeppelin Group. Even though no significant disruptions in the supply chain can be identified at present, and Caterpillar is making every conceivable effort to avoid such disruptions, it cannot be ruled out that the epidemic could develop into a pandemic and cause massive disruptions in Caterpillar's supply chain and thus also of Zeppelin with a corresponding impact on business performance. Moreover, Zeppelin is represented in China by a subsidiary and a joint venture, which made a significant contribution to sales and net profit of the Plant Engineering SBU in the 2019 fiscal year. If the situation in China fails to normalize, a corresponding negative impact on the business performance of the Plant Engineering SBU and thus the Zeppelin Group has to be expected.

PERSONNEL-RELATED RISKS

Trends on the labor market continue to turn into an employee market. Demographic changes, which will lead to the retirement of larger groups of employees within the next five to ten years, and the competitive situation with other companies require additional measures to attract and retain employees in order to counteract the shortage of skilled workers. At the same time, ever increasing numbers of employees of generations Y and Z are leading to new demands on a modern company, especially with regard to digitalization. One indicator of employee satisfaction is the rate of voluntary resignations. There was a pleasing development in the 2019 fiscal year and, at 4.4%, this rate is below the previous year's figure of 5.8%. In this context, the long average length of service of 9.1 years underlines the unchanged high level of employee loyalty toward Zeppelin.

The Human Resources division of the Zeppelin Group is working on a large number of strategic projects and initiatives to ensure that the company continues to maintain its high performance. As part of this year's Group strategic process, work was done on "People 2025" in order to identify necessary action areas for the future. Measures for the workplace of the future and the necessary HR development measures were defined for each strategic business unit. As part of this process, particular focus was placed on the job profile of a service technician, since this is a core component of the success of the Zeppelin business model. In order to counteract foreseeable bottlenecks in (re)staffing, the target group of professionals in particular is considered in the HR recruitment strategy.

The Z MATCH employee recommendation program is an important recruiting channel: a total of 60 new employees were hired via this channel in 2019. This helps to fill vacancies more quickly and therefore more cost-effectively. With an apprenticeship stand at the bauma 2019 trade fair, Zeppelin was able to get the next generation of employees interested in working for the Group. Completely new perspectives are also opening up for career entrants at Zeppelin: the new Z NEXT trainee program started with a total of five trainees in various divisions of the company.

In particular young generations need to strike a balance between professional and private life. This entails the risk that these employee groups will leave the company quickly if they cannot find an adequate workplace. Since obtaining the “audit berufundfamilie” certificate in March 2018, we have been working on implementing the 52 measures that will help to improve the work-life balance. The first report for the external evaluators was successfully completed by March 15, 2019.

Particular milestones in the first reporting cycle were achieved with the uniform regulation of mobile work and pilot offers in health management. The Z Fit initiative was launched to maintain the current high health rate of 96.5% (2019). Just in time for the start of spring, employees were able to take advantage of company bicycle leases under attractive terms. The advisory services offered by the famPLUS family service continue to be well used to support employees in the areas of care, childcare and psychosocial counseling. Another benefit of these services is the prevention of psychological stress and general overstressing.

Zeppelin will work on the harmonization and digitalization of processes in Human Resources over the next few years. The goal is to implement a uniform human capital management software solution. As a forerunner, the digital payroll accounting "myZBOX" was piloted with the software solution PeopleDoc. myZBOX means the personal, secure, and electronic safe deposit box that can access important documents from anywhere and any device – for example, the digital payroll accounting provided there by Zeppelin. This not only creates modern solutions, but also takes "sustainability" into account.

FINANCIAL RISKS

The Group’s financial ability to act at any time is primarily ensured by the syndicated credit facility that was set up in 2011 and then extended prematurely and increased in 2019. This credit facility has a term until 2024 and a prolongation option of one year on two occasions. 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. Extensive credit facilities are also available for SLB transactions, especially for financing the rental fleet.

In accordance with the Group's financial strategy of hedging around two thirds of its average financial liabilities against interest rate risks, the Group makes use of interest rate swaps. These hedging transactions secure ZEP against an increase in interest expenses in the event of drawdowns under the syndicated credit facility as well as for bonded loans. Hedging transactions have been concluded that expire in 2022, 2023, 2024, and 2025. In addition, bonded loans with fixed interest rates were also issued. These transactions provide the Group with long-term protection against the risk that rates will rise again. The Group's business activities in emerging markets and developing countries expose it to currency risks. To limit these risks, cash flows in other currencies from individual transactions or projects are hedged with currency forwards and futures. In addition, the Group limits currency risks by financing its subsidiaries in emerging economies and developing countries in local currencies and by employing sophisticated asset management techniques. To monitor currency risks, the 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 largely stable currency markets resulted in an overall low foreign currency loss in 2019. Additional information regarding interest rate changes and currency risks can be found in the Notes to the Consolidated Financial Statements.

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

GENERAL ASPECTS

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

Dedicated planning and reporting is a key aspect of risk management. The goal here is to ensure comprehensive recording of risks. All managers are involved in the identification, analysis, and evaluation of risks. Countermeasures to avoid or reduce risks are initiated as needed.

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

In addition, the ad-hoc risk reporting process ensures that adequate measures are initiated in a timely manner if material risks occur. The Group's established Risk Panel is responsible for monitoring all risks and tracking the measures that have been initiated.

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

In 2019, the Group auditing department conducted several standard audits. These were mainly conducted at the operational Group companies Zeppelin Power Systems GmbH & Co. KG, Zeppelin Power Systems Russland OOO and Zeppelin Rental GmbH, as well as at Zeppelin GmbH (two audits) and in further investigations in the Fraud and Compliance area. In addition, the documentation of user acceptance tests was reviewed as part of the SAP implementation at Zeppelin Österreich GmbH. Follow-up inspections were conducted at Zeppelin Baumaschinen GmbH (two of them) and Zeppelin Rental GmbH (one of them). Furthermore, in 2019 a "Compliance Audit" was conducted for the first time at Zeppelin Armenia Ltd. This is an audit approach that focuses primarily on factors relevant to compliance, and adherence to applicable guidelines and legal regulations.

ASSESSMENT OF RISK CATEGORIES

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

- Asset risks (inventories/stocks, receivables, risks in the rental fleet, risks from agreements with financing companies (Rental Purchase Options/RPOs, reported in the contract risk category until 2017))
- Currency risks (transaction/translation currency risks)
- Contract risks (contract risks, warranty risks)
- Financial risks (order backlog risks, sales risks, fiscal risks, market-related earning risks, other risks)

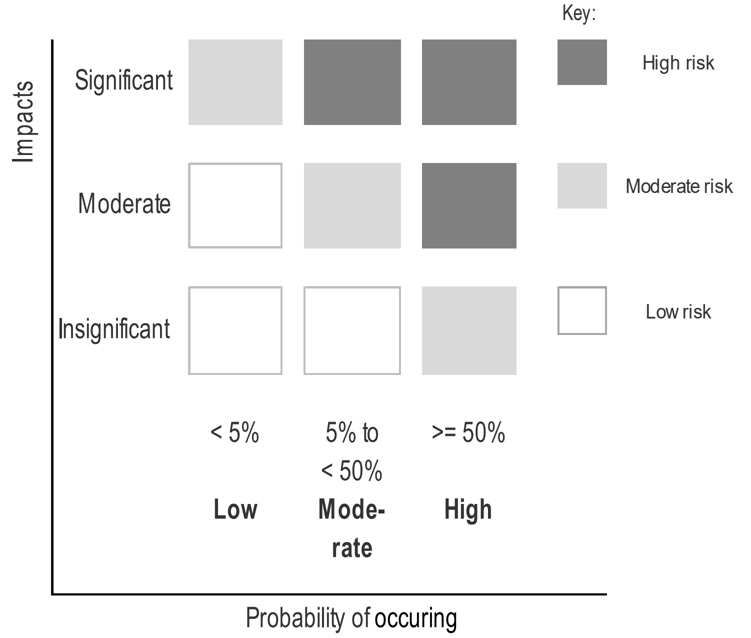
An evaluation matrix is used to assess risks in terms of their probability of occurrence and their potential impacts on financial performance. The definitions used are explained below.

Definitions

Degree of impact	Definition of impact
Insignificant	Only insignificant, limited negative impacts on the financial performance (net losses[22] < EUR 10 million)
Moderate	Some negative impacts on the financial performance (net losses[22] >= EUR 10 million and < EUR 20 million)
Significant	Considerable negative impacts on the financial performance (net losses[22] >= EUR 20 million)

Probability of occuring	Description
< 5%	Low
5% to < 50%	Moderate
>= 50%	High

Evaluation matrix



Classification of Risk Categories

Risk category	Risk of occuring	Impact on profit situation[22]	Risk assessment
Asset risks	Moderate	Insignificant	Low
Currency risks	n/a	Insignificant	Low/moderate
Contract risks	Low	Insignificant	Low
Financial risks	Moderate	Insignificant	Low

[22] Per risk category

OVERALL ASSESSMENT OF THE RISK SITUATION

The implemented risk management system is highly regarded within the Group and is an integral component of the business processes. It ensures that control mechanisms and measures to avoid and reduce risk are effective.

The Group's 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 going concern of Zeppelin GmbH or its subsidiaries existed during the reporting year, nor are any such risks presently discernible for the future. With regard to the risks associated with the global spread of the Covid-19 virus, we refer to the comments under Performance-Related Risks.

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 a leading and successful provider 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. In this respect, Zeppelin implemented and continued a number of strategic initiatives in 2019 designed to ensure the profitability of the Group over the long term. In 2019, these included strategic company acquisitions in the field of traffic telematics and site traffic safety, the expansion of sales territories for Caterpillar, MaK and Trimble products, and the creation of a strategic Management Center for IT, digitalization, and innovation.

Zeppelin acquired all shares in Luther HL GmbH & Co. KG, METON GmbH and the affiliated foreign companies Levotec s.r.o. (Slovakia) and METON s.r.o. (Czech Republic) with retroactive effect to January 1, 2019. Luther HL and METON are active in the development and production of traffic telematics solutions, LED lighting technology and mobile crash barrier systems at sites in Hoppstädt-Weiersbach (DE), Levoča (SK), and Tuchoměřice near Prague (CZ). Luther HL and METON have been successfully operating as certified traffic safety companies in Rhineland-Palatinate and neighboring German states for many years. With this acquisition, Zeppelin is further expanding its nationwide coverage in the area of site and traffic guidance. Zeppelin has thereby added product development and manufacturing to its portfolio, increasing the degree of value-added. This enables the Europe-wide distribution of innovative and pioneering traffic guidance systems.

On December 31, 2019, Zeppelin took over from Caterpillar the distribution and service of construction and special equipment for surface and underground mining in Sweden and Denmark (including Greenland). The entire portfolio of new and used machines, as well as service and spare parts and Zeppelin's rental services will be offered in the new territories. Zeppelin also offers the adequate products and services for the mining industry in the north of Sweden. The Zeppelin Group sees great potential in the new regions and is pursuing a long-term growth strategy. One area of focus will be on building a strong organization for equipment rental and related services.

Another element of the transaction was the takeover of distribution and service operations for the MaK brand – not only in Sweden, Denmark, and Greenland, but also in the Baltic states (Estonia, Latvia, Lithuania), Finland, Iceland, and the Faroe Islands. To this end, Zeppelin acquired Baltic Marine Contractor (BMC) based in Tallinn, Estonia. MaK is one of the leading brands in premium marine engines and generators, as well as gas engines for power generation. MaK engines are used in cruise ships, ferries, cargo ships, inland waterway vessels, offshore facilities, tugs and salvage vessels, as well as in cutters and dredgers. The MaK brand also belongs to the US Caterpillar group.

Adjustments were made in the organization in order to be best prepared for the new challenges in Scandinavia. Since January 1, 2020, the new companies in Sweden and Denmark have been managed under the newly established "Construction Equipment Nordics" strategic business unit. Service and distribution for MaK will be integrated into the Power Systems SBU and rental activities into the Rental SBU. There were also changes in the existing SBUs: the "Construction Equipment EU" SBU became "Construction Equipment Central Europe", and the "Construction Equipment CIS" SBU became "Construction Equipment Eurasia".

In addition, the strategic management center "Zeppelin Digit" was founded, which pools cross-business area topics in the areas of IT, digitalization, and innovation as well as the activities of Z-Lab. Additional measures to digitalize current Group business models will be carried out in coming years. Customers will thus be able to process all major and relevant transactions with Zeppelin digitally. Digitalization will make it much easier to handle current processes and will create the resources for other, more consulting-intensive businesses. In the future, the two models – digital and analog – will work hand in hand to ensure corporate success of Zeppelin.

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, 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 in the sales territories. In addition, an online whistleblower system, the Zeppelin Trust Line, has been set up for employees and third parties for the optional anonymous reporting of suspected compliance cases.

Regular compliance trainings are supplemented by a multilingual compliance e-learning program. As in previous years, individual compliance workshops were again conducted in 2019 for an expanded group of managers and junior managers in collaboration with the Konstanz Institute of Corporate Governance (KICG) at the University of Konstanz.

The Zeppelin Group's compliance program was strengthened further by expanding compliance management within the 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

In light of trade wars, climate change, and the spread of the Covid-19 virus, economic performance in 2020 will be marked by fundamental uncertainties and stress factors. Topics will be positive impetus such as the partial agreement in the trade conflict between the USA and China, the agreement between the United Kingdom and the EU, as well as the continued loose monetary policy of the major central banks.

The International Monetary Fund forecasts GDP growth of 3.4% for the global economy in 2020. A strengthening from 1.2% to 1.4% is predicted for the euro area, whereby Germany, with forecast growth of 1.3%, is roughly at the general European level. A slight improvement to 1.7% is expected for Austria. The same applies to the Czech Republic and the Slovak Republic, where growth is forecast to rise to 2.6% and 2.7% respectively. A decline in the forecast, but still at a comparatively high level, is recorded for Poland at 3.1%. An increase to 1.9% is forecast for the Russian economy. By contrast, Ukraine is predicted to stagnate at 3.0%. While the USA (2.1%) and China (5.8%) continue their downward trend, Brazil (2.0%) and India (7.0%) are forecast to reverse the trend.[23]

The Hauptverband der Deutschen Bauindustrie (Confederation of the German Construction Industry) and the Zentralverband des Deutschen Baugewerbes (Central Association of the German Construction Industry) expect sales growth of 5.5% in the construction industry in 2020. While residential construction (+7.0%) will remain stable, an ambivalent performance is forecast for commercial construction (+5.5%): while (building) construction permits for factory and workshop buildings are in decline, construction permits for storage and commercial buildings, as well as office and administration buildings show an upward trend. In public construction, the leading building associations expect a 4% increase in sales for 2020.[24] Dealers and rental companies of construction machinery expect total sales in 2020 to increase by 2% compared to the previous year. Expectations among Austrian construction companies have recently fallen slightly. Construction output in Austria is expected to increase by 1.3% in 2020. While construction output in the Czech Republic is expected to grow by 1.6%, growth of only 1.0% is forecast for the Slovak Republic.[25]

The positive growth trend in the construction machine markets relevant to the Construction Equipment CIS SBU is expected to continue in 2020, albeit at a much slower pace.

According to the European Rental Association, the European rental market, which is important for the Rental SBU, is expected to grow by 3.2% in 2020. Growth in the German rental market is estimated at 4.5%.

Shipbuilding continues to develop unevenly worldwide, with a positive outlook for the LNG-powered cruise ship sector, ferries, and special ships. Locomotive business, which is also of relevance to the Power Systems SBU, continues to move toward electrification and hybrid locomotives. There are growth opportunities in the combined heat and power plants sector, but also higher project risks. Further growth potential is seen in the segment of critical emergency power applications, such as data centers, due to continuing digitalization and the further increase in security and redundancy requirements. For the engines and systems industry, the VDMA expects the market to stabilize at a low level and sales to grow by 1%[24] in 2020.

The Plant Engineering SBU expects demand to cool down and the market to contract slightly, particularly in the rubber and tire industry, and among plastics producers and processors. Industrial production in the industrialized countries is likely to stagnate. Overall, we are facing the smallest increase in production in ten years. According to the BDI, export-oriented German industrial sectors are generally in difficult waters. According to the mechanical engineering barometer of the auditing and consulting firm PricewaterhouseCoopers, a decline in sales of 4.2% is expected for the mechanical and plant engineering industry as a whole.[26] A 6.0% decline in sales is expected for the food and packaging machinery sector in 2020.

For the 2020 fiscal year, the Group expects a moderate growth in sales , whereas net profit before tax is expected to fall significantly in view of the integration of the new distribution and service activities. Return on capital employed (ROCE) is expected to remain at the previous year's level. Zeppelin GmbH expects a significant decline in the net profit according to IFRS for 2020. There are no major differences with respect to the annual net profit in the financial statement for ZEP between IFRS and the German Commercial Code. The globally spreading Covid-19 epidemic may further dampen the economic performance of the Zeppelin Group.

E PROPOSED ALLOCATION OF PROFITS

Based on the disposable profit of EUR 410,109 thousand, the Management Board proposes distributing a regular dividend of 18% of the consolidated net profit attributable to the shareholders of Zeppelin GmbH (EUR 89,459 thousand), thus EUR 16,103 thousand for fiscal year 2019, and carrying EUR 394,006 thousand forward to new account.

[23] IMF World Economic Outlook Database, October 2019.
[24] VDMA Economic Outlook December 2019.
[25] EUROCONSTRUCT, November 2019.

[26] Press portal "Deutscher Maschinenbau ist und bleibt auch 2020 im Krisenmodus" (*German mechanical engineering is and will remain in crisis mode even in 2020*) from January 6, 2020.

Friedrichshafen, March 12, 2020

The Management Board of Zeppelin GmbH

Peter Gerstmann | Michael Heidemann | Christian Dummler | Alexandra Mebus

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2019

in kEUR	No.	2019	2018
Sales	1	3,118,488	2,896,948
Cost of sales	2	-2,647,079	-2,456,509
Gross profit on sales		**471,408**	**440,438**
Research and development costs		-5,083	-5,956
Selling expenses		-199,014	-182,833
General administrative expenses		-140,960	-126,576
Other income	3	61,094	48,012
Other expenses	4	-31,219	-29,849
Impairment of financial instruments and contract assets (net)		-5,802	318
Share in the result of companies accounted for using the equity method		1,437	1,375
Profit before net financial result		**151,862**	**144,929**
Interest result	6	-16,353	-14,361
thereof, interest expenses	6	-21,395	-18,715
thereof, interest income	6	5,041	4,354
Other financial result	6	-1,818	259
thereof, other financial expenses	6	-5,471	-3,105
thereof, other financial income	6	3,653	3,364
Net financial result		**-18,171**	**-14,101**
Net profit before tax		**133,691**	**130,827**
Income taxes	7	-41,294	-40,828
Net profit after tax		**92,397**	**89,999**
thereof, attributable to non-controlling interests		2,938	1,537
thereof, attributable to the shareholders of Zeppelin GmbH		89,459	88,462

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2019

in kEUR	2019	2018
Net profit after tax	**92,397**	**89,999**
Pension plan remeasurements	-12,801	-702
Income taxes	3,318	149
Items that will not be reclassified to profit or loss	**-9,483**	**-552**
Exchange differences on the translation of foreign operations	7,688	-2,648
Hedging gains or losses including transfer to profit or loss	-432	-1,753
Income taxes	148	453
Items that may be reclassified to profit or loss	**7,404**	**-3,948**
Other comprehensive income after tax	**-2,079**	**-4,500**
Total comprehensive income	**90,318**	**85,499**
thereof, attributable to non-controlling interests	2,908	1,474
thereof, attributable to the shareholders of Zeppelin GmbH	87,410	84,025

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

OF ZEPPELIN GMBH AS OF DECEMBER 31, 2019

in kEUR	No.	12/31/2019	12/31/2018
Assets			
Current assets			
Cash and cash equivalents	9	68,884	67,178
Financial assets	10	16,482	17,372
Trade receivables	10	425,027	369,700
Contract assets	11	27,947	32,199
Other assets	12	47,091	43,874
Income tax receivables		4,614	3,388
Inventories	13	601,048	497,557
		1,191,094	**1,031,269**
Non-current assets			
Financial assets	14	34,508	27,434
Trade receivables	14	8,500	12,147
Other assets	12	57,570	51,984
Income tax receivables		292	167
Investments accounted for using the equity method	15	17,020	18,870
Intangible assets	16	115,929	51,749
Property, plant, and equipment	17	1,282,547	1,117,947
Deferred taxes	7	82,898	72,059
		1,599,265	**1,352,358**
		2,790,358	**2,383,627**

in kEUR	No.	12/31/2019	12/31/2018
Equity and liabilities			
Current liabilities			
Financial liabilities	18	142,015	82,066
Trade payables	18	133,340	133,066
Other financial liabilities	18	126,290	118,748
Contract liabilities	11	160,270	119,263
Other liabilities	19	110,135	94,713
Income tax liabilities		8,065	9,790
Employee benefits	21	98,620	84,416
Other provisions	22	36,176	36,218
		814,912	**678,281**
Non-current liabilities			
Financial liabilities	20	633,242	512,050
Other financial liabilities	20	165,512	148,272
Contract liabilities	11	17,019	14,156
Other liabilities	19	72,073	61,543
Income tax liabilities		20,462	15,285
Employee benefits	21	171,708	138,332
Other provisions	22	9,181	6,978
Deferred taxes	7	40,820	37,345
		1,130,015	**933,961**
Equity			
Share capital	23	100,000	100,000
Capital reserves	23	60,000	60,000
Retained earnings	23	688,340	614,817
Accumulated other comprehensive income	23	-12,816	-10,766
Equity attributable to the shareholders of Zeppelin GmbH		**835,524**	**764,051**
Non-controlling interests	23	9,907	7,334
		845,431	**771,385**
		2,790,358	**2,383,627**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2019

in kEUR	Share capital	Capital reserves	Retained earnings	Accumulated other comprehensive income			Equity attributable to the shareholders of Zeppelin GmbH	Non-controlling interests	Equity
				Pension plan re-measurements	Exchange differences on the translation of foreign operations	Hedging gains or losses			
01/01/2018	**100,000**	**60,000**	**536,745**	**-1,039**	**-6,112**	**822**	**690,416**	**5,969**	**696,385**
Net profit after tax			88,462				**88,462**	1,537	**89,999**
Other comprehensive income				-552	-2,585	-1,300	**-4,438**	-63	**-4,501**
Total comprehensive income			**88,462**	**-552**	**-2,585**	**-1,300**	**84,025**	**1,474**	**85,499**
Dividends			-10,367				**-10,367**	-109	**-10,476**
Other changes			-22				**-22**		**-22**
12/31/2018	**100,000**	**60,000**	**614,817**	**-1,592**	**-8,697**	**-477**	**764,051**	**7,334**	**771,385**
Net profit after tax			89,459				**89,459**	2,938	**92,397**
Other comprehensive income				-9,483	7,717	-284	**-2,049**	-29	**-2,079**
Total comprehensive income			**89,459**	**-9,483**	**7,717**	**-284**	**87,410**	**2,908**	**90,318**
Dividends			-15,923				**-15,923**	-1,954	**-17,877**
Changes in the consolidation group								1,615	**1,615**
Other changes			-13				**-13**	3	**-10**
12/31/2019	**100,000**	**60,000**	**688,340**	**-11,075**	**-979**	**-761**	**835,524**	**9,907**	**845,431**

CONSOLIDATED STATEMENT OF CASH FLOWS

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2019

in kEUR	2019	2018
Net profit after tax	**92,397**	**89,999**
Income taxes	41,294	40,828
Net profit before tax	**133,691**	**130,827**
Depreciation, amortization, impairments and reversals of impairment losses	225,631	206,127
thereof, intangible assets	9,641	6,558
thereof, property, plant and equipment excluding rental fleet	59,257	55,682
thereof, rental fleet	156,719	143,702
thereof, financial assets	13	185
Share in the result of companies accounted for using the equity method	-1,437	-1,375
Change in post-employment benefit obligations	18,817	-4,583
Change in long-term provisions	4,281	676
Unrealized foreign exchange rate gains/losses	-532	1,775
Interest income and expenses	16,353	14,361
Income from other participations	-868	-1,128
Other non-cash income/expenses	17,766	-3,286
Income from asset disposals	816	421
Change in inventories	-103,473	-44,292
Change in RPO assets held for rental	-76,826	-53,556
Change in trade receivables	-48,860	-14,418
Change in other receivables and assets	-12,880	-17,289
Change in trade payables	-19,444	21,217
Change in other payables and other liabilities	114,369	-4,223
Income taxes received	1,196	1,932
Income taxes paid	-33,362	-29,874
Cash flow from operating activities	**235,238**	**203,312**

in kEUR	2019	2018
Cash flow from operating activities	**235,221**	**203,312**
Payments for investments in		
Intangible assets	-62,481	-18,061
Property, plant and equipment excluding rental fleet	-64,860	-49,851
Rental fleet	-193,755	-164,515
Financial assets	-1,546	-429
Proceeds from the sales of		
Intangible assets	9	113
Property, plant and equipment excluding rental fleet	1,207	5,336
Rental fleet	33,568	43,201
Financial assets	614	77
Net cash flow from business combinations	-23,420	-9,489
Interest received	2,115	1,906
Dividends received	868	1,128
Cash flow from investing activities	**-307,682**	**-190,584**
Proceeds from non-current financial liabilities	80,000	7,515
Repayment of non-current financial liabilities	-32,332	0
Net proceeds and repayments of current financial liabilities	35,372	4,211
Proceeds from the conclusion of SLB transactions	75,106	72,369
Payments for SLB liabilities	-25,996	-74,991
Payments for lease liabilities	-22,921	-21,306
Interest paid	-18,274	-13,498
Dividends paid to shareholders of Zeppelin GmbH	-15,923	-10,367
Distributions made to non-controlling interests	-1,954	-109
Cash flow from financing activities	**73,078**	**-36,175**
Changes in cash and cash equivalents	**634**	**-23,447**
Cash and cash equivalents at the beginning of the period	**67,178**	**91,175**
Changes in cash and cash equivalents	634	-23,447
Foreign exchange rate differences in cash and cash equivalents	1,072	-550
Cash and cash equivalents at end of the period	**68,884**	**67,178**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2019

A COMPANY

The Zeppelin Group (hereinafter "Zeppelin" or "Group") provides solutions for the following areas: construction and agricultural equipment, rental equipment, construction logistics, drives and energy, engineering, and plant engineering. The Group is legally domiciled in Friedrichshafen, with its headquarters located in Garching near Munich. The consolidated financial statements comprise Zeppelin GmbH and its subsidiaries.

Group-wide collaboration at Zeppelin revolves around a management holding company and six strategic business units (hereinafter "SBU"): Construction Equipment EU, Construction Equipment CIS, Rental, Power Systems, Plant Engineering, and Z Lab. The structure supports the bundling of operations and the targeted orientation of the business models towards various markets and customers.

Zeppelin GmbH is a *Kapitalgesellschaft* (corporation) whose voting rights are held 96.25% by Luftschiffbau Zeppelin GmbH, Friedrichshafen, and 3.75% by the Zeppelin Foundation. The Zeppelin Foundation is administered by the City of Friedrichshafen. The Zeppelin Foundation holds 90.0% of the shares in Luftschiffbau Zeppelin GmbH; the remaining 10.0% are held by Zeppelin GmbH. Based on an agreement concluded between Zeppelin GmbH and Luftschiffbau Zeppelin GmbH on November 7, 2011, control is passed through to the Zeppelin Foundation, which therefore is the ultimate parent company of Zeppelin GmbH. The Zeppelin Foundation does not have legal personality and does not prepare consolidated financial statements. That is why Zeppelin GmbH is obliged to prepare consolidated financial statements in accordance with Section 290 (1) sentence 1 HGB (German Commercial Code).

B BASIS OF PREPARATION

As a non-publicly traded company, Zeppelin GmbH makes use of the option under Section 315e (3) HGB to prepare its consolidated financial statements in accordance with IFRS.

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS and IAS) and Interpretations (IFRIC and SIC) adopted into European law by the European Commission as at the reporting date. The International Accounting Standards are drawn up by the International Accounting Standards Board (IASB) while the interpretations are designed by the International Financial Reporting Standards Interpretations Committee (IFRSIC). These bodies are supported by a private foundation based in London (GB), the International Accounting Standards Foundation.

The fiscal year corresponds to the calendar year. All figures are presented in euros, the functional currency of the Group, and have been rounded up or down to the nearest thousand euros (kEUR). Rounding may result in rounding differences.

The consolidated financial statements are prepared in accordance with the historical cost convention with exceptions made e.g. for derivatives and participations, which are measured at fair value.

The consolidated financial statements have been authorized for submission to the shareholders and to the Supervisory Board of Zeppelin GmbH on March 12, 2020 by the Management Board. The shareholders may request changes or amendments to the consolidated financial statements in the course of approval.

ACCOUNTING STANDARDS APPLIED

Standards Applied for the First Time

The following standards, interpretations, or amendments to standards were mandatory for the first time in fiscal year 2019:

IFRIC 23 – Uncertainty over income tax treatments

Clarification as to how the recognition and measurement requirements in IAS 12 are to be applied where there is uncertainty over income tax treatments. Zeppelin measures tax risk items at the most likely amount or at the expected value. The measurement method that best reflects the tax risk is used. Application of IFRIC 23 did not result in any accounting changes.

IFRS 9 – Prepayment features with negative compensation

Clarification as to how certain financial instruments with prepayment features are to be classified in accordance with IFRS 9. Since the consolidated financial statements of Zeppelin GmbH do not contain any such financial instruments, there were no effects.

IAS 28 – Long-term interests in associates and joint ventures

The amendment clarifies that an entity shall apply IFRS 9 to long-term interests in associates or joint venture only if those parts of a net investment in that associate or joint venture are not accounted for using the equity method.

IAS 19 – Plan amendments, curtailments, or settlements

The changes mainly relate to the recognition of an amendment, curtailment or settlement of a defined benefit plan. As there was no need for a plan amendment in the fiscal year 2019, there was no effect on the consolidated financial statements.

IFRS 3, IFRS 11, IAS 12, IAS 23 – Annual improvements (cycle 2015 to 2017)

There were no effects on the consolidated financial statements in the fiscal year 2019.

Standards not yet Adopted

By the date of preparation of the consolidated financial statements, the IASB and IFRIC had published new and amended existing accounting standards, the first-time application of which is only mandatory or permitted after the reporting date. The regulations and expected effects of their application on the consolidated financial statements are presented below:

Standard/Interpretation/Framework		First application	Brief summary
IFRS 3	"Business combinations"	01/01/2020	Definition of a business: in particular, it is made clear that in addition to at least one input factor, there must also be a substantive process, which together contribute significantly to the ability to create results (output). The change has no effect on current accounting practices, as the definition of business was already applied by Zeppelin in the past.
IFRS 9, IAS 39, IFRS 7	"Financial instruments", "Financial instruments: Recognition and measurement" and "Financial instruments: Disclosures"	01/01/2020	Changes in connection with the IBOR[1] reform and questions about replacing the existing reference interest rates (such as EURIBOR) by introducing risk-free reference interest rates, as these had been shown to be susceptible to manipulation in times of crisis. In connection with the transition to the new interest rates, uncertainties existed as to whether the replacement of the existing benchmark interest rates could lead, among other things, to the termination of hedging relationships. Since Zeppelin only has interest rate hedging relationships in euros, there is no uncertainty regarding the continued existence of the hedging relationships. Therefore, no effects on current accounting practices are assumed.
IAS 1, IAS 8	"Presentation of financial statements" and "Accounting policies, changes in accounting estimates and errors"	01/01/2020	Harmonization of the definition of "materiality" in IAS 1 and IAS 8. Since this change is a harmonization and not a fundamental realignment and interpretation of "materiality", we do not see any impact on Zeppelin.
Conceptual framework in IFRS standards	Adjustment of cross-references to the conceptual framework in IFRS	01/01/2020	Adjustments to cross-references within accounting standards have no impact on accounting, valuation, presentation, or disclosure.
IFRS 17	"Insurance contracts"	01/01/2021	Replaces IFRS 4. Rules on accounting for insurance contracts are not relevant to Zeppelin.
IAS 1	"Presentation of financial statements"	01/01/2022	Classification of liabilities as current or non-current. Clarification that the classification of liabilities as current or non-current is based on the rights that exist at the end of the reporting period. Management expectations regarding the exercise of such rights are not taken into account. Zeppelin does not expect any reclassification arising from this.
IFRS 10, IAS 28	"Consolidated financial statements", "Investments in associates and joint ventures"	Still open	The amendments to IFRS 10 and IAS 28 deal with the sale or contribution of assets between an investor and an associate or joint venture. IFRS 10 requires a parent company to recognize the full amount of the gain or loss on disposal of a subsidiary in the statement of profit or loss when control is lost. In contrast, IAS 28 requires that, in a sale transaction between an investor and an associate or joint

[1] "Interest Rate Benchmark Reform"

	venture, the gain or loss on disposal is recognized only to the extent of the investor's interest in that entity. On December 27, 2015, the IASB decided to postpone the date of first-time adoption of this amendment standard indefinitely. The amended standards have no material effect on the consolidated financial statements.

Consolidation Group

Subsidiaries

The following subsidiaries are included in the consolidated financial statements:

Name	Registered office		Equity share in %	
	Country	Town/City	12/31/2019	12/31/2018
Zeppelin GmbH	Germany	Friedrichshafen	-	-
AT Baumaschinentechnik Beteiligungs GmbH	Germany	Munich	100.0	100.0
Baustellen-Verkehrs-Technik GmbH (merged into Zeppelin Rental GmbH in 2019)	Germany	Barleben	-	100.0
Luther HL GmbH & Co. KG (acquired in 2019 / share deal)	Germany	Hoppstädten-Weiersbach	100.0	-
Meton GmbH (acquired in 2019 / share deal)	Germany	Hoppstädten-Weiersbach	100.0	-
Zeppelin Aviation & Industrial Service GmbH (formerly: BIS Inspection Service GmbH)	Germany	Ulm (formerly: Hamburg)	100.0	100.0
Zeppelin Baumaschinen GmbH	Germany	Munich	100.0	100.0
Zeppelin Lab GmbH	Germany	Berlin	100.0	100.0
Zeppelin Power Systems GmbH & Co. KG	Germany	Hamburg	100.0	100.0
Zeppelin Power Systems Verwaltungs GmbH	Germany	Hamburg	100.0	100.0
Zeppelin Rental GmbH	Germany	Garching near Munich	100.0	100.0
Zeppelin Rental Verwaltungs GmbH	Germany	Garching near Munich	100.0	100.0
Zeppelin Struktur GmbH	Germany	Garching near Munich	100.0	100.0
Zeppelin Systems GmbH	Germany	Friedrichshafen	100.0	100.0
Zeppelin Armenien OOO	Armenia	Abovyan	100.0	100.0
Zeppelin Systems Benelux N.V.	Belgium	Genk	100.0	100.0
Zeppelin Systems Latin America Equipamentos Industriais Ltda.	Brazil	São Paulo	100.0	100.0
Zeppelin Systems China (Beijing) Co. Ltd.	China	Beijing	100.0	100.0
Zeppelin Systems China (Shanghai) Co. Ltd.	China	Shanghai	60.0	60.0
Zeppelin Danmark A/S (established in 2019)	Denmark	Brondby	100.0	-
Zeppelin Systems UK Limited	England	Nottingham	100.0	100.0
Zeppelin Systems France S.A.R.L.	France	Vénissieux Cedex	100.0	100.0
Smart Controls India Ltd. (included in consolidation group for first time in 2019)	India	Madhya Pradesh	60.0	40.0
Zeppelin Systems India Pvt. Ltd.	India	Vadodara	100.0	100.0
Nuova Ciba S.p.A.	Italy	Reggio Emilia	100.0	100.0
Zeppelin Systems Italy S.r.l.	Italy	Milan	90.0	90.0
Zeppelin Österreich GmbH	Austria	Fischamend, near Vienna	100.0	100.0
Zeppelin Rental Österreich GmbH & Co. KG	Austria	Fischamend, near Vienna	100.0	100.0
Zeppelin Rental Österreich Verwaltungs GmbH	Austria	Fischamend, near Vienna	100.0	100.0
Zeppelin Polska Sp. z.o.o.	Poland	Warsaw	100.0	100.0
Zeppelin Immobilien Russland OOO	Russia	Moscow	100.0	100.0
Zeppelin Power Systems Russland OOO	Russia	Moscow	100.0	100.0
Zeppelin Russland OOO	Russia	Moscow	100.0	100.0

Name	Registered office		Equity share in %	
	Country	Town/City	12/31/2019	12/31/2018
Zeppelin Systems Gulf Co. Ltd.	Saudi Arabia	Al Jubail	100.0	100.0
Zeppelin Sverige AB (established in 2019)	Sweden	Mölndal	100.0	-
Zeppelin International AG	Switzerland	Steinhausen	100.0	100.0
Zeppelin Systems Singapore Pte. Ltd.	Singapore	Singapore	100.0	100.0
DIMA service for plant engineering s.r.o.	Slovak Republic	Bratislava	100.0	100.0
Zeppelin SK s.r.o.	Slovak Republic	Banská Bystrica	100.0	100.0
Zeppelin Systems Korea Corporation	South Korea	Gyeonggi Province	100.0	100.0
Zeppelin Tadschikistan OOO	Tajikistan	Dushanbe	100.0	100.0
Zeppelin CZ s.r.o.	Czech Republic	Modletice near Prague	100.0	100.0
Zeppelin Turkmenistan JV	Turkmenistan	Ashgabat	100.0	100.0
Zeppelin Ukraine TOV	Ukraine	Kiev	100.0	100.0
Zeppelin Central Asia Machinery OOO	Uzbekistan	Tashkent	100.0	100.0
Zeppelin Systems USA Inc.	United States of America	Odessa, Florida	100.0	100.0
Zeppelin Weißrussland OOO	Belarus	Minsk	100.0	100.0

The following subsidiaries are not included in the consolidated financial statements because their non-inclusion has no material impact on the presentation of the net assets, financial position and results of operations. Zeppelin measures the shares in these companies at fair value through profit or loss. The fair values largely correspond to the historical acquisition costs.

Name	Registered office		Equity share in %	
	Country	Town/City	12/31/2019	12/31/2018
Luther Verwaltungs GmbH (acquired in 2019 / share deal)	Germany	Hoppstädten-Weiersbach	100.0	-
MWB Marine Services GmbH	Germany	Bremerhaven	60.0	60.0
Zeppelin SkySails Sales & Service Verwaltungs GmbH (liquidated/removed in 2019)	Germany	Hamburg	-	90.0
Fehmarnbelt Solution Services A/S	Denmark	Greve	50.0	-
Baltic Marine Contractors OÜ (acquired in 2019 / share deal)	Estonia	Tallinn	100.0	-
Levotec s.r.o. (acquired in 2019 / share deal)	Slovak Republic	Levoča	100.0	-
Meton s.r.o. (acquired in 2019 / share deal)	Czech Republic	Tuchoměřice	100.0	-
PJSC "Ukrcukorteploi-zolyaciya" (UCTI)	Ukraine	Vyshneve	98.0	98.0

Joint ventures

In 2019, for the first time the joint venture Fehmarnbelt Solution Services A/S is no longer included in the consolidated financial statements using the equity method, rather it is treated as a long-term investment in a joint venture in accordance with IFRS 9. This has no material impact on the presentation of the net assets, financial position and results of operations.

Associates

The following associate is included in the consolidated financial statements using the equity method:

Name	Registered office Country	Registered office Town/City	Equity share in % 12/31/2019	Equity share in % 12/31/2018
CZ Loko a.s.	Czech Republic	Česká Třebová	49.0	49.0

CZ Loko, a.s., whose registered office is in Česká Třebová (Czech Republic), is an associate accounted for using the equity method and is a strategic sales partner of Zeppelin. The company mainly manufactures, repairs, and sells railway traction vehicles, metal structures, and machinery. Zeppelin CZ s.r.o. holds 49.0% of the shares and thus participates in the decision-making process. In addition, the Management Board and commercial management of Zeppelin CZ s.r.o. are members of the Supervisory Board of CZ Loko.

In the previous year, Smart Controls India Ltd., based in Gwalior, India, was accounted for using the equity method. The increase in the shareholding from 40% to 60% means the company was initially consolidated in 2019 due to the acquisition of a majority interest. As a result, the company is no longer reported as an associate unlike the previous year.

Subsidiaries with significant non-controlling interests

The consolidated financial statements include the following subsidiaries with significant non-controlling interests:

Name	Registered office Country	Registered office Town/City	Equity share in % 12/31/2019	Equity share in % 12/31/2018
Smart Controls India Ltd.	India	Madhya Pradesh	40.0	60.0
Zeppelin Systems China (Shanghai) Co. Ltd.	China	Shanghai	40.0	40.0
Zeppelin Systems Italy S.r.l.	Italy	Milan	10.0	10.0

The following tables present financial information on Smart Controls India Ltd. before intragroup eliminations:

in kEUR	Smart Controls India Ltd. 12/31/2019
Share in net assets	
Current assets	3,492
Non-current assets	585
Current liabilities	-1,800
Non-current liabilities	-148
	2,129
Share in %	40.0
	852

in kEUR	Smart Controls India Ltd. 2019
Share in net profit or loss after tax	
Sales	5,533
Net profit	776
Share in %	40.0
	310

in kEUR	Smart Controls India Ltd. 2019
Share in cash flow from operating activities	
Cash flow from operating activities	868
Share in %	40.0
	347
Share in cash flow from investing activities	
Cash flow from investing activities	-49
Share in %	40.0
	-20
Share in cash flow from financing activities	
Cash flow from financing activities	-512
Share in %	40.0
	-205
Dividends	**68**

The following tables present the financial information on Zeppelin Systems China (Shanghai) Co. Ltd. before intragroup eliminations:

in kEUR	Zeppelin Systems China (Shanghai) Co. Ltd. 12/31/2019	12/31/2018
Share in net assets		
Current assets	54,846	47,465
Non-current assets	783	5,375
Current liabilities	-35,381	-35,248
Non-current liabilities	0	0
	20,248	**17,592**
Share in %	40.0	40.0
	8,099	**7,037**

in kEUR	Zeppelin Systems China (Shanghai) Co. Ltd. 2019	2018
Share in net profit or loss after tax		
Sales	63,296	48,894
Net profit	7,236	3,786
Share in %	40.0	40.0
	2,894	**1,515**

in kEUR	Zeppelin Systems China (Shanghai) Co. Ltd. 2019	2018
Share in cash flow from operating activities		
Cash flow from operative activities	2,795	7,928
Share in %	40.0	40.0
	1,118	**3,171**
Share in cash flow from investing activities		
Cash flow from investing activities	12	69
Share in %	40.0	40.0
	5	**27**
Share in cash flow from financing activities		
Cash flow from financing activities	-4,625	0
Share in %	40.0	40.0
	-1,850	**0**
Dividends	**1,850**	**0**

The following tables present financial information on Zeppelin Systems Italy S.r.l. before intragroup eliminations:

in kEUR	Zeppelin Systems Italy S.r.l. 12/31/2019	Zeppelin Systems Italy S.r.l. 12/31/2018
Share in net assets		
Current assets	7,463	6,578
Non-current assets	761	830
Current liabilities	-4,169	-3,150
Non-current liabilities	-1,268	-1,292
	2,787	**2,965**
Share in %	10.0	10.0
	279	**297**

in kEUR	Zeppelin Systems Italy S.r.l. 2019	Zeppelin Systems Italy S.r.l. 2018
Share in net profit or loss after tax		
Sales	6,661	17,787
Net profit	184	190
Share in %	10.0	10.0
	18	**19**

in kEUR	Zeppelin Systems Italy S.r.l. 2019	Zeppelin Systems Italy S.r.l. 2018
Share in cash flow from operating activities		
Cash flow from operating activities	496	-599
Share in %	10.0	10.0
	50	**-60**
Share in cash flow from investing activities		
Cash flow from investing activities	-11	-1
Share in %	10.0	10.0
	-1	**0**

in kEUR	Zeppelin Systems Italy S.r.l. 2019	Zeppelin Systems Italy S.r.l. 2018
Share in cash flow from financing activities		
Cash flow from financing activities	-391	-1,124
Share in %	10.0	10.0
	-39	**-112**
Dividends	**36**	**109**

Business Combinations

Takeover of distribution and service activities in Sweden, Denmark, and Greenland

Under the Master Sale and Transfer Agreement of September 26, 2019, selected assets and liabilities of Pon Equipment AB, Pon Power AB, Pon Rental Sweden AB, all Gothenburg, Sweden, as well as Pon Equipment A/S, Brondby, Pon Power A/S, Esbjerg, both Denmark, and Pon Equipment and Pon Power Greenland ApS, Nuuk, Greenland, were taken over by Zeppelin Sverige AB and Zeppelin Danmark A/S, respectively, newly founded in 2019, in asset deals. The transaction also included the acquisition of all shares in Baltic Marine Contractors OÜ and the acquisition of two non-essential activities. Following approval by the supervisory authorities, control was obtained as of December 31, 2019.

The preliminary total purchase price of the transaction is EUR 106.5 million. In addition, a purchase price of EUR 822 thousand was paid for the shares in Baltic Marine Contractors OÜ. Baltic Marine Contractors OÜ is not consolidated for reasons of materiality and is therefore not included in the following statement of net assets.

The acquisitions were made at the fair value of the assets and liabilities transferred. At the time of initial consolidation, the fair values of the transaction were as follows:

in kEUR	
Assets	
Current assets	
Cash and cash equivalents	111
Other financial assets	1,552
Trade receivables	32,444
Other assets	1,555
Inventories	79,297
	114,958
Non-current assets	
Financial assets	279
Intangible assets	38,441
Property, plant, and equipment	57,695
Deferred taxes	2,339
	98,753
	213,711
Liabilities	
Current liabilities	
Financial liabilities	9,342
Trade payables	20,307
Other financial liabilities	294
Contract liabilities	3,631
Other liabilities	3,856
Employee benefits	8,649
Provisions	3,008
	49,087
Non-current liabilities	
Financial liabilities	32,211
Other financial liabilities	442
Other liabilities	323
Employee benefits	22,758
Provisions	2,179
Deferred taxes	182
	58,095
	107,182
Net assets	**106,528**

The gross amount of receivables equals EUR 34,535 thousand. It is assumed that a partial amount of EUR 2,091 thousand is not recoverable.

As part of the preliminary purchase price allocation, a customer base with a useful life of 10 years was recognized. The purchase price allocation is preliminary with regard to the forecast of future cash flows, the churn rate, and the workforce[2].

In addition, goodwill of EUR 7,288 thousand was capitalized. The goodwill reflects the existing distribution network and the well-trained workforce.

In particular, the aim of the transactions is to expand the territories covered by distribution and service activities to Sweden, Denmark, and Greenland, enabling the realization of future earnings potential and to further strengthen the Zeppelin Group's market position in Europe. For the MaK engine brand, the distribution and service territory also includes Estonia, Latvia, Lithuania, Finland, Iceland, and the Faroe Islands.

Including the companies from January 1 to December 31, 2019 would have an impact on the Zeppelin Group's net assets, financial position and rsults of operations in the form of additional sales of approximately EUR 340 million and additional net profit before interest and taxes of approximately EUR 7 million.

Luther Group

With a purchase agreement dated August 2, 2019 and economic effect as of January 1, 2019 (assumption of control as of October 1, 2019), Zeppelin Rental GmbH acquired all shares and the associated voting rights in Luther HL GmbH & Co. KG, Luther Verwaltungs GmbH, Levotec s.r.o., Meton GmbH and Meton s.r.o. (hereinafter "Luther Group"). The purchase price was around EUR 22,829 thousand.

The group is active in the field of site and traffic guidance as well as the manufacture, distribution, and rental of telematics, LED lighting technology, and crash barrier systems.

The acquisition was made at the fair value of the assets and liabilities transferred. At the time of acquisition, the fair values were as follows:

[2] Assumptions regarding the measurement of the existing employee base

in kEUR	
Assets	
Current assets	
Cash and cash equivalents	929
Other financial assets	1,589
Trade receivables	795
Other assets	61
Inventories	9,645
	13,019
Non-current assets	
Financial assets	191
Intangible assets	15,931
Property, plant, and equipment	13,029
Deferred taxes	45
	29,196
	42,216
Liabilities	
Current liabilities	
Financial liabilities	4,275
Trade payables	2,011
Other financial liabilities	200
Contract liabilities	2,421
Other liabilities	3,482
Employee benefits	284
Provisions	107
	12,781
Non-current liabilities	
Financial liabilities	4,939
Deferred taxes	1,667
	6,606
	19,387
Net assets	**22,829**

The gross amounts of receivables correspond to their fair values. No bad debts were identified.

As part of the preliminary purchase price allocation, a customer base with a useful life of 8 years was recognized. In addition, goodwill of EUR 8,100 thousand was realized. This reflects an improvement in regional coverage in the traffic safety segment and the expansion of the portfolio to include the production of temporary crash barriers and traffic telematics systems. The goodwill is not depreciable for tax purposes due to the transaction structure.

Including the company from January 1 to December 31, 2019 would have an impact on the Zeppelin Group's net assets, financial position and results of operations in the form of additional sales of approximately EUR 17 million and additional net profit before interest and taxes of approximately EUR 2 million.

Smart Controls India Ltd.

With economic effect from April 1, 2019, the share in Smart Controls India Ltd. was increased by 20% to 60%, representing a gain of control.

A purchase price of INR 88,000 thousand, or EUR 1,132 thousand, was paid for the acquisition of the twenty-percent share.

The acquisition was made at the fair value of the assets and liabilities transferred. At the time of acquisition, the fair values were as follows:

in kEUR	
Assets	
Current assets	
Cash and cash equivalents	944
Other financial assets	0
Trade receivables	1,345
Other assets	264
Inventories	1,137
	3,690
Non-current assets	
Intangible assets	3,464
Property, plant, and equipment	460
	3,924
	7,614
Liabilities	
Current liabilities	
Trade payables	730
Financial liabilities	695
Other liabilities	1,073
Income tax liabilities	17
Employee benefits	50
	1,425
Non-current liabilities	
Financial liabilities	**8**
	1,433
Net assets	**6,182**

The gross amount of receivables equals EUR 1,355 thousand. It is assumed that a partial amount of

EUR 10 thousand is not recoverable. As part of the final purchase price allocation, a customer base with a useful life of 10 years was recognized. Furthermore, the technology, an order backlog, and a trademark with a useful life of 5 years were recognized as intangible assets. Deferred tax liabilities are attributable to the disclosed hidden reserves.

The identified goodwill of EUR 970 thousand primarily represents the expansion in the software development and automation technology segment. The goodwill is not depreciable for tax purposes due to the transaction structure..

The revaluation of the 40% share previously held and a carrying amount of EUR 2,152 thousand resulted in a gain of EUR 112 thousand on the acquisition date, which is reported under other net financial result. The fair value of the previous at-equity participation on the acquisition date (EUR 2,264 thousand) represents a purchase price component in accordance with IFRS 3.

Shares of non-controlling interests of EUR 1,615 thousand were recognized in the course of initial consolidation. The shares were recognized in accordance with IFRS 3 using the partial goodwill method.

Including the company from January 1 to December 31, 2019 would have an impact on the Zeppelin Group's net assets, financial position and results of operations in the form of additional sales of approximately EUR 7 million and additional net profit before interest and taxes of approximately EUR 0 million.

C ACCOUNTING POLICIES

Zeppelin has consistently applied the following accounting policies in all periods presented.

CONSOLIDATION AND INVESTMENTS

The consolidated financial statements comprise Zeppelin GmbH and its subsidiaries. A subsidiary is a company which is directly or indirectly controlled by Zeppelin GmbH. Control exists when Zeppelin has the power over the investee, has a risk exposure, or rights, to variable returns from its involvement with the investee and has the ability to use its power over the investee to affect the amount of the investor’s returns. If facts and circumstances indicate that one or more of the three elements of control have changed, Zeppelin reassess whether it controls an investee. In the case of structured companies, control may arise from contractual arrangements.

Zeppelin assigns the consolidated net profit after tax and each component of the other comprehensive income to the shareholders of Zeppelin GmbH and those of the non-controlling interests. The total comprehensive income is allocated to the shareholders of Zeppelin GmbH and the non-controlling interests even if this results in a negative balance for the interests of non-controlling interests.

An entity is included in the consolidated financial statements from the date on which Zeppelin obtains control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the reporting period are recognized in the consolidated financial statements from the date on which Zeppelin obtains control of the subsidiary until the date on which control ceases.

All intragroup assets and liabilities, equity, income and expenses and cash flows from transactions between Group companies are eliminated on consolidation.

Uniform accounting and valuation principles are used for preparing the annual statements of those companies included in the consolidated financial statements.

A list of the subsidiaries of Zeppelin GmbH is included in the "Consolidation Group" section.

When the shareholding of non-controlling interests in equity changes, the carrying amounts of the controlling and non-controlling interests are adjusted to reflect the changes in their relative ownership interests in the subsidiary. Zeppelin recognizes any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received directly in equity and allocates it to Zeppelin GmbH shareholders.

Consolidation ends when Zeppelin relinquishes control of the subsidiary. In this case, the associated assets (including goodwill), liabilities, non-controlling interests, and other components of equity are derecognized. Any resulting gain or loss is recognized in the statement of profit or loss. Any retained investment is accounted for either at fair value or, in the case of investments in associates and joint ventures, using the equity method.

Business combinations are accounted for using the acquisition method. The acquisition costs arising from the company acquisition are measured as the sum of the consideration transferred, which is measured at the fair value on the acquisition date, and the value of the non-controlling interests in the acquired company. For each business combination, Zeppelin determines whether non-controlling interests are measured at fair value or at the proportionate share of the acquired entity's identified net assets. The costs arising from the business combination are recognized as administrative expenses. Goodwill arising from a business combination is initially measured at cost, being the difference between the sum of the consideration transferred, the amount of non-controlling interests and the previously held interests over the identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired exceeds the total consideration transferred, the difference is recognized in the statement of profit or loss. Goodwill is tested for impairment annually and written down to the lower recoverable amount if necessary.

Entities measured using the equity method include investments in associates and joint ventures.

Associates are entities in which Zeppelin has significant influence over the financial and operating policies, but does not control them completely or controls them through joint control. A joint venture results from an agreement in which the parties exercise joint control and share the rights to the net assets of the joint venture.

Investments in associates and joint ventures are accounted for using the equity method. The investment is initially recognized at cost but subsequently adjusted for any changes in Zeppelin's share of the net assets of the associated company or joint venture.

Zeppelin's share of the net profit after tax of the associate or joint venture is reported in the consolidated statement of profit or loss, its share of other income in other comprehensive income.

Where necessary, adjustments are made to the uniform Group accounting policies and valuation methods.

Zeppelin determines annually at the reporting date whether there is any objective evidence that the investment in an associate or joint venture may be impaired.

Intragroup balances and transactions as well as income and expenses from intragroup transactions are eliminated when preparing the consolidated financial statements.

Gains and losses on transactions with companies accounted for using the equity method are eliminated against Zeppelin's interest in the associated company to the amount of Zeppelin's interest. However, losses are only eliminated to the extent that there is no indication of impairment. When the associate sells the products resulting from intragroup deliveries, these corrections are reversed in the statement of profit or loss or in subsequent years by adjusting the Group retained earnings.

Foreign Currency Valuation

Each company translates foreign currency transactions into the functional currency of that company at the transaction date. In subsequent periods, companies measure monetary assets and liabilities at the closing rate. Non-monetary items denominated in foreign currencies continue to be measured at the historical exchange rate at the transaction date. Exchange differences arising from measurement in the functional currency of the respective company are recognized in the statement of profit or loss.

Assets and liabilities of companies not belonging to the eurozone are translated into the reporting currency of the Group (euro) at the closing rate, income and expenses at the average rate of their respective functional currency. Differences arising from translation using the reporting currency are recognized in other comprehensive income.

	12/31/2019	12/31/2018
Closing rate		
EUR/CZK	25.41	25.72
EUR/DKK	7.47	7.47
EUR/GBP	0.85	0.89
EUR/PLN	4.26	4.30
EUR/RUB	69.96	79.72
EUR/SEK	10.45	10.27
EUR/USD	1.12	1.15
EUR/UAH	26.42	31.71

	2019	2018
Average rate		
EUR/CZK	25.67	25.65
EUR/DKK	7.47	7.45
EUR/GBP	0.88	0.88
EUR/PLN	4.30	4.26
EUR/RUB	72.46	74.04
EUR/SEK	10.59	10.29
EUR/USD	1.12	1.18
EUR/UAH	28.95	32.13

Impairment Tests

At each reporting date, Zeppelin determines whether there is any indication that an asset may be impaired. If such an indication exists, Zeppelin performs an impairment test.

In order to carry out impairment tests, the assets concerned must generate cash inflows that are largely independent of those attributable to other assets. This applies to individual assets only in a few cases. Generally, individual assets must be combined into larger cash-generating units (CGUs) for the impairment test.

For the impairment test, the carrying amount of the CGU or the individual asset is compared with the recoverable amount. The recoverable amount represents the amount that Zeppelin can realize by continuing to include the CGU or individual asset into its operations (represented by value in use) or by selling it (represented by fair value less costs to sell). If the recoverable amount is less than the carrying amount of the asset or CGU, an impairment loss to the recoverable amount is recognized as an expense.

Goodwill acquired in business combinations is allocated to those CGUs or groups of CGUs that are expected to benefit from the synergies of the combination. For Zeppelin, each SBU represents a group of CGUs to which goodwill is allocated for impairment testing.

Zeppelin generally determines the recoverable amount of CGUs or individual assets at fair value less costs to sell. The DCF method is applied. The cash flows used for the calculation are derived from the mid-term plan approved by management for the next three years on an after-tax basis. The expected cash flows after this period are extrapolated using growth rates. The growth rate corresponds to 1.0% (12/31/2018: 1.0%). The cost of capital after taxes is used to determine the present value. The fair value determined in this way falls into level 3 of the fair value hierarchy.

If an impairment loss is recognized for a CGU, it is first allocated to the goodwill attributable to that CGU and then allocated proportionately to the remaining carrying amounts of the CGU.

Impairment losses on goodwill are not reversed. For other assets, the reversal of impairment losses is limited to a maximum of amortized cost.

Classification by Maturity

Zeppelin classifies assets and liabilities in the balance sheet according to maturity.

Assets and liabilities are classified as current if their realization is expected within twelve months of the reporting date. All other assets and liabilities are classified as non-current.

Bank liabilities under the syndicated credit facility of Zeppelin GmbH are reported under non-current liabilities insofar and as long as the remaining term of the syndicated credit facility agreement at the reporting date is at least 12 months.

Sales from Contracts with Customers

Zeppelin recognizes sales when performance obligations to customers are met by the transfer of an agreed good or the provision of an agreed service.

Sales are measured at the transaction price. The transaction price is the consideration expected to be received by the Group for the transfer of the goods or provision of the services. Variable transaction price components such as rebates, cash discounts, contractual penalties, or customer bonuses reduce sales.

Customer payments are generally due upon performance or as milestone payments according to specific payment schedules.

With a few exceptions, Zeppelin generates sales in the project business based on the progress on work performed over a given period.

Zeppelin recognizes sales from services both on a time and period basis. In the case of time-based service provision, sales are recognized at the amount of the billable consideration after the service has been rendered. Period-based sales recognition is done either according to the performance progress or at the amount of the billable consideration.

If a specified threshold value is exceeded, the performance progress is determined at the ratio of the costs incurred in the period to the estimated total costs. Below this threshold, sales may not be realized in excess of the costs incurred during the period. Contract amendments may result in both adjustments to the transaction price and adjustments to the performance progress.

Sales from selling products for which Zeppelin has a repurchase obligation (hereinafter "RPO transactions") are recognized as a sale with right of return or as a lease, depending on the contractual arrangements between the sales financing partner and the end customer. If the agreement between the sales financing partner and the end customer includes an option to return the contractual item, it is accounted for as a sale with a right of return. On the other hand, if the agreement contains an obligation for the sales financing partner to take back the asset, it is accounted for as a lease.

For disposals deemed sales with the right of return, Zeppelin estimates the return rate at the time of sale and reduces the proceeds from the sale by the present value of the agreed repurchase prices in accordance with this rate. The present value of the repurchase prices is carried as a liability as a repurchase obligation. The amount of the repurchase obligation is reassessed in each period. Changes in estimates lead to sales corrections in the current fiscal period. If the right of return is not exercised at the end of the contract term, the repurchase obligation is reversed through the statement of profit or loss against the realization of sales.

For disposals deemed as leases, the proceeds from the disposal are deferred in full – partly as a financial liability, partly as deferred sales – on the liabilities side. The present value of the repurchase prices is carried as a financial liability. The difference between the proceeds from the disposal and the financial liability is carried on the liabilities side as deferred sales and recognized as rental income and interest income on a straight-line basis over the term of the contract.

Rental income relates primarily to operating leases. Income from operating leases is recognized on a straight-line basis over the term of the lease.

Income from warranty extensions is deferred as a liability and recognized on a straight-line basis over the term of the contract.

Construction Equipment EU SBU

The business activities of the Construction Equipment EU SBU mainly comprise the sale, rental, and servicing of construction machines (partly with extended warranty). Contracts from the sale of construction machines and services are not combined.

Sales from selling construction machines are recognized upon delivery and transfer of control to the customer. For bill-and-hold agreements, sales are recognized upon invoicing.

Sales may also be made as RPO transactions. The timing of sales recognition in these cases depends on whether the transaction is classified as a sale with right of return or as a lease.

Sales from service contracts are recognized on a time and period basis.

Construction Equipment CIS SBU

The business activities of the Construction Equipment CIS SBU mainly comprise the sale, rental, and servicing of construction machines and agricultural equipment (partly with extended warranty). Contracts from the sale of construction machines and agricultural equipment and services are not combined.

Sales from the selling of construction machines and agricultural equipment are recognized upon delivery and transfer of control to the customer.

Sales may also be made as RPO transactions. The timing of sales recognition in these cases depends on whether the transaction is classified as a sale with right of return or as a lease.

Sales from service contracts are recognized on a time and period basis.

Rental SBU

The Rental SBU rents out construction machines as well as a wide range of construction equipment, modular room systems, construction site and traffic guidance systems, work platforms, forklifts and lifts, and vehicles. In addition, a comprehensive range of services is offered, including in project business.

Rentals and services represent separate performance obligations. The transaction price is allocated to the individual performance obligations on the basis of the contracted prices.

The rental business is carried out by way of an operating lease.

Sales from services are recognized on a time and period basis.

Sales from the project business are recognized at the time of invoicing at the amount of the chargeable consideration.

Power Systems SBU

The business activities of the Power Systems SBU comprise the distribution and service of engine and drive solutions (some with extended warranties). In addition, services in the project business are provided through the sale of, inter alia, generating sets for power generation and combined heat and power plants.

Sales from selling engines and drive solutions are recognized upon delivery and transfer of control to the customer. In the case of delivery to consignment warehouses, sales are recognized at the time the consignment is delivered to the warehouse, as control passes to the customer at this time.

Sales from servicing are recognized on a time and period basis.

Sales from the project business are mainly recognized on a period basis according to the performance progress.

If a customer receives the option to purchase additional engines at fixed prices at the time the contract is concluded, part of the transaction price is allocated to this option and realized when the option is exercised or lapses.

Plant Engineering SBU

The business activities of the Plant Engineering SBU comprise the development, implementation, and manufacture of customer-specific plants for the storage and processing of high-quality bulk materials, and the development and manufacture of components. In addition, the SBU offers various after-sales and quality services.

Sales from the project business are recognized on a period basis according to the performance progress.

If only development services are offered, sales are recognized when control over the development results is transferred to the customer.

Sales from the selling of components are recognized upon delivery and transfer of control to the customer.

Sales from quality services are recognized at the time of invoicing at the amount of the charged consideration.

Sales from after-sales services are recognized on a time and period basis.

INCOME TAXES

The tax expense for the period consists of current and deferred taxes. Taxes have been recognized in the statement of profit or loss unless they relate to items recognized directly in equity or in other comprehensive income. In this case, the taxes have been recognized in equity or in other comprehensive income.

The current tax claims and tax liabilities are determined in accordance with the tax regulations applicable on the balance sheet date.

Offsetting of current tax assets and liabilities is permitted only if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the tax assets and liabilities relate to income taxes levied by the same tax authority either on the same taxable entity or on different taxable entities. This means tax entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

For uncertain income tax items, the best estimate is the probable expected tax payment.

Deferred taxes are recognized for temporary differences between the carrying amounts under IFRS and the tax base of assets and liabilities, and for tax loss carryforwards and tax credits. Deferred taxes are not recognized for temporary differences arising on initial recognition of an asset or liability if the assets or liabilities result from a transaction that is not a business combination and, at the time of the transaction, affects neither profit or loss before tax nor taxable income.

Zeppelin recognizes deferred tax assets only to the extent that it is probable that future taxable result will be available against which the deductible temporary differences and unused tax losses and credits can be offset. Zeppelin tests deferred tax assets for impairment at each reporting date.

Deferred tax liabilities arising from temporary differences in connection with investments in subsidiaries, associates and interests in joint ventures are recognized by Zeppelin, unless the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates which, according to current estimates, apply in accordance with the current legal situation.

Deferred tax assets and deferred tax liabilities are offset if they relate to the same tax authority and the same taxable entity or to a group of different taxable entities that are jointly assessed for income tax purposes. Deferred taxes from short-term temporary differences are not offset with deferred taxes from long-term temporary differences.

Inventories

Inventories are carried at the lower of cost or net realizable value. In addition to directly attributable direct costs, production costs also include overheads attributable to the production process.

Depending on the business model and market conditions, the portfolio value is determined using the first-in, first-out method or the average method.

Intangible Assets

Goodwill arising on business combinations is measured at the acquisition date at the excess of the consideration received for the shares acquired in the companies over the net assets acquired. The net assets correspond to the difference between the fair values of the acquired assets and the fair values of the assumed liabilities and contingent liabilities.

Goodwill is not subject to scheduled amortization but is tested for impairment annually or when there are indications that it may be impaired. Details of the annual impairment test are presented in the "Impairment Tests" section.

Expenses for the development of new products are carried on the assets side as development costs if the products are technically and economically feasible and intended for the Group's own use or marketing, the expenses can be reliably measured, and sufficient resources are available to complete the development project.

Production costs of internally generated intangible assets include direct costs as well as overheads attributable to the development process. Development expenses that do not meet the criteria set out in the previous paragraph, and research expenses are recognized immediately in the statement of profit or loss. Internally generated intangible assets are amortized on a straight-line basis over their useful lives and written down if there are indications of impairment.

Individually acquired intangible assets are carried at cost.

Intangible assets acquired as part of a business combination are measured at fair value at the acquisition date.

Acquired intangible assets are amortized on a straight-line basis over their period of use and subjected to an annual impairment test if there are indications of impairment.

Licenses and similar rights are amortized over their contractual terms. Other useful lives are as follows:

	Useful life
Software, concessions, and industrial property rights	3 – 10 years
Internally generated intangible assets	5 years

Useful lives and residual values are reassessed at each reporting date and adjusted if necessary.

Apart from goodwill, Zeppelin does not recognize any intangible assets with indefinite useful lives.

Subsequent expenses are recognized in the statement of profit or loss if they cannot be capitalized.

Property, Plant, and Equipment

Property, plant, and equipment is initially recognized at cost and subsequently measured at amortized cost less accumulated depreciation and accumulated (non-scheduled) impairment losses. Reversals of impairment losses are recognized up to the amount of the amortized cost. In addition to directly attributable direct costs, production costs also include overheads attributable to the production process.

Expenses for maintenance and repairs are recognized in the statement of profit or loss unless they are capitalized as subsequent acquisition or production costs.

Property, plant, and equipment is depreciated on a straight-line basis over its estimated useful life to its expected residual value. The useful lives of property, plant, and equipment are reassessed at each reporting date and adjusted if necessary. Land is not depreciated.

The estimated useful lives of significant property, plant, and equipment for 2019 and 2018 are:

	Useful life
Building	5 – 60 years
Technical equipment and machinery	2 – 25 years
Operating and business equipment	2 – 20 years
Rental fleet	3 – 10 years

Leasehold rights are depreciated on a straight-line basis over the term of the agreement.

Borrowing Costs

If a considerable period of time elapses before a tangible asset or intangible asset is ready for operation, the borrowing costs directly attributable to the acquisition or production of the asset are capitalized. The recognition of borrowing costs begins at the commencement of acquisition or production and ends when the asset is ready for operation.

Financial Instruments

Financial instruments are contracts that give rise to a financial asset of one party and a financial liability or equity instrument of the other. These include both primary financial instruments (e.g. trade receivables, borrowings, cash and cash equivalents, loans and bonded loans, as well as trade payables and other liabilities) and derivative financial instruments (interest rate swaps, currency swaps, and forward exchange operations).

Primary financial instruments are initially recognized when they are purchased or sold on the settlement date and derivative financial instruments are initially recognized on the trading date.

A financial asset is derecognized when the contractual rights to cash flows from the asset expire or the rights to receive the cash flows and all significant opportunities and risks of ownership of the financial asset are transferred to another entity. Derecognition does not take place if all significant opportunities and risks are retained or if, in the event of risk sharing, control over the asset is retained. The retained portion of such financial assets is recognized separately as a financial asset and/or financial liability (continuing involvement).

Financial liabilities are derecognized when all contractual obligations have been met, canceled, or lapsed.

Financial assets are grouped into the following categories for measurement and reporting purposes:

- Measured at amortized cost ("AC"), which at Zeppelin includes in particular cash and cash equivalents, trade receivables and other receivables, as well as loans;
- Measured at fair value through profit or loss ("FVTPL"), which at Zeppelin includes in particular participations, interests in non-consolidated subsidiaries, and all derivatives with a positive fair value that are not accounted for in accordance with hedge accounting rules.

The following categories exist for the measurement and reporting of financial liabilities:

- AC, which at Zeppelin includes in particular loans and bonded loans, trade payables, and other liabilities;
- FVTPL, which at Zeppelin includes in particular all derivatives with a negative fair value that are not accounted for in accordance with hedge accounting rules.

The consolidated financial statements do not include financial instruments at fair value through other comprehensive income ("FVOCI").

Financial assets are allocated to the AC category if they are held exclusively to collect the contractual cash flows and the contractual payments relate exclusively to interest and principal repayments.

With few exceptions, all financial liabilities are classified as AC that do not have to be classified as FVTPL or are accounted for under hedge accounting rules.

Financial assets and financial liabilities are allocated to the FVTPL category if they are held exclusively for trading purposes. Under certain conditions it would also be possible to allocate financial instruments to this category by exercising an accounting option – the fair value option – although these financial instruments would actually have to be accounted for in accordance with the rules for the AC category. However, Zeppelin does not exercise the fair value option.

Zeppelin categorizes all financial assets and financial liabilities at the date of acquisition and periodically reassesses whether the criteria for classification are still met.

Upon initial recognition, financial instruments are measured at fair value, for financial asset or financial liabilities that are not measured at FVTPL, plus or less any directly attributable transaction costs.

The fair value generally corresponds to the transaction price. The fair value of financial assets and financial liabilities in the AC category with maturities of more than twelve months that do not bear interest or bear interest at low rates corresponds to the present value of the agreed cash flows. The present value is determined using a discount rate appropriate to the term. An exception exists for trade receivables without significant financing components. These are measured on initial recognition at the amount of the unconditional claim to consideration.

Financial assets and financial liabilities in the AC category are subsequently measured using the effective interest method. Using the effective interest method, all directly attributable fees, consideration paid or received, transaction costs, and other premiums or discounts included in the calculation of the effective interest rate are amortized over the expected term of the financial instrument.

Interest income and expenses from the application of the effective interest method are recognized in the income statement under interest income or interest expenses from financial instruments.

Financial assets and financial liabilities in the FVTPL category are subsequently measured at fair value, with changes in value recognized in the statement of profit or loss.

Derivatives embedded in contracts where the underlying is a financial asset are never accounted for separately. Instead, the hybrid financial instrument is assessed as a whole with regard to its classification. Embedded derivatives whose underlying contract is a financial liability are separated from the underlying contract and accounted for separately under certain conditions (e.g. loans with interest rate agreements that include a floor).

Zeppelin reports financial assets and financial liabilities gross. They are only offset if at the present time there is an enforceable right to set off with respect to the amounts and it is intended to settle them on a net basis.

Impairments

The calculation of loss allowances for financial assets in the AC category (as well as for contract assets from agreements with customers) is based on a forward-looking model taking into account expected credit defaults.

For non-performing financial assets, loss allowances are recorded at the gross amount. A financial asset is classified as non-performing ("definition of default") if there are significant reasons to believe that a debtor is unlikely to meet its payment obligations to Zeppelin.

Financial assets are derecognized when they are irrecoverable, for example as a result of the conclusion of insolvency proceedings.

All financial assets that are neither non-performing nor irrecoverable are collectible. These financial assets are written down at the time of initial recognition in accordance with the 12-month expected credit loss (hereinafter "12-month ECL"). In the event of a significant deterioration in creditworthiness, they are written down by the amount of the expected credit loss by maturity (hereinafter "lifetime ECL").

For trade receivables and contract assets, a simplified approach is applied in which only the lifetime ECL plays a role (hereinafter "simplified approach"). Under this approach, risk categories are created and assigned different impairment rates. The Group companies determine the default risk according to individual approaches, taking into account country and business area-specific risks. The companies use data from market data portals (including Creditreform), historical default rates, and customer-specific, forward-looking credit risk analyses.

In addition, all financial assets in the AC category (and contract assets from agreements with customers) are tested for individual impairment indicators at each reporting date. Financial assets are considered impaired if, as a result of one or more events occurring after the initial recognition of the asset, there is objective evidence that the expected future cash flows have changed negatively.

Objective evidence of an impairment can be various facts such as late payment over a certain period of time, initiation of enforcement measures, imminent insolvency or over-indebtedness, application for or opening of insolvency proceedings, or failure of restructuring measures.

Trade receivables that are already impaired upon initial recognition are carried at the net carrying amount.

Hedge Accounting

Zeppelin uses derivative and foreign currency components of primary financial instruments to hedge cash flows against interest rate and exchange rate fluctuations and to hedge fair value against interest rate fluctuations. However, the requirements for hedge accounting are applied only when the conditions for hedge accounting are met. For reasons of practicability, hedge accounting is only applied to hedges of exchange rate risks if a certain period-related threshold for the nominal volume of hedging transactions without hedge accounting is exceeded. The threshold is derived from an upper limit for the potential impact of the failure to apply hedge accounting on consolidated net profit after tax and the period accrual of expenses and income. Zeppelin designates all derivative components with a few exceptions relating to the Plant Engineering SBU.

Hedge accounting can only be applied if there is a clear hedging relationship between the hedged item and the hedging instrument with demonstrable, sufficient effectiveness. The hedging relationship must be formally documented and its effectiveness demonstrated upon initial recognition as a hedging relationship and subsequently on a quarterly basis.

The hedging relationship meets all hedge effectiveness requirements if

- the value of the hedging transaction moves in the opposite direction to the value of the underlying transaction,
- the credit risk does not have a dominant influence on the hedging relationship, and
- the hedging ratio of the hedging relationship reported in the balance sheet corresponds to the actual hedging ratio.

The effectiveness of hedging relationships is demonstrated by prospective effectiveness tests. In the case of currency hedges, the prospective effectiveness test is based on a comparison of the main terms of the hedging transaction with the main terms of the underlying transaction; in the case of interest rate hedges it is based on a statistical method (regression analysis).

Where hedge accounting is applied to derivatives or to the foreign currency component of primary financial instruments used to hedge against the risk of fluctuating cash flows ("cash flow hedges"), the effective portion of changes in the fair value of the derivative are recognized in other comprehensive income and reported in the accumulated other comprehensive income for hedge accounting. The effective change in value is the smaller of the cumulative change in value of the hedging instrument and the cumulative change in value of the hedged item. The undesignated and ineffective portion of the change in value continues to be recognized in the statement of profit or loss. If the hedging transactions relate to cash flows from operating activities, the portion of the change in value recognized in the statement of profit or loss is reported under other expenses and income. Otherwise, they are reported under other financial expenses and income.

Effectiveness is the degree to which the changes in value of the hedged item and the hedging instrument offset each other. The effective and ineffective portions of the change in value are determined using the cumulative dollar offset method.

The amount recognized in accumulated other comprehensive income is reclassified to the statement of profit or loss in the same period or periods in which the hedged expected cash flows or hedged item affect the profit or loss.

Hedge accounting is discontinued as soon as a forecast transaction is no longer probable and the hedging instrument no longer meets the criteria for hedge accounting, expires, or is sold, terminated, or exercised. The hedging transaction is henceforth be accounted for in accordance with the rules for financial assets and financial liabilities in the FVTPL category. If a forecast transaction is no longer expected to occur, the amount previously recognized in accumulated other comprehensive income for hedge accounting is immediately reclassified to the statement of profit or loss. In all other respects, the reclassification of the amounts previously recognized in accumulated other comprehensive income for hedge accounting follows the same principles as for continuing cash flow hedges.

In the case of hedging relationships used to hedge changes in the fair value of assets, liabilities, or off-balance-sheet firm commitments (hereinafter "fair value hedges"), the changes in the fair value of the hedged item attributable to the risk, and the changes in the fair value of the hedging derivative are recognized in the statement of profit or loss and reported net. For financial instruments measured at amortized cost, the cumulative adjustments are amortized over the (remaining) term.

Fair Value

Fair values are determined on the basis of a three-level hierarchy based on the proximity of the valuation factors used to an active market (hereinafter the "fair value hierarchy"). A market is referred to as "active" if quoted prices are readily and regularly available on that market and these prices are based on actual, regularly occurring market transactions.

Level 1: The fair value corresponds to a price for identical assets and liabilities quoted on active markets (unchanged).

Level 2: The fair value is based on market data that is either directly or indirectly observable for the asset or liability and that does not represent quoted prices under Level 1.

Level 3: The fair value is based on input data that is not quoted prices under Level 1 and not derived from directly or indirectly observable market data.

The fair values of Levels 2 and 3 are determined using financial valuation methods (e.g. discounted cash flow models). They correspond to the prices that would be received between independent market participants for the sale of an asset or paid for the transfer of a liability.

The fair values underlying these consolidated financial statements have been determined on the basis of the market conditions prevailing on the reporting date.

Reclassifications between the levels of the fair value hierarchy require a separate explanation in the notes to the consolidated financial statements. The periods covered by these consolidated financial statements do not include any reclassifications between hierarchical levels.

Cash and Cash Equivalents

Cash and cash equivalents comprises cash (cash on hand and bank balances) and cash equivalents. Cash equivalents are short-term, highly liquid financial investments with initial maturities of less than 3 months that can be converted into fixed cash amounts at any time and subject to insignificant fluctuations in value.

Employee Benefits

Obligations for short-term employee benefits are recognized as personnel expenses as soon as the related work is performed. In addition, a liability is recognized for performance already provided by the employee if there is a legal or constructive obligation to pay that benefit at the reporting date and the amount of the obligation can be reliably estimated.

Post-employment benefits include defined contribution and defined benefit plans.

For defined contribution plans, Zeppelin's obligation is limited to the payment of fixed contributions. The pension payments themselves are made by an external institution (e.g. an insurance company) without triggering further obligations for Zeppelin. All other forms of pension provision are defined benefit plans. This also applies to pension provision covered by pension plans if Zeppelin is obliged to make additional payments to achieve a guaranteed minimum return.

Payments for defined contribution plans are recognized as personnel expenses in the period in which the related work is performed. Prepaid contributions are recognized as an asset to the extent that there is a right to reimbursement or reduction of future payments.

In the case of defined benefit plans, the obligations are determined annually using the projected unit credit method by actuarial valuation. For each plan, economic trend assumptions (e.g. salary and pension trends) are taken into account in addition to estimates of the future benefits which the employees have tendered in the current and previous periods. This amount is discounted at a discount rate appropriate to the term and offset against the fair value of the plan assets. The discount rate used to determine the actuarial present value of promised retirement benefits is determined on the basis of returns at the reporting date on high-quality fixed-rate corporate bonds denominated in the same currency and with the same maturity as the benefit entitlements earned at the measurement date.

Any excess of plan assets over pension obligations resulting from this calculation is limited in amount to the present value of the economic benefits available in the form of repayments or reductions in future contributions. When calculating the present value of an economic benefit, applicable minimum funding requirements must also be taken into account.

Gains and losses from the revaluation of the pension obligation are recognized directly in other comprehensive income. The revaluation includes the actuarial gains and losses, the return on plan assets (excluding interest), and the effect of any asset ceiling (excluding interest). The service cost, which represents the additional entitlements of employees acquired in the fiscal year, is part of personnel expenses. The interest result, which is calculated as the imputed interest on the basis of the actuarial interest rate applicable to the net obligation or net assets at the beginning of the fiscal year, is recognized in the net financial result.

Past service cost and gains and losses on plan settlements are recognized immediately as personnel expenses in the period in which the change, curtailment, or settlement occurs.

Other long-term employee benefits mainly comprise anniversary provisions and provisions for partial retirement obligations. Valuation is based on the valuation principles for defined benefit pension plans. Obligations from partial retirement agreements are offset against the fair value of the plan assets. A surplus of assets is reported under other assets. Effects from revaluations are recognized in personnel expenses in the period in which they arise.

Termination benefits are recognized as an expense at the earlier of the following two dates: when Zeppelin can no longer withdraw the offer or when the restructuring measures have been decided and communicated. If it can be assumed that the benefits will not be settled in full within twelve months of the reporting date, they must be discounted.

Other Provisions

Other provisions are recognized for all currently identifiable risks and contingent liabilities that will result in a future economic burden and the amount of which can be reliably estimated.

Provisions are recognized at the amount required to settle the obligations on the basis of the best estimate. Non-current provisions are recognized at present value if the effect of discounting is material.

Leasing

Zeppelin acts as both lessee and lessor.

Accounting as Lessee

As lessee, Zeppelin generally recognizes a right of use and a corresponding lease liability for each lease.

Zeppelin makes use of the exemptions for short-term leases with a term of less than twelve months and leases for low-value assets. Expenses arising from these leases are recognized as expenses on a straight-line basis over the term of the contract.

Zeppelin does not make use of the option to combine leasing and non-leasing components.

Rights to use intangible assets are accounted for in accordance with the rules for intangible assets.

Rights of use arising from leases are initially measured at cost. Cost comprises the initial carrying amount of the lease liability plus any lease payments made before or at the beginning of the lease less any incentive payments and plus any initial direct costs.

The rights of use are subsequently measured at amortized cost less cumulative scheduled depreciation and cumulative impairment losses. Depreciation is charged over the shorter of the useful life of the rights of use or the term of the lease. If ownership of the leased asset is transferred to Zeppelin (through the exercise of an option or other contractual arrangement), it is depreciated over the (remaining) useful life of the leased asset.

The initial and subsequent measurement of lease liabilities are based on the present value of the minimum lease payments outstanding at the reporting date. Interest expenses are spread over the term in such a way as to produce a constant interest rate.

Accounting as Lessor

With regard to accounting as lessor, a distinction is made between operating leases and finance leases.

In the case of finance leases, the material opportunities and risks arising from ownership of the leased asset are transferred to the lessee. This results in the recognition of a receivable at the amount of the present value of future lease payments to be made.

If the opportunities and risks remain with Zeppelin, an operating lease exists and the leased assets are measured at amortized cost and reported under "Rental fleet". Leased assets are depreciated in accordance with the rules for property, plant, and equipment. The lease payments are recognized in the statement of profit or loss under rental income on a straight-line basis over the remaining term of the contract.

Sale-Leaseback Transactions

The sale-leaseback transactions (hereinafter "SLB") entered into by Zeppelin for refinancing purposes include tender rights. There is no transfer of control. Assets that are the subject of such agreements remain under property, plant, and equipment. Zeppelin recognizes payment obligations arising from SLB transactions as liabilities at their present value. They are discounted at the implicit interest rate.

D Discretionary Decisions and Estimates

The preparation of IFRS consolidated financial statements requires that discretionary decisions and assumptions be made about future events that affect the recognition and measurement of assets and liabilities. In individual cases, the actual values may deviate from the discretionary decisions and estimates. Changes are recognized at the time they become known in accordance with the accounting and valuation methods applicable to the respective assets and liabilities. This applies in particular to the following assets and liabilities.

Zeppelin performs annual impairment tests for all cash-generating units that contain goodwill. The impairment tests are based on assumptions regarding the development of cash flows and the weighted average cost of capital (WACC) of the respective unit.

The carrying amounts of property, plant, and equipment and intangible assets are based on assumptions regarding useful lives and residual values. In the case of the rental fleet from RPO transactions without a purchase option, the residual value estimates are based on assumptions about the development of the residual values of the machines underlying the transactions.

The carrying amount of the return rights from RPO transactions with purchase options is based on assumptions about the development of the residual values of the machines underlying the transactions at the time the options are exercised and about the development of the return rate.

Contract assets and liabilities from sales recognition based on performance progress are based on assumptions about the expected total contract costs.

In determining the impairment of financial assets measured at amortized cost, assumptions are made about the expected solvency of the respective debtors.

The recognition of deferred tax assets is based in part on expectations about the development of the taxable income of the respective taxable entity.

Other provisions are based on assumptions and estimates regarding the occurrence, amount, and timing of the respective obligations. Details about the assumptions and estimates underlying the provisions are given in Note 22.

E NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

1 SALES

Sales from contracts with customers are broken down by SBU, product, and type of sales recognition as follows:

in kEUR	2019 Construction Equipment EU	Construction Equipment CIS	Rental	Power Systems	Plant Engineering	Holding company	Consolidation	Group
Sales								
Earthmoving equipment (new)	857,639	241,358	0	0	0	0	-3,808	**1,095,188**
Earthmoving equipment (used)	242,793	16,260	0	0	0	0	-492	**258,562**
Rental business	319	519	260,799	0	0	3,688	-34,987	**230,337**
Forklifts	13,539	0	44,042	0	0	0	-581	**57,000**
Power systems	0	0	0	232,014	0	0	-2,721	**229,293**
Agricultural equipment	0	14,259	0	0	0	0	0	**14,259**
Production plants	0	0	0	0	111,899	0	0	**111,899**
Processing plants and mixers	0	0	0	0	94,873	0	-12	**94,861**
Systems for the food industry and liquids handling	0	0	0	0	46,785	0	0	**46,785**
Components and site equipment	0	0	66,401	0	16,081	0	-10	**82,472**
Spare parts	227,197	199,100	0	107,944	0	405	-33,510	**501,135**
Customer service	112,682	28,203	70,005	52,193	56,880	0	-7,610	**312,352**
Miscellaneous	15,348	0	68,030	31	5,533	2,450	-7,924	**83,468**
Zeppelin GmbH	0	0	0	0	0	29,091	-28,214	**877**
	1,469,517	**499,697**	**509,277**	**392,183**	**332,050**	**35,633**	**-119,871**	**3,118,488**
Sales								
thereof at a point in time	1,433,268	498,682	491,256	327,263	71,366	33,184	-116,052	**2,738,967**
thereof over time	36,249	1,016	18,021	64,920	260,684	2,450	-3,819	**379,521**
	1,469,517	**499,697**	**509,277**	**392,183**	**332,050**	**35,633**	**-119,871**	**3,118,488**

in kEUR	2018							
	Construction Equipment EU	Construction Equipment CIS	Rental	Power Systems	Plant Engineering	Holding company	Consolidation	Group
Sales								
Earthmoving equipment (new)	722,423	248,696	0	0	0	0	-816	**970,304**
Earthmoving equipment (used)	232,983	19,563	0	0	0	0	-2,229	**250,317**
Rental business	385	777	244,798	0	0	1,165	-32,030	**215,096**
Forklifts	12,439	0	38,097	0	0	0	-539	**49,997**
Power systems	0	0	0	202,254	0	0	-2,447	**199,807**
Agricultural equipment	0	13,464	0	0	0	0	0	**13,464**
Production plants	0	0	0	0	111,533	0	0	**111,533**
Processing plants and mixers	0	0	0	0	111,662	0	-22	**111,639**
Systems for the food industry and liquids handling	0	0	0	0	63,994	0	0	**63,994**
Components and site equipment	0	0	59,753	0	15,803	0	-17	**75,538**
Spare parts	224,662	175,915	0	106,090	0	0	-33,809	**472,858**
Customer service	109,093	24,063	80,928	51,262	45,063	0	-7,897	**302,513**
Miscellaneous	13,117	0	49,573	29	140	2,451	-6,138	**59,171**
Zeppelin GmbH	0	0	0	0	0	25,321	-24,604	**718**
	1,315,102	**482,478**	**473,148**	**359,635**	**348,195**	**28,938**	**-110,549**	**2,896,948**
Sales								
thereof at a point in time	1,209,080	482,189	454,047	308,732	96,611	26,455	-103,129	**2,473,986**
thereof over time	106,022	289	19,101	50,903	251,584	2,482	-7,420	**422,962**
	1,315,102	**482,478**	**473,148**	**359,635**	**348,195**	**28,938**	**-110,549**	**2,896,948**

The following table shows the value of all or part of the unfulfilled obligations arising from contractual relationships with customers as of the respective reporting date (hereinafter "order backlog")[3] and the periods during which Zeppelin expects to realize sales from this order backlog.

in kEUR	Subsequent year	2nd to 5th subsequent year	Thereafter	Total
12/31/2019	866,582	207,328	6,492	**1,080,402**
12/31/2018	742,176	147,488	2,023	**891,686**

[3] According to IFRS, the order backlog only includes order relationships with fixed consideration agreements and secure receipt of consideration.

2 Cost of Sales

The cost of sales comprises:

in kEUR	2019	2018
Cost of sales		
Cost of materials	-2,157,275	-1,996,808
Personnel expenses	-340,962	-310,606
Depreciation	-48,662	-44,753
Other expenses	-100,181	-104,342
	-2,647,079	**-2,456,509**

3 Other Income

The other income comprises:

in kEUR	2019	2018
Other income		
Handling margin from SLB transactions	47	3,294
Reimbursements	6,397	4,643
Book gains from asset disposals	6,319	1,573
Release of provisions and other liabilities	6,467	7,486
Rents and leases	178	2,301
Exchange rate gains	13,769	10,700
Income from derecognized receivables	304	777
Insurance compensation and indemnity payments	12,217	4,918
Miscellaneous	15,396	12,321
	61,094	**48,012**

The increase in book gains from asset disposals is mainly due to the sale of a property by Zeppelin Systems Benelux NV.

Insurance compensation and indemnity payments increased in particular due to a reclassification of EUR 7.4 million from sales. The corresponding figure for the previous year was EUR 5.4 million, which is still reported under sales.

4 Other Expenses

Other expenses include:

in kEUR	2019	2018
Other expenses		
Losses from asset disposals	-2,132	-1,994
Exchange rate losses from foreign currency valuation	-12,423	-12,301
Expenses from the derecognition of financial instruments	-1,877	-506
Claims expenses for motor vehicles, machines, and other	-2,780	-381
Contributions	-948	-2,349
Other taxes	-2,175	-3,423
Expenses for bank and guarantee fees, financial	-1,830	-1,372
Miscellaneous	-7,054	-7,906
	-31,219	**-29,849**

5 Personnel Expenses

Personnel expenses include:

in kEUR	2019	2018
Personnel expenses		
Wages and salaries	-461,593	-423,423
Social security contributions	-94,351	-86,140
Post-employment benefits	-4,636	-3,747
	-560,580	**-513,310**

The average number of employees during the year was:

Full-time equivalents	2019	2018
Employees		
Sales, marketing	1,627	1,546
Service (spare parts and after-sales)	4,265	3,910
Engineering, order processing, materials management, logistics	987	900
Production, assembly, quality management	753	716
Administration	1,256	1,142
Trainees and apprentices	322	287
	9,210	**8,502**

6 NET FINANCIAL RESULT

The net financial result consists of the interest result and other financial result and includes the following income and expenses:

in kEUR	2019	2018
Net financial result		
Interest result		
Interest income		
from financial instruments	2,127	1,890
from discounting	2,914	2,448
from loans to affiliated companies	0	16
from interest rate derivatives	0	0
	5,041	**4,354**
Interest expenses		
from financial instruments	-14,292	-12,159
from discounting	-3,138	-3,187
from lease agreements	-2,756	-1,800
from loans from affiliated companies	0	0
from interest rate derivatives	-1,208	-1,568
	-21,395	**-18,715**
	-16,353	**-14,361**
Other financial result		
Other financial income		
Income from participations	868	1,128
Other income from financial instruments	2,785	2,236
	3,653	**3,364**
Other financial expenses		
Other expenses from financial instruments	-5,471	-3,105
	-5,471	**-3,105**
	-1,818	**259**
	-18,171	**-14,101**

The expenses from discounting include interest expenses from the subsequent measurement of post-employment benefits and other long-term employee benefits amounting to EUR 968 thousand (2018: EUR 1,328 thousand), from the compounding of other provisions amounting to EUR 138 thousand (2018: EUR 203 thousand), and contract assets and liabilities amounting to EUR 2,032 thousand (2018: EUR 1,655 thousand).

Gains and losses from the derecognition of financial assets measured at amortized cost are of minor significance.

Further information on the financial result is provided in section G.

7 INCOME TAXES

The income tax expense is composed as follows:

in kEUR	2019	2018
Income tax		
Current income tax	-44,747	-41,706
Deferred income tax	3,453	878
	-41,294	**-40,828**

The income tax rate of 29.7% levied in Germany comprises corporation tax (15.0%), trade tax (average 13.8%), and solidarity surcharge (5.5%).

The differences to the effective tax rate are explained as follows:

in kEUR	2019	2018
Net profit before tax	**133,691**	**130,827**
Tax rate in %	29.69	29.69
Expected income tax expense	**-39,691**	**-38,841**
Different tax rates	10,365	8,603
Effect from tax rate changes	-186	696
Taxes for previous years	-4,603	-8,383
Other non-deductible expenses and taxes, and effects from changes in permanent	-8,477	-7,753
Tax-free income	1,260	3,674
Change in the assessment whether deferred tax assets can be recognized	13	825
Miscellaneous effects	24	350
Actual income tax expense	**-41,294**	**-40,828**
Effective tax rate in %	30.89	31.21

The deferred tax rates shown in the following table are the result:

in kEUR	12/31/2019		12/31/2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Recognition in the consolidated financial statements				
Deferred taxes before offsetting				
Cash and cash equivalents	1	0	4	180
Other financial assets and receivables (current)	6,002	12,160	14,704	26,626
Inventories	12,020	3,898	32,042	29,890
Financial assets (non-current)	265	5,663	779	4,438
Other financial assets and receivables (non-current)	668	14,403	1	14,306
Intangible assets	3,467	2,704	3,229	1,565
Property, plant, and equipment	7,417	160,584	5,187	143,014
Current liabilities	84,597	11,703	93,057	13,342
Current provisions	5,176	6,996	7,509	14,081
Non-current liabilities	114,790	217	105,915	274
Employee benefits	22,811	2,050	16,824	1,861
Non-current provisions	1,209	3	1,522	43
Loss carryforwards	5,635	0	5,143	0
	264,057	**220,380**	**285,916**	**249,620**
Value allowance	-1,598	0	-1,582	0
Offsetting	-179,561	-179,560	-212,274	-212,274
	82,898	**40,820**	**72,059**	**37,345**

The change in deferred taxes from 2018 to 2019 in the contract assets, liabilities, and inventories items is mainly due to an alignment of the tax balance sheet values with the requirements of IFRS 15.

The current portion of deferred tax assets amounts to EUR 76,756 thousand (12/31/2018: EUR 65,452 thousand). The current portion of deferred tax liabilities amounts to EUR 1,654 thousand (12/31/2018: EUR 1,644 thousand). There are temporary differences on interests in subsidiaries, associates, and joint ventures amounting to EUR 9,838 thousand (12/31/2018: EUR 8,522 thousand), for which no deferred tax liabilities were recognized in the reporting periods presented. The differences would only become effective for tax purposes in the event of a sale of the investment, but no sale is intended in the foreseeable future.

The initial consolidation of newly acquired or newly established companies resulted in an addition of EUR 304 thousand in deferred tax liabilities in the fiscal year, recognized outside of profit or loss.

Deferred taxes recognized in equity with no effect on profit or loss amount to EUR 4,262 thousand (2018: EUR 796 thousand).

In Germany, there are corporation tax loss carryforwards of EUR 4,926 thousand (12/31/2018: EUR 4,726 thousand), and trade tax loss carryforwards of EUR 5,270 thousand (12/31/2018: EUR 5,059 thousand). Overseas, there are loss carryforwards of EUR 18,158 thousand (12/31/2018: EUR 15,168 thousand).

As Zeppelin did not expect sufficient taxable profit to be available for offsetting in future periods at each reporting date, no deferred tax assets were recognized for the following items:

in kEUR	12/31/2019 Gross amount	12/31/2019 Value for tax purposes	12/31/2018 Gross amount	12/31/2018 Value for tax purposes
Deferred tax assets				
Deductible temporary differences	0	0	0	0
Tax loss carryforwards	10,331	1,580	10,001	1,582
thereof income tax and local income tax	7,139	1,137	6,821	1,142
thereof trade tax	3,193	661	3,180	441
	10,331	**1,580**	**10,001**	**1,582**

The unrecognized loss carryforwards expire as follows:

in kEUR	Amount	Indefinite	Expiry date: Subsequent year	Expiry date: 2nd to 5th subsequent year	Expiry date: Indefinite
12/31/2019	10,331	10,331	0	0	0
12/31/2018	10,001	9,125	876	0	0

For companies that had closed the current or prior period with a loss, deferred tax assets of EUR 11,253 thousand (12/31/2018: EUR 9,244 thousand) after offsetting with deferred tax liabilities were reported. This approach is based on management's assessment that the substantiated profit forecasts for subsequent years show that the companies will generate taxable profit in future which can be used to offset deductible temporary differences. Zeppelin assumes that, on the basis of profit planning, the existing loss carryforwards will be continuously reduced and used up in the respective planning periods. The profit forecasts are based on long-term secured contractual relationships with customers and corresponding order backlogs compared to previous years.

8 Other Notes to the Consolidated Statement of Profit or Loss

Depreciation of property, plant and equipment and amortization of intangible assets are included in the following items of the consolidated statement of profit or loss:

in kEUR	2019	2018
Scheduled depreciation		
In the cost of sales	-48,566	-44,605
In the selling expenses	-7,889	-5,696
In the administrative expenses	-11,918	-9,414
In the research and development costs	-485	-453
	-68,858	**-60,169**

F NOTES TO THE BALANCE SHEET

9 CASH AND CASH EQUIVALENTS

A breakdown of cash and cash equivalents is shown below:

in kEUR	12/31/2019	12/31/2018
Cash and cash equivalents		
Cash in hand and bank	68,884	67,178
	68,884	**67,178**

The development of cash and cash equivalents is presented in the statement of cash flows.

10 CURRENT FINANCIAL ASSETS

Current financial assets include:[4]

	12/31/2019		
in kEUR	FVTPL	AC	Miscellaneous
Cash and cash equivalents	**-**	**68,884**	**-**
Financial assets			
Derivatives	35	-	-
Loans	-	2,013	-
Continuing involvement	-	-	13
Other receivables	-	14,422	-
	35	**16,434**	**13**
Trade receivables	**-**	**425,027**	**-**

	12/31/2018		
in kEUR	FVTPL	AC	Miscellaneous
Cash and cash equivalents	**-**	**67,178**	**-**
Financial assets			
Derivatives	298	-	200
Loans	-	880	-
Continuing involvement	-	-	148
Other receivables	-	15,846	-
	298	**16,726**	**348**
Trade receivables	**-**	**369,700**	**-**

Information on financial assets to related entities is provided in section I.

The carrying amounts of current financial assets correspond to their fair values.

For derivative financial instruments, future cash flows are determined using forward curves. In particular, exchange rates and yield curves are used, which can be observed on the relevant markets and obtained via market information systems. The fair value of these instruments corresponds to the sum of the discounted cash flows. The fair values determined for derivatives therefore fall under level 2 of the fair value hierarchy (see the "Fair Value" subsection in the "Financial Instruments" section under "C Accounting Policies").

[4] Derivatives in hedge accounting and continuing involvement do not fall under any of the measurement categories of IFRS 9. They are therefore included in the "Miscellaneous" category.

Transfers of Receivables

The continuing involvement (assets and liabilities) included in the financial statements results from joint liability risks from risk-sharing agreements with sales financing partners.

In certain transactions, receivables from customers due in the short term are transferred to a sales financing partner against payment of consideration. This is generally a leasing company. This converts the short-term receivable into a financing transaction with the customer. Under certain conditions and within the framework of risk-sharing agreements, Zeppelin undertakes to share the credit default risk from the sales financing partner's financing transaction proportionately. The volume of receivables subject to risk sharing in the fiscal year 2019 was EUR 4,647 thousand (2018: EUR 8,065 thousand). The nominal amount of receivables with risk sharing as at the balance sheet date was EUR 13,808 thousand (12/31/2018: EUR 11,358 thousand). The maximum risk of loss resulting from these receivables was EUR 9,235 thousand (12/31/2018: EUR 7,765 thousand). The carrying amount and fair value of the continuing involvement recognized for this purpose were each EUR 9,249 thousand (12/31/2018: EUR 7,776 thousand). At the time of derecognition, the difference between the carrying amount of the receivable and the value of the continuing involvement was recognized in the statement of profit or loss. No fees were incurred for the conclusion of the contracts.

In 2018 there was also an ABS program, whose term ended in the first half of the 2018 fiscal year. Under the ABS program, the buyer of the receivables was obliged to purchase certain short-term trade receivables. The purchase obligation revolved on a monthly basis and related to trade receivables of a maximum of EUR 23,500 thousand. The relevant risks for the risk assessment were credit risk and late payment risk. The credit risk consisted of the risk of defaulting receivables and was largely transferred against payment of a fixed purchase price discount. A first loss guarantee amounting to 1.0% of the receivables transferred and the risk of late payment were retained in full.

The volume of receivables transferred under the ABS program in 2018 was between EUR 12,151 thousand and EUR 23,500 thousand. The nominal amount of the receivables transferred existing at December 31, 2018 was EUR 0 thousand. The maximum risk of loss resulting from these receivables was EUR 0 thousand. The carrying amount and fair value of the continuing involvement recognized for this purpose were each EUR 0 thousand in 2018. At the time of derecognition, the fair value of the continuing involvement, the purchase price discounts, and the program fees were recognized in the statement of profit or loss. Expenses from purchase price discounts and program fees were EUR 55 thousand in 2018.

11 Contract Assets and Liabilities

The contract assets result primarily from the project business. Contract liabilities result from the project business, services, and warranty extensions.

in kEUR	12/31/2019	12/31/2018
Contract assets		
Project business		
Gross inventory	27,495	31,815
Loss allowances	-670	-310
	26,825	**31,505**
Other contracts		
Gross inventory	1,122	694
Loss allowances	0	0
	1,122	**694**
	27,947	**32,199**
Contract liabilities		
from the project business	92,452	66,804
from service contracts	26,193	20,208
from warranty extensions	58,644	46,407
	177,288	**133,419**

Changes in the balance of contract assets and liabilities from the project business may result from advance payments, interim and final settlements, sales recognition based on performance progress, adjustments to sales, performance obligations settled in prior periods, and exchange rate effects. Changes in the fiscal year amounting to EUR 4,184 thousand (2018: EUR 11,152 thousand) are attributable to adjustments of performance obligations met in previous periods. Zeppelin recognized sales of EUR 14,732 thousand (2018: EUR 30,933 thousand) for performance obligations included in contract liabilities from prior periods.

The balance of contract liabilities from service contracts represents the excess of service payments received from customers over the cumulative sales recognized from the rendering of services. Zeppelin recognized sales of EUR 8,665 thousand (2018: EUR 8,148 thousand) for performance obligations included in contract liabilities from prior periods.

The balance of contract liabilities from extended warranties represents the excess of warranty payments received from customers over the cumulative sales recognized from the rendering of warranty services. Zeppelin recognized sales of EUR 7,674 thousand (2018: EUR 9,606 thousand) for performance obligations included in contract liabilities from prior periods.

12 Other Assets

A breakdown of other assets is shown below:

in kEUR	12/31/2019 Total	12/31/2019 thereof current	12/31/2018 Total	12/31/2018 thereof current
Other assets				
Refund claims and advance payments for other taxes	4,210	4,210	4,138	4,138
Excess of plan assets over the defined benefit pension plans	279	0	0	0
Advance payments for wages and salaries	1,268	1,268	1,374	1,374
Repurchase rights from RPO transactions	48,269	11,804	47,829	10,751
Advance payments for warranty extensions	32,365	15,340	24,051	12,003
Advance payments for purchased services	2,269	1,778	1,696	1,370
Miscellaneous other advance payments	16,001	12,690	16,770	14,237
	104,661	**47,091**	**95,858**	**43,874**

Advance payments for purchased services mainly relate to advance rent payments for short-term rents or rents for low-value assets, warranty extensions, insurance and bank charges, which are not interest expenses, advance pension payments, and maintenance services. The miscellaneous other advance payments mainly relate to excise taxes.

13 Inventories

A breakdown of the carrying amount of inventories is shown below:

in kEUR	12/31/2019	12/31/2018
Inventories		
Raw materials, consumables, and supplies	19,852	25,015
Work in progress	47,124	30,410
Finished goods and	489,022	398,404
Advance payments on	45,049	43,729
	601,048	**497,557**

EUR 1,839,298 thousand of inventories were recorded as material consumption (2018: EUR 1,689,285 thousand). Zeppelin recorded impairment losses on inventories of EUR 18,218 thousand (2018: EUR 17,803 thousand) in the fiscal year and realized reversals of impairment losses on inventories of EUR 6,163 thousand (2018: EUR 5,509 thousand). Reversals of impairment losses on inventories result from disposals at prices that exceed the previously estimated net realizable value.

14 Non-Current Financial Assets

The carrying amounts and fair values of non-current financial assets are[5]:

	12/31/2019				
	FVTPL		AC		Miscellaneous
in kEUR	Carrying amount	Market value	Carrying amount	Market value	
Financial assets					
Derivatives	0	0	0	0	291
Shares in affiliates	17,501	17,501	0	0	0
Participations	679	679	0	0	0
Loans	0	0	728	728	0
Continuing involvement	0	0	0	0	9,210
Other receivables	0	0	6,100	6,100	0
	18,180	**18,180**	**6,828**	**6,828**	**9,500**
Trade receivables	**-**	**-**	**8,500**	**8,646**	**-**

	12/31/2018				
	FVTPL		AC		Miscellaneous
in kEUR	Carrying amount	Market value	Carrying amount	Market value	
Financial assets					
Derivatives	0	0	-	-	549
Shares in affiliates	13,826	13,826	-	-	-
Participations	18	18	-	-	-
Securities	0	0	0	0	0
Loans	-	-	727	727	-
Continuing involvement	-	-	-	-	7,617
Other receivables	-	-	4,697	4,697	-
	13,844	**13,844**	**5,424**	**5,424**	**8,166**
Trade receivables	**-**	**-**	**12,147**	**12,294**	**-**

[5] Derivatives in hedge accounting and continuing involvement do not fall under any of the measurement categories of IFRS 9. They are therefore included in the "Miscellaneous" category.

Information on financial assets to related parties is provided in section H.

Information on determining the fair values of derivatives is provided in section C.

The carrying amount of the shares in affiliates relates firstly to shares in subsidiaries that were not included in the consolidation group for reasons of materiality (see subsection "Subsidiaries" in the section "Consolidation Group" under "B Basis of Preparation"). Secondly, the carrying amount includes shares in the parent company of Zeppelin GmbH, Luftschiffbau Zeppelin GmbH, Friedrichshafen, of EUR 11,276 thousand. The shares correspond to 10.0% of the subscribed capital of EUR 35,000 thousand. The shares do not confer any dividend subscription rights and are inalienable. The fair value corresponds to the historical acquisition costs.

The carrying amount of the participations relates to shares held by Zeppelin GmbH in Wirtschaftsförderung Bodenseekreis GmbH. The participation in Energyst B.V. was already written down in full in previous years.

The information on the fair values of the loans corresponds to the present value of the cash inflows. They are discounted using credit risk-adjusted interest rates. The valuation method falls under level 2 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

For derivative financial instruments, future cash flows are determined using forward curves. In particular, exchange rates and yield curves are used, which can be observed on the relevant markets and obtained via market information systems. The fair value of these instruments corresponds to the sum of the discounted cash flows. The fair values determined for derivatives therefore fall under level 2 of the fair value hierarchy (see the "Fair Value" subsection in the "Financial Instruments" section under "C Accounting Policies").

15 Investments Accounted for Using the Equity Method

The carrying amount of investments accounted for using the equity method are attributable to associates and joint ventures as follows:

in kEUR	12/312019	12/31/2018
Investments accounted for using the equity method		
Associates	17,020	18,198
Joint ventures	-	673
	17,020	**18,870**

The carrying amount of associates includes CZ Loko a.s.

Summarized financial information about CZ Loko a.s. is presented in the following table:

in kEUR	12/31/2019	12/31/2018
Share of equity capital		
Net assets		
Current assets	67,362	53,587
Non-current assets	27,536	26,793
Current liabilities	-51,988	-40,490
Non-current liabilities	-7,194	-6,237
	35,716	**33,654**
Share in %	49.0	49.0
Other adjustments	-481	-390
	17,020	**16,100**

in kEUR	2019	2018
Share in profit or loss after tax		
Sales	97,340	88,857
Net profit	2,822	2,762
Share in %	49.0	49.0
	1,383	**1,353**
Share of other comprehensive income		
Other comprehensive income	-86	-86
Share in %	49.0	49.0
	-42	**-42**
Dividends received	**n/a**	**550**

Due to the acquisition of shares with majority acquisition, Smart Controls India Ltd. is no longer accounted for using the equity method in the fiscal year, rather in 2019 it is included for the first time in the consolidated financial statements as an affiliated company. Zeppelin has the following interests in net profit or loss after tax and other comprehensive income:

in kEUR	2018
Total comprehensive income	
Net profit after tax	200
Other comprehensive income	-10
	190

In 2019, the joint venture Fehmarnbelt Solution Services A/S is no longer accounted for using the equity method, rather it is treated as a long-term participation in accordance with IFRS 9, as it is not material for the presentation of net assets, financial position and results of operations of the Group. Zeppelin has the following interests in net profit or loss after tax and other comprehensive income:

in kEUR	2018
Total comprehensive income	
Net loss after tax	-156
Other comprehensive income	-2
	-157

16 Intangible Assets

The changes in intangible assets are shown below:

in kEUR	Goodwill	Software, con-cessions, industrial rights	Internally generated intangible assets	Payments in advance	Total
Costs					
01/01/2018	**75,471**	**60,408**	**0**	**4,931**	**140,810**
Additions	2,829	12,820	138	2,274	18,061
Disposals	0	-153	0	-116	-269
Changes in the consolidation group	0	3,134	0	0	3,134
Net exchange differences	48	-549	0	0	-501
Transfers	0	491	2,549	-2,848	191
Reclassifications	0	0	0	0	0
12/31/2018	**78,348**	**76,151**	**2,687**	**4,240**	**161,426**
Additions	0	12,513	531	1,557	14,601
Disposals	0	-734	0	-20	-754
Changes in the consolidation group	16,939	42,319	0	0	59,258
Net exchange differences	266	993	0	18	1,277
Transfers	0	2,233	0	-2,246	-12
Reclassifications	0	24	0	0	24
12/31/2019	**95,553**	**133,498**	**3,218**	**3,550**	**235,819**
Accumulative amortization and impairment losses					
01/01/2018	**-61,412**	**-42,266**	**0**	**-1**	**-103,679**
Amortization	0	-4,144	-425	0	-4,568
Impairments	0	-1,990	0	0	-1,990
Reversals of impairments	0	0	0	0	0
Disposals	0	137	0	1	139
Changes in the consolidation group	0	0	0	0	0
Net exchange differences	-77	498	0	0	422
Transfers	0	0	0	0	0
Reclassifications	0	0	0	0	0
12/31/2018	**-61,488**	**-47,764**	**-425**	**0**	**-109,677**
Amortization	0	-8,960	-681	0	-9,641
Impairments	0	0	0	0	0
Reversals of impairments	0	0	0	0	0
Disposals	0	731	0	0	731
Changes in the consolidation group	0	-42	0	0	-42
Net exchange differences	-128	-725	0	0	-854
Transfers	0	0	0	0	0
Reclassifications	0	-407	0	0	-407
12/31/2019	**-61,617**	**-57,167**	**-1,106**	**0**	**-119,890**

The asset class "Software, concessions, and industrial rights" includes the ERP system for the Construction Equipment EU SBU. The carrying amount as of December 31, 2019 was EUR 21,937 thousand (12/31/2018: 18,428).

This item also includes changes to the consolidation group resulting from the capitalization of the customer base, technology, trademark, and order backlog in connection with the acquisition of shares in the Luther Group (share deals), the asset deals by Zeppelin Sverige AB and Zeppelin Danmark A/S and the acquisition of a majority interest in Smart Controls India Ltd. (see the section "Business Combinations" under "B Basis of Preparation").

As a result of these transactions, a customer base of EUR 36,192 thousand was recognized as of December 31, 2019, which is amortized over a period of 8 to 10 years.

The acquisition of the Luther Group resulted in the capitalization of a trademark totaling EUR 606 thousand, which is amortized on a straight-line basis over a useful life of 15 years. As of December 31, 2019, this was recognized at EUR 596 thousand.

As of December 31, 2019, there were contractual obligations to acquire intangible assets amounting to EUR 152 thousand (12/31/2018: EUR 378 thousand).

The allocation of the carrying amount of goodwill to the CGU groups is presented below:

in kEUR	12/31/2019	12/31/2018
Goodwill		
Construction Equipment EU	8,052	8,012
Rental	16,366	7,587
Plant Engineering	2,230	1,260
	26,648	**16,859**

Of the increase in goodwill for the Rental CGU group, EUR 8,100 thousand is attributable to the acquisition of shares in the Luther Group (share deals). In addition, goodwill of EUR 7,288 thousand from the asset deals under the Master Sale and Transfer Agreement (see the section "Business Combinations" under "B Basis of Preparation") must also be taken into account. The goodwill is not included in the previous presentation. It will be allocated to a new CGU group from the 2020 fiscal year.

Zeppelin generally determines the recoverable amount of a CGU group as its fair value less costs to sell. The DCF method is applied. The cash flows used for the calculation are derived from the mid-term plan approved by management for the next three years on an after-tax basis. The expected cash flows after this period are extrapolated using growth rates. As at the reporting date, the growth rate was 1.0% (12/31/2018: 1.0%). The growth rate reflects management's expectations of future growth derived from the past. To determine the present value, cost of capital rates after taxes of between 4.7% and 6.9% (12/31/2018: 5.0% to 6.0%) were used. The cost of capital rates take into account Zeppelin's industry-specific risk. The determined fair value falls under level 3 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

17 Property, Plant, and Equipment

Changes in property, plant, and equipment are presented below:

in kEUR	Land and buildings	Technical equipment and machinery	Operating and business equipment	Rental fleet (RPO)	Rental fleet (other)	Advance payments and assets under construction	Total
Costs							
01/01/2018	**485,906**	**71,923**	**156,002**	**278,815**	**626,137**	**11,439**	**1,630,222**
Additions	18,824	4,568	35,607	99,287	164,517	13,756	336,558
Disposals	-5,387	-2,405	-10,237	-64,781	-80,958	-934	-164,701
Changes in the consolidation group	475	121	337	0	312	0	1,244
Net exchange differences	-1,219	-686	-1,621	-57	-1,146	-1,196	-5,925
Transfers	2,101	-715	1,664	0	-862	-3,575	-1,387
Reclassifications	-172	-44	179	0	-84	19	-102
12/31/2018	**500,528**	**72,763**	**181,931**	**313,264**	**707,916**	**19,508**	**1,795,910**
Additions	43,256	7,947	56,482	139,513	193,755	8,374	449,329
Disposals	-6,949	-3,725	-17,176	-94,918	-77,622	-268	-200,658
Changes in the consolidation group	3,857	5,661	4,248	0	1,653	0	15,419
Net exchange differences	2,097	1,129	3,833	93	2,027	1,587	10,767
Transfers	5,256	850	10,583	-2,385	-8,420	-8,295	-2,411
Reclassifications	-19	197	409	0	-1,549	-34	-996
12/31/2019	**548,027**	**84,822**	**240,311**	**355,568**	**817,760**	**20,871**	**2,067,359**

in kEUR	Land and buildings	Technical equipment and machinery	Operating and business equipment	Rental fleet (RPO)	Rental fleet (other)	Advance payments and assets under construction	Total
Accumulative depreciation and impairment losses							
01/01/2018	**-166,853**	**-46,053**	**-103,034**	**-37,597**	**-204,987**	**-86**	**-558,609**
Depreciation	-23,431	-5,304	-26,947	-43,243	-89,212	0	-188,136
Impairments	0	0	0	0	0	0	0
Reversals of impairments	0	0	-92	0	69	0	-23
Disposals	400	2,322	8,426	19,090	34,464	86	64,788
Changes in the consolidation group	0	-2	700	0	0	0	698
Net exchange differences	273	428	977	17	535	0	2,229
Transfers	-12	161	217	0	832	0	1,198
Reclassifications	0	22	-177	0	50	0	-106
12/31/2018	**-189,624**	**-48,426**	**-119,930**	**-61,733**	**-258,250**	**0**	**-677,963**
Depreciation	-25,992	-5,187	-28,041	-46,553	-98,302	0	-204,076
Impairments	-24	0	-13	0	-13	0	-50
Reversals of impairments	7	71	71	0	84	0	233
Disposals	4,597	3,673	15,814	32,157	44,053	0	100,294
Changes in the consolidation group	-85	-8	-742	0	0	0	-836
Net exchange differences	-711	-710	-2,040	-20	-633	0	-4,113
Transfers	-49	650	-514	2,385	-3	0	2,469
Reclassifications	-635	-200	-403	0	466	0	-772
12/31/2019	**-212,517**	**-50,136**	**-135,798**	**-73,764**	**-312,596**	**0**	**-784,812**

The asset classes shown in the statement of changes in non-current assets include rights of use for leased assets. Further details are provided in Note 27.

In the fiscal year 2019, Zeppelin received compensation of EUR 11,813 thousand for damaged property, plant, and equipment (2018: EUR 9,879 thousand).

As at December 31, 2019, there were contract obligations for Zeppelin to acquire property, plant, and equipment amounting to EUR 49,158 thousand (12/31/2018: EUR 93,568 thousand).

18 Current Financial Liabilities

Current financial liabilities include[6]:

in kEUR	FVTPL (12/31/2019)	AC (12/31/2019)	Miscellaneous (12/31/2019)
Financial liabilities			
Borrowings	-	47,432	-
Bonded loans	-	1,380	-
Derivatives	279	-	-
Lease liabilities	-	-	92,911
Continuing involvement	-	-	13
Miscellaneous	-	-	-
	279	**48,813**	**92,924**
Trade payables	**-**	**133,340**	**-**
Other financial liabilities	**-**	**126,290**	**-**

in kEUR	FVTPL (12/31/2018)	AC (12/31/2018)	Miscellaneous (12/31/2018)
Financial liabilities			
Borrowings	-	8,763	-
Bonded loans	-	23,391	-
Derivatives	1,157	-	5
Lease liabilities	-	-	48,603
Continuing involvement	-	-	148
Miscellaneous	-	0	-
	1,157	**32,153**	**48,755**
Trade payables	**-**	**133,066**	**-**
Other financial liabilities	**-**	**118,748**	**-**

Information on financial liabilities to related entities is provided in section H.

Current financial liabilities have a maturity of less than one year. Therefore, their carrying amounts at the reporting date correspond to their fair values. The fair values fall under level 2 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

For derivative financial instruments, future cash flows are determined using forward curves. Exchange rates and yield curves are used, which can be observed on the relevant markets and obtained via market information systems. The fair value of these instruments corresponds to the sum of the discounted cash flows. As such, the fair values determined for derivatives fall under level 2 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

[6] Derivatives in hedge accounting and continuing involvement do not fall under any of the measurement categories of IFRS 9. They are included in the "Miscellaneous" category.

19 OTHER LIABILITIES

Other liabilities include:

in kEUR	12/31/2019 Total	12/31/2019 thereof current	12/31/2018 Total	12/31/2018 thereof current
Other liabilities				
Other tax liabilities	41,045	41,045	37,390	37,390
Deferred sales from RPO transactions	125,737	54,260	110,303	49,151
Liabilities for wages and salaries	1,696	1,633	1,759	1,628
Advance payments for services to be rendered	6,089	6,089	5,437	5,267
Other advance payments	7,640	7,108	1,367	1,277
	182,208	**110,135**	**156,257**	**94,713**

Advance payments for services to be rendered mainly relate to marketing support and rent. The other advance payments mainly relate to obligations to employees and other benefits.

20 Non-Current Financial Liabilities

The carrying amounts and fair values of non-current financial liabilities are[7]:

in kEUR	12/31/2019				
	FVTPL		AC		Miscellaneous
	Carrying amount	Market value	Carrying amount	Market value	
Financial liabilities					
Borrowings	0	0	147,166	148,302	0
Bonded loans	0	0	242,269	249,800	0
Derivatives	4,358	4,358	0	0	6,203
Lease liabilities	0	0	0	0	224,023
Continuing involvement	0	0	0	0	9,223
	4,358	**4,358**	**389,435**	**398,102**	**239,449**
Trade payables	**0**	**0**	**0**	**0**	**0**
Other financial liabilities	**0**	**0**	**165,512**	**164,206**	**0**

in kEUR	12/31/2018				
	FVTPL		AC		Miscellaneous
	Carrying amount	Market value	Carrying amount	Market value	
Financial liabilities					
Borrowings	-	-	147,146	148,258	-
Bonded loans	-	-	162,309	168,595	-
Derivatives	4,073	4,073	-	-	5,272
Lease liabilities	-	-	-	-	185,622
Continuing involvement	-	-	-	-	7,628
	4,073	**4,073**	**309,454**	**316,853**	**198,522**
Trade payables	**-**	**-**	**0**	**0**	**-**
Other financial liabilities	**-**	**-**	**148,272**	**147,628**	**-**

[7] Derivatives in hedge accounting and continuing involvement do not fall under any of the measurement categories of IFRS 9. They are included in the "Miscellaneous" category.

Information on financial liabilities to related entities is provided in section I.

With the exception of the disclosures on the fair value of the continuing involvement, the fair values of the financial liabilities correspond to the present value of the cash outflows. They are discounted using credit risk-adjusted interest rates. The valuation method falls under level 2 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

For derivative financial instruments, future cash flows are determined using forward curves. In particular, exchange rates and yield curves are used, which can be observed on the relevant markets and obtained via market information systems. As such, the fair values determined for derivatives fall under level 2 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

21 Employee Benefits

Employee benefits include:

in kEUR	12/31/2019 Total	12/31/2019 thereof current	12/31/2018 Total	12/31/2018 thereof current
Employee benefits				
Short-term employee benefits				
Vacation and overtime	26,271	26,271	18,833	18,833
Variable salary components and bonuses	42,100	42,100	39,504	39,504
Commissions	6,641	6,641	6,309	6,309
Social contributions	5,946	5,946	4,941	4,910
Miscellaneous	4,076	4,076	2,241	2,159
	85,034	**85,034**	**71,829**	**71,715**
Net liability from defined benefit pension plans	**172,986**	**7,179**	**141,182**	**7,279**
Other long-term employee benefits				
Jubilee bonuses	3,000	647	2,493	395
Partial retirement	3,699	686	2,371	631
Miscellaneous	227	0	147	0
	6,927	**1,333**	**5,010**	**1,026**
Post-employment benefits	**5,382**	**5,075**	**4,727**	**4,397**
	270,328	**98,620**	**222,748**	**84,416**

Provisions for Defined Benefit Pension Plans

Zeppelin provides participating employees with post-employment pension and similar benefits in the form of defined contribution and defined benefit plans under which benefits are payable in the form of payments on and after retirement, disability, and death.

Defined contribution plans mainly relate to the statutory pension insurance of the Federal Republic of Germany and company pension benefits with contributions paid to direct insurance companies by way of employer financing and deferred compensation.

Expenses for defined contribution plans amounted to EUR 3,322 thousand (2018: EUR 2,358 thousand).

The largest defined benefit commitment is the pension plan of Zeppelin Metallwerke GmbH (now Zeppelin GmbH), which was closed in 1995 and largely transferred to Zeppelin Baumaschinen GmbH and Zeppelin Systems GmbH in the course of restructuring. The amount of the respective claims depends on the length of service and the pensionable income before January 1, 1996. Current pensions are adjusted annually at 1.0%. In addition, there are further defined benefit commitments for smaller pension plans and individual commitments to managing directors and selected executives. The commitments provide for a lifelong pension, a partial disability or survivors' pension, or corresponding contributions and various capital options.

Furthermore, defined benefit pension obligations of EUR 22,758 thousand were assumed in the 2019 fiscal year from the acquisition under the Master Sale and Transfer Agreement. The benefits under the pension plan are graduated according to different percentages depending on salary intervals.

As at the reporting date, for a total of 3,445 employees (12/31/2018: 3,009) there were obligations from defined benefit commitments, of which 1,136 are due to active employees (12/31/2018: 1,048), 639 to former employees with vested pension rights (12/31/2018: 404) and 1,670 to pensioners and surviving dependants (12/31/2018: 1,557).

Zeppelin has invested plan assets to meet and finance its defined benefit commitments, which are measured at fair value and offset against provisions for pensions. Plan assets include reinsurance policies and funds paid into pension trusts (CTAs) as plan assets. The plan assets are earmarked, secured against insolvency, and pledged.

A breakdown of the net liability and changes thereto are presented below:

in kEUR	12/31/2019	12/31/2018
Net liability		
Provisions for pensions	183,094	149,154
thereof covered	6,706	13,309
thereof not covered	176,388	135,846
Fair value of plan assets	-10,128	-7,973
	172,966	**141,182**

The fair value of plan assets includes EUR 20 thousand (2018: EUR 0 thousand) surplus of assets from a direct commitment (payment into a CTA).

in kEUR	Provisions for pensions	Plan assets	Net liability
01/01/2018	**151,941**	**7,805**	**144,137**
Service cost	1,139	0	1,139
Interest result	2,111	134	1,977
Benefits paid by company / plan	-7,557	-778	-6,779
Actuarial gains (-) and losses (+)	-49	-261	212
from the change in demographic assumptions	1,602	0	1,602
from the change in financial assumptions	-2,030	0	-2,030
due to experience adjustments	379	0	379
Employee contributions	160	162	-2
Employer contributions	360	694	-334
Net exchange differences	137	122	14
Changes in the consolidation group	912	94	818
12/31/2018	**149,154**	**7,973**	**141,182**

in kEUR	Provisions for pensions	Plan assets	Net liability
01/01/2019	**149,154**	**7,973**	**141,182**
Service cost	2,151	0	2,151
Interest result	2,302	170	2,132
Benefits paid by company / plan	-6,220	693	-6,913
Actuarial gains (-) and losses (+)	12,801	198	12,604
from the change in demographic assumptions	-138	0	-138
from the change in financial assumptions	13,803	0	13,803
due to experience adjustments	-864	0	-864
Employee contributions	174	221	-46
Employer contributions	-214	609	-823
Net exchange differences	539	170	369
Changes in the consolidation group	38	0	38
Acquisitions	22,758	0	22,758
Miscellaneous	-391	94	-485
12/31/2019	**183,094**	**10,128**	**172,966**

The increase in the actuarial gains and losses in 2019 is mainly due to the lower interest rate level.

For the following fiscal year Zeppelin expects payments for employer contributions to plan assets of EUR 962 thousand (12/31/2018: EUR 958 thousand), and pension payments of EUR 235 thousand (12/31/2018: EUR 113 thousand).

The valuation of provisions for pensions is essentially based on the following actuarial assumptions:

Percent (%)	12/31/2019	12/31/2018
Discount rate	0.3 - 2.0	1.0 - 1.6
Future wage and salary increases	1.5 - 2.9	1.8 - 2.9
Future pension increases	1.0 - 2.0	1.0 - 2.0

The calculation basis for life expectancy is the 2018 G mortality tables by Klaus Heubeck.

The average duration of provisions for pensions is between 4.1 and 20.7 years (12/31/2018: 4.0 to 20.4 years).

Zeppelin is exposed to actuarial risks from the measurement of provisions for pensions. The carrying amount of provisions is particularly sensitive to fluctuations in discount rates and life expectancy. The following sensitivity analysis provides a quantitative assessment of the extent of the actuarial risks.

in kEUR	12/31/2019	12/31/2018
Discount rate		
+ 0.25%	177,988	138,060
- 0.25%	188,832	146,327
Life expectancy		
+ 1 year	192,660	148,263
- 1 year	173,508	135,803

A breakdown of the plan assets is presented below:

in kEUR	12/31/2019			12/31/2018		
	listed	unlisted	Total	listed	unlisted	Total
Plan assets						
Cash	0	36	**36**	0	104	**104**
Equity instruments	1,586	0	**1,586**	1,065	0	**1,065**
Debt instruments	2,269	0	**2,269**	1,590	0	**1,590**
Real estate	0	964	**964**	679	0	**679**
Investment funds	205	0	**205**	0	481	**481**
ABS program	0	0	**0**	113	0	**113**
Insurance policies	0	4,824	**4,824**	0	3,744	**3,744**
Miscellaneous	245	0	**245**	197	0	**197**
	4,305	5,823	**10,128**	3,643	4,330	**7,973**

22 Other Provisions

A breakdown of other provisions is presented below:

in kEUR	Warranties	Onerous contracts	Provisions	Loyalty bonuses and other price reduction	Legal fees	Miscellaneous	Total
01/01/2018	**15,966**	**3,499**	**1,260**	**3,485**	**2,488**	**9,978**	**36,677**
Addition	11,604	4,261	676	4,149	1,328	7,328	29,346
Utilization	-6,185	-3,084	-707	-2,865	-159	-2,833	-15,833
Reversals	-4,846	-112	-128	-252	-309	-1,904	-7,550
Discounting	-10	-1	0	0	0	-2	-13
Unwinding of the discount	19	0	0	0	0	41	59
Interest rate change	0	0	0	0	0	0	0
Changes in the consolidation group	137	0	0	0	0	574	711
Net exchange differences	-47	-19	-6	0	-107	-21	-200
12/31/2018	**16,638**	**4,545**	**1,095**	**4,517**	**3,241**	**13,160**	**43,197**

in kEUR	Warranties	Onerous contracts	Provisions	Loyalty bonuses and other price reduction	Legal fees	Miscellaneous	Total
12/31/2018	**16,638**	**4,545**	**1,095**	**4,517**	**3,241**	**13,160**	**43,197**
Addition	14,034	2,073	1,107	3,607	1,446	9,059	31,325
Utilization	-7,325	-2,872	-347	-3,018	-177	-3,986	-17,725
Reversals	-5,787	-146	-97	-296	-1,768	-3,767	-11,861
Discounting	-3	0	0	0	0	-266	-269
Unwinding of the discount	5	2	0	0	0	38	46
Interest rate change	0	0	0	0	0	0	0
Changes in the consolidation group	0	0	0	0	0	107	107
Net exchange differences	193	36	11	0	6	292	538
12/31/2019	**17,755**	**3,638**	**1,768**	**4,811**	**2,748**	**14,637**	**45,357**

A summary of other provisions by maturity is presented in the following table:

in kEUR	12/31/2019 Total	12/31/2019 thereof current	12/31/2018 Total	12/31/2018 thereof current
Other provisions				
Warranties	17,755	13,435	16,638	14,755
Onerous contracts	3,638	3,362	4,545	4,315
Commissions	1,768	1,768	1,095	1,095
Loyalty bonuses and price reductions	4,811	4,811	4,517	4,517
Legal fees	2,748	2,748	3,241	3,241
Miscellaneous	14,637	10,051	13,160	8,295
	45,357	**36,176**	**43,197**	**36,218**

Warranty provisions are recognized for warranty obligations. The valuation takes into account the expected value of the warranty costs attributable to the sales made. Warranty provisions are reversed upon expiry of the respective warranty period. The number of warranty claims, the warranty costs, and the timing of warranty claims are subject to estimation.

Provisions for onerous contracts are recognized for pending sales transactions if the unavoidable costs exceed the expected economic benefits from the settlement of these transactions. Expected costs and sales are estimated. A large part of the provisions relates to orders for which sales are realized according to degree of completion. They are recognized as soon as the expected total costs from the fulfillment of the contract exceed the contract value.

Provisions for commissions relate to expected obligations to pay commissions to third parties for the brokerage of business. The amount of the brokerage commission is estimated.

Provisions for loyalty bonuses and other price reductions are recognized for the achievement of certain targets (e.g. sales targets) within a defined period. Estimates are required in terms of attaining the targets and the amount of the resulting discounts.

Provisions for legal fees are recognized for expected litigation expenses. Estimates relate to the amount of court costs such as court fees and expenses, as well as non-court costs, for example for lawyers. It is also necessary to estimate the extent of Zeppelin's contribution to the costs of the proceedings and the time at which it will be able to benefit from the pending proceedings.

23 Equity

The share capital of EUR 100,000 thousand (12/31/2018: EUR 100,000 thousand) is divided into two shares. These are issued and fully paid in. The following table illustrates the carrying amount per share and the associated voting rights.

in kEUR	12/31/2019	12/31/2018
Luftschiffbau Zeppelin GmbH		
Carrying amount of share capital	96,250	96,250
Voting rights in %	96.25	96.25
Zeppelin Foundation		
Carrying amount of share capital	3,750	3,750
Voting rights in %	3.75	3.75

Zeppelin distributed a dividend of EUR 15,923 thousand in fiscal year 2019 (2018: EUR 10,367 thousand). The dividend is paid to the shareholders of Zeppelin GmbH in proportion to their shares.

The capital reserve of EUR 60,000 thousand results from shareholder contributions. It serves to permanently strengthen the equity of Zeppelin GmbH.

A breakdown of retained earnings is presented below:

in kEUR	12/31/2019	12/31/2018
Retained earnings		
Shares in Luftschiffbau Zeppelin GmbH	11,276	11,276
First-time application of IFRS	15,952	15,952
Foreign currency translation differences	-37,417	-37,417
Other retained earnings	698,529	625,006
	688,340	**614,817**

The reserve for the first-time application of IFRS includes the equity differences resulting from the conversion from HGB to IFRS. The reserve for currency translation includes the cumulative currency translation differences up to the date of conversion to IFRS. Other retained earnings obtain the accumulated earnings of the companies included in the consolidated financial statements.

Based on the disposable profit of EUR 410,109 thousand, the Management Board proposes distributing a regular dividend of 18% of the consolidated net profit attributable to the shareholders of Zeppelin GmbH (EUR 89,459 thousand), thus EUR 16,103 thousand for fiscal year 2019 and carrying EUR 394,006 thousand forward to new account.

The value of deferred taxes reported in accumulated other comprehensive income is EUR 4,262 thousand (12/31/2018: EUR 796 thousand).

in kEUR	12/31/2019 Before income taxes	Income taxes	After income taxes
Actuarial gains (-) and losses (+) from pension plans	-15,074	3,999	-11,075
Hedge relationships	-1,024	263	-761

in kEUR	12/31/2018 Before income taxes	Income taxes	After income taxes
Actuarial gains (-) and losses (+) from pension plans	-2,273	681	-1,592
Hedge relationships	-592	115	-477

In the fiscal year, EUR -507 thousand (2018: EUR 346 thousand) was reclassified from accumulated other comprehensive income for hedge accounting to the statement of profit or loss. The related deferred taxes were EUR -150 thousand (2018: EUR 103 thousand).

24 Capital Management

As part of its capital management, Zeppelin's objective is to maintain or increase the company's ability to continue as a going concern and the benefits for the shareholders of Zeppelin GmbH through financial stability. In order to achieve these objectives, measures are taken to control the capital structure by managing the extent of debt financing. The control methods have not changed compared to the previous year.

Zeppelin's credit agreements include financial covenants relating in part to equity and debt. Zeppelin has complied with all financial covenant agreements.

Zeppelin monitors the capital on the basis of the debt ratio, the equity ratio, and the return on capital according to IFRS. The control ratios are aimed at the management of balance sheet equity.

A breakdown of the ratios is presented below:

	12/31/2019	12/31/2018
Debt ratio[8]	1.42	1.12
Equity ratio	30.3 %	32.4 %
Return on capital	**6.7 %**	**7.6 %**
Earnings before interest and income tax	150,044	145,188
Capital employed	2,251,541	1,905,829

The capital employed consists of fixed assets and working capital. The basis for calculating the ratios has not changed compared to the previous year. Looking at the key figures without taking the acquisitions in Sweden and Denmark into account, the debt ratio would have been 1.04 and earnings before interest and taxes would have been EUR 155,496 thousand.

The previous year's figure for the debt ratio was adjusted due to a redefinition of the ratio in 2019 in order to enable a comparison of the figures. This was based on an alignment of the values to new IFRS requirements.

25 Leasing

Lessee

Zeppelin's lease agreements mainly relate to real estate, motor vehicles (hereinafter "vehicles"), office and business equipment, as well as technical equipment and machinery.

The term of the lease agreements for real estate is between 21 and 684 months (12/31/2018: between 2 and 684 months). Extension and termination options were agreed under these leases. Zeppelin uses these options to ensure the best possible flexibility with regard to the continuation or abandonment of sales locations and rental stores. The measurement of lease liabilities reflects current estimates of the expected exercise or non-exercise of these options. Zeppelin is partially obliged to restore the properties to their original condition upon termination of a lease agreement. Provisions for restoration obligations are recognized for this purpose in accordance with IFRIC 1 in conjunction with IAS 37.

The term of the lease agreements for vehicles is between 11 and 66 months (12/31/2018: between 6 and 74 months). There are no purchase or extension options or termination options. Compensation payments are made for excess mileage if the maximum mileage on which the contract is based is exceeded. Vehicle lease agreements are often

[8] The debt ratio is equal to the financial debt divided by the earnings before interest, taxes, depreciation and amortization.

concluded with a time lead corresponding to the manufacturers' delivery times.

The term of the lease agreements for office and business equipment is between 1 and 74 months (12/31/2018: between 1 and 60 months). There are usually no purchase or extension options or termination options.

The term of the lease agreements for technical equipment and machinery is between 19 and 72 months (12/31/2018: between 21 and 61 months). There are usually no purchase or extension options or termination options.

The following table summarizes cash flows, expenses, and income resulting from leases:

in kEUR	2019	2018
Interest expenses from lease liabilities	-2,756	-1,800
Expenses from short-term lease agreements	-13,033	-15,722
Expenses from lease agreements for low-value assets	-8,075	-2,915
Expenses from variable lease payments other than lease payments	-370	-762
Income from subleases	771	1,028
Cash outflow from leasing	-38,993	-38,928
thereof from lease liabilities	-21,094	-23,890
thereof from short-term leasing and low-value assets	-17,899	-15,038

The total of fixed lease payments for contracts whose term had not yet commenced as at the reporting date amounted to EUR 1,761 thousand (12/31/2018: EUR 985 thousand).

Changes to the carrying amounts of the rights of use are presented below:

in kEUR	Land and buildings	Technical equipment and machinery	Operating and business equipment	Rental fleet (other)
Costs				
01/01/2018	**99,078**	**4,592**	**19,164**	**469**
Additions	13,796	1,029	8,078	2
Disposals	-5,179	-303	-2,748	-41
Changes in the consolidation group	453	0	0	0
Net exchange differences	-394	-22	-427	0
Transfers	7	-965	1,511	0
Reclassifications	-160	0	-74	0
12/31/2018	**107,601**	**4,330**	**25,504**	**430**
Additions	21,335	1,988	27,878	0
Disposals	-2,420	-602	-4,080	0
Changes in the consolidation group	2,423	218	208	396
Net exchange differences	478	29	776	0
Transfers	10	-1,345	673	0
Reclassifications	-19	0	0	0
12/31/2019	**129,409**	**4,619**	**50,958**	**826**
Accumulative depreciation and impairment losses				
01/01/2018	**-12,441**	**-1,374**	**-5,441**	**-150**
Additions (depreciation)	-13,623	-1,084	-6,655	-103
Additions (impairments)	0	0	0	0
Reversals of impairments	0	0	-108	0
Disposals	327	281	2,380	0
Changes in the consolidation group	0	0	0	0
Net exchange differences	164	8	82	0
Transfers	-7	167	-229	0
Reclassifications	0	0	24	0
12/31/2018	**-25,581**	**-2,002**	**-9,947**	**-253**
Additions (depreciation)	-15,893	-788	-8,157	-124
Additions (impairments)	0	0	0	0
Reversals of impairments	0	0	0	0
Disposals	634	588	3,853	0
Changes in the consolidation group	0	0	0	0
Net exchange differences	-258	-13	-136	0
Transfers	-49	723	-363	0
Reclassifications	-635	0	-3	0
12/31/2019	**-41,782**	**-1,492**	**-14,752**	**-376**

Information on the maturities of the lease liability is provided in Note 27 "Liquidity Risk".

Zeppelin uses SLB transactions to finance certain parts of the rental fleet.

Lessor

Zeppelin rents out construction machines as well as a wide range of construction equipment, modular room systems, construction site and traffic guidance systems, work platforms, forklifts and lifts, and vehicles. The vast majority of rental business is accounted for in accordance with the rules for operating leases. In addition, rental income includes income from deferred sales from RPO transactions, which are accounted for as rentals.

Income from operating leases was:

in kEUR	2019	2018
Income from leases	414,851	391,085
thereof variable	0	871

In subsequent fiscal years, Zeppelin expects fixed payments from operating leases of:

in kEUR	12/31/2019	12/31/2018
Proceeds from operating leases		
in subsequent year	82,080	54,453
thereof SBU Rental order backlog	66,662	45,240
in 2nd subsequent year	9,716	6,005
in 3rd subsequent year	6,868	6,883
in 4th subsequent year	4,014	6,438
in 5th subsequent year	1,356	6,188
Thereafter	334	6,673
	104,368	**86,641**

Changes to the carrying amount of assets leased under operating leases are presented below:

in kEUR	Rental fleet (RPO)	Rental fleet (other)
Costs		
01/01/2018	**278,815**	**626,137**
Additions	99,287	204,117
Disposals	-64,781	-120,558
Changes in the consolidated group	0	312
Net exchange differences	-57	-1,146
Transfers	0	-862
Reclassifications	0	-84
12/31/2018	**313,264**	**707,916**
Additions	139,513	193,755
Disposals	-94,918	-77,622
Changes in the consolidated group	0	1,653
Net exchange differences	93	2,027
Transfers	-2,385	-8,420
Reclassifications	0	-1,549
12/31/2019	**355,568**	**817,760**
Accumulative depreciation and impairment losses		
01/01/2018	**-37,597**	**-204,987**
Additions (depreciation)	-43,243	-89,212
Additions (impairments)	0	0
Reversals of impairments	0	69
Disposals	19,090	34,464
Changes in the consolidated group	0	0
Net exchange differences	17	535
Transfers	0	832
Reclassifications	0	50
12/31/2018	**-61,733**	**-258,250**
Additions (depreciation)	-46,553	-98,302
Additions (impairments)	0	-13
Reversals of impairments	0	84
Disposals	32,157	44,053
Changes in the consolidated group	0	0
Net exchange differences	-20	-633
Transfers	2,385	-3
Reclassifications	0	466
12/31/2019	**-73,764**	**-312,596**

G Financial Instruments

26 Other Disclosures on Financial Instruments

Classification

The following table summarizes the carrying amounts of the financial instruments included in the consolidated financial statements by measurement category:

in kEUR	12/31/2019	12/31/2018
Financial assets		
AC	525,675	471,175
FVTPL	18,214	14,143
	543,889	**485,318**
Financial liabilities		
AC	863,390	741,693
FVTPL	4,637	5,231
	868,027	**746,924**

Zeppelin has not made any reclassifications between these categories.

The excess of financial liabilities over financial assets mainly results from the accounting for leases and for SLB transactions. The assets recognized for these transactions (rights of use and rental fleet) are not financial instruments but property, plant, and equipment and are therefore not included in the above comparison.

Offsetting

Zeppelin does not hold any cash collateral and does not set off any balance sheet items. Derivative financial instruments, credit balances, and liabilities to banks are recognized gross in the consolidated statement of financial position.

In the case of derivative financial instruments and account balances with banks, all derivatives existing between the counterparties concerned as well as credit balances and liabilities could be offset in the event of insolvency. At present, Zeppelin has no legal right to set off, nor does Zeppelin intend to settle on a net basis.

Carrying amounts and offsetting potentials are presented in the summary below:

in kEUR	12/31/2019	12/31/2018
Derivatives		
Derivatives with positive fair value	326	1,047
Offsetting potential	-326	-1,045
	0	**2**
Derivatives with negative fair value	10,840	10,507
Offsetting potential	-326	-1,045
	10,514	**9,462**
	10,514	**9,461**
Cash at bank and borrowings		
Cash at bank	68,884	67,178
Offsetting potential	-8,822	-14,986
	60,062	**52,192**
Borrowings	194,599	155,908
Offsetting potential	-8,822	-14,986
	185,776	**140,922**
	245,839	**193,114**

Collateral Provided and Received

Zeppelin has not pledged any financial assets as collateral for financial liabilities and does not itself hold any significant collateral for financial assets.

Net Results

The following table summarizes the net results from financial instruments by measurement category. They include net income and expenses from interest, revaluation, net exchange differences, loss allowances, and disposal effects.

in kEUR	2019	2018
Financial assets		
AC	-3,658	-2,899
FVTPL	1,552	111
	-2,106	**-2,788**
Financial liabilities		
AC	-13,604	-9,133
FVTPL	-5,972	-939
	-19,576	**-10,072**

The net results in the AC measurement category include expenses from the application of the effective interest method of EUR -15,947 thousand (2018: EUR -12,023 thousand).

Hedge Accounting

In accordance with group policies, Zeppelin uses derivative financial instruments only with a reference to hedged items within the framework of currency and interest rate risk management to hedge cash flows from interest and exchange rate fluctuations and to hedge the fair value against interest-related fluctuations (see section "Principles of Financial Risk Management" under Note 27 "Management of Financial Risks"). However, not every hedging relationship is accounted for as such. The following summary presents the carrying amounts of the derivatives portfolio by hedges reported in the balance sheet and not reported in the balance sheet:

in kEUR	12/31/2019	12/31/2018
Derivatives		
Cash flow hedging		
Derivatives for interest rate hedging	-10,561	-9,346
thereof in hedge relationships reported in the balance sheet	-6,203	-5,272
thereof in hedge relationships whose accounting had to be discontinued	-4,358	-4,073
Derivatives for currency hedging	-244	-846
thereof in hedge relationships reported in the balance sheet	0	13
thereof in hedge relationships not reported in the balance sheet	-244	-480
thereof in hedge relationships whose accounting had to be discontinued	0	-379
	-10,805	**-10,192**
Fair value hedging		
Derivatives for interest rate hedging	291	731
thereof in hedge relationships reported in the balance sheet	291	731
thereof in hedge relationships not reported in the balance sheet	0	0
	291	**731**
	-10,514	**-9,461**
thereof positive fair values	326	1,047
thereof negative fair values	10,840	10,507

Hedge Accounting for Currency Hedges

Zeppelin uses forward exchange contracts and currency swaps to manage currency risks. Zeppelin also uses the foreign currency component of medium and non-current financial liabilities from SLB transactions to hedge currency risks arising from the EUR/PLN currency pair (see subsection "Currency Risk" in the section "Market Risks" under Note 27 "Management of Financial Risks").

For practical reasons, the hedge accounting rules for these hedges are only applied from a certain period-related threshold. With the exception of derivatives, which are used to hedge cash flows from projects of the SBU Plant Engineering (here Zeppelin only designates the spot price component), Zeppelin generally includes all derivative components in hedge accounting. As a result, hedge accounting is applied for the following currency hedging relationships:

- Hedging of firmly contracted customer and purchase contracts (EUR/USD) that are recognized off-balance-sheet
- Hedging of intercompany loans (EUR/RUB)
- Hedging of highly probable firmly contracted cash inflows in foreign currency (EUR/PLN)

Risks arising from firmly contracted customer and purchase contracts (EUR/USD) that are recognized off-balance-sheet are hedged by concluding forward exchange transactions. Intercompany loans (EUR/RUB) are hedged by concluding currency swaps in the corresponding currency with matching amounts and maturities. 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 following tables present a summary of the key terms of the forward exchange contracts used to hedge firmly contracted customer and purchase contracts that are recognized off-balance-sheet and the currency swaps used to hedge intercompany loans in fiscal year 2018. As of December 31, 2019, there were no longer any designated currency hedges with FX derivatives as hedging instruments.

in kEUR	Carrying amount	Nominal	Zeppelin		Price	
			pays	receives	from	to
12/31/2018						
Positive fair values						
Currency forwards	18	3,902	EUR	USD	1.14	1.16
Negative fair values						
Currency forwards	5	834	EUR	USD	1.15	1.15

The nominal amount of these transactions was due as follows:

in kEUR	Subsequent year	2nd to 5th subsequent year	Thereafter	Total
12/31/2018				
	4,736	0	0	**4,736**

A breakdown of the carrying amounts of derivatives (reported under non-current and current financial assets and non-current and current financial liabilities) and the related amounts recognized in accumulated other comprehensive income is presented below:

in kEUR	Carrying amount		Accumulated change in value	Accumulated other comprehensive income	
	Positive fair values	Negative fair values		for current cash flow hedges	for ended cash flow hedges
12/31/2018					
	18	5	22	14	-343

The contract assets and liabilities resulting from firmly contracted customer and purchase contracts had the following carrying amounts:

in kEUR	Firmly contracted supplier agreements			Accumulated change in value
	Contract assets	Contract liabilities	Off-balance-sheet portion	
12/31/2018				
	275	0	4,458	-22

Since fiscal year 2018, Zeppelin hedged highly probable, firmly contracted cash inflows in foreign currency from operating activities for the EUR/PLN currency pair with maturities matching those of the foreign currency component of financial liabilities from medium- and long-term SLB transactions in the corresponding currency. It is expected that the offsetting changes in value of the underlying and hedging transactions will be almost completely offset in the future the currency risk.

The table below presents a summary of the key terms of the financial liabilities from medium- and long-term SLB transactions used to hedge highly probable cash inflows from operating activities denominated in foreign currencies:

in kEUR	Carrying amount	Remaining balance of liability	Term
12/31/2019			
	13,822	14,528	3 to 5 years
12/31/2018			
	7,838	7,838	3 to 6 years

The nominal amount of these transactions is due as follows:

in kEUR	Sub-sequent year	2nd to 5th sub-sequent year	Thereafter	Total
31/12/2019				
	4.045	9.777	0	**13.822**
31/12/2018				
	1.995	5.619	223	**7.838**

A breakdown of the carrying amounts of these transaction (reported under non-current and current financial liabilities) and the related amounts recognized in accumulated other comprehensive income is presented below:

in kEUR	Carrying amount	Accu-mulated change in value	Accu-mulated other compre-hensive income
12/31/2019			
	14,099	189	-20
12/31/2018			
	7,838	207	-207

The underlying transactions are off-balance-sheet, firmly contracted, and highly probable cash inflows from operating activities. The expected inflows of cash and cash equivalents and their accumulated change in value are as follows:

in kEUR	Expected cash inflows	Accu-mulated change in value
12/31/2019		
	13,822	-189
12/31/2018		
	7,838	-207

Changes to the amount recognized in accumulated other comprehensive income for currency risk hedges are as follows:

in kEUR	Carrying amount
01/01/2018	**206**
Change in fair value	-518
Recycling due to realization of the underlying transaction	-288
Recycling for losses that are no longer expected	63
12/31/2018	**-537**
Change in fair value	11
Recycling due to realization of the underlying transaction	507
Recycling for losses that are no longer expected	0
12/31/2019	**-19**

Non-offsetting, ineffective portions of the hedging relationships generally result from the one-sided consideration of the specific credit risk of each party in the hedging transactions. In 2019 there was no ineffectiveness in FX hedges.

Hedge Accounting for Interest Rate Hedges

Zeppelin uses interest rate swaps to manage interest rate risks (see subsection "Interest Rate Risk" in the section "Market Risk" under Note 27 "Management of Financial Risks").

Volumes and maturities are aligned with the structure of the cash flows of the financial liabilities and with the desired degree of hedging. To the extent that the parameters of the hedged item and the hedging instrument relevant to valuation match, the changes in value of the hedged item and the hedging instrument caused by interest rate fluctuations are systematically offset.

Hedging relationships are reported in the balance sheet as cash flow hedges or fair value hedges. The hedged item are bonded loans and drawdowns under the syndicated credit facility.

Cash Flow Hedges

The following tables present a summary of the main terms of the interest rate swaps used to hedge cash flows from hedged item with variable interest rates:

in kEUR	Carrying amount	Nominal	Zeppelin pays		Zeppelin receives	
			from	to	from	to
12/31/2019						
Negative fair values						
	6,203	60,000	1.65 %	1.71 %	3M Euribor	3M Euribor

in kEUR	Carrying amount	Nominal	Zeppelin pays		Zeppelin receives	
			from	to	from	to
12/31/2018						
Negative fair values						
	5,272	60,000	1.65 %	1.71 %	3M Euribor	3M Euribor

The maturity structure of these transactions is summarized in the table below according to reference amounts:

in kEUR	Subsequent year	2nd to 5th subsequent year	Thereafter	Total
12/31/2019				
	0	0	60,000	**60,000**
12/31/2018				
	0	0	60,000	**60,000**

A breakdown of the carrying amounts of derivatives (reported under non-current and current financial assets and non-current and current financial liabilities) and the related amounts recognized in accumulated other comprehensive income is presented below:

in kEUR	Carrying amount		Accumulated change in value	Accumulated other comprehensive income	
	Positive fair values	Negative fair values		for current cash flow hedges	for ended cash flow hedges
12/31/2019					
	0	6,203	-1,098	-1,099	95
12/31/2018					
	0	5,272	-171	-171	117

The carrying amounts of the hedged items (reported under non-current and current financial liabilities) are as follows:

in kEUR	Carrying amounts	Accumulated change in value
12/31/2019		
Bonded loans	243,649	0
thereof hedged	0	0
Drawdowns under the syndicated credit facility	58,797	0
thereof hedged	58,797	1,915
	58,797	**1,915**
12/31/2018		
Bonded loans	185,700	0
thereof hedged	64,980	0
Drawdowns under the syndicated credit facility	150,289	0
thereof hedged	59,451	516
	124,431	**516**

The stated carrying amount of the bonded loan includes accrued interest of EUR 1,380 thousand.

Changes to the amount recognized in accumulated other comprehensive income for interest rate hedges are as follows:

in kEUR	Carrying amount
01/01/2018	**954**
Change in fair value	701
Recycling due to realization of the underlying transaction	-1,709
12/31/2018	**-54**
Change in fair value	280
Recycling due to realization of the underlying transaction	-1,230
12/31/2019	**-1,004**

Non-offsetting, ineffective portions of the hedging relationship generally result from the one-sided consideration of the specific credit risk of each party in the hedging instrument. For reasons of materiality, Zeppelin does not recognize this ineffectiveness.

In the case of interest rate hedges, ineffectiveness may also arise from contractual agreements in the hedged item, which cannot be reflected in the hedging instrument. These include, for example, floor agreements that are included in the agreements on interest on loans.

In addition, ineffectiveness arose from the introduction of IFRS accounting. This is a one-time special effect that arises exclusively from the interest rate derivatives in the portfolio at the time of conversion.

The market value existing in these cases when hedge accounting was adopted on January 1, 2017 leads to ineffectiveness. Income of EUR 0 thousand (2018: EUR 744 thousand) was recognized in other comprehensive income for ineffectiveness.

Fair Value Hedges

The following table presents a summary of the main terms of the hedging instruments used to hedge fluctuations in the fair value of bonded loans:

in kEUR	Carrying amount	Nominal	Zeppelin pays		Zeppelin receives	
			from	to	from	to
12/31/2019						
Positive fair values						
	291	4,500	3M Euribor + 2.055%	3M Euribor + 2.055%	3.75 %	3.75 %

in kEUR	Carrying amount	Nominal	Zeppelin pays		Zeppelin receives	
			from	to	from	to
12/31/2018						
Positive fair values						
	731	25,000	3M Euribor + 1.9075%	3M Euribor + 2.055%	3.20 %	3.75 %

The maturity structure of these transactions is summarized in the table below according to reference amounts:

in kEUR	Subsequent year	2nd to 5th subsequent year	Thereafter	Total
12/31/2019				
	0	4,500	0	**4,500**
12/31/2018				
	20,500	4,500	0	**25,000**

The carrying amounts of derivatives in fair value hedges (reported under non-current and current financial assets and non-current and current financial liabilities) are as follows:

in kEUR	Carrying amount		Accumulated change in value
	Assets	Liabilities	
12/31/2019			
	291	0	-377

in kEUR	Carrying amount		Accumulated change in value
	Assets	Liabilities	
12/31/2018			
	731	0	-786

The carrying amounts of the hedged items (reported under non-current financial liabilities) are as follows:

in kEUR	Carrying amount	Accumulated base adjustment	Accumulated change in value
12/31/2019			
Bonded loans	4,600	34	377
12/31/2018			
Bonded loans	25,333	0	786

As part of the fair value hedge, income and expenses from the subsequent measurement of derivatives amounting to EUR -226 thousand (2018: EUR -334 thousand) were recognized. Adjustments of EUR -226 thousand (2018: EUR -334 thousand) and amortization of carrying amount adjustments of EUR 261 thousand (2018: EUR 393 thousand) were recognized in the carrying amount of the loans. The changes in the value of the hedged item and the hedging instrument caused by changes in the market interest rate level are systematically balanced out so that the parameters of the hedged item and the hedging instrument relevant to valuation match.

Non-offsetting, ineffective portions of the hedging relationship generally result from the one-sided consideration of the specific credit risk of each party in the hedging instrument. For reasons of materiality, Zeppelin does not recognize this ineffectiveness.

27 Management of Financial Risks

Principles of Financial Risk Management

The principles and responsibilities for the management and controlling of risks arising from financial instruments are defined by Group management in accordance with the legal provisions and set out in Group guidelines.

The Group is exposed to various financial risks arising from the Group's business and financing activities. Financial risks are divided into liquidity, default, and market risks (currency and interest rate risks).

Group management and the Group Supervisory Board receive regular reports on the Group's financial risks. Compliance with the group guidelines is checked by the internal audit department and selectively by the Group auditor.

The methods and assumptions used in financial risk management have not changed since the previous reporting period.

Liquidity Risk

The liquidity risk is managed on the basis of business planning, which ensures that the funds required to finance the operating business and current and future investments in all Group companies are available promptly and in the required currency at reasonable cost. Liquidity risk management includes determining, with the aid of a liquidity plan, liquidity requirements from operating activities, investing activities, and other financial measures.

A rolling 12-month liquidity forecast and medium-term financial plan show the Group's liquidity requirements, which are fully covered at all times by a long-term syndicated credit facility of sufficient size, bonded loans, and concluded and available SLB capacities.

The following summary presents the expected cash outflows from financial liabilities at the respective reporting dates:

in kEUR	in subsequent year		in 2nd to 5th subsequent year		Thereafter	
	Interest	Re-payment	Interest	Re-payment	Interest	Re-payment
12/31/2019						
Financial liabilities						
Borrowings	3,936	49,851	6,128	148,369	0	0
Bonded loans	2,674	0	9,483	112,500	4,286	130,000
Derivatives	2,314	87,295	7,741	0	455	0
thereof currency forwards	0	87,295	0	0	0	0
thereof interest rate derivatives	2,314	0	7,741	0	455	0
Lease liabilities	2,952	93,142	7,061	192,819	914	33,806
Miscellaneous	0	0	0	0	0	0
	11,877	**230,287**	**30,411**	**453,688**	**5,655**	**163,806**
Trade payables	**1,553**	**137,883**	**0**	**0**	**0**	**0**
Other financial liabilities	**130**	**130,220**	**208**	**166,237**	**53**	**7,206**

in kEUR	in subsequent year		in 2nd to 5th subsequent year		Thereafter	
	Interest	Re-payment	Interest	Re-payment	Interest	Re-payment
12/31/2018						
Financial liabilities						
Borrowings	7,845	9,347	19,694	147,695	0	0
Bonded loans	2,712	22,000	7,439	87,500	2,312	75,000
Derivatives	2,150	50,868	6,441	0	695	0
thereof currency forwards	0	50,868	0	0	0	0
thereof interest rate derivatives	2,150	0	6,441	0	695	0
Lease liabilities	0	51,230	0	171,989	0	16,606
Miscellaneous	0	0	0	0	0	0
	12,707	**133,445**	**33,574**	**407,184**	**3,006**	**91,605**
Trade payables	**0**	**134,521**	**0**	**0**	**0**	**0**
Other financial liabilities	**0**	**120,189**	**0**	**147,818**	**0**	**3,019**

In the reporting period, Zeppelin made all interest and principal repayments on time and in full and also met all capital requirements contained in credit and loan agreements. There are no concentrations of risk. Contingent liabilities are not expected to result in material actual liabilities and thus significant cash outflows for which no provisions have been recognized.

Default Risk

Credit Risk Management

To manage credit risk, Zeppelin has established a creditworthiness management system tailored to market conditions and customers. Before an order is accepted, a credit assessment is carried out on the basis of the creditworthiness data available on the customer. The Construction Equipment EU, Power Systems, and Rental SBUs use a market data portal for this purpose. Credit risk classes and credit limits are determined on the basis of the results of the credit assessment. If credit limits are exceeded, transactions are only settled against advance payment or the deposit of additional collateral such as bank guarantees. A significant proportion of new and used machines and engines are sold with the involvement of sales financing partners. At our own risk, purchase price deferrals or long-term financing purchase agreements are only granted in exceptional cases after intensive credit checks. Zeppelin harmonizes Group-wide credit management for customers who have business relationships with multiple SBUs by assigning Group credit limits, escalation processes, and monthly reporting on the utilization of Group limits.

The markets of the Plant Engineering SBU are highly diversified. In order to reduce the risk of bad debt losses, the Group concludes agreements regarding down payments and interim payments, collaterals, and credit and trade credit insurance. In order to protect itself against economic and political risks, the Group takes advantage of German government-backed trade export credit guarantees.

The availability of market data on the creditworthiness of customers is very limited in the markets in which the Construction Equipment CIS SBU operates. Therefore, transactions are generally only carried out against advance payment or bank guarantees. Credit limits and payment terms are only granted if, in exceptional cases, the creditworthiness of a customer can be assessed with sufficient reliability. Credit limits and payment terms are subject to strict monitoring.

Zeppelin only invests its cash and cash equivalents in banks with the highest creditworthiness and probabilities of default close to zero. If creditworthiness deteriorates significantly, Zeppelin withdraws all cash and cash equivalents promptly or reduces them to a level that is acceptable from a risk perspective.

Default Risk

Zeppelin distinguishes between recoverable non-performing and irrecoverable financial assets. Zeppelin divides credit risk into creditworthiness levels using different concepts tailored to market conditions and customers.

A financial asset is classified as non-performing ("definition of default") if there are significant reasons to believe that a debtor is unlikely to meet its payment obligations to Zeppelin.

A financial asset is deemed irrecoverable if, for example, Zeppelin is unable to collect the amount receivable definitively as a result of the conclusion of insolvency proceedings.

All financial assets that are neither non-performing nor irrecoverable are collectible. The following table summarizes the credit quality and the maximum default risk represented by the gross value according to the aforementioned categories:

in kEUR	Credit quality	Valuation allowance	Gross value	Valuation allowance	Carrying amount
12/31/2019					
Financial assets					
Loans	recoverable	Lifetime ECL	2,212	0	2,212
	non-performing	Lifetime ECL	3,868	-3,339	529
Other receivables	recoverable	Lifetime ECL	22,904	0	22,904
	non-performing	Lifetime ECL	2,681	-421	2,260
			31,665	**-3,760**	**27,905**
Trade receivables	**Lifetime ECL – simplified approach**		**460,066**	**-26,539**	**433,527**
Contract assets	**Lifetime ECL – simplified approach**		**28,617**	**-670**	**27,947**
Cash and cash equivalents					
Cash and cash equivalents	recoverable	12-month ECL	68,884	0	68,884
	non-performing	Lifetime ECL	810	-810	0
			69,694	**-810**	**68,884**

in kEUR	Credit quality	Valuation allowance	Gross value	Valuation allowance	Carrying amount
12/31/2018					
Financial assets					
Loans	recoverable	12-month ECL	1,377	0	1,377
	non-performing	Lifetime ECL	3,568	-3,339	229
Other receivables	recoverable	Lifetime ECL	20,389	0	20,389
	non-performing	Lifetime ECL	717	-562	155
			26,051	**-3,901**	**22,150**
Trade receivables	**Lifetime ECL – simplified approach**		**401,364**	**-19,517**	**381,848**
Contract assets	**Lifetime ECL – simplified approach**		**32,509**	**-310**	**32,199**
Cash and cash equivalents					
Cash and cash equivalents	recoverable	12-month ECL	67,178	0	67,178
	non-performing	Lifetime ECL	810	-810	0
			67,988	**-810**	**67,178**

In the case of financial instruments measured at fair value through profit or loss, the carrying amount reflects the maximum default risk.

in kEUR	12/31/2019	12/31/2018
Financial assets		
Derivatives	326	1,047
Shares	17,501	13,826
Participations	679	18
Securities	0	0
	18,505	**14,891**

Loss Allowances

Loss allowances are recognized by Zeppelin taking into account past events and expectations regarding the future development of credit risk (see the "Impairment Losses" subsection in the "Financial Instruments" section under "C Accounting Policies"). The methods used to measure the loss allowance have not changed compared with the previous year.

Loans mainly relate to associates and affiliated companies not included in the consolidation group.

The change in the loss allowance on other receivables is attributable to the change in the gross balance.

Loss allowances on trade receivables and contract assets are consistently measured using a simplified approach that only takes into account expected credit losses to maturity.

The following risk profile is derived for trade receivables in relation to the maturity structure:

in kEUR	Total	not due	days until overdue						non-performing
			< 30	31 - 60	61 - 90	91 - 180	181 - 360	> 360	
12/31/2019									
Trade receivables									
Gross	460,066	265,412	132,257	23,671	10,027	5,357	4,839	14,148	6,361
Loss allowance	-26,539								
	433,527								

in kEUR	Total	not due	days until overdue						non-performing
			< 30	31 - 60	61 - 90	91 - 180	181 - 360	> 360	
12/31/2018									
Trade receivables									
Gross	401,364	256,906	98,029	14,076	5,169	5,675	6,003	10,536	4,971
Loss allowance	-20,079								
	381,285								

Changes to the balance of loss allowances on trade receivables are presented below:

in kEUR	Creditworthiness not impaired	Creditworthiness impaired	Total
01/01/2018	**-15,198**	**-6,937**	**-22,134**
Transfer	-369	-234	**-603**
Revaluation	-1,633	-99	**-1,733**
Derecognition	1,575	109	**1,684**
Reversal	3,550	195	**3,745**
Change in gross value	-186	-951	**-1,137**
Change in creditworthiness parameters	-189	0	**-189**
Change in the consolidated group	0	-179	**-179**
Net exchange differences	285	181	**467**
12/31/2018	**-12,164**	**-7,915**	**-20,079**
Transfer	56	-56	0
Revaluation	-2,802	-10,681	**-13,483**
Derecognition	1,089	430	**1,519**
Reversal	2,453	2,199	**4,652**
Change in gross value	0	0	**0**
Change in creditworthiness parameters	759	0	**759**
Change in the consolidated group	0	-24	**-24**
Net exchange differences	-120	-182	**-302**
12/31/2019	**-10,730**	**-16,228**	**-26,959**

Changes in the balance of loss allowances on contract assets are attributable to changes in the gross value.

Cash and cash equivalents comprises cash on hand and bank balances. The change in the carrying amounts of irrecoverable cash and cash equivalents is attributable to currency translation effects.

Market Risks

Zeppelin is exposed to market risks from exchange rate and interest rate fluctuations. Zeppelin uses derivative financial instruments (forward exchange contracts, currency and interest rate swaps) to manage the impact of market risks on its operating results. These hedges are entered into under appropriate consideration of the risk management requirements applicable to banks and are subject to strict monitoring. Zeppelin's risk positions are hedged taking account of certain risk limits. In individual cases, Zeppelin also uses primary financial instruments to hedge currency risks.

Currency Risk

Zeppelin's global operations expose it to currency risks arising from fluctuating exchange rates. Zeppelin uses the value-at-risk approach to measure currency risks.

The objective of currency risk management is to hedge cash flows and fair values against exchange rate fluctuations.

The Group's exposure to foreign exchange risk consists primarily of EUR/USD, EUR/RUB, EUR/CZK, EUR/GBP, EUR/PLN, USD/UAH, and USD/RUB.

Currency risks from the USD/UAH and USD/RUB currency pairs are largely eliminated by minimizing the difference between income and expenses in the respective foreign currency (hereinafter "natural hedges"). Zeppelin also limits currency risks by concluding forward exchange contracts and currency swaps. Zeppelin also uses the foreign currency component of medium and long-term financial liabilities from SLB transactions in EUR to hedge currency risks arising from the EUR/PLN currency pair. Due to these hedges, the natural hedges, and offsetting effects between the different currency pairs within the Group, Zeppelin is not exposed to any significant currency risks in a normal market environment.

The main non-derivative financial instruments (cash and cash equivalents, trade and other receivables, loans, bonded loans, trade payables, and other liabilities) are nominated in their functional currency. Due in particular to the generally short-term maturity of these instruments, possible changes in exchange rates have only a very minor impact on consolidated net profit after tax and consolidated total comprehensive income.

The following sensitivity analysis illustrates the extent of the currency risk. It shows the effects of hypothetical exchange rate changes on consolidated net profit after tax and the consolidated total comprehensive income. The effects are determined by applying hypothetical changes in the exchange rate to the measurement of the derivative and non-derivative financial instruments as at the reporting date. In the case of derivative financial instruments accounted for as hedging instruments in cash flow hedges, changes in other comprehensive income for hedge accounting are also taken into account. It is assumed that the portfolio at the reporting date is representative for the year as a whole.

On the basis of Zeppelin's currency hedging strategy, the currency pairs EUR/CZK and EUR/RUB only have sensitivities resulting from the interest rate difference. These are not disclosed below due to lack of materiality. Currency risks from the USD/RUB and USD/UAH currency pairs are largely eliminated by natural hedges. Effects from loans in EUR to the Zeppelin companies in Sweden, Denmark, and Russia are not included in the sensitivity analysis, as these loans are fully secured. The sensitivity analysis therefore focuses on the presentation of the currency risk from the EUR/USD and EUR/PLN currency pairs.

If the exchange rates of the above currency pairs had been 10.0% higher or lower as at the reporting date, this would have had the following effects on consolidated net profit after tax and the consolidated total comprehensive income:

in kEUR				2019		2018	
				Net profit for the year	Total compre-hensive income	Net profit for the year	Total compre-hensive income
Derivatives							
	EUR	USD	+ 10.0%	-303	0	2,114	280
			- 10.0%	374	0	-2,580	-342
Original financial instruments							
	EUR	USD	+ 10.0%	319	0	-1,252	0
			- 10.0%	-390	0	1,531	0
Balance							
	EUR	**USD**	**+ 10.0%**	**15**	**0**	**862**	**280**
			- 10.0%	**-15**	**0**	**-1,049**	**-342**

in kEUR				2019		2018	
				Net profit for the year	Total compre-hensive income	Net profit for the year	Total compre-hensive income
Derivatives							
	EUR	PLN	+ 10.0%	0	0	-16	0
			- 10.0%	0	0	-22	0
Original financial instruments							
	EUR	PLN	+ 10.0%	-120	-901	-178	-713
			- 10.0%	146	1,101	217	871
Balance							
	EUR	**PLN**	**+ 10.0%**	**-120**	**-901**	**-194**	**-713**
			- 10.0%	**146**	**1,101**	**195**	**871**

Interest Rate Risk

Financial instruments sensitive to interest rates are subject to an interest rate risk. This exists either in the form of a market value risk or a cash flow risk. The market value risk is determined according to the sensitivity of the book value of a financial instrument depending on the market interest rate level. The cash flow risk describes the extent to which future interest payments will change as a result of changes in interest rates.

Financial liabilities sensitive to interest rates consist primarily of variable-interest liabilities to banks and other variable-interest financial liabilities in EUR.

The objective of interest rate risk management is to hedge the interest rate risk for a specific period and a defined proportion of the Group's financial liabilities against a significant increase in capital market interest rates. Zeppelin uses interest rate swaps for this purpose.

The following sensitivity analysis illustrates the extent of the interest rate risk. It shows the effects of a hypothetical parallel shift in the yield curve for the euro area on consolidated net profit after tax and the consolidated total comprehensive income. The analysis takes account of the effects of a change in interest rates on the interest result from derivative and non-derivative financial instruments and on the reporting date value of derivative financial instruments. In the case of derivatives accounted for as hedging instruments in cash flow hedges, changes in other comprehensive income for hedge accounting are also taken into account. It is assumed that the portfolio at the reporting date is representative for the year as a whole.

A parallel shift of +50 or -25 basis points in the yield curve for the euro area would have had the following effects on consolidated net profit after tax and the consolidated total comprehensive income:

in kEUR	2019 Net profit for the year	2019 Total comprehensive income	2018 Net profit for the year	2018 Total comprehensive income
+50 BP	703	1,154	787	1,331
-25 BP	-360	-592	-406	-685

In the previous year, the values for sensitivities were still calculated before taxes. To ensure that these figures are comparable with 2019, the previous year's figures have been adjusted and the figures after taxes are presented.

H Notes to Transactions with Related Parties

Zeppelin's related entities include joint ventures, associates, and participations, Luftschiffbau Zeppelin GmbH and its subsidiaries, and the Zeppelin Foundation.

In addition, ZF Friedrichshafen AG, which is controlled by the Zeppelin Foundation, and all of its affiliated companies are also related entities.

Transactions with related parties as well as receivables and liabilities existing at the reporting date result from ordinary business activities and are broken down as follows:

in kEUR	Affiliates 2019	Affiliates 2018	Associates 2019	Associates 2018	Participations 2019	Participations 2018
Deliveries and services rendered						
Sale of goods	80	7	8,434	5,981	0	0
Other services	277	6	80	128	0	0
	357	**13**	**8,514**	**6,109**	**0**	**0**
Deliveries and services received						
Sale of goods	577	262	0	1	186	0
Other services	70	26	2	52	0	272
	647	**288**	**2**	**52**	**186**	**272**
Dividends received	**868**	**1,128**	**0**	**0**	**0**	**0**

in kEUR	LZ GmbH 2019	LZ GmbH 2018	ZF Group 2019	ZF Group 2018
Deliveries and services rendered				
Sale of goods	0	0	0	269
Other services	0	0	0	48
	0	**0**	**0**	**318**
Deliveries and services received				
Sale of goods	22	21	226	305
Other services	1,621	1,596	0	0
	1,643	**1,618**	**226**	**305**
Dividends received	**0**	**0**	**0**	**0**

in kEUR	Affiliates 12/31/2019	Affiliates 12/31/2018	Associates 12/31/2019	Associates 12/31/2018	Participations 12/31/2019	Participations 12/31/2018
Receivables	358	2	0	2,162	229	299
Liabilities	62	500	0	49	4	1

in kEUR	LZ GmbH 12/31/2019	LZ GmbH 12/31/2018	ZF Group 12/31/2019	ZF Group 12/31/2018
Receivables	8	10	145	0
Liabilities	147	0	17	81

Transactions with related parties were conducted on terms and conditions that do not differ from those applicable to transactions with independent business partners.

The current remuneration of the active members of the Management Board is EUR 3,640 thousand (2018: EUR 3,398 thousand), of which EUR 3,142 thousand (2018: EUR 2,912 thousand) relates to short-term employee benefits and EUR 498 thousand (2018: EUR 486 thousand) to post-employment benefits. The pension provisions of the members of the Management Board are EUR 9,634 thousand (12/31/2018: EUR 7,657 thousand). The remuneration of the Supervisory Board for fiscal year 2019 is EUR 610 thousand (2018: EUR 571 thousand).

Pension payments amounting to EUR 498 thousand (2018: EUR 486 thousand) were made to former members of the Management Board. The provision for pension payments to former members of the Management Board is EUR 12,253 thousand (12/31/2018: EUR 11,281 thousand).

In addition, Group companies have not conducted any reportable transactions with members of the Management Board or Supervisory Board of Zeppelin GmbH or other members of management in key positions or with companies in whose management or supervisory bodies these persons are represented. This also applies to close family members of this group of persons.

I Other Notes

28 Notes to the Statement of Cash Flows

In order to ensure a more appropriate economic presentation, the changes in RPO leased assets have been reclassified from cash flow from investing activities to cash flow from operating activities. This concerns a revenue-generating activity of the company, which is part of its regular business operations. The reclassified value corresponds to EUR 76,826 thousand in the fiscal year and EUR 53,556 thousand in the previous year, which has been included in the cash flow from operating activities as a new item "Change in RPO assets held for rental". Accordingly, the "Payments for investments in rental fleet" were reduced by EUR 139,513 thousand (2018: EUR 99,287 thousand) and the "Proceeds from the sales of rental fleet" by EUR 62,761 thousand (2018: EUR 45,691 thousand). Moreover, "Other non-cash income/expenses" increased by EUR 74 thousand (2018: EUR 40 thousand).Changes to the carrying amounts of the financial liabilities included in the statement of cash flowsare presented below:

in kEUR	Borrowings	Bonded loans	Lease liabilities
01/01/2018	**150,381**	**185,587**	**239,742**
Cash flow from financing activities	11,726	0	-23,928
Changes in the consolidation group	0	0	642
Net exchange differences	-6,376	0	-1,065
Changes in fair value	0	59	0
Other changes	177	53	18,834
12/31/2018	**155,908**	**185,700**	**234,225**

in kEUR	Borrowings	Bonded loans	Lease liabilities
12/31/2018	**155,908**	**185,700**	**234,225**
Cash flow from financing activities	25,040	58,000	26,189
Changes in the consolidation group	5,385	0	4,094
Net exchange differences	8,919	0	789
Changes in fair value	0	35	0
Other changes	-654	-85	51,637
12/31/2019	**194,598**	**243,649**	**316,934**

In addition to the cash flow from financing activities totaling EUR 109,229 thousand (2018: EUR -12,202 thousand), interest of EUR 18,274 thousand (2018: EUR 13,498 thousand) was paid.

The cash flow from investing activities does not include any additions to rights of use, as the addition is offset by the recognition of a lease liability at the same amount. Information on rights of use and lease liabilities can be found under Note 26. Furthermore, the financial statements do not include any non-cash transactions.

29 Events After the Reporting Date

The remaining shares in Fehmarnbelt Solution Services A/S, Greve, Denmark, were acquired with a purchase agreement dated January 13, 2020 and economic effect from January 1, 2020. The shares in the company therefore increased from 50% to 100%.

The epidemic of the novel Covid-19 virus, which is spreading worldwide, represents a potentially significant performance risk for the Zeppelin Group. Even though no significant disruptions in the supply chain can be identified at present, and Caterpillar is making every conceivable effort to avoid such disruptions, it cannot be ruled out that the epidemic could develop into a pandemic and cause massive disruptions in Caterpillar's supply chain and thus also of Zeppelin with a corresponding impact on business performance. Moreover, Zeppelin is represented in China by a subsidiary and a joint venture, which made a significant contribution to sales and net profit of the Plant Engineering SBU in the 2019 fiscal year. If the situation in China fails to normalize, a corresponding negative impact on the business performance of the Plant Engineering SBU and thus the Zeppelin Group has to be expected.

No other significant events occurred after the end of the 2019 fiscal year whose effects would have had a material or endangering impact on the Group's position.

30 Auditor's Fees

The auditor of Zeppelin GmbH is PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (hereinafter "PwC"). The fees amounted to EUR 665 thousand in fiscal year 2019 (2018: EUR 838 thousand) and are broken down as follows:

in kEUR	2019	2018
Auditor's fees		
Auditing services	543	496
Other services	122	342
	665	**838**

The auditing services item includes fees for auditing the annual financial statements and the consolidated financial statements of Zeppelin GmbH, for auditing the annual financial statements of the German subsidiaries included in the consolidated financial statements, and for reviewing the reporting packages of certain foreign subsidiaries. The auditing fee for the Zeppelin Group amounts to a total of EUR 1,140 thousand (2018: EUR 1,159 thousand). Other audit firms from PwC's network were involved in the audit.

The other services item comprises the fees for Zeppelin GmbH and the Group's German subsidiaries that are included in the consolidated financial statements. This includes EUR 26 thousand for certification services, EUR 31 thousand for tax consulting services, and EUR 65 thousand for other services.

In addition to PwC, other audit firms were active in an advisory capacity within the Group.

31 Disclosure

Zeppelin GmbH prepares consolidated financial statements, which must be submitted to the Federal Gazette.

Zeppelin Baumaschinen GmbH, Garching near Munich, Zeppelin Systems GmbH, Friedrichshafen, Zeppelin Power Systems GmbH & Co. KG, Hamburg, Zeppelin Rental GmbH, Friedrichshafen, Zeppelin Lab GmbH, Berlin, and Zeppelin Aviation & Industrial Service GmbH, Ulm (formerly: BIS Inspection Service GmbH, Hamburg), do not disclose their annual financial statements in accordance with § 264 para. 3 HGB or § 264b HGB.

32 Corporate Bodies

The members of the Management Board of Zeppelin GmbH are Mr. Peter Gerstmann (Chairman of the Management Board), Mr. Michael Heidemann (Deputy Chairman of the Management Board), Mr. Christian Dummler (Managing Director), and Ms. Alexandra Mebus (Managing Director and Labor Director).

The Supervisory Board of Zeppelin GmbH comprises Mr. Andreas Brand (Chairman), Mr. Heribert Hierholzer (Deputy Chairman), Mr. Dr. Reinhold Festge, Mr. Dr. Werner Pöhlmann, Mr. Univ.-Prof. Dr.-Ing e. h. Dr. h. c. Dieter Spath, Mr. Univ.-Prof. Dr. Dr. h. c. mult. Horst Wildemann, Mr. Thomas Mann, Ms. Roswita Feineis, Ms. Marita Weber, Mr. Ralph Misselwitz, Mr. Vincenzo Savarino, and Ms. Prof. Dr. Yasmin Mei-Yee Weiß.

Friedrichshafen, March 12, 2020

The Management Board of Zeppelin GmbH

Peter Gerstmann	Michael Heidemann	Christian Dummler	Alexandra Mebus

INDEPENDENT AUDITOR'S REPORT

To Zeppelin GmbH, Friedrichshafen

AUDIT OPINIONS

We have audited the consolidated financial statements of Zeppelin GmbH, Friedrichshafen, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2019, consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from January 1 to December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Zeppelin GmbH, which is combined with the Company's management report, for the financial year from January 1 to December 31, 2019. In accordance with the German legal requirements, we have not audited the content of the statement on corporate governance pursuant to § [Article] 289f Abs. [paragraph] 4 HGB [Handelsgestzbuch: German Commercial Code] (information about the proportion of female members).

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the statement on corporate governance referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the statement on corporate governance pursuant to § 289f Abs. 4 HGB (information about the share of women), which we obtained prior to the date of our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility to read the other information and to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE ADVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the

Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The advisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure, and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective in-

formation and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Munich, March 12, 2020

PricewaterhouseCoopers GmbH

Wirtschaftsprüfungsgesellschaft

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German Public Auditor	German Public Auditor

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Annual reports and further information about Zeppelin are available online at zeppelin.com.

The annual report was published in April 2020.
It is also available in German.

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