ANNUAL REPORT 2023

ZEPPELIN
WE CREATE SOLUTIONS

zeppelin.com

ZEPPELIN
AT A GLANCE

IFRS

		2023	2022	2021	2020	2019
SALES						
Construction Equipment Central Europe SBU	EUR million	1,703	1,516	1,494	1,373	1,470
Construction Equipment Nordics SBU	EUR million	306	292	292	258	n/a
Construction Equipment Eurasia SBU	EUR million	309	525	642	494	500
Rental SBU	EUR million	739	666	576	528	509
Power Systems SBU	EUR million	461	442	437	407	392
Plant Engineering SBU	EUR million	518	493	340	306	332
Total for the Group [1]	EUR million	3,935	3,838	3,696	3,272	3,118
EMPLOYEES						
Average for the year (FTEs) including trainees						
Construction Equipment Central Europe SBU		3,155	3,084	3,000	2,949	2,914
Construction Equipment Nordics SBU		735	709	667	603	588
Construction Equipment Eurasia SBU		965	1,677	1,981	1,906	1,872
Rental SBU		2,219	1,982	1,811	1,769	1,651
Power Systems SBU		1,023	1,041	1,057	1,044	1,022
Plant Engineering SBU		1,884	1,699	1,614	1,622	1,529
Total for the Group [1]		10,361	10,557	10,458	10,170	9,748
FIXED ASSETS [2]						
Additions	EUR million	595.9	465.4	382.5	368.6	466.9
Changes in consolidated companies	EUR million	185.8	20.3	6.9	0.5	74.7
Amortization	EUR million	286.9	267.0	250.5	241.6	213.7
as a percentage of additions		48	57	65	66	46
of which rental assets						
• Additions	EUR million	446.7	380.1	289.0	265.7	333.3
• Changes in consolidated companies	EUR million	130.9	0.5	5.6	0.0	1.7
• Amortization	EUR million	197.8	175.5	162.1	156.5	144.9
NET PROFIT BEFORE TAX	EUR million	153.8	134.6	159.5	124.6	133.7
NET GROUP INCOME	EUR million	100.1	104.4	118.0	91.5	92.4
CASH FLOW [3]	EUR million	-9.0	-42.8	240.1	259.6	75.4
EQUITY	EUR million	1,183.0	1,128.5	1,009.3	890.0	845.4
• of which subscribed capital	EUR million	100.0	100.0	100.0	100.0	100.0
• of which capital reserves	EUR million	60.0	60.0	60.0	60.0	60.0
• of which retained earnings	EUR million	1,018.4	937.8	858.4	759.5	688.3
• of which accumulated other comprehensive income	EUR million	-7.0	15.7	-23.0	-41.3	-12.8
• of which shares held by non-controlling interests	EUR million	11.6	15.0	13.9	11.7	9.9

SBU: Strategic business unit
[1] in 2022 including Zeppelin GmbH, klickrent GmbH, Zeppelin Lab GmbH and klickparts GmbH; in 2023 including Zeppelin GmbH, klickrent GmbH and Zeppelin Lab GmbH
[2] Financial assets, companies valued according to the equity method, intangible assets, and property, plant and equipment
[3] Cash flow from operating activities (IFRS)

CONTENTS

THE GROUP MANAGEMENT BOARD

PETER GERSTMANN

- Chairman of the Management Board of Zeppelin GmbH / CEO
- Group Development and Innovation, Auditing, Group Communications, IT Security
- Plant Engineering strategic business unit
- Degree in Business Administration
- Member of the Management Board of Zeppelin GmbH since 2007 and Chairman since 2010

CHRISTIAN DUMMLER

- Managing Director of Zeppelin GmbH / CFO
- Controlling, Finance, Real Estate Management, Legal, and Corporate Social Responsibility
- Power Systems strategic business unit
- Certified banking specialist
- Member of the Management Board of Zeppelin GmbH since 2011

FRED CORDES

- Managing Director of Zeppelin GmbH / COO
- Sales, Marketing, and Service
- Construction Equipment Central Europe, Nordics, Eurasia strategic business units – as of July 1, 2023: Construction Equipment Germany/Austria and Construction Equipment International strategic business units
- Degree in Mechanical Engineering
- Member of the Management Board of Zeppelin GmbH since 2023

ALEXANDRA MEBUS

- Managing Director of Zeppelin GmbH / CHRO
- HR, HR Development, Compliance and Data Protection, Diversity, IT/Digitalization
- Rental strategic business unit
- Master of Business Administration, degree in Social Education
- Member of the Management Board of Zeppelin GmbH since 2018

MANAGEMENT BOARD REPORT

Dear customers, partners, employees, and readers[1),]

At EUR 3.93 billion, the Zeppelin Group increased sales year-on-year in 2023, and at EUR 153.8 million, net profit before tax also significantly exceeded the profit from the previous year, which was markedly impacted by the effects of the Russian war against Ukraine.

After Zeppelin experienced ongoing supply bottlenecks in relation to its manufacturer partner Caterpillar and other suppliers throughout the previous year, there were fundamental improvements to delivery capability in 2023. Due to the high order backlog to be processed, sales again increased slightly compared to the previous year. Set against this, a noticeable reluctance to buy and invest was evident in almost all of our business segments. This reluctance was due to global geopolitical and economic uncertainty as well as persistently high interest rates. Good delivery capability from Caterpillar and other suppliers, as well as limited capacities for new machine equipment, led to another increase in working capital.

The Construction Equipment Eurasia SBU was particularly affected by the economic consequences arising from Russia's war against Ukraine. The European Union's tenth package of sanctions, imposed at the beginning of February 2023, had extensive impact and led to the discontinuation of almost all business activity in Russia, in coordination with our manufacturing partners. Despite the difficult environment, Zeppelin succeeded in maintaining business capability at the Ukrainian company.

In the middle of the year, Zeppelin responded to the changed market conditions and customer expectations with the restructuring of the Construction Equipment strategic business units. The previous Construction Equipment Central Europe, Nordics and Eurasia units were consolidated into the Construction Equipment Germany/Austria SBU and the Construction Equipment International SBU.

To make it possible for the Group to proactively respond to challenges such as sustainability, digitalization and the shortage of skilled workers, the existing GPS strategy was updated and adapted in a comprehensive strategy meeting.

Zeppelin also experienced inorganic growth in 2023. With the acquisition of the rental organization CP ApS in Denmark, Zeppelin further expanded its commitment to temporary rental solutions in Scandinavia, while acquisition of Bauhof Service GmbH strengthened the energy service division in southern Germany. The number of employees in the Group remained approximately the same, as the reduction in personnel in Russia was offset by the acquisition of new companies and expansion of our service capacities.

On September 28, 2023, an article published in Handelsblatt made compliance-related allegations against Zeppelin, in connection with the business relationship with Uzbek state-owned company NMMC (Navoi Mining and Metallurgical Company JSC). Zeppelin takes these allegations very seriously and, in cooperation with the Supervisory Board and our business partners, has enacted various measures to investigate them. Among other actions, a law firm specializing in investigation of compliance cases was commissioned to fully examine the allegations. These investigations have now been largely completed and have so far not confirmed any of the allegations against Zeppelin. The final report is expected by the end of March / beginning of April 2024. Based on the current perspective, the Management Board is not expecting any non-compliant results from the investigations. Zeppelin

[1)] To aid readability, the male and female pronouns are not used in every case. All personal pronouns should be understood as gender-neutral.

carries a special responsibility as a foundation-owned company, and as such has established a comprehensive structure dedicated to compliance, and has also anchored it firmly in the company's values.

Construction Equipment Central Europe

Despite declining incoming orders over the course of the year, the Construction Equipment Central Europe business unit can look back on a year of high sales growth due to the high order backlog. However, incoming orders in the regions was down in all areas. In all countries relevant to the business unit, the construction industry struggled in the face of sharply rising construction costs, interest-related high financing costs and regulations that discourage investment. There is a considerable need for essential investments in energy infrastructure, digitalization and maintenance, as well as transport routes. We therefore expect demand to improve in future. The companies will expand the product offering with alternative drive concepts, close product portfolio gaps in the area of small wheel loaders, and develop further segments such as agriculture and waste disposal. The addition of pioneering technologies such as assistance systems, machine control and comprehensive digital service solutions will further strengthen their market position.

Construction Equipment Nordics

The companies in our Nordic regions likewise slightly increased their sales performance. Although the construction industry also recorded declines in Sweden and Denmark, the general decline in incoming orders was largely offset by sales successes – such as the sale of a Cat 7495 electric rope shovel with an operating weight of over 1,300 metric tons. For 2024, the SBU is focusing on high market coverage and expansion of the service network in the context of the service excellence programs. The autonomous and carbon-neutral operation of Caterpillar machine fleets in the field of raw material extraction also offers growth prospects. There are further opportunities in terms of major investments in infrastructure and future technologies in northern Sweden. Completion of the head office in Gothenburg will significantly strengthen Zeppelin's presence in Sweden. With new demo facilities in Skejby (DK) and Gothenburg (SWE), it will be possible to demonstrate the performance of Caterpillar machines to customers in the best possible way.

Chairman of the Management Board of Zeppelin GmbH / CEO

Construction Equipment Eurasia

For the regions relevant to the Construction Equipment Eurasia strategic business unit, it is hoped that the Russian war against Ukraine will end as soon as possible and that the Central Asian countries will stabilize. Following the complete withdrawal from construction and mining business in Russia, a small number of employees in Russia continue to meet the existing and unsanctioned obligations in respect of those customers which are not subject to sanctions. Zeppelin stands with its employees in Ukraine and has been able to continue business activity there despite the adverse circumstances. In Uzbekistan and Armenia, the market for construction and mining equipment continued to develop positively despite the conflict with Azerbaijan. Based on the reforms being taken, the investment climate and the announcement of state construction projects, there are good future business opportunities here.

Rental

Despite a challenging environment and complex framework conditions, the Rental business unit closed the year successfully. Sales were higher than last year; however, increased equipment costs, the rise in interest rates and targeted investment in unlocking the Scandinavian market had a negative impact on earnings. The business unit significantly strengthened its market position in Denmark by acquiring CP ApS. With the introduction of alternative fuels such as hydrotreated vegetable oils (HVO), the energy portal and a variety of environmentally friendly solutions, the Rental SBU integrated customer requirements for sustainable operations into its diversified service portfolio. As well as helping to further open up the Scandinavian markets, the expansion of digitalization and sustainability solutions also offers additional growth opportunities in the expected volatile environment.

Power Systems

In light of sustained high incoming orders for engine overhauls and repairs, growing new business for large heat pumps and grid replacement systems, as well as international marine yacht servicing being the most strongly growing market, the Power Systems business unit was able to increase both incoming orders and sales and earnings compared to the previous year. Despite the uncertain supply situation, the Electric Power Diesel division was boosted by requests for remotorization. For 2024, the Power Systems SBU will focus on digital solutions, alternative fuels and sustainable drive and energy systems.

Plant Engineering

In spite of crises, high inflation and rising energy costs, the markets of the Plant Engineering SBU have seen stable development. High demand was powered by recycling solutions in the plastics and tire sector as well as mixed solutions in battery remanufacturing. Food production plants are under considerable price and competitive pressure, and polyolefin production plants came to the end of their investment cycle. However, comparatively high interest rates and regulatory uncertainties are increasingly leading to delays in awarding contracts and reluctance to invest. In the coming year, the business unit will focus on efficiently processing the continued high order backlog.

Growth is expected to primarily be achieved via future-focused markets. This is why the focus is on expanding business in plastic and tire recycling as well as in battery mass processing.

Digital topics

Scalability and the creation of synergies were prerequisite considerations in restructuring Group IT Services to be a partner to the strategic business units and centralized departments. The implementation of comprehensive IT solutions had already begun with the introduction of SAP S/4HANA and CRM Salesforce in the European companies. In the infrastructure area, AWS Cloud has been implemented to ensure more efficient storage of machine data. Group IT Services will play a key role in aiding digital transformation in the construction industry, with the support of the SBUs. Further examples of Zeppelin's future-oriented mindset include investing in Internet of Things by means of a cooperation with Fraunhofer, and using artificial intelligence to create data-driven use cases.

Corporate Social Responsibility

Within the framework of its Corporate Social Responsibility (CSR) strategy, Zeppelin puts customers, products, and services at the center of its activities and focuses on its own authentic contributions in the areas of ecology, economy, and social responsibility. For example, the calculation of our carbon emissions is currently being expanded to include downstream and upstream categories along the value chain (Scope 3), the portfolio of sustainable products and services is being significantly expanded, the comprehensive catalog of sustainability-related actions – such as the transition of company-owned sites to climate-neutral operations – is being continued as planned, and a CSR week is being held with guests from science as well as customer and partner. New buildings are always constructed to be climate-neutral in operation.

Zeppelin as an employer

The HR strategy focuses on three areas: Attract, Develop and Retain. One of the initiatives launched last year was the Employer Branding project to revamp the employer brand. In the Develop area, there were pilot implementations of the "Leadership Gym" management training course and 270-degree feedback. The Z VOICE global employee opinion survey delivered new insights into our strengths and weaknesses. The results were evaluated, action areas analyzed and a Group-wide follow-up process established. With the ongoing "WE are colorful" initiative, Zeppelin is continuously committing itself to diversity, both internally and externally.

Acquisitions and Investments

In investments such as the new construction of the national office in Gothenburg, which has been designed for climate-neutral operation, Zeppelin is positioning itself as an example of sustainable corporate policy. Investments in digitalizing business processes included, for example, the SAP S/4 Hana project and the introduction of tools for digitalizing incoming invoices and dispatching. Zeppelin made significant investments in safeguarding and expanding its market position, in the form of the renewal and expansion of rental fleets as well as of our service infrastructure. In addition, the acquisitions of Bauhof GmbH and CP ApS / Denmark strengthened the market position at both national and international level.

Financials

Creditreform Rating AG has again given the Zeppelin Group an "A-" rating and a "stable" outlook. This very good company rating was significantly influenced by the fact that the Zeppelin Group was able to increase sales in 2022 and maintain a stable operating result, even though the effects of the Russian war against Ukraine had a noticeable impact on sales and earnings. Despite increasingly challenging framework conditions, business performance was good and confirms the company's high level of resilience as a result of its strategic alignment.

Outlook

The assumption is that the construction industry's cautiousness to invest will lead to comparatively low incoming orders and the normalization of rental fleet utilization. Zeppelin expects a compensatory effect from growing service payments and an increase in activities outside the construction industry. Even in a challenging market environment, we expect generally stable business development in view of our market position, diversified business models and the high machine and engine population. The market in Russia has been lost for the foreseeable future. However, the realignment of the Construction Equipment strategic business units offers opportunities for improving market cultivation and increasing efficiency. There may also be opportunities which arise from maintaining our operations in Ukraine.

In principle, the infrastructure requirements of the energy transition – for converting buildings to be climate-neutral, dismantling power plants, rewilding and constructing power lines – offer good future prospects. The need to convert existing fleets to sustainable

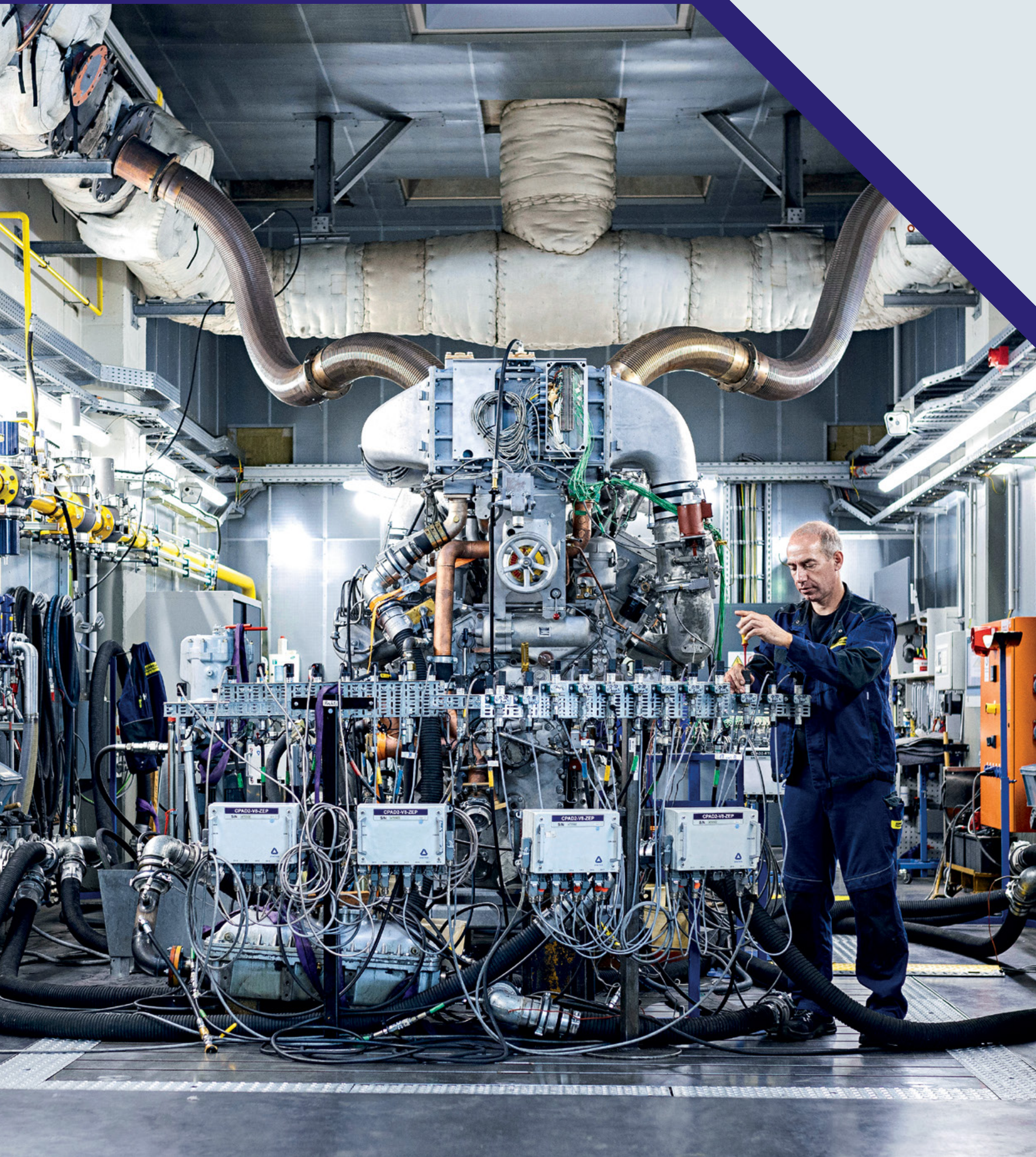
drive and energy systems means that a huge changeover program is expected. Rental business will also continue to grow in the coming year with temporary, flexible solutions. In addition, we are well represented within our international plant engineering in future markets for recycling, battery masses and CO2-reducing plant solutions.

On behalf of the Management Board of Zeppelin GmbH, I would like to thank our customers for their trust in our services; this is what has made it possible for us to achieve success in a challenging geopolitical and economic environment. We would like to express our special thanks to all Zeppelin employees for their loyalty, solutions focus and passion at these still-unprecedented times. Our thanks also go to the Employee Representatives for their support, and our shareholders and Supervisory Boards for their trust in us.

Peter Gerstmann

Chairman of the Management Board of Zeppelin GmbH

THE SUPERVISORY BOARD



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
President and CEO of TÜV Rheinland Berlin Brandenburg Pfalz e.V.

Dr. Kristin Neumann
Chief Financial Officer (CFO), Brenntag SE

Prof. Dr. Yasmin Weiß
Professor at University of Technology Nuremberg

EMPLOYEE REPRESENTATIVES

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

Thomas Mann
HR Representative, Zeppelin Baumaschinen GmbH

Carolin Bautzmann
Member of the Management Board of Zeppelin Rental Danmark ApS, representative of senior executives

Janine Heide
Political Secretary of IG Metall Offenbach

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

Frederic Striegler
2nd Authorized Representative of the Friedrichshafen / Upper Swabian Chapter of the IG Metall Trade Union

SUPERVISORY BOARD REPORT

Dear employees, customers and business partners, shareholders,

The 2023 financial year was a very successful one for the Zeppelin Group. We can once again enter a very good result into our company history. In a very challenging environment, we managed to increase sales and earnings compared to the previous year. The exit from the Russian market was largely completed in 2023. In this process, assets were sold off in compliance with the provisions of sanctions law and the structures were substantially adjusted. Being able to maintain business in Ukraine was particularly meaningful for us.

The previous year's highly dynamic pricing eased significantly. The massive disruptions to supply chains were largely resolved. Our partner Caterpillar returned to its usual delivery capability. The high inflow of machines, engines and components resulted in a sustained high working capital and consequently a correspondingly high interest burden. Nonetheless, investment continued at a high level in the expansion and renewal of rental park capacities, infrastructure, technology and inorganic growth. Zeppelin is known for sustainable and profitable growth. The future viability of the company shapes our conduct and activities.

As in the previous year, markets relevant to Zeppelin continued to see predominantly declining development in the 2023 financial year. Consequently, incoming orders fell significantly, with around 50 percent of the decline resulting from the exit from the Russian market. The Zeppelin Group nevertheless succeeded in achieving slight sales growth and generating a very good result thanks to its high order backlog.

The company's profitability remained good and very satisfactory during the financial year. The company value continued to increase and develop consistently. Substantial contributions were generated for the associated Zeppelin Foundation and Luftschiffbau Zeppelin GmbH.

In the 2023 financial year, the Supervisory Board performed the tasks incumbent upon it in accordance with the law, the Articles of Association and the Rules of Procedure with great care, supervising the work of the Management Board and providing advisory support in the management of the company, crisis management, strategic further development and key individual topics. The Management Board promptly and directly involved the Supervisory Board on all issues and decisions of fundamental relevance.

The Chairman of the Management Board and the entire Management Board also regularly updated the Chair of the Supervisory Board and its representatives on current developments and material processes outside board meetings. All members of the Supervisory Board were punctually and extensively informed in writing on a monthly basis about the performance of the Zeppelin Group.

The most important objective was to ensure the long-term and successful further development of the Group. The Supervisory Board and the Management Board work together openly, responsibly and trustingly, as well as very constructively. This is a foundation for our joint success.

“THE SUPERVISORY BOARD THANKS YOU FOR YOUR COMMITMENT.”

Andreas Brand

Chairman of
the Supervisory Board

In the 2023 financial year, the focus of reporting and consulting was on the economic development, the exit from the Russian market and related consequences for the net assets, financial position, and results of operations, as well as strategic development and key Group-wide projects. In addition, acquisition opportunities and projects were discussed in the context of strategic development.

In three scheduled and three extraordinary meetings, the Supervisory Board advised and supported the Management Board in developing the company on the basis of documents, reports and presentations regarding the company’s strategy, planning, possible acquisitions 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, reporting related to the integration of acquisitions, and sustainability reporting.

The corporate, investment and financial plans for 2024 were discussed in detail and adopted, along with forecasts for 2025 and 2026. In addition, it provided advice on the development and expansion of new business segments, employee recruitment, retention and development, the further development of the Group-wide financial, risk and compliance management system, the sustainability strategy, as well as measures for implementing them.

The Personnel and Audit Committee fulfilled the requirements stipulated by law and the Articles of Incorporation. The intensity of the committee’s work has increased significantly. Eight meetings dealt with key issues relating to corporate development and strategy, fundamental issues of corporate policy, topics relating to accounting, auditing and internal control and reporting systems, as well as the audit of the annual financial statements. Additionally, the Personnel and Audit Committee also regularly addressed the company’s economic and financial situation. Regulatory developments most relevant to Zeppelin were the subject of the consultations. One focal point was preparing the Supervisory Board meetings concerning acquisition projects, war-related impacts and associated decisions.

Personnel topics such as appointing Managing Directors, succession planning, HR development and consulting on remuneration systems were also key areas of responsibility. In particular the Personnel and Audit Committee dealt with the succession of the Chairman of the Management Board of the Zeppelin Group, who will retire in 2024.

After proper consideration and consultation with the Management Board, a number of projects and measures were recommended to the Supervisory Board for consultation and resolution. These consisted mainly of acquisition projects and financial and investment plans for the 2024 financial year. Resolutions were also passed concerning the appointment and re-appointment of Managing Directors of Zeppelin GmbH and affiliated companies, based on relevant recommendations by the Personnel Committee.

The Personnel and Audit Committee and the Supervisory Board extensively dealt with the compliance allegations against Zeppelin which were raised in an article in Handelsblatt on September 28, 2023, in connection with the business relationship with Uzbek state-owned company NMMC (Navoi Mining and Metallurgical Company JSC). The Supervisory Board promptly commissioned a law firm specialized in investigating compliance cases and received ongoing reports about the status and content of the investigations. These investigations have now been largely completed and have so far not confirmed any of the allegations against Zeppelin. The final report is expected by the end of March / beginning of April 2024. Based on the current perspective, the Management Board is not expecting any non-compliant results from the investigations.

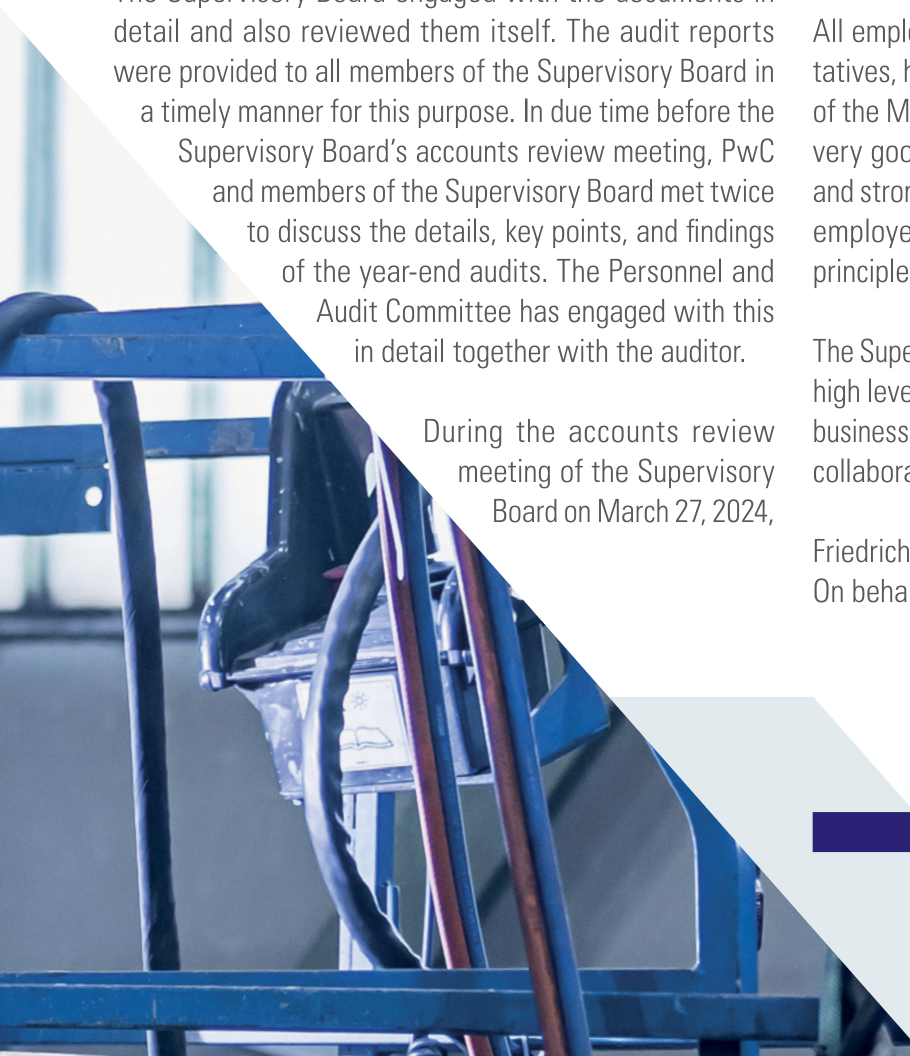
The activities of the Supervisory Board and in particular its monitoring of the Management Board did not give rise to any complaints.

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, 2023, 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. The Personnel and Audit Committee has engaged with this in detail together with the auditor.

During the accounts review meeting of the Supervisory Board on March 27, 2024, 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, approved the report, and at the same time approved the financial statements of Zeppelin GmbH and the consolidated financial statements.



The annual financial statements and consolidated financial statements are thus approved. The Supervisory Board approved the Management Board's proposal concerning the appropriation of net profit and recommended that the shareholders also approve this.

The Supervisory Board passed a resolution at the meeting on October 24, 2022, to appoint Mr. Fred Cordes to the Management Board of Zeppelin GmbH with effect from January 1, 2023. Mr. Cordes took over the Sales, Service and Marketing divisions, and took over responsibility for the Central Europe, Nordics and Eurasia Construction Equipment strategic business units from Mr. Michael Heidemann, who retired on June 30, 2023 after more than 30 years of work for Zeppelin. The Supervisory Board would like to thank Mr. Heidemann for the many years of excellent and successful collaboration.

All employees of the Zeppelin Group, employee representatives, heads of the strategic business units and members of the Management Board did excellent work in 2023. The very good result follows logically from a well-positioned and strong company, the strong performance of all Zeppelin employees, as well as clear and sustainable corporate principles.

The Supervisory Board wishes to gratefully acknowledge the high level of commitment shown. We thank our customers, business partners and Caterpillar for their trust and excellent collaboration.

Friedrichshafen, March 27, 2024
On behalf of the Supervisory Board

Andreas Brand

Andreas Brand
Chairman of the Supervisory Board

ZEPPELIN WORLDWIDE

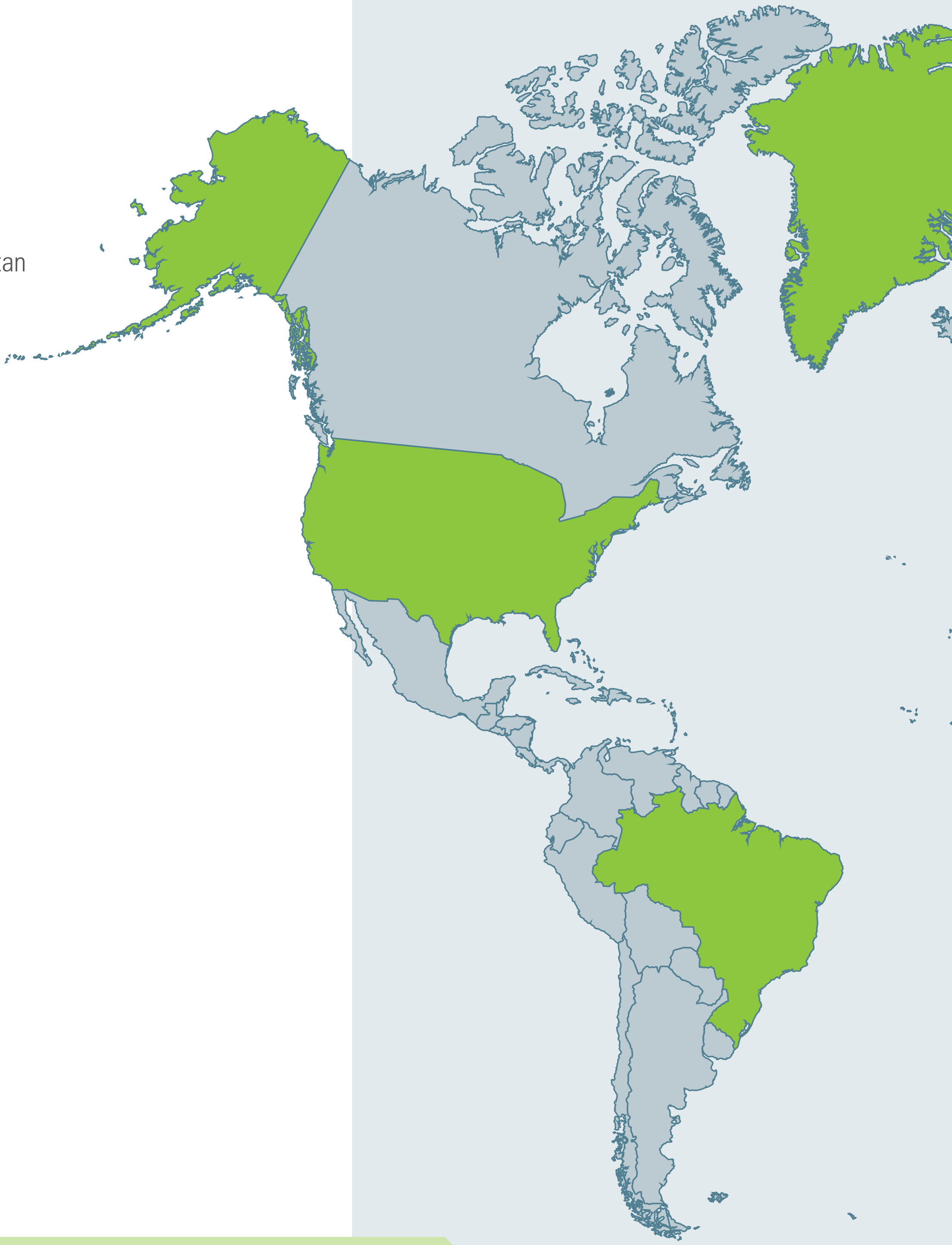
10,361 employees in 26 countries support our customers' competitiveness with an extensive portfolio of products and services.

Construction equipment
Armenia, Denmark,
Germany, Greenland, Austria,
Poland[1)], Russia[2)], Sweden,
Switzerland, Slovak Republic,
Tajikistan, Czech Republic,
Turkmenistan, Ukraine, Uzbekistan

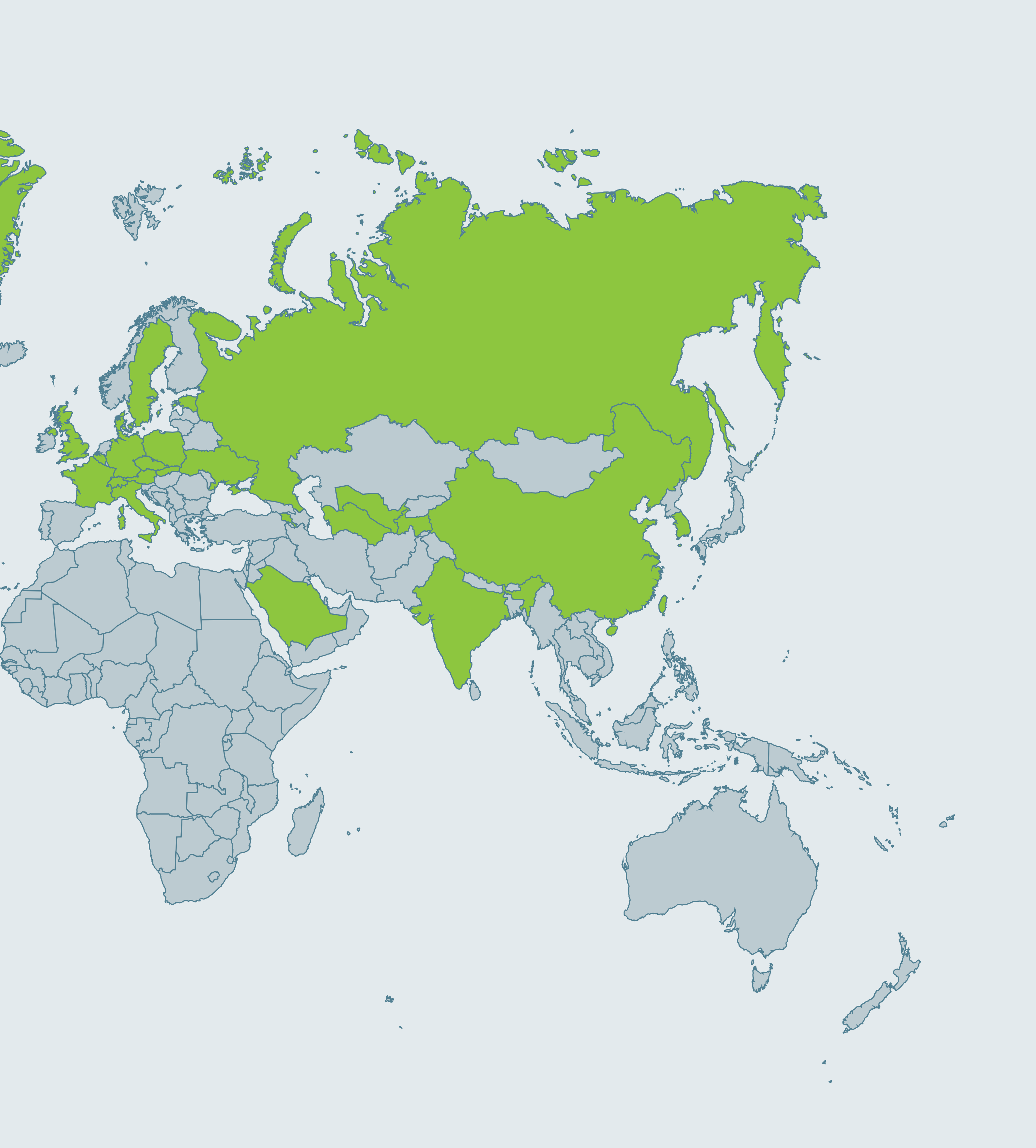
Rental
Denmark, Germany,
Austria, Sweden,
Slovak Republic, Czech Republic

Power Systems
Armenia, Denmark, Germany,
Estonia, Greenland, Austria,
Sweden, Slovak Republic,
Tajikistan, Czech Republic,
Turkmenistan, Ukraine,
Uzbekistan

Plant Engineering
Belgium, Brazil,
China, Germany,
France, United Kingdom,
India, Italy,
Saudi Arabia, Singapore,
South Korea, USA

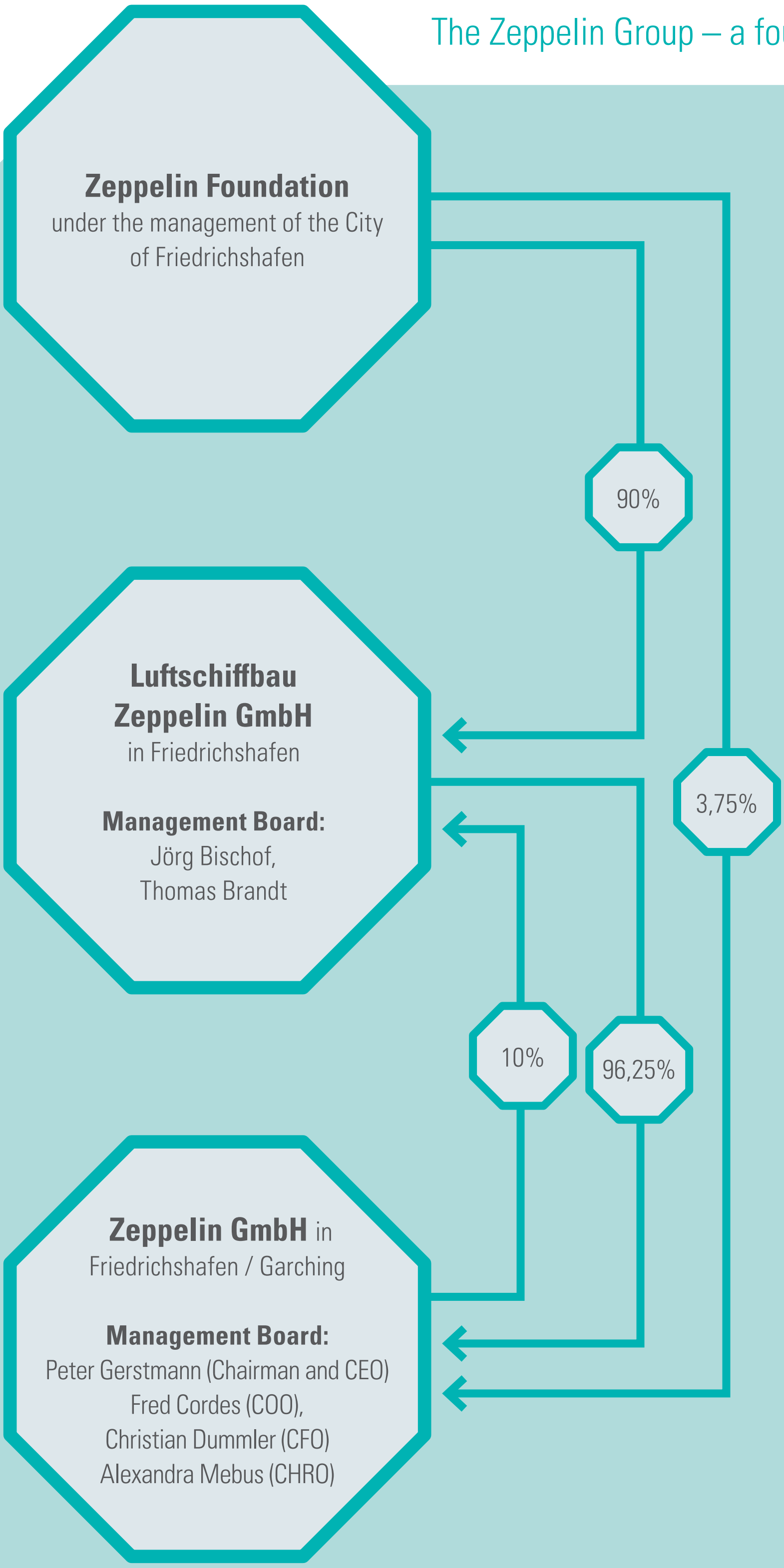


1) Hyster forklifts / Manitou material handling equipment / Groupil electric vehicles / Grove mobile cranes / Meclift container movers / Kamag swap-body transporters and terminal tractors only
2) Sales and servicing of agricultural machinery and products only; no business activities with Caterpillar and SEM construction equipment; dealership closed until further notice



OVERVIEW OF THE ZEPPELIN GROUP

The Zeppelin Group – a foundation-owned company

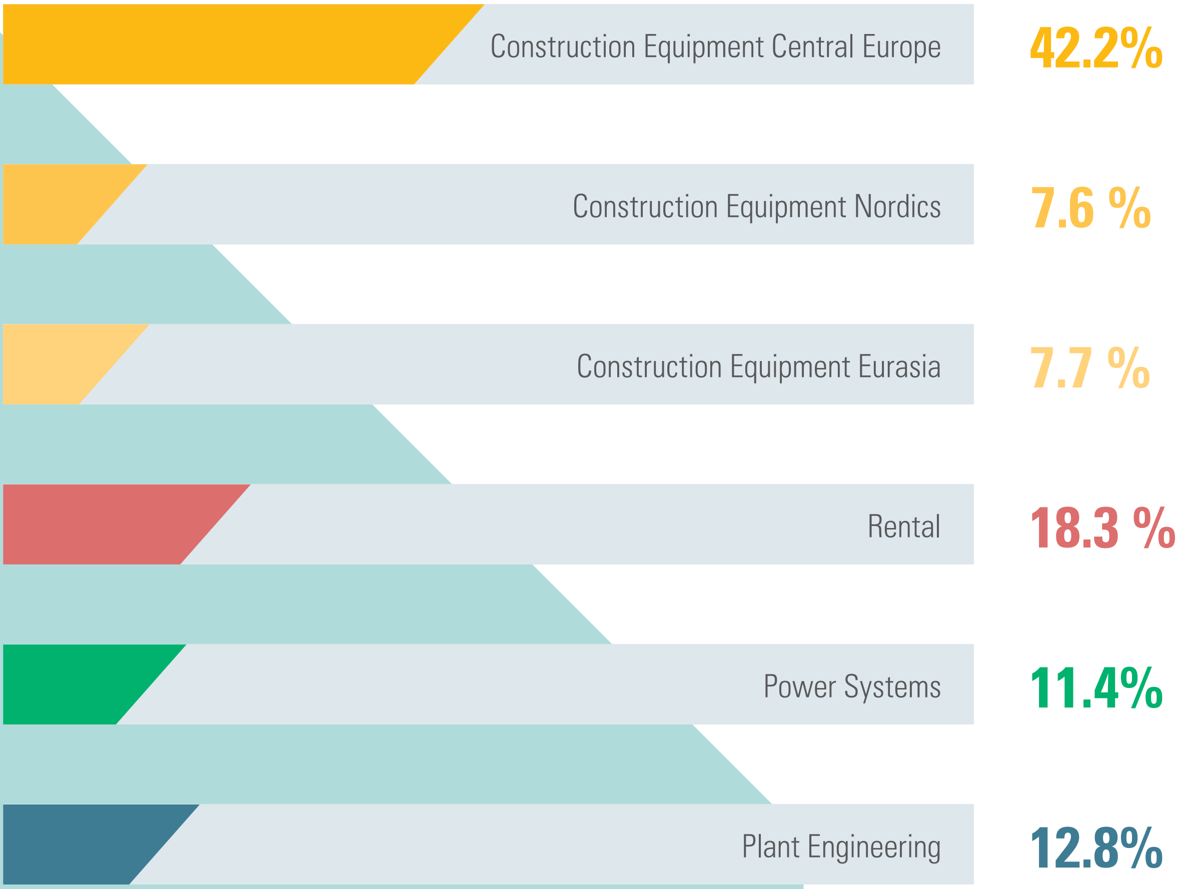


Its roots can be traced back to the establishment of the Zeppelin Foundation by Ferdinand Graf von Zeppelin in 1908. The Zeppelin Foundation still owns a direct stake in Zeppelin GmbH, as well as an indirect stake via Luftschiffbau Zeppelin GmbH.

The Zeppelin Group offers solutions in the construction industry, drive and energy systems, engineering and plant engineering. The offering ranges from the distribution and service of construction, mining, forestry and agricultural machinery, through rental and project solutions for the construction industry and industry as a whole, to drive and energy systems as well as engineering, plant engineering, and customer-oriented digital solutions in all relevant business segments. Zeppelin is represented in 26 countries worldwide.

In the 2023 financial year, the Group workforce comprised over 10,000 employees and generated sales of EUR 3,93 billion. To date, the Group has structured its activities into six strategic business units (Construction Equipment Central Europe, Construction Equipment Nordics, Construction Equipment Eurasia, Rental, Power Systems, Plant Engineering). Following a realignment of the Construction Equipment Germany/Austria and Construction Equipment International strategic business units from January 1, 2024, the Group will be organized into five strategic business units plus the Strategic Management Center Group IT Services. Zeppelin GmbH is the Group holding company. It is legally domiciled in Friedrichshafen and has its head office in Garching bei München.

Share of Group sales



CONSTRUCTION EQUIPMENT CENTRAL EUROPE

The Construction Equipment Central Europe SBU is a leader in the distribution and service of new and used construction machines, as well as add-on parts and components. Its range includes over 200 different types of machine from market leader Caterpillar. This SBU provides customers with powerful earthmoving, excavation of materials, demolition, recycling, and civil engineering and road construction equipment, as well as offering gardening and landscaping, agricultural, and industrial machinery. The product range is rounded off with special equipment for surface and underground mining, plus fleet management and machine control systems. A dense network of branches, with 70 sites across five European countries as well as central spare parts warehouses, guarantees a fast response and quick delivery for customers. The general overhaul of construction equipment also presents a cost-effective and resource-conserving alternative to buying new. There is a particular emphasis on all-round assistance for customers, who are offered a range of integrated solutions from customized financing to all-inclusive service contracts.

"The current challenges require constant adaptation to the construction equipment business and this requires great flexibility. Machine technology is constantly developing further – digitalization is taking huge steps forward. The dedicated, overarching technology department which we created in 2023, is set to even more effectively respond to growing requirements in the future, so we will be able to offer customers pioneering technologies such as assistance systems and machine control systems in line with practical considerations and requirements on construction sites, or even be an innovation leader in alternative drive systems.

Fred Cordes
Head of the Construction Equipment Central Europe strategic business unit

SALES
in millions of euros / in accordance with IFRS

2023: **1.703**

2022: **1.516**

EMPLOYEES
year's average, including trainees

2023: **3.155**

2022: **3.084**

SHARE
of Group sales (2023) [1)]

42,2 %

[1)] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

CONSTRUCTION EQUIPMENT CENTRAL EUROPE

Review

The European construction industry in 2023 presents a very different picture compared to 2022: The emphasis is on challenges in terms of economic prospects, bureaucratic obstructions, a general lack of construction activity and rising financing costs. In this context, the regions within the SBU have developed differently. While construction companies in Germany and Austria were still benefiting from high order backlogs in 2023, business in the Czech Republic and Slovak Republic was impacted by global factors affecting the economic situation of these countries. The war in Ukraine and related changes to the economy and supply chains continue to have a considerable impact. Effects from the economic turbulence of recent years are also still evident. All these factors have led to a downturn in the construction machine market in these markets.

Caterpillar has certified Zeppelin Construction Equipment Germany as one of the first dealers worldwide for Cat® Command. This means our customers will be able to implement remote control of machines and thereby move a step closer to the great future vision of autonomously driven construction machinery.

In a milestone for development, design, production and sales, the 50,000th Cat mobile excavator rolled off the production line in the summer. It was delivered to a Stuttgart-based construction company, where the new work tool is part of a sustainability offensive.

Zeppelin Construction Equipment Germany received the "Growth Award" from Caterpillar in 2023, for European sales of machines for two-way technology. Among the achievements honored in this way was the above-average growth in the number of new machines for rails.

While Caterpillar expands its product range of material handlers and solutions for industrial applications, Zeppelin also presents customer-specific special designs and solutions. In 2023, these included, for example, a prototype for scrap handling and a specially designed tracked excavator for pipeline construction.

Zeppelin Construction Equipment scored sustainability points with its Rebuild program, which significantly extends the service life of older machines by means of a complete overhaul. Refurbishing consumes fewer raw materials and less energy than buying new.

Outlook

In 2024 the economic situation will continue to be strained due to the geopolitical situation in Ukraine and the Middle East. The development of the German market will be heavily dependent on how much we succeed in accelerating investments, reducing bureaucracy and speeding up approval procedures. Doing so is essential for the advancement of transport infrastructure projects, whether rail, road or bridge. This also applies to the implementation of energy transition projects and the expansion of digital infrastructure.

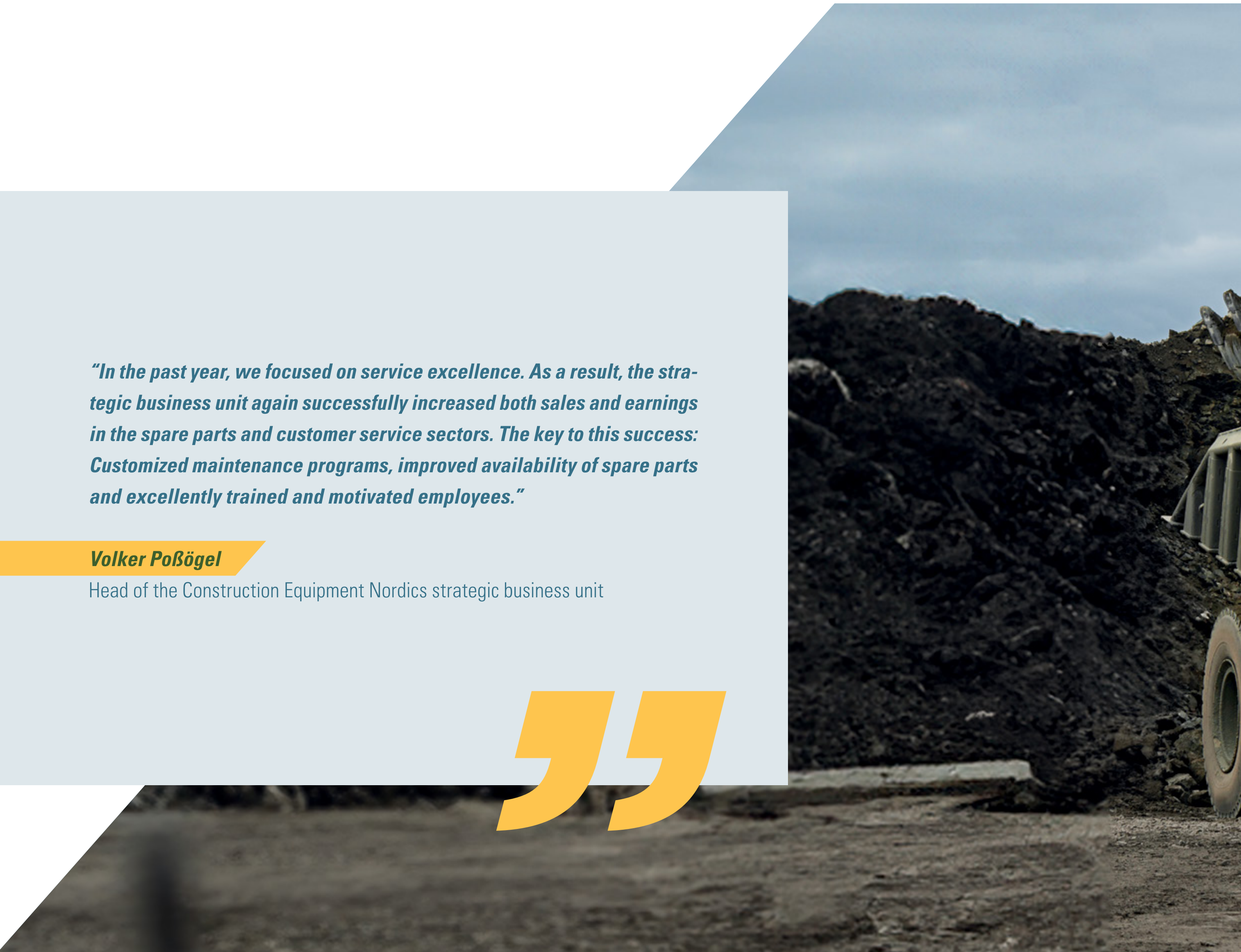
The Zeppelin Czech Republic and Zeppelin Slovakia companies will consolidate their leading position in the distribution and service of construction equipment in their respective markets. In both countries, rental activities are being boosted to accommodate flexible customer requirements. Assistance systems, technologies and online tools that considerably improve the efficiency of machine applications will bolster our competitive advantage.

Given the continuing strained environment, there will be a consistent focus on customer requirements. The product range is being expanded with new loaders, and we are working on opening up further segments, such as agriculture. On the matter of recycling and disposal, Zeppelin Construction Equipment will intensify its commitment with a view to setting the course for energy efficiency and sustainability. Developments which are becoming significantly more prominent because of climate change will be further advanced by means of innovative technologies.

Meanwhile, the shortage of skilled workers in our industry is also becoming increasingly acute. Going forward Zeppelin will make even greater efforts to attract new employees to the construction equipment area, especially in terms of servicing. Because ultimately, expanding our service capabilities is key to our customers' success. The need for prompt repair and maintenance as well as professional support for equipment fleets mean that proactive maintenance is more and more in demand.

CONSTRUCTION EQUIPMENT NORDICS

The Construction Equipment Nordics strategic business unit is a reliable partner for the distribution and service of new and used Caterpillar construction machinery and accessories. It offers customized solutions in the fields of earthmoving, excavation of materials, demolition, recycling and road construction, as well as for gardening and landscaping, and forestry. One focus is supporting mining operations in northern Sweden. The products offered in this area also include special equipment for surface and underground mining, fleet management equipment, machine control systems and other technological solutions. Zeppelin operates a branch network of 17 sites in Sweden, Denmark and Greenland, and has a dedicated Component Repair Center and spare parts warehouses.



"In the past year, we focused on service excellence. As a result, the strategic business unit again successfully increased both sales and earnings in the spare parts and customer service sectors. The key to this success: Customized maintenance programs, improved availability of spare parts and excellently trained and motivated employees."

Volker Poßögel
Head of the Construction Equipment Nordics strategic business unit

SALES
in millions of euros / in accordance with IFRS

2023: **306**

2022: **292**

EMPLOYEES
year's average, including trainees

2023: **735**

2022: **709**

SHARE
of Group sales (2023) [1]

[1] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

CONSTRUCTION EQUIPMENT NORDICS

Review

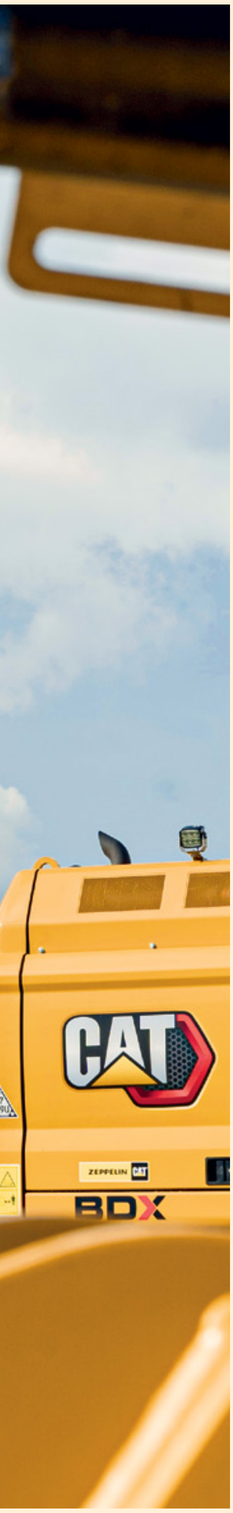
The Swedish construction industry saw a further decline in orders compared to the previous year, whereas the area of raw material extraction in Sweden continued at a high level due to stable copper and iron prices.

In Denmark, turnover in the industrial sector increased; however the construction sector encountered delays in commissioning caused by rising interest rates and material prices as well as an emerging labor shortage, and as a result sales figures were stagnant.

One of the most notable successes for the Nordics strategic business unit in 2023 was the sale of the largest machine ever sold within the Zeppelin Group: The Cat 7495 electric rope shovel for the development of mining areas, with an operating weight of 1,300 metric tons.

This year the strategic business unit expanded its improved, data-based and proactive service approach and designated additional strategic action areas, which are continuously evaluated by means of a newly implemented balanced scorecard. There was also a focus on expanding service capacity and related targeted training programs.

With construction progressing at the new headquarters in Gothenburg, the Nordics business unit is investing in better and more effective working conditions, thereby increasing both customer benefits and employer attractiveness. We have invested in achieving our sustainability goals by minimizing CO_2 emissions through the improvement of building standards in our branches, as well as using green electricity and improving waste recovery and prevention.



Outlook

For the 2024 financial year, there is an expectation of lower sales figures in the areas of industry, infrastructure and construction. We are likely to see a positive impact from enormous infrastructure investments in northern Sweden, in respect of railways and ports and in future-focused technologies such as battery production and carbon-neutral steel mills. In addition, larger-scale infrastructure projects for road and tunnel construction continue to be supported by public funds. In Greenland, there are also attractive future business prospects on offer in the mining industry. As such, there are continuous investments in feasibility studies for new mining sites on the island.

In 2024, the SBU will focus on a data-driven marketing and service approach as well as a customer-segment-oriented sales approach. The demo locations in Skejby, Denmark, and Gothenburg, Sweden, will be able to deliver an excellent customer experience.

Zeppelin is developing important building blocks for carbon-neutral mining operation in intensive collaboration with key customers, and by means of innovative, electrically powered construction machines and their maintenance. Solutions in this area include all-electric mining trucks in fully autonomous operation.

CONSTRUCTION EQUIPMENT EURASIA

The Construction Equipment Eurasia SBU's portfolio includes Caterpillar construction equipment and special equipment for surface and underground mining, as well as large and special equipment for mining, 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. With its Eurasia business unit, Zeppelin is represented at 40 sites across six countries in the Eurasian area (in Ukraine, parts of Russia and other CIS countries). Zeppelin leads the way in the region, with its Component Repair Centers for overhauling drive components (engines, axles and transmissions) for mining equipment.

"The Eurasia SBU experienced a difficult year in 2023, dominated by Russia's war against Ukraine and political turbulence in the Armenia region. Amid these difficult conditions, our teams responded quickly and switched to the necessary crisis management. The whole team has done an excellent job. Wherever possible, contact with customers was maintained and the business organized in such a way that our customers could still be served, taking into account the legal framework conditions. In Ukraine in particular, continuing business uninterrupted, under war conditions, was a huge challenge for our employees. Our hope is that the war against Ukraine will end soon and that normal, peaceful conditions will be restored for our customers, employees and the business of the SBU.

Frank Janas
Head of the Construction Equipment Eurasia strategic business unit

SALES

in millions of euros / in accordance with IFRS

2023: **309**

2022: **525**

EMPLOYEES

year's average, including trainees

2023: **965**

2022: **1.677**

SHARE

of Group sales (2023) [1)]

[1)] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

CONSTRUCTION EQUIPMENT EURASIA

Review

Russian's ongoing war against Ukraine dominated life and weakened the economic output of this strategic business unit. In conjunction with the tenth European Union package of sanctions against Russia, and the decision by our manufacturing partner Caterpillar, Zeppelin decided to completely withdraw from the construction and mining business in Russia, and as such to close almost all branches and terminate almost all employees. Connected with this withdrawal, sales of commodities and fixed assets as well as resales of machines located before the border were actioned with considerable price discounts and had a significant effect on the Group's result.

In Ukraine, the business had to be organized amid the impact of the war and under the constant risk of destruction. It was possible to secure the organization, retain the majority of jobs and generate sufficient cash flow to maintain business operations.

Despite the immense challenges, considerable order successes were achieved in these regions during a difficult 2023 financial year: A contract with a mine operator in Uzbekistan was concluded for 28 Cat 793 off-highway trucks, and further projects were initiated.

In Armenia there were indications of successful development, with the completion of a long-planned conversion from mining dealership to full-stack dealership. Large-scale orders for motorway construction were also completed. In Ukraine too, mining deliveries and orders with key customers in bridge and road construction contributed to sales.

Outlook

The greatest hope we hold for 2024 is that the Russian war against Ukraine will end. Connected to this is the hope that employees, customers and partners will be able to peacefully return to a normal life. For the Armenia region, it is important that the conflict with Azerbaijan does not escalate further. Zeppelin expects political stability in the three Central Asian countries that Zeppelin is active in.

These expectations are fundamental prerequisites for the stable continuation of the business and the future possibility of participating in the development of the region's enormous resources and growing again despite increasing Asian competition in the region.

The strong commitment we have to Ukraine and the local company there is unwavering, with operations and preparation for the future being driven forward. Zeppelin will continue to support employees and their families in the war zones and will do everything to be prepared for future reconstruction.

In Uzbekistan, we see good opportunities for expanding the business due to the advancing course of government reform, the consistent improvement in the investment climate and numerous government construction projects. Extensive expansion investments are underway, particularly in the mining sector. In this area, Zeppelin Uzbekistan can successfully participate in major projects with productive Caterpillar technology as well as first-class product support, technology transfer and training for customer personnel. In 2024, extensive infrastructure projects are also expected to connect remote parts of the country to a modern road network.

In Armenia, the continuation of state road-building programs is expected, and Zeppelin Armenia is already very intensively involved with these. New opportunities are also opening up in mining. Key customers are planning investments and have tendered projects. The agricultural machinery business also continues to develop successfully.

Long-term and very close partnerships with manufacturers of world-leading brands, as well as extensive investments by our customers – particularly in Armenia and Uzbekistan, but also in Ukraine – provide grounds for an optimistic outlook in respect of Zeppelin's agricultural business as well as meaningful diversification in the region.

RENTAL

With customized solutions in the areas of machine and equipment rental, temporary infrastructure and construction logistics, the Rental strategic business unit ensures the safe and efficient execution of projects in construction, industry, manual trades and events. More than 75,000 machines and devices for rent, from the global market leader Caterpillar and other renowned manufacturers, guarantee maximum availability, quality and range. Temporary infrastructure provides needs-based concepts in site and traffic guidance, energy and construction water supply, power generation and air conditioning technology as well as customized modular room solutions – from planning, installation, through to ongoing support from a single source. Through the overarching planning and coordination of all secondary processes on a construction site, construction logistics ensures the framework conditions for smooth processes as well as adherence to deadlines and budgets. Zeppelin Rental is represented in six countries with over 160 rental stores, competence centers, and operating facilities, and is one of the largest equipment rental companies in Europe.

"First and foremost I must thank our fantastic team. Even in the current challenging market environment, they always find the best solutions for our customers, meet their needs as partners and have made 2023 a successful year. Thank you so much for your incredible dedication! And our team is constantly growing: With the successful acquisition of CP, we are not only gaining a strong market position in Denmark, but also welcoming many new colleagues to the Rental team. Together we have what it takes to develop sustainably and prepare for the future."

Arne Severin

Head of the Rental strategic business unit

SALES
in millions of euros / in accordance with IFRS

2023: **739**

2022: **666**

EMPLOYEES
year’s average, including trainees

2023: **2.219**

2022: **1.982**

SHARE
of Group sales (2023) [1]

18,3 %

[1] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

RENTAL

Review

The Rental strategic business unit can look back on a very successful year – despite a great deal of market adversity. Declining capacity utilization in the construction industry has put increased pressure on prices. The costs of market entry in Scandinavia and high interest rates put additional strain on earnings. Nevertheless, with its diversified portfolio Rental was able to generate sales above the previous year's level, and once again made a significant contribution to the good Group result.

In 2023 the Zeppelin Group acquired CP ApS, one of the leading rental companies in Denmark. With this acquisition, the Rental SBU is further expanding its international activities. As a specialist in construction site equipment, CP ApS primarily rents modular room systems, construction machines and construction equipment, and is active in construction site management and planning. The acquisition will benefit our customers in Denmark thanks to a significantly expanded range of products and services from a single source.

The acquisition of Bauhof Service GmbH in Germany strengthens the capacity of the Rental SBU in the area of energy, climate and water. Bauhof Service GmbH primarily specializes in setting up and supporting electricity and water supplies to construction sites, using its own staff and technology. This acquisition offers the opportunity for sustainable growth in a business segment that is already noticeably affected by labor shortages.

The Rental strategic business unit has been offering low-emissions technologies for more than ten years. However, in the area of medium-sized and large construction machines, we are still some distance away from offering sustainable products aligned with market requirements. Following the approval of HVO in commercial vehicles, Zeppelin Rental has been relying on this alternative fuel since 2023. It has a carbon footprint that is up to 90 percent smaller than diesel, thus facilitating the sustainable implementation of construction projects.

Zeppelin Rental Germany underwent its third international sustainability rating by EcoVadis, achieving gold certification for the first time. Zeppelin Rental is thereby demonstrating its continuous improvement in the areas of occupational safety, sustainability and environmental protection.

The Rental business unit was once again a winner at the European Rental Awards. This time it was in the "Best Initiative in People" category, which recognized the diversity of recruitment and retention campaigns carried out. Zeppelin Rental Austria also won the "Solid Supplier Award" in the Construction Logistics and Rental category for the seventh time in a row, meaning it continues to be the best supplier in the country.

Investments in the future included the opening of the 15,000-square-meter service center and training center in Weimar and the move to the new rental store in Kalsdorf near Graz. Both contributed to the expansion of the site network and strengthened performance.

Outlook

In Europe, a sustained decline in construction activities is expected. The housing sector will continue to show the biggest slowdown in overall growth, while investments in public construction and infrastructure projects are likely to prop up demand for rental and construction logistics services in the future. Despite this continuing challenging environment and complex framework conditions, the Rental business unit is in an excellent position and has a positive outlook on 2024.

Because of its highly diversified portfolio that has high relevance for other sectors such as industry and events, as well as a broad customer structure, the business unit is able to compensate for external influences and market fluctuations in individual areas, and to exploit growth opportunities.

The strategic focus will continue to be on the further development of the integrated service portfolio and expanding the international market presence. In 2024, this will include successfully completing the integration of CP ApS, the associated strengthening of the market position in Denmark and the consolidation of the market position in Sweden.

Sustainability and digitalization, as well as further increasing employer attractiveness, are the key topics for ensuring long-term success. In order to drive forward the transformation of the construction industry together with customers and make a contribution to climate-neutral construction sites with sustainable solutions, the portfolio will be further expanded across all business segments. Prioritizing maximum customer benefit, investments will be made in the development of digital products and efficient services, and added value will be generated through the intelligent use of data. Numerous initiatives and attractive offers in the recruitment and retention management area will contribute to further strengthening the employer brand.

POWER SYSTEMS

Zeppelin Power Systems is a leading provider of drive, propulsion, traction and energy solutions. Since 1954, the business unit has been a distribution and service partner for Caterpillar engines. More than 1,000 qualified employees provide highly efficient, durable customized system solutions with comprehensive services for industrial and marine applications, the oil and gas industry, rail vehicles, as well as power and heat generation. Digital products, system components and ready-made solutions for treating ballast water complete the portfolio.

"The key is a corporate culture which takes a clear stance on topics such as sustainability and social responsibility, one which puts customer benefit at the heart of what we do and does right by the people who give their best every day – the people in our company. All of this is brought together in our new 2030 self-image and our mission for the future: With our customized drive, propulsion, traction and energy systems, we are shaping the technological transformation towards decarbonization and digitalization.

Eva-Maria Graf

(Interim) Head of the Power Systems strategic business unit

SALES
in millions of euros / in accordance with IFRS

2023: 461

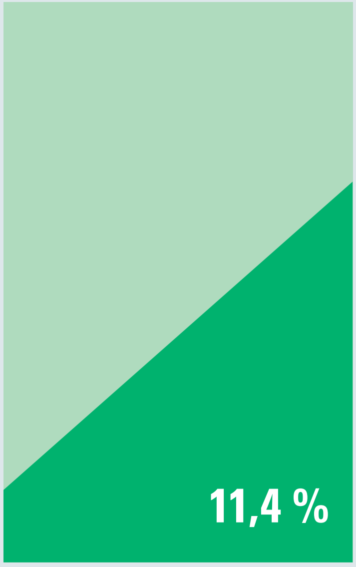
2022: **442**

EMPLOYEES
year's average, including trainees

2023: 1.023

2022: **1.041**

SHARE
of Group sales (2023) [1)]



[1)] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

POWER SYSTEMS

Review

Zeppelin Power Systems benefited from high incoming orders for engine overhauls and repairs in 2023, as well as growing new business in large-scale heat pumps and grid backup systems. In addition, the international megayacht service was the fastest growing market – very positive developments were recorded in both Germany and Denmark.

Nevertheless, supply chain issues and limited availability of materials affected Zeppelin Power Systems' business. The loss of business in Russia and Belarus, however, was almost balanced out by growth in European countries.

Zeppelin Power Systems met its customer at all the industry-relevant trade fairs, such as Baltexpo, STL Kalkar and Agritechnica. Zeppelin Power Systems was able to present the new 13-liter Cat C13D diesel engine for its European debut. The Cat battery pack was also exhibited at the Zeppelin Power Systems trade fair stand. Currently still in the development phase, this modular system, which will later be combined with electric engines, will make a decisive contribution to electrification and offer solutions for decarbonizing our applications.

With the opening of the service sales office in Ulm, Zeppelin Power Systems is strengthening its presence in southern Germany and ensuring even better accessibility for our customers. Caterpillar recognized the quality of Zeppelin Power Systems' service with its Platinum Certificate in 2023. This is Cat's highest award for dealers and certifies a high level of spare parts and service expertise.

Outlook

In 2024, Power Systems will continue its clear focus on digital solutions, alternative fuels, drive, propulsion, traction, and energy systems, and service excellence. In the area of sustainable energy systems, we will deploy fuel cell technology and large-scale heat pumps, which play an important role in the decarbonization of heating networks. As well as already-implemented combined heat and power projects, in which large-scale heat pumps are used primarily to increase overall system efficiency, we are currently investigating additional application areas in the high-temperature range and in waste heat utilization in industrial plants.

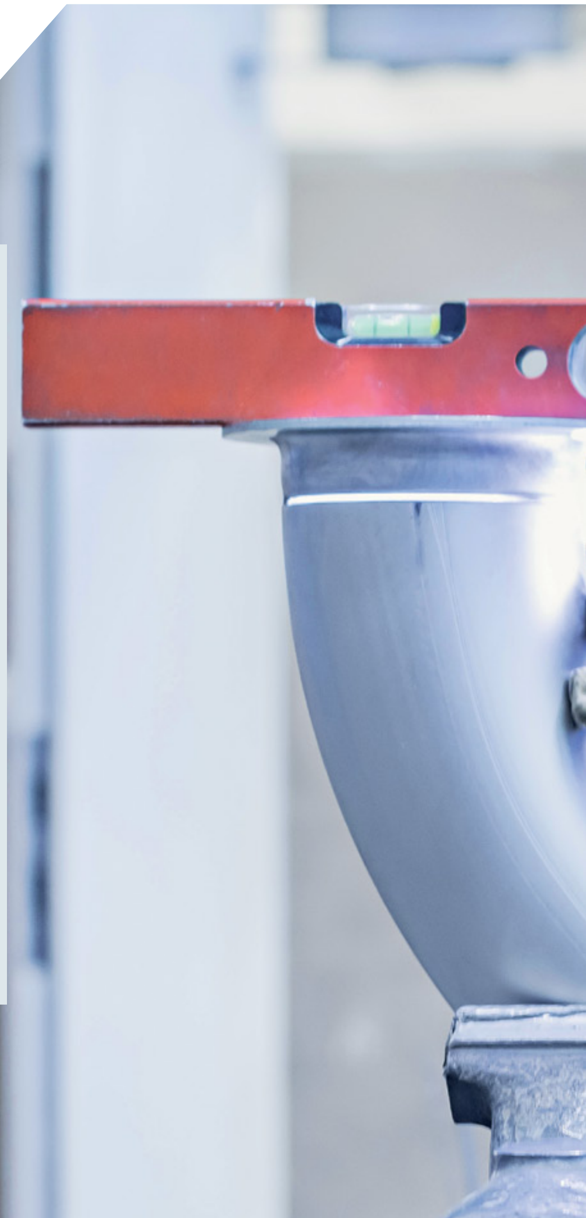
Power Systems is building up personnel and expertise in the future markets of hydrogen and PEM fuel cells in order to be able to develop and test generator sets and systems (including engine-based ones). This will lead to prototypes and test facilities for a wide range of applications.

Furthermore, there will be a particular emphasis on the new mission statement, which describes the self-image of Power Systems. The underlying strategic pillars determine the direction of Power Systems, now and in the future: “Sustainability and decarbonization”, “Future orientation and digitalization”, “Flexibility and organizational development” and “Contemporary leadership, inclusion and diversity”.

The challenges for 2024 are the dynamic price developments on the market and the continued uncertain global political situation. The service division of Zeppelin Power Systems, which will continue to be expanded in 2024 as a supporting pillar of the company, will increasingly have to deal with the challenge of a lack of skilled workers.

PLANT ENGINEERING

The Plant Engineering strategic business unit specializes in the design, construction, and technological upgrading of industrial plants for storing, conveying, mixing, dosing, and weighing high-quality bulk materials and raw materials. With around 1,800 employees worldwide, Zeppelin Systems provides solutions for customers in the plastics, chemicals, rubber, and tire industries. Customers in the food industry also value our many years of technological know-how and experience in delivering turnkey solutions. From plant planning and project implementation to after-sales service including process optimization – Zeppelin Systems is an integrated solutions provider, which delivers complete solutions from a single source. Every plant is characterized by customized features to meet specific customer requirements, smart automation solutions, and comprehensive service. With roots in Germany and global operations at more than 20 sites around the world, the business unit makes industrial-scale product testing available to customers in its own technology centers, thereby facilitating the assessment and sustainable optimization of customers' plant design. Zeppelin Systems also develops and manufactures mechanical and plant engineering components that can be seamlessly integrated into third-party systems.



"In 2024 we will turn our focus to innovation and future technologies. The top priority is expanding business in the areas of plastic and tire recycling as well as production of battery masses. I am proud that we have successfully executed mega-projects in the toughest regional and climatic conditions. Going forward, we will expand our position as a leading system provider for sustainable solutions in the rubber and tire business together with international partners. We Create Solutions!

Dr. Markus Vöge

neering strategic business unit

SALES

in millions of euros / in accordance with IFRS

2023: **518**

2022: **493**

EMPLOYEES

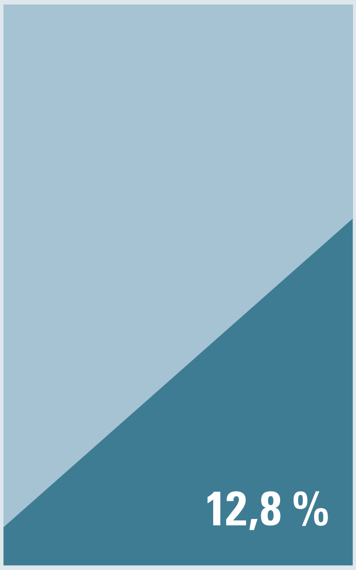
year's average, including trainees

2023: **1.884**

2022: **1.699**

SHARE

of Group sales (2023) [1)]



[1)] Here: Total SBU sales. For calculation reasons, rounding differences of one unit (€, % etc.) may occur in the tables and charts.

PLANT ENGINEERING

Review

The markets in which Plant Engineering is active saw stable development in 2023. Sales continued at a high level due to high order backlogs, primarily from China and the USA. This enabled us to successfully weather the geopolitical crises and the impacts of high inflation and energy prices. However, demand has diminished and rising credit interest rates have led to customers postponing orders and had a particularly negative impact on the willingness to invest in major projects.

There is high market demand for recycling solutions in the plastics and tire sector, and mixing solutions for the preparation of input materials for the production of batteries are also in demand. As such, Zeppelin Systems is involved in the construction of battery pilot plants in the field of dry coating technology for customers in India and South Korea. Here, materials for producing the battery mass are mixed in a dry process using innovative solutions from Zeppelin. As one of the few companies in this market, Zeppelin Systems is able to safely and consistently process the sometimes explosive and toxic ingredients. With a newly developed dosing unit, Zeppelin Systems is closing a market-relevant and process-critical gap in the calendering of battery mass.

Zeppelin Systems founded the Zeppelin Sustainable Tire Alliance together with international partners. It seeks to make tire production more sustainable along the process and value chain and to promote recycling of used tires on an industrial scale – with Zeppelin Systems acting as a system integrator of sustainable technologies. Alliance members include a Polish company, which in 2015 built Europe's largest pyrolysis plant for used tire recycling. In the context of this cooperation, Zeppelin Systems secured the engineering order for a new tire recycling plant in Poland in 2023. From process engineering to the final planning of the plant, Systems supplies important key components from a single source, as the main responsible engineering partner.

Zeppelin Plant Engineering is also successfully active in the field of carbon capture. Direct Air Capturing (DAC) removes CO_2 directly from atmospheric air. Zeppelin Systems is supplying a subsystem for a customer in the USA, in which the auxiliary materials required for this purpose can be safely and non-destructively conveyed and stored – a flagship project with high-profile impact.

Project activities in the area of plastics production facilities are concentrated in the Middle East. Overall, demand remains stable – despite increased societal concerns about the use of plastic. In light of these concerns, plastic recycling continues to gain momentum globally. This opens up new business segments for Zeppelin Systems with existing customers. The food sector experienced high competitive pressure this year. Nevertheless, multiple orders were won from one of the largest animal feed producers worldwide.

In order to continue offering the best solutions in plant engineering, Zeppelin invests in training, studies and the promotion of young talent. The effects of demographic change are particularly noticeable in segment-specific key positions (especially in the technical sector). As such, special attention is given to the development of attractive career paths and the transfer of knowledge among employees.

With the introduction of the Salesforce Sales Cloud at all German sites – and planned implementation in all international subsidiaries – plant engineering is accelerating and optimizing its sales. As the first globally used sales platform for the plant, product and after-sales business, it enables the recording and evaluation of all customer touchpoints worldwide.

Outlook

The year 2024 opened with a high order backlog for plant engineering, which must now progress to efficient and profitable processing. There is a continued need to concentrate on performance, with sales expected to be in line with the previous year. One of the focal areas is service, which will be further developed and expanded with specific solutions and optimization offers.

For plant engineering, there is potential in utilizing international synergies and therefore in the growth of the subsidiaries. Growth is expected in the markets of the future of plastics, tire and battery recycling as well as in raw material processing for battery production. There is a large number of projects in the pipeline, but they face geopolitical crises and continued high inflation. These will continue to be dominant factors in 2024, which may lead to sustained high cost and competitive pressures while at the same time holding back investments.

REALIGNMENT OF THE CONSTRUCTION EQUIPMENT SBUS

With its division into strategic business units, the Zeppelin Group aligns its activities with the heterogeneous business models of the respective regions and their individual market requirements and customer needs. As a result of Russia's war of aggression against Ukraine and the resulting withdrawal from Russia, requirements in the relevant regions changed and necessitated restructuring.

In order to continue to offer market-oriented solutions, in mid-2023 management decided to realign the existing Construction Equipment strategic business units. The previous three Construction Equipment SBUs (Central Europe, Nordics and Eurasia) have been combined into two units: Construction Equipment Germany/Austria and Construction Equipment International.

These two SBUs bundle together the business activities and the associated regions, strategically uniting the corresponding national companies. Besides Germany and Austria, the Construction Equipment International SBU is made up of the construction and agricultural machinery business in Armenia, Denmark, Poland, Sweden, Slovak Republic, Tajikistan, Czech Republic, Turkmenistan, Ukraine and Uzbekistan. Russia is also part of the Construction Equipment International SBU, and following the discontinuation of all activities in the construction machinery business, the focus there will be on the remaining agricultural machinery distribution and service.

"Customers in the German and Austrian markets have particularly high requirements in terms of technology, comprehensive service and spare parts logistics. For the international markets customer group, the mining and oil and gas industries, along with machine size requirements, customer-oriented service facilities and technical equipment are decisive," says Fred Cordes, COO of Zeppelin GmbH.

The new structure also supports the harmonization of processes, applications and digital solutions in close coordination with Zeppelin's partner Caterpillar. Adjusting to two Construction Equipment SBUs will also result in simplified communications, balanced sales and employee numbers, as well as less complexity. The realignment of the SBUs did not affect the shareholder structure of the national companies. Country responsibility in the "Zebra companies" will be retained.

After approval by the Supervisory Board of Zeppelin GmbH of this structural change and the necessary changes in responsibilities at an extraordinary meeting, the realignment came into force at the beginning of July 2023. Targeted succession planning made it possible to fill all positions from our own ranks. For customers and business partners, this ensured continuity at the highest management level as well as a successful and smooth transition.

The new organizational structure will result in the following personnel changes:

- **Holger Schulz,** most recently Managing Director of Zeppelin Russia OOO, becomes Head of the Construction Equipment Germany/Austria SBU and Chairman of the Management Board of Zeppelin Baumaschinen GmbH.

- **Stanislav Chládek,** Managing Director of Zeppelin CZ s.r.o., becomes Head of the Construction Equipment International SBU and Chairman of the Management Board of Zeppelin International AG

- **Fred Cordes,** previously Chairman of the Management Board of Zeppelin Baumaschinen GmbH, handed over chairmanship of the Management Board of Zeppelin Baumaschinen GmbH to Holger Schulz on August 1, 2023.

As COO and a member of the Group Management Board, Fred Cordes is responsible for the Sales, Marketing and Service departments. In addition, he assumes responsibility for the Construction Equipment Germany/Austria SBU and the Construction Equipment International SBU at the holding level.

To enable continuity and maintain transparency during the transition period, the reporting system and therefore the management concept were adapted to the new structure on January 1, 2024. As such, the 2023 Annual Report is drafted using the former SBU structure.

ORDER SUCCESSES

Construction Equipment Central Europe

Detecting and deactivating munitions in the Baltic Sea is the core business of the company Eggers Kampfmittelbergung. For this purpose, the company from Hamburg received a new flagship piece of equipment from the Zeppelin Hamburg branch, in the form of the Cat 374 with LRE boom. Because the combination carrier unit was not available ex works in conjunction with the long-reach excavator boom, the cross-company Customizing department at Zeppelin initiated a conversion of the boom with foamed excavator arm. In future, the intention is to use Cat® Command, a precursor to autonomously driven construction machines, to control the construction machine with the Eggers Octopus Tool (EOT) i500 – a proprietary development by the weapons specialist EOT i500 – using only monitors, for potential hazards without a direct line of sight.

Construction Equipment Nordics

Zeppelin Denmark recorded a major order from Munck Denmark for nine excavators of different sizes, five 906 wheel loaders and two 772G dump trucks. In addition Boliden, the internationally active Swedish metals group with its own mines and huts, signed a contract with Zeppelin Sweden for a Cat 7495. With an operating weight of more than 1,300 metric tons, this electric rope shovel is the largest machine ever sold in the Zeppelin Group.

Construction Equipment Eurasia

Zeppelin Armenia also had another very successful financial year. One highlight here was the newly strengthened business relationship with the customer Kapavor, in the context of which the company delivered Cat and SEM equipment worth 4.5 million euros. Further contracts relating to agriculture equipment were also signed and some of the machines have already been delivered to these customers.

Zeppelin Ukraine was able to conclude an order with its major customer Autostrada, for several hydraulic and demolition excavators as well as a CAT 836K. The compactor is the first of its kind to be sold in Ukraine.

It was also possible to win back the important mining customer Arcelor Mittal, to which four Cat 784 dump trucks worth 8 million US dollars were supplied – more than 13 years after the last delivery.

Rental

The Fehmarn Belt Fixed Link is the largest infrastructure project in Northern Europe, and Zeppelin Rental is contributing to it as an important service partner. The around 18-kilometer-long submerged tunnel will make passenger and freight transport between Germany and Denmark faster, more climate-friendly and less stressful. Because of the scope of the project, a temporary rental store was erected on the German side in the immediate vicinity of the construction site. A cross-section of Zeppelin Rental's broad portfolio is in use there, including vehicles, floodlight masts, work platforms, vehicles, construction machines, tankers and construction vehicles. A project site was established on the Danish side in Rödby some years ago.

Power Systems

In 2023, Zeppelin Power Systems was responsible for the entire planning and implementation of a large-scale heat pump system for Stadtwerke Duisburg in one of the largest IKWK (innovative combined heat and power) projects – from civil and structural engineering to plant engineering. The power generation plant is the largest IKWK plant connected to a wastewater treatment plant in the whole of Germany. Zeppelin Power Systems also acted as a general contractor for the planning, construction and commissioning of a turnkey CHP plant for heat and electricity generation on behalf of a Berlin district heating plant. As well as construction of this combined heat and power plant based on a Cat G20CM34 generator set, a full-service maintenance contract was also concluded.

Plant Engineering

In the past year, Plant Engineering received a major order from a large petrochemical customer, for two new LDPE (EVA) plants in China, respectively with a capacity of 300,000 and 400,000 metric tons per year. LDPE (EVA) is a special plastic which has product characteristics that require consideration, particularly when designing pneumatic conveyor systems and silos. This plastic is primarily used for solar cells and the textile industry. The order is valued at an eight-figure sum. Commissioning of the plant is planned for mid-2025. Zeppelin Systems also recorded numerous orders in the single- to double-digit million range in 2023 with premium customers in the rubber and tire industry as well as the food and beverage industries. Future-oriented orders from the battery sector are also on the books.

FAREWELL TO MICHAEL HEIDEMANN

Grafen tip their hats to more than three decades of service and remarkable management performance: At the end of June 2023, Michael Heidemann left the Zeppelin Group for a well-deserved retirement – though not without an appropriately festive evening event. With customers, partners, companions, friends and family invited as well as colleagues, the party was held at Motorworld Munich.

Under the motto "Beschwingte Momente voller Genuss" (Lively moments full of enjoyment), the Zeppelin Group bid farewell to Michael Heidemann with a varied and lively program of musical and culinary highlights. "Michael Heidemann has spent decades decisively shaping the Group and our business success with his people-focused, value-oriented and strategic management style. For me personally, he was not only an excellent sparring partner and colleague, but also an important trusted figure," said Peter Gerstmann, Chairman of the Group Management Board.

After training as an industrial business management assistant and working as a clerk in Sales, Michael Heidemann got off to a quick start at an early age: At the age of 30, he was appointed as the youngest branch manager and member of the Management Board of Tecklenborg in Werne. In 1992, he joined Zeppelin – which was still operating under the name Zeppelin Metallwerke GmbH at that time – as branch manager in Oberhausen. After four successful years there, he was promoted to sales manager for Germany, a position that included taking over and leading the New Company Structure project at Zeppelin. His main task was to set up a new sales and service structure – made up of the sales and service centers and the associated branches, in a structure which has proven its value ever since.

He was a member of the Management Board of Zeppelin Baumaschinen GmbH from 1999 and served as its chairman from 2008. Heidemann was appointed to the Group Management Board in 2000, where he has been Vice Chairman since 2010. He left his management position at the largest subsidiary of the Zeppelin Group in 2017 and has been Chairman of the Supervisory Board of Zeppelin Baumaschinen GmbH since then. Michael Heidemann will also continue in this position beyond 2023.

As Deputy Chair on the Group Management Board, he was responsible for the Sales, Marketing and Service departments as well as the Construction Equipment Central Europe, Construction Equipment Nordics and Rental strategic business units until December 2022. Fred Cordes, who already took over his new area of responsibility as Managing Director of the Group Management Board at the beginning of 2023, has now succeeded Michael Heidemann.

"The name says it all: Our own 'Mister Construction Equipment', also known as Michael Heidemann, stands for the construction equipment business at Zeppelin like no one else. With his efforts he has made a significant contribution to the success and further development of the Group. On behalf of the entire Group Management Board and our employees, I express our thanks and appreciation for his outstanding management performance and enormous loyalty to all employees, business partners and customers over the years. I wish him all the best for his upcoming retirement," said Peter Gerstmann.

FINANCE TARGET PICTURE 2026

CFO Summit 2023

A shortage of skilled workers and rising regulatory requirements are increasingly presenting challenges for the company's administrative processes. Zeppelin is proactively reacting to this development with the Group-wide "Finance Target Picture 2026" program, and making use of technological innovations to harmonize and automate processes. This will reduce time-consuming manual activities and so create more capacity for employees to perform value-adding tasks. The transformation of the Zeppelin Group's finance organization has been driven by the newly created "Finance Transformation & Governance" unit since the beginning of 2024. This shows that Zeppelin is equipping itself for the future with modern, harmonized financial processes and more efficient tools.

Projects from the following four pillars are being carried out under the "Finance Target Picture 2026" program: Employees and Culture, Processes, Organization & Governance and Data & Technology. Zeppelin will implement these transformation projects in three phases: The Structure & Governance phase was launched in 2023, and focuses on basic work and clarification of responsibilities. In 2024, the focus will be on harmonizing processes and data objects, with automation in the spotlight in 2025. The finance unit has a clear mission: To provide excellent support to Zeppelin's operational business and to manage finances optimally.

TRADE FAIRS & EVENTS

Zeppelin was present at numerous trade fairs in 2023

For Zeppelin Power Systems, these were the Baltexpo in Gdańsk and Shipping Technics Logistics in Kalkar, Germany. At these events, Power Systems presented its AEC (Active Equipment Connect) for maximum machine availability, demonstrating how easily performance data can be monitored and possible repair requirements detected at an early stage. The new Cat C13D diesel engine was also presented at Agritechnica 2023, the world's leading trade fair for agricultural technology. Zeppelin Construction Equipment had a busy trade fair schedule. Among others, it attended steinexpo, NordBau and Agritechnica to present products, services and innovations such as the European premiere of the Cat 988 GC and Cat® Command – the precursor to autonomous driving. Zeppelin presented a world premiere at Agritechnica: As a special highlight for trade fair visitors, the new ZL60T telescopic handler and three other loaders from the cooperation with the new manufacturer partner Atlas Weyhausen were on show.

Plant engineering took part in numerous trade fairs both nationally and internationally. The company celebrated a premiere at the renowned Battery Show in Stuttgart, Germany, with its solutions for material handling and mixing technology for the preparation of raw materials for the manufacture of batteries. The company was jointly in attendance with the company Magdalena Kitzmann for the first time at Nuremberg's Powtech, the trade event for process engineering, analytics and the processing of powders, bulk materials, fluids and liquids. Magdalena Kitzmann presented process engineering solutions in plastics processing with innovative materials handling components and mixers from Zeppelin.

Zeppelin Rental went directly to the customer on its 2023 construction site tour. Together with sales colleagues, the promotion team stopped at more than 250 construction sites in over 100 cities and municipalities. The nine-week tour was focused on in-person dialog. The construction site tour is intended as a way for Zeppelin Rental to thank everyone who is supported by the diverse solutions in their everyday work. At the same time, the tour was also a good starting point for talking about upcoming projects and possible customer needs. With trade fair appearances at events such as at NordBau, Schulbau, Deutscher Straßenausstattertag and Data Center World, Zeppelin Rental also catered to its various target groups and demonstrated the diverse application possibilities of its broad portfolio.

HR events ensure visibility

In 2023, the Zeppelin HR department initiated and attended several events with a view to positioning itself as an attractive employer on the candidate market.

Every year the One Young World Summit is an inspiring event giving young talented individuals the opportunity to exchange ideas and pursue answers to the greatest challenges of our times. This year, over 2,000 young talents from more than 190 nations came together in Belfast. The Zeppelin Group was represented by two delegates for the first time.

Team spirit, fair play and cohesion are hugely valued at Zeppelin – and this year's Zeppelin Cup once again demonstrated as much in a very impressive manner. With 21 teams, 300 Zeppeliners and many enthusiastic spectators, the internal football tournament offered renewed proof of excellent cooperation, even beyond the workplace.

ZEPPELIN
GROUP STRATEGY 2030

Climate change, digitalization, the skilled workers shortage, inflation and geopolitical conflicts – the challenges facing Zeppelin are diverse. The key question: Is Zeppelin on the right path? What measures are the companies implementing and what Group challenges are relevant across different SBUs? The business areas devised answers to these questions in a regularly recurring, strictly defined strategy process. SBUs and central functions were tasked with critically reviewing their strategies and adapting them to the challenges at hand. To do so, potentials and risks were identified and strategic initiatives (must-win battles) updated or redefined with regard to the strategic period up to 2030. The results were presented and discussed at the Group Strategy Meeting in Hamburg at the beginning of September 2023. The updating of the SBU strategies and must-win battles led to a calibration and refinement of the Group's existing GPS strategy.

The foundation on which the Group's success is built continues to be the GPS strategy, with its pillars of growth (continuous growth), performance (outstanding performance) and stability (sustainable stability).

The "Growth" pillar has had "future-oriented products and technologies" added to it, to meet changing and increasing customer needs. In addition, there is a strategic focus on tapping into new future markets for the recycling of raw materials, electromobility, alternative energy generation and the expansion of digital service models. The most significant lever for "performance" is the qualification and motivation of employees, in order to have the best team on board in Zeppelin's industries. The aim is to enhance operational excellence with efficient and digital processes and applications, so as to strengthen competitiveness and secure long-term profitability. The values-based corporate culture, as well as strong international partnerships and networks, continue to form the core of the "stability" pillar. To be able to appropriately facilitate the growth plans, efficient finance, IT and CSR processes are also an important prerequisite. Moreover, there are three challenges which all the SBUs are facing to the same extent: Digitalization, people resources and sustainability – these can only be resolved with cooperation between all SBUs and the central functions.

The strategy was rolled out Group-wide by means of numerous communication measures. The measures taken in the SBUs are now being reported on an ongoing basis, by continuously monitoring the progress of the agreed must-win battles.

PRODUCT INNOVATIONS

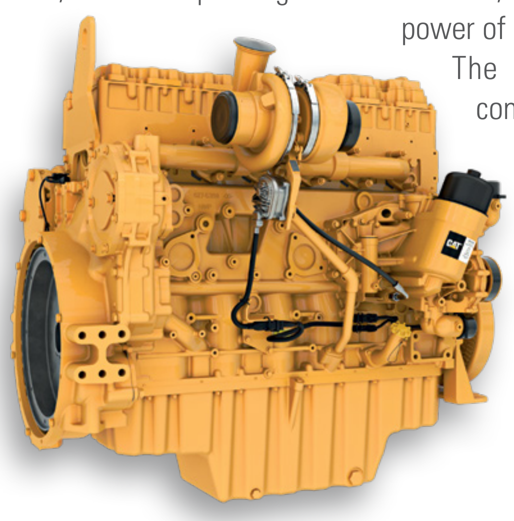
Plant Engineering is implementing a pioneering project in the field of carbon capture. Direct Air Capturing (DAC) removes CO_2 directly from atmospheric air. Zeppelin Systems is supplying a subsystem for a customer in the USA, in which the auxiliary materials required for this purpose can be safely and non-destructively conveyed and stored. To prepare for this, tests were successfully carried out at the technology center in Friedrichshafen.

Zeppelin Systems is part of the GUTBatt and GIGABAT research projects aimed at developing suitable processes for preparing raw materials for battery production. GUTBatt is a project funded by the Federal Ministry of Education and Research, in which the process for dry coating of electrodes is further developed. Zeppelin Systems supports the project with its expertise in mixing and dosing battery masses in the drying process and also provides the consortium with the necessary machine technology. GIGABAT is a project funded by the European Union. Zeppelin Systems is further developing raw material handling for gigafactories and has a key role in improving the use of raw materials. As part of this process, Zeppelin Systems is developing a track and trace process to make it possible to trace battery masses and their ingredients after the manufacturing process.

As the digital transformation continues, the creation of customer added value is a top priority for Zeppelin Rental. As a registered energy supply company, Zeppelin Rental also supplies construction sites, commercial enterprises and properties with electricity. With a new energy portal, the company provides its customers with a digital management tool for easier order processing and contract management. The portal enables an efficient digital process for the transparent management of energy delivery. In addition to the simple registration of new delivery points and the preparation of meter registration, customers also benefit from clearly displayed contracts, invoices and consumption data.

Quick, easy, digital: Since 2023, customers have been able to conclude legally binding rental contracts with Zeppelin Rental with just one click. After submitting a request, they receive a customized offer by email, which can be accepted straight away using an intuitively designed web interface. This enables significant savings in terms of time and resources.

Zeppelin Power Systems presented the new Cat C13D diesel engine at Agritechnica 2023, the world's leading trade fair for agricultural technology. Having already been introduced to the US market by Caterpillar at the beginning of the year, Agritechnica was the engine's first launch for the European engine market. The Cat C13D brings to market a new engine that is more efficient, more compact and quieter. With an output of 40 kW per liter, the Cat C13D is the leader in its class and, with an output range of 340 to 515 kW, it combines the power of three engines. The possibility of consolidating the



machine offering with a single engine has been well received by our customers, as it makes service, as well as procurement and stocking of spare parts, much easier. Even as we are going through the current energy transition, diesel and combustion engines will continue to be used in off-highway segments. The new Cat C13D offers new possibilities here. Lower fuel consumption, more power, higher torque and a wider range of environmental and altitude properties enable optimized use of resources and as such, more sustainable use.

Zeppelin Construction Equipment was able to offer its customers an expanded product portfolio this year thanks to its manufacturer partner Caterpillar. For example, the new Cat 352 tracked excavator with straight boom was made available for demolition and excavation work. Thanks to electro-hydraulic pilot control, it is now equipped as standard with technologies for greater versatility, accuracy and efficiency in demolition and excavation work. The new-generation Cat 950 and 962 wheel loaders offer premium performance that increases efficiency, with easy-to-use technologies such as constantly full bucket-filling. This means a productivity increase of up to ten percent compared to the previous models. At the same time, service intervals have been pushed back, which has an impact on maintenance costs, which are up to 30 percent lower.

In the summer, Zeppelin Construction Equipment Germany launched the latest version of the Visionlink 3.0 fleet management solution, together with Caterpillar, and was one of the first dealers worldwide to be certified by Caterpillar for Cat® Command – a remote control system for construction machines. At the same time, the product portfolio was expanded with four loaders in the class up to 6.5 metric tons. This wheel loader series, with product designation ZL (Zeppelin Loader), was developed in cooperation with the company Atlas Weyhausen.

Zeppelin Lab: Digitalization of the construction industry through innovation and ideation

Zeppelin Lab GmbH (Z Lab) is the incubator and innovation laboratory of the Zeppelin Group. The akii (digital access management for the construction site) and zamics (digital equipment management for the construction industry) business models are currently being developed in Z Lab. Both ventures entered into new project partnerships in 2023, focused on sales and expanding the scope of functions and the hardware portfolio. The aim is to scale up the ventures in 2024. The asset-free rental platform klickrent, which emerged from Z Lab, successfully achieved its planned scaling-up path and doubled its 2022 figures with sales of over 20 million euros. This was the first corporate start-up from Z Lab to successfully establish itself on the market. In 2023, Z Lab continued to focus on developing innovative business models for digitalizing the construction industry, and organized several industry and expert events within the Open Innovation approach. Z Lab also managed internal offerings and training courses on the topic of innovation and idea management.

GROUP
IT SERVICES

The Strategic Management Center Group IT Services ensures the standardization and overarching implementation and use of IT solutions that meet the requirements of the SBUs, as well as the exploitation of Group-wide synergies. Processes and systems to meet the needs of the specialist departments are standardized through intensive collaboration. This is done on the basis of design requirements and within the framework of the relevant customer expectations. The department also acts as a consultant and service partner as well as an initiator in the Group's digital and IT environment.

In order to optimally position itself for the Group's growing requirements, the Strategic Management Center underwent organizational restructuring in 2023. The new structure is based on external and internal factors such as increased requirements for operational reliability and scalability. It was also possible to reduce complexity in the structure and create standards as well as clear interfaces. The Strategic Management Center Group IT Services is now subdivided into the areas of Strategy & Architecture, Data Management, Business Applications and Infrastructure & Operations.

> “THE SELECTED SOFTWARE IS ULTIMATELY JUST A VEHICLE – WHAT REALLY MAKES THE DIFFERENCE IS THE UNDERLYING DATA AND PROCESSES, AS WELL AS THE SUITABLE SOLUTIONS FOR OUR PRIMARY BUSINESS.”

Arife Baltaci

Chief Digital Information Officer

The Strategy & Architecture area explicitly focuses on IT governance, the alignment of IT service processes and methods, and a common skill set for IT project managers. In addition, improved IT portfolio management has been implemented. This includes a coordinated requirements process as well as the planning and implementation of dedicated KPIs for the management and reporting of IT projects. Increasing transparency in IT projects automatically led to enhanced differentiation between costs for project implementation (“Build”) and those relating to operation (“Run”).

Another focus area for Strategy & Architecture is identity and authorization management. To speed up and professionalize the provision of users and permissions, a central catalog platform for requests will be implemented.

In the area of IT Service Management (ITSM), the roll-out of harmonized processes and tools will continue across the business units, which will form the fundamental basis for future IT operations.

The Zeppelin Group has experienced a remarkable development in its business processes through the integration of the AWS Cloud, thereby creating further innovation potential and future prospects. The merging of innovative technology with established industry practices marks a turning point for Zeppelin and opens up new horizons in the industry. For example, it enables large amounts of sensor data generated by machines to be efficiently stored and analyzed. This access to real-time data has optimized maintenance, improved operations and minimized downtimes.

In addition, existing solutions such as zeppelin.com have been tailored to focus on the individual business segments of the Group, guaranteeing customers the

fastest possible access to the appropriate website. The multi-domain changeover has considered the products and services of the respective business units on the one hand, and a uniform Group presence on the other. This means that specific products and solutions are offered and the Group's portfolio is also presented.

The implementation work for the Group-wide Salesforce CRM tool is being continued. Zeppelin Baumaschinen Deutschland GmbH will follow here, as well as Zeppelin Systems and the Rental SBU. An integrated solution for the future creation of quotes using Salesforce and the calculation tool Camos (CPQ system) is currently in the implementation phase.

With the help of an integrative approach in the "Z4ALL" project, the foundation has been laid for the standardization of processes based on the development of a uniform SAP S/4HANA template. This approach included the preparation and nomination of global process owners within the Construction Equipment Central Europe, Construction Equipment Nordics and Power Systems SBUs.

The SAP project for Zeppelin Österreich GmbH was completed with the implementation of a large number of improvements and extended functionalities across all business processes.

In the area of Data Management, a central Group BI program has been initiated to make it possible to introduce overarching reporting functions (Group, SBU and local units). In addition, the application of requirements from the Finance Target Picture and Next Generation Reporting programs is supported.

Implementing an integration platform means that data can be exchanged between applications and systems irrespective of their location and format. The introduction will enable the standardization of data integration at Zeppelin with a view to increasing quality, reducing costs and improving agility, in an increasingly networked business environment.

Zeppelin is investing in a standardized AI and advanced analytics platform to create a basis for the development of data-driven use cases. Forward-looking technologies, such as machine learning, artificial intelligence and advanced analytics, can help to deliver comprehensive insights into customer behavior and increase efficiency.

Strategic partnerships with research institutes, such as Fraunhofer on the Internet of Things (IoT), offer Zeppelin access to the latest technologies and further access to expertise and resources.

CORPORATE SOCIAL RESPONSIBLITY

As a foundation-owned company, the Zeppelin Group is committed to the infinity principle and assumes responsibility in the areas of the economy, environment and society. As such, sustainable corporate governance is a prerequisite for Zeppelin if we are to make an authentic long-term contribution to the economy and to society as a sustainable and economically successful company, based on the strength of our corporate culture. Zeppelin focuses on long-term, sustainable commercial success, and generating value for employees, customers, suppliers, and the company itself. Corporate social responsibility is therefore an integral part of our corporate strategy.

Expansion of the CSR strategy

In the context of the Zeppelin Group's strategy, the CSR strategy was expanded in 2023, and products and services were aligned in such a way that they have the maximum impact on sustainability in terms of customer expectations. The Zeppelin Group's CSR strategy pursues the clear vision of playing a central role in the transformation of relevant industries into sustainable economic sectors.

Integration of ESG targets into the syndicated credit facility agreement

The syndicated credit facility agreement is the most important financing instrument for Zeppelin. It is of central significance for ensuring financial viability and financing strategic investments, as well as the Group's growth. In the course of increasing and extending the syndicated credit facility agreement in summer 2023, there was a particular focus on the Group-wide sustainability targets. After the audit to confirm the 2022 data basis, the first review of target achievement will take place in 2024.

CSR week 2023

Following its successful debut last year, the Zeppelin Group successfully held a second CSR Week. The virtual event made sustainability more tangible and allowed employees to experience the diverse CSR measures in place at Zeppelin. Issues focused on during the event were climate and environmental protection, transformation to sustainable business, employee satisfaction, employer attractiveness and sustainable products and services. Zeppelin also ensured a clean environment outside during this special event too: Several companies took part in World Clean-up Day by collecting and disposing of waste around their sites.

Tested and award-winning sustainability

Zeppelin's commitment to sustainability has once again been recognized with several awards from EcoVadis. In the sustainability rating, Zeppelin Rental GmbH and Zeppelin Österreich GmbH achieved Gold, Zeppelin Systems GmbH and Zeppelin Sverige AB received Silver and Zeppelin Baumaschinen GmbH was rated Bronze.

Expansion of CO_2 disclosure

In view of the steadily increasing requirements in this area, Zeppelin expanded its CO_2 disclosure in 2023 and for the first time started recording the indirectly caused CO_2 emissions along the entire value chain – referred to as Scope 3 CO_2 emissions. The direct (Scope 1) and indirect (Scope 2) CO_2 emissions caused by Zeppelin have already been included in the annual Sustainability Report since 2019.

Modernization strategy for the sites

In order to become carbon-neutral in its own business operations by 2030, Zeppelin is modernizing all company-owned locations and constructing new buildings for climate-neutral operations. A new logistics hall was built on the grounds at the Friedrichshafen site. The extremely energy-efficient hall features a green roof and a photovoltaic system, and will enable shorter transport routes and fewer transport losses once it is completed in mid-2024. In addition, the Ludwig-Dürr hall is being renovated to achieve a total energy consumption saving of around 50 percent after completion in 2025, thanks to insulated walls and a photovoltaic system.

“WE ACCOMPANY AND SUPPORT OUR CUSTOMERS IN ACHIEVING THEIR SUSTAINABILITY GOALS.”

Christian Dummler

Managing Director and CFO,
also with Group-wide responsibility
for Corporate Social Responsibility

Societal and social responsibility

Zeppelin supports causes and projects in the fields of sport, science, education and culture that reflect the company's values. The Group is also committed to supporting charitable causes through donations in cash or in kind.

The Zeppelin Group reports publicly on its progress in the CSR area every year. The **Sustainability Report** for the 2022 financial year, which also includes the progress report concerning the UN Global Compact, was published digitally on the Zeppelin website in German and English in 2023.

More than 57,000 people were affected by the earthquake in Turkey and Syria in February 2023. Zeppelin initiated a donation campaign for the "Aktion Deutschland hilft" alliance. In addition to the 50,000 euros initially donated by the Group, 12,340 euros was additionally donated by employees.

It has now become something of an annual tradition for trainees from all German companies to initiate a donation project. They are responsible for selecting the social causes as well as for promoting the campaign across all German sites.

Zeppelin's team spirit also shines through in its sponsorship of sports, especially team sports. For several years now, teams supported by Zeppelin have included VfB Friedrichshafen, in the fields of volleyball, football, handball and badminton.

The encouragement of young people and their development is of particular importance to Zeppelin. One instance of this is the long-standing support of Zeppelin University, which celebrated its 20th anniversary in 2023, and also the JUST! Youth Foundation founded by Zeppelin GmbH and Luftschiffbau Zeppelin GmbH. Awards of up to 25,000 euros are given to recognize outstanding work in natural sciences and engineering, economics, and social and cultural science. Two award-winning students from Friedrichshafen even had the opportunity to present their idea of a solar catamaran at this year's climate conference in New York.

ZEPPELIN AS AN EMPLOYER

> COMMITTED AND SATISFIED EMPLOYEES PERFORM BETTER.

Member of the Management Board and CHRO

Revision of the HR strategy

The new HR strategy, which was revised in the context of the 2023 strategy call, is built around three areas: Attract, Develop and Retain. The must-win battles identified included issues which are central to securing the company's success in light of current challenges: Employer branding, expansion of development and career opportunities, ensuring fair compensation and benefit packages, and developing a KPI concept for measuring success.

Attract

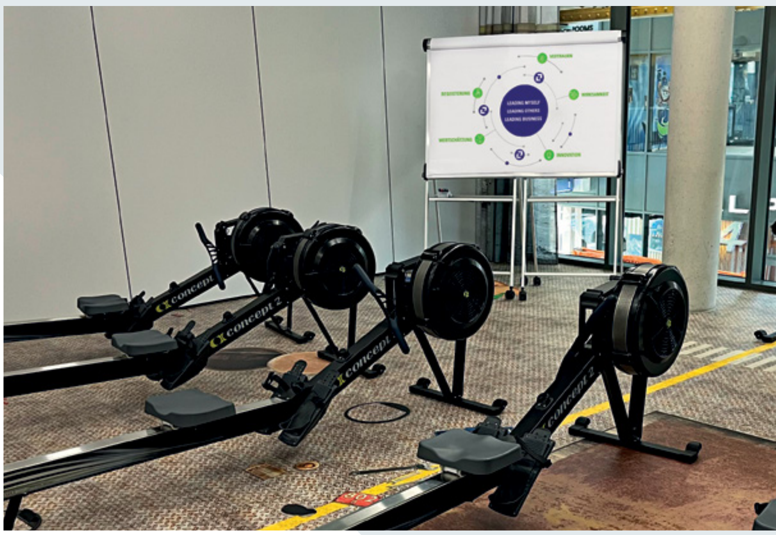
To ensure Zeppelin continues being positioned as an attractive employer, a Group-wide employer branding project was launched in 2023. After a status quo analysis, specific recommendations were developed, including strengthening cross-company collaboration, optimizing recruitment processes and sharpening the employer message. The revision of the employer promise, including its key messages, is scheduled for completion in 2024.

New Zeppelin employees were welcomed in the context of onboarding events (Z Welcome, trainee welcome days), which included eleven trainees related to Z NEXT, and 127 other trainees and dual students. Two masters scholars completed an executive masters degree at Zeppelin University in 2023.

Develop

Various global management development programs were also carried out for different management levels in 2023.

The first Zeppelin Leadership Gym took place in July 2023. At the pilot event, attended by 60 managers from different SBUs, the aim was to make tangible the Zeppelin leadership principles of trust, effectiveness, innovation, appreciation and enthusiasm, by means of practical exercises. Based on the excellent feedback which followed, the format will be further rolled out in 2024.



Following a pilot in the Finance area, 270-degree feedback for managers – which incorporates the various perspectives of the individual's own manager, employees and peers – will be integrated as part of the development landscape and further rolled out in 2024.

The Workday modules of Performance, Talent Management and Learning have been further expanded. The talent and succession planning process Z TALENT was carried out in the system for the first time.

Retain

The global Z VOICE employee survey provided feedback on topics that influence employee satisfaction and motivation. Of the 9,000 people surveyed, 66 percent took part in the digital survey. After the survey, a comprehensive follow-up process took place with central and decentralized measures, including training and exchange formats for various target groups.

Through the Z COLORFUL initiative, Zeppelin has made a Group-wide commitment to diversity, inclusion and equal opportunities. Diversity Day featured digital events, as well as the launch of an e-learning course on tackling unconscious bias. The Diversity Ambassadors contribute to the implementation of the Z COLORFUL objectives by promoting SBU-specific issues and functioning as disseminators of information. The Z NOW women's network organized regular meetings and lectures on the role of women in the development of the Zeppelin Group. The newly established PROUD network serves to ensure the LGBTQI+ community is represented at Zeppelin. Diversity targets have been entrenched in talent and development programs, with the intention of women making up a 20-percent share of the total workforce by 2025. Annual participation in the hercareer career fair in Munich is intended to attract talented female staff to Zeppelin.

Workshops for managers on the topic of "Healthy Leadership" as well as the health week initiated by Z FIT, which featured exercise- and nutrition-related content, completed the offering on the balancing of work and private life. All these measures led to a successful re-auditing by audit berufundfamilie.

For Zeppelin, people are also at the heart of new workplace concepts. The office concept with open-space landscapes and retreat options, which was already implemented in pilot areas in 2022, continues. Teams can decide whether they prefer New Work, a classic work environment or a mixed approach. This means the framework conditions for the working model and collaboration are defined in line with requirements. Refurbishment and relocation measures are planned for 2024.

Outstanding employer award

Zeppelin is also perceived as an excellent employer by external parties. This was confirmed with awards as Germany's Best Employer 2023 (Stern), Fair Company (Handelsblatt), Employer of the Future (German Innovation Institute for Sustainability and Digitalization), Top Company 2023 (Kununu) as well as Germany's most coveted employer and Germany's training champions (F.A.Z.-Institut).

These achievements are also due to the commitment in the individual companies. Externally, Zeppelin Rental Germany was awarded the ERA Award Best Initiative in People. And Zeppelin Baumaschinen GmbH is also fighting prejudice in the construction industry, in cooperation with the Hagedorn Group and the "Frau am Bau" (Women in Construction) campaign, which has received media attention.

KEY HUMAN RESOURCES FIGURES

Employees

as an average for the year, including trainees

3.155 / + 2,3 %
Construction Equipment Central Europe

1.884 / +10,9 %
Plant Engineering

735 / + 3,7 %
Construction Equipment Nordics

10.361 / - 1,9 %
Entire Group [1)]

1.023 / - 1,7 %
Power Systems

965 / - 42,4 %
Construction Equipment Eurasia

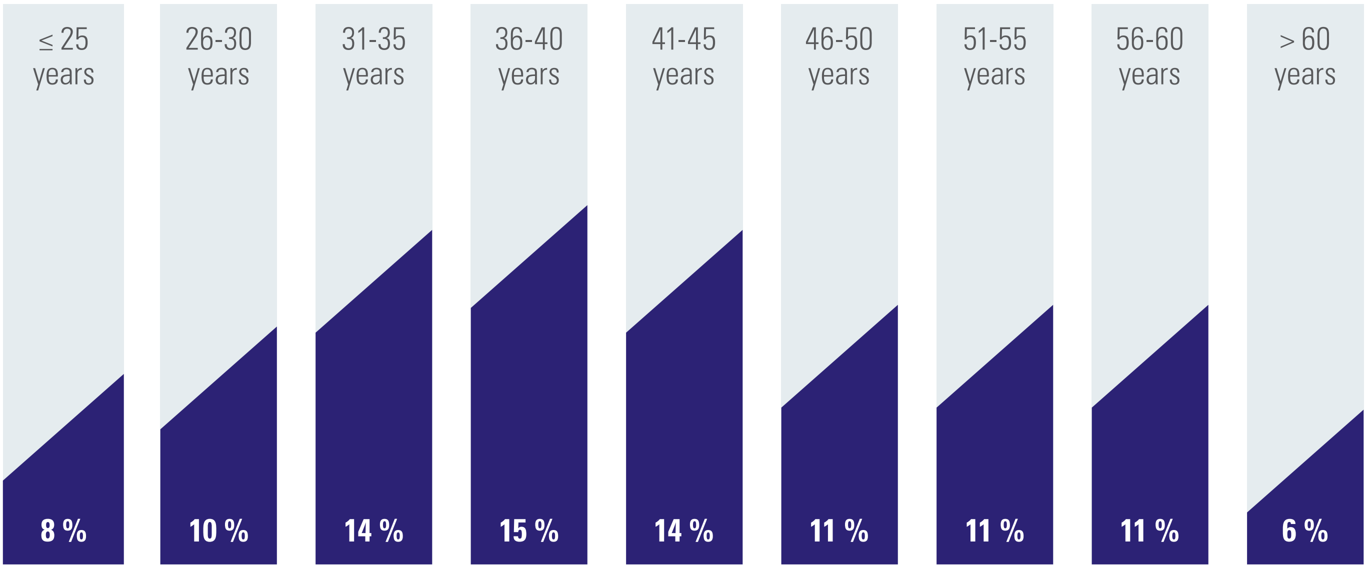
2.219 / + 12 %
Rental

[1)] Including employees of the companies Zeppelin GmbH, klickrent GmbH, Zeppelin Lab GmbH and klickparts GmbH; as at December 31, 2023; percentage change compared to December 31, 2022

Age structure

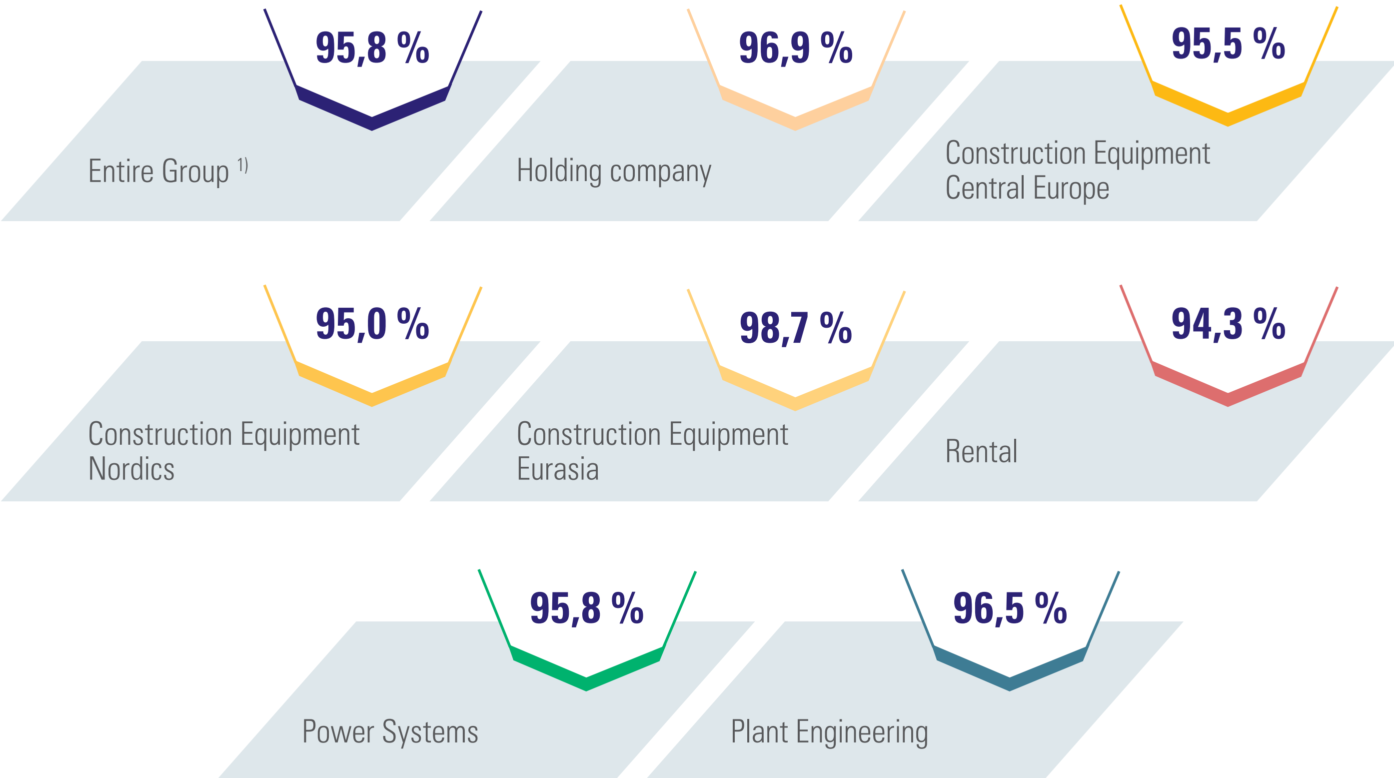
as a percentage

Entire Group



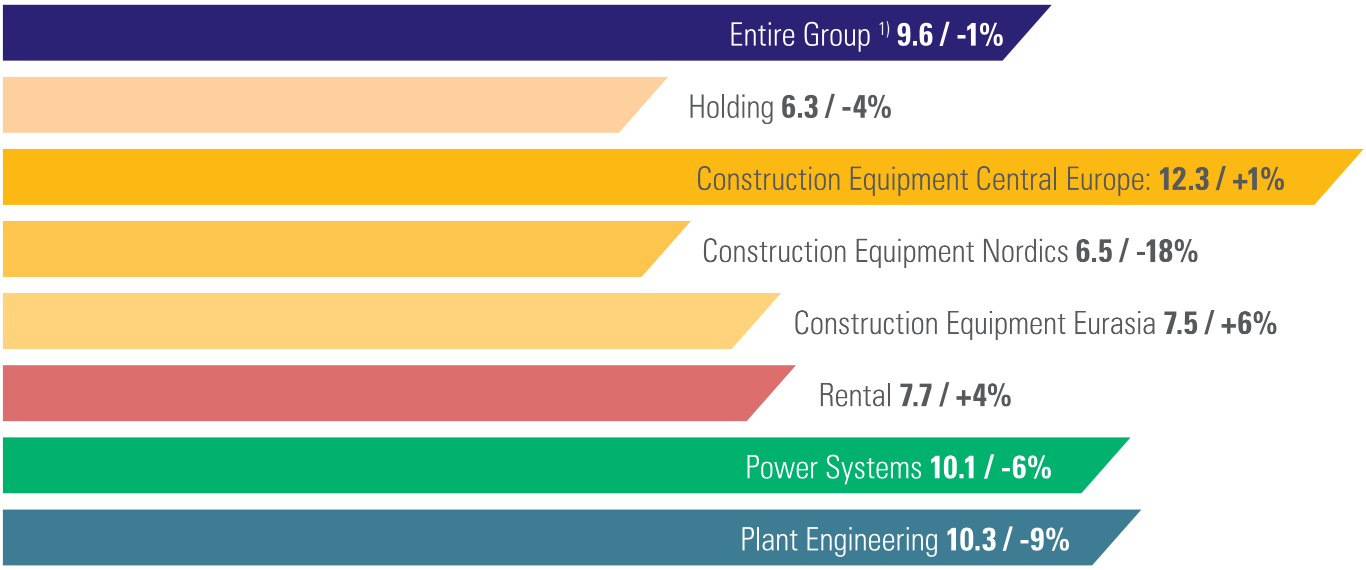
Health rate

as a percentage

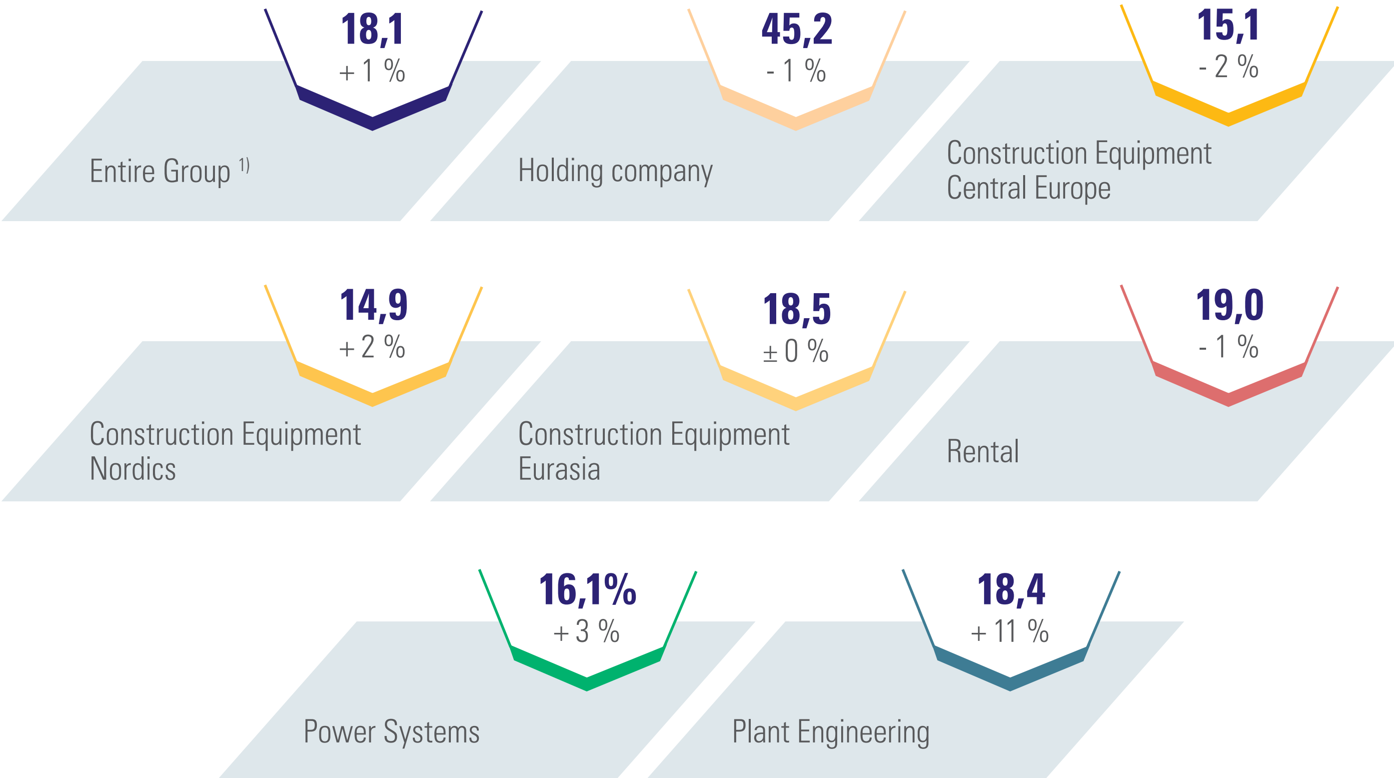


KEY HUMAN RESOURCES FIGURES

Average in years of service [2)]
in years



Proportion of women [2) 3)]
in percent



1) in 2022 including employees of the companies Zeppelin GmbH, klickrent GmbH, Zeppelin Lab GmbH and klickparts GmbH; in 2023 including employees of the companies Zeppelin GmbH, klickrent GmbH and Zeppelin Lab GmbH; as at: December 31, 2023
2) Percentage change compared with December 31, 2022
3) Proportion of women by headcount (excluding Management Board, excluding trainees); percentage change compared to December 31, 2022

Employees by country [4)]

as an average for the year, including trainees

Armenia 131 / -3%	**Belgium** 15 / -12 %	**Brazil** 120 / 3%
China 120 / -16 %	**Denmark** 474 / 50 %	**Germany** 6,380 / 6 %
Estonia 13 / -7 %	**France** 21 / -13 %	**Greenland** 11 / 10 %
UK 20 / 33 %	**India** 250 / 11 %	**Italy** 53 / 6 %
Austria 320 / 5 %	**Poland** 159 / -1 %	**Russia** 141 / -80 %
Saudi Arabia 19 / -5 %	**Sweden** 619 / 4 %	**Switzerland** 17 / -6 %
Singapore 13 / -7 %	**Slovak Republic** 154 / 1 %	**South Korea** 0 / -100 %
Tajikistan 10 / -17 %	**Czech Republic** 517 / 5 %	**Turkmenistan** 19 / -10 %
Ukraine 439 / -17 %	**USA** 92 / 2 %	**Uzbekistan** 62 / -2 %

4) by headcount, as at December 31, 2023, percentage change compared to December 31, 2022
For calculation reasons, rounding differences of one unit (€, %, etc.) may appear in the tables and graphics.

GROUP MANAGEMENT REPORT & GROUP FINANCIAL STATEMENTS

2023

CONSOLIDATED MANAGEMENT REPORT

OF ZEPPELIN GMBH AND THE GROUP FOR THE FINANCIAL YEAR 2023

A BUSINESS ACTIVITIES OF ZEPPELIN GMBH AND THE GROUP

The following management report is the Consolidated Management Report and Group Management Report for Zeppelin GmbH. It presents the business performance of the Zeppelin Group ("Zeppelin" or "Group") and Zeppelin GmbH, including the results of the financial year from January 1 to December 31, 2023, as well as the position of the Group and Zeppelin GmbH as of December 31, 2023.

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 the financial year. Luftschiffbau Zeppelin GmbH holds 96.25% and Zeppelin Foundation, administered by the city of Friedrichshafen, holds 3.75% of the subscribed capital of Zeppelin GmbH in the amount of EUR 100.0 million.

At the end of the year, Zeppelin GmbH had 287 employees (previous year: 277, full-time equivalents). The Supervisory Board consists of 12 members, which is formed on a parity basis in accordance with Section 7 of the German Codetermination Act (MitbestG).

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 Central Europe ("CE"), Construction Equipment Eurasia, Construction Equipment Nordics, Rental, Power Systems, and Plant Engineering.

The business activities of the Construction Equipment CE, Eurasia and Nordics SBUs comprise the sales and servicing of Caterpillar construction machines, mining equipment, components as well as agricultural and forestry machinery of the AGCO/Fendt and Massey Ferguson brands. In Germany and various countries of Central, Northern and Eastern Europe and Central Asia, Zeppelin is the sales partner of Caterpillar Inc., headquartered in Irving, (Texas/USA). The sales territories of the other manufacturer partners are distributed across Central and Eastern European countries. Caterpillar stopped accepting orders for new machines, engines and spare parts in Russia in August 2022 due to Russia's war against Ukraine. Consequently, the Construction Equipment Eurasia SBU reduced its business activities in Russia to agricultural machinery services for non-sanctioned customers and products by the end of 2023.

The Power Systems SBU sells Caterpillar diesel and gas engines in the same sales territories as the construction equipment SBUs and also services MaK-brand marine engines in many other countries. It provides a wide range of engineering and other services for drive and power solutions. Due to the sanctions imposed against Russia, the Power Systems business in Russia was discontinued.

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, in particular in Central Europe. A comprehensive range of services is also offered.

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.

RESEARCH AND DEVELOPMENT

The Group's research and development activities mainly relate to innovative new digital business models and development projects of the Power Systems and Plant Engineering SBUs. Research and development costs in the reporting year amounted to EUR 3.6 million (previous year: EUR 2.6 million).

B BUSINESS REPORT

1 ECONOMIC CONDITIONS

MACROECONOMIC ENVIRONMENT

The economic slowdown of the global economy from the previous year continued in 2023. While catch-up effects from the COVID-19 pandemic led to higher demand for services, demand for goods declined. In particular, the continued high inflation rates in many places put pressure on private consumer spending. High domestic demand was only seen in the USA, which had a supportive effect on the worldwide economy. In China, the weak domestic economy and the slumping real estate sector meant that growth was less than expected.[1]

To combat high inflation, the central banks in the USA and euro area, among others, had raised their key interest rates further. Energy prices normalized in 2023, although there was another slight increase recently. World market prices for commodities declined. Increasing geopolitical risks, such as the geopolitical tensions between the USA and China, Russia's war against Ukraine and Hamas' terrorist attacks on Israel, are also putting the global economy at risk.[2]

Among the European countries, the German economy cooled down particularly sharply. Although industry and the construction sector still benefited from high order backlogs, these declined significantly in the context of weak incoming orders. The construction sector in particular reacted strongly to the rise in interest rates. A rise in net wages stabilized private consumer spending, due in particular to the use of the inflation compensation premium.[3] Although the shortage of skilled workers continued to affect nearly all sectors in 2023, it especially had an impact on the construction sector and industry.[4]

The high interest rates have so far not managed to hinder the strong economic growth in the USA. Private consumer spending was buoyed by wage increases and a robust labor market. Compared to other national economies, the COVID-19 pandemic has led to a greater reduction in personal savings.[5] In addition, commercial construction investments, particularly in the US semiconductor industry, proved to be a growth driver. However, there are initial signs that the US economy is slowing down.[6]

After the easing of the strict zero-COVID-19 policy, the Chinese economy was slow to recover. The real estate crisis has been a huge burden.[7] So far, the real estate sector has only slowly responded to the Chinese government's support measures (including lowering interest rates). In addition, weak sales and construction activity are weighing on the construction sector.[8] Foreign investment in the country fell to an all-time low. For reasons such as concerns about geopolitical conflicts, companies are reducing their dependence on China by relocating supply chains to other countries.[9]

Despite extensive sanctions measures on the part of the EU, Russia managed to generate high revenues from oil exports in 2023. The economy turned out to be more robust than expected.[10] However, the high military expenditure was a burden on the Russian budget. Social policy played a major role in the overall structure of public spending. In addition, there was a lack of funding for investments in infrastructure.[11]

Ukraine continues to suffer severe economic effects due to Russia's war of aggression. Reconstruction costs were estimated at over USD 400 billion in 2023.[12]

The key interest rate in the euro area was last raised by the European Central Bank (ECB) to 4.5% in September. Despite the falling inflation rate, further increases in the key interest rate are not excluded. A possible reduction is not expected before mid-2024. The prerequisite for this would be a sustained fall in inflation below the target value of 2%.[13]

The US Federal Reserve last raised the key rate for the US dollar in July 2023. At 5.5%, it is a whole percentage point above that for the euro area. A possible cut in the key interest rate is being discussed earlier than for the euro area. A sustained fall in inflation would also be required in this case.[14]

At 2.7%, the forecast for the growth rate of worldwide economic output for 2023 shows no change compared to the previous year's growth rate (2.7%). At 0.5% (previous year: 3.4%), the euro area recorded a significant downturn and all reported countries recorded a declining growth rate. The main driver of this development is Germany, where economic output is actually negative at -0.3% (previous year: 1.8%). Sweden and the Czech Republic also show a negative development of -0.4% (previous year: 2.8%) and -0.5% (previous year: 2.4%), respectively. Poland performed at least slightly positively at 0.5% (previous year: 5.3%) and Denmark at 1.1% (previous year:

[1] Panel of experts: Annual expert report 2023/24, from November 8, 2023, p. 19.
[2] Panel of experts: Annual expert report 2023/24, from November 8, 2023, p. 27-32.
[3] Panel of experts: Annual expert report 2023/24, from November 8, 2023, pages 17-18, 53 and 55.
[4] tagesschau.de: "Staff bottlenecks in all industries," from November 29, 2023.
[5] tagesschau.de: "The US economy is growing surprisingly fast," from October 26, 2023.
[6] Panel of experts: Annual expert report 2023/24, from November 8, 2023, p. 23.
[7] tagesschau.de: "Tianjin – Symbol of China's economic crisis" from November 10, 2023.
[8] Panel of experts: Annual expert report 2023/24, from November 8, 2023, p. 24-25.
[9] tagesschau.de: "China procures due to decoupling of supply chains," from November 28, 2023.
[10] businessinsider.de: "Russia's oil revenues are higher than before the war in Ukraine – but Putin's profits are falling," from December 13, 2023.
[11] dw.com: "Russia's new state budget: Everything for the war?" from November 16, 2023.
[12] Bertelsmann Foundation: "Outliers or not? Ukraine's economy and accession to the EU," from November 15, 2023.
[13] tagesschau.de: "Head of the German Federal Bank considers interest rate cuts to be premature," from November 28, 2023.
[14] faz.net.de: "A Fed director boosts the DAX," from November 29, 2023.

2.7%).[15] At 1.3%, the Slovak Republic recorded the highest growth of the reported euro area countries, which is attributable to investments made by chemical companies, vehicle construction and the metal industry in greater energy efficiency, among other things.[16] In the previous year, growth was 1.7%.[17] Austria recorded the largest decline in economic growth at -0.8% (previous year: 4.8%).[18] Following the drastic fall in the previous year (-29.1%), Ukraine expects growth in economic output of 4.8% for 2023 despite the continuation of the war. At 2.6%, the forecast for Russia has also reversed (previous year: -2.1%). The US economy was robust at 2.5% (previous year: 1.9%) and that of in Brazil with 3.1% (previous year: 2.9%). China posted strong growth of 5.2% compared to the previous year (3.0%). Despite a slight decline compared to the previous year (7.2%), growth in India's expected economic output remains at the very high level of 6.3%.[19]

Since the beginning of 2023, the euro has performed differently compared with other currencies. The most important foreign currencies for the Group are the US dollar, the Ukrainian hryvnia and the Czech koruna. The US dollar started 2023 at an exchange rate of 1.07 USD/EUR and ended slightly lower at 1.11 USD/EUR.[20] The Ukrainian hryvnia, which is not freely exchangeable, depreciated from 39.24 UAH/EUR to 42.15 UAH/EUR over the course of the year. In the same period, the Czech koruna depreciated slightly from 24.12 CZK/EUR to 24.72 CZK/EUR.[21]

MARKET DEVELOPMENT

The markets that are important for the **Construction Equipment CE SBU** performed as follows in the reporting year: The construction economy in Germany is developing heterogeneously in 2023. While commercial construction and public building have only suffered slight losses in revenue, the crisis in housing construction is intensifying. Increased financing costs and high material prices – also as a result of material bottlenecks and increased energy prices – are leading to sharp declines in building permits and increasing order cancellations.[22] Incoming orders decreased (in real terms -4.9% from January to October 2023 compared to the previous year) and construction sales also declined by 3.2% in real terms.[23] For the year as a whole, the Main Association of the German Construction Industry e.V. (Hauptverband der Deutschen Bauindustrie e.V.) expects a decline in sales of 5.5% in real terms, and a drop in sales of 3.5% in real terms for 2024.[24]

The ifo Business Climate Index for trade and industry in Germany fell to 86.4 points in December 2023, down from 88.9 points in December 2022. The mood deteriorated even further, especially in the main construction industry. The ifo business climate index was already in the clearly negative range at the beginning of 2023, at -20.9 points. At -33.1 points, December 2023 marks the lowest business climate indicator in this sector since 2005. Companies are skeptical about the coming year 2024.[25]

At 68.7%, the machine utilization rate in December was significantly lower than in the previous year (December 2022: 77.1%). The forward order book in the main construction industry was also lower at the end of the year, at 3.7 months on average for the construction sectors (December 2022: 4.3 months).[26]

In Austria, the construction industry lost its momentum of the first quarter during the course of 2023. Weak economic growth, the slow decline in construction prices and high interest rates on loans are curbing demand for new office and retail buildings and exacerbating the decline in residential construction. On average, production stagnated in the first eleven months of 2023.[27] The mood among Austrian construction companies is generally bleak: The situation index declined in December (-4.4 points) and stood at -6.3 points below zero, in a range that was last reached at the start of the COVID-19 crisis. However, companies are more optimistic again with regard to the coming months: The expectation index increased by 3.8 points and was again above zero at 4.4 points. However, production and employment expectations remain negative.[28]

After two years of growth, the Czech construction industry hit a crisis in 2023. High interest rates and rising construction costs are also reducing the willingness of companies and private developers to invest, which is causing residential construction to slump in particular.[29] For example, the number of newly built apartments in November 2023 fell by 40.7% year-on-year, and the number of completed apartments by 19.2%. The number of building permits is also declining (-11.7% compared to the previous year). Construction production decreased by 3.8% in November compared to the previous month, and by 6.5% year-on-year. Compared to 2022, building construction output declined more strongly than that of civil engineering (-7.7% and -3.9% respectively).[30]

Compared to the other countries of the Construction Equipment CE SBU, the construction economy in the Slovak Republic is experiencing mostly positive developments. Overall, construction output recorded a volume of 6.5 billion euros from January to November 2023 and increased by 2.6% compared to the previous year. Civil engineering work (including road and highway construction)

[15] Ifo economic forecast Winter 2023, p. 5-6.
[16] GTAI: "Slovakia continues its growth trajectory," from November 27, 2023.
[17] Federal Statistical Office: "Eurostat data: Slovakia in comparison," from April 30, 2023.
[18] Wifo: "Economic recovery is slowing," from December 21, 2023.
[19] World Bank Global Economic Prospects January 2024, p. 195-197.
[20] Exchange rates of the ECB as of December 31, 2022/2023.
[21] Exchange rates obtained from infront as of December 31, 2022/2023.
[22] The Hauptverband der Deutschen Bauindustrie e.V. Press Conference Kick-off of the year, January 12, 2024 and ifo Schnelldienst: "On the current situation in residential construction," from November 15, 2023.
[23] The Main Association of the German Construction Industry e.V. Current figures, December 22, 2023.
[24] The Main Association of the German Construction Industry e.V. Sales forecast for the construction industry, January 8, 2024.
[25] ifo.de: "ifo Business Climate Index declined (December 2023)," from December 18, 2022.
[26] ifo Economic Outlook December 2023, p. 16.
[27] Bank Austria Österreich currently January 2024 and Bank Austria Österreich in focus October 2023.
[28] Wifo: Konjunkturtest 12/2023.
[29] GTAI: "Czech Republic's construction industry is struggling with the recession," from November 8, 2023.
[30] Czech Statistical Office Construction Output November 2023.

increased in November for the eighth consecutive month (+11.1% compared to November 2022); additionally, building construction also grew for the second consecutive time (+5.1% compared to November 2022). Overall, civil engineering increased by 17.9% in the first eleven months compared to the previous year. However, building construction declined by 3.2% during this period.[31]

The German construction machine industry is experiencing another peak year in 2023 despite the slowing construction economy. Although there are now signs of falling sales, a significant decline for the year as a whole is unlikely.

At the end of December 2023, the market was again 0.8% above the previous year's value at 39,186 units (retail: -0.8%, Rental: +2.2%). The retail/rental split remains unchanged compared to the previous year and remained at 70% (retail) to 30% (rental) in 2023. The market for road construction machinery (+9.3%) grew particularly strongly year-on-year. Large and standard machines are ahead of compact machines at 4.6%, which have to cope with slight sales losses of -0.3%. In terms of value, market volume in 2023 also grew by 5.7% to just under EUR 3.7 billion (2022: EUR 3.5 billion).

The Austrian construction machine market decreased by 6.0% to 2,521 machines in 2023 (previous year: 2,683 units), excluding telehandlers.

The Czech construction machine market suffered from the poor situation of the construction industry in 2023 and declined significantly over the course of the year. As of the end of December, the total market (excluding telehandlers) stood at 2,453 units, which is 13.9% below the previous year's level (January to December 2022: 2,849 machines).

Despite the comparatively positive development of the Slovak construction industry, the construction machinery industry there is declining. Overall, the construction machine market fell by 7.6% to 881 units in 2023 (2022: 953 units).

The ongoing war between Russia and Ukraine remains the dominant factor in the fourth quarter of 2023. Following receipt of the conditional special approval from the Swiss State Secretariat for Economic Affairs (SECO) for the sale of the sanctioned inventories and fixed assets in Russia to non-sanctioned business partners, the **Construction Equipment Eurasia SBU** started intensively selling the commodities and fixed assets located in Russia from mid-April 2023. At the end of 2023, Zeppelin Russia's machinery and spare parts inventory covering the entire construction and mining machinery business was sold. The sale of the Component Repair Center (CRC) in Petrosavodsk has been negotiated. Approval from the Russian State Commission is required to process the sale. The corresponding application for approval of the transaction has been submitted. Therefore, as soon as the necessary approval has been obtained, the CRC will be sold together with the fixed assets in this property. Rental is planned for the branch office in St. Petersburg. A potential interested party for the rental has been identified and the rental agreement is ready for signing. As soon as the approval already applied for from the Federal Office for Economic Affairs and Export Control (BaFa) is available, the lease agreement will be signed for a five-year lease term.

At the end of 2023, there were still 120 employees in Russia. The branch network has been reduced to five sites, which are necessary for the continuation of the agricultural machinery service business.

Business in Ukraine is essentially limited to the sale of spare parts and customer services to mining and agricultural customers as well as the sale of a small number of construction and agricultural machines.

The construction and mining equipment markets in Uzbekistan and Armenia continued to develop positively in 2023.

The markets of the **Construction Equipment Nordics SBU** in Sweden were stable overall. At 89.9, the construction sector indicator at the end of the year was significantly lower than in the previous year (December 2022: 101.7). Both the residential construction sector and the commercial real estate sector recorded a decline in construction activity. The main reason is considered to be insufficient demand, despite low tender prices. Expectations are at a historic all-time low. The market in the mining sector continues to be boosted by high copper and iron prices. The Swedish market for construction machines and mining equipment as a whole was estimated at 6,021 units in 2023 (2022: 5,221 units).

The Danish markets of the SBU remained robust. The production index in the construction sector remained almost unchanged compared to the previous year, and the unemployment rate is also remaining steady at a low level. Construction companies saw bad weather as a limiting factor for their production, as well as labor shortages and lack of demand. Trade restrictions due to the war in Ukraine make commodity mining in Greenland an attractive alternative in the long term. The total Danish market for construction and mining equipment is estimated to reach 4,522 units in 2023 (2022: 4,840 units).

In its October 2023 report, the European Rental Association (ERA) adjusted the expected market growth. In Germany, for example, forecast growth was increased from 2.4% to 3.9%, which is due in particular to price developments. A similar trend can also be seen in almost all other markets of the **Rental SBU,** such as the Czech Republic with growth of 7% and Denmark with an increase of 4%. In Austria, on the other hand, market growth was revised downwards from 2.1% to 1.3% and in Sweden from 1.8% to 1.0% compared to the ERA Report 2022. This is due to developments in the construction industry, particularly weak residential construction. Market growth in the Slovak Republic is reported at 1.3%.

According to the latest report from the VDMA, the business climate in Germany has brightened slightly since the last survey for the industries in the **Power Systems SBU** with assessments of the current situation and the outlook for

[31] Statistical Office of the Slovak Republic: "Construction production in November 2023," from January 11, 2023.

the coming months appearing somewhat more positive than before.[32] While the regional markets in Europe and America continue to cool, the Asian market remains robust.

Demand in the industrial segment continues to be at an acceptable level. The Electric Power Diesel (Invest)/Gas division is currently mainly driven by engine repowering requests and investments via the CHP tenders. However, the volume of these tenders was not fully exhausted in the fourth quarter of 2023 for the first time in a long time. This is due, among other things, to the political framework conditions and the uncertain gas supply situation. The use of heat pumps complements the range of CHP solutions and could open up another business segment.

Demand for new data centers continues to be high. Additional requests for grid replacement systems, e.g., for industrial applications, ensure a robust market environment. In addition, synthetic fuels are envisaged as a bridging technology. The locomotive business, especially in the Czech Republic and the Slovak Republic, remains robust. New, larger series tenders for international applications also for diesel locomotive engines are returning to the German market.

There is still movement in the marine segment, mainly through investments in tourist shipping (inland waterways, yacht construction) as well as in government and military applications. In addition to the traditional diesel drive, the industry relies on battery hybrid systems and methanol as fuel. The market volume of ballast water treatment systems is expected to be on a downturn after the retrofitting of the existing fleets is largely completed.

Demand for the SBU's services and capacity utilization in this area are at record levels across all segments.

The **Plant Engineering SBU** only recorded positive growth in its markets in the USA and China, and the incoming orders arising supported the overall results for the year. On the other hand, no uniform development can be seen for the different product groups in the EU. The tense political situation, inflation and persistently high interest rates are severely hampering the willingness of most international customers to invest. For example, order success in the last quarter of 2023 fell below the average incoming orders for the first nine months. This confirms the trend that is evident in the industry both worldwide and in Germany. The negative influencing factors continue to exist and ensure a noticeable restraint in investment. The relevant associations also do not currently expect a trend reversal for 2024.

2 Development of the Group's Business

Key Performance Figures for the Group

EUR million	2023	2022
Sales	3,934.7	3,838.2
Gross margin[33]	15.3 %	14.7 %
EBT	153.8	134.6
Return on sales[34]	3.9 %	3.5 %
Return on capital employed, YE[35]	6.4 %	6.2 %

Sales Development and Orders

The 2023 financial year was a successful one for Zeppelin overall. Group sales increased by 2.5% to EUR 3,934.7 million (previous year: EUR 3,838.2 million). This is despite the challenging conditions surrounding high inflation rates, a sharp rise in interest rates on loans and construction costs, the withdrawal from the Russian market and a shortage of skilled workers.

The sales of the SBUs dedicated to the rental, sales and servicing of construction and mining machinery and engines increased by EUR 74.9 million in the 2023 financial year. The war-related decline in sales at the Construction Equipment Eurasia SBU continued at an even greater rate in 2023 (-41.2%); however, this was more than offset by strong growth, particularly at the Construction Equipment CE SBU (12.3%) and the Rental SBU (10.9%). In addition, sales in the Plant Engineering SBU showed moderate growth.

Sales by SBU

EUR million	2023	2022	Change %
Construction Equipment CE	1,702.6	1,516.4	12.3 %
Construction Equipment Nordics	305.6	291.8	4.7 %
Construction Equipment Eurasia	308.9	525.2	-41.2 %
Rental	738.7	666.3	10.9 %
Power Systems	461.1	442.4	4.2 %
Plant Engineering	518.1	493.2	5.1 %
Group sales[36]	**3,934.7**	**3,838.2**	**2.5 %**

[32] VDMA Business Survey I/2024, January 2024.
[33] Gross margin = gross profit on sales / sales
[34] Return on sales = net profit before tax / sales
[35] ROCE = EBIT / capital employed; capital employed = fixed assets + working capital
[36] Including Zeppelin GmbH, klickrent GmbH and Z Lab GmbH as well as consolidation effects.

In the 2023 financial year, a total of 16,853 machines, forklift trucks and engines were launched on the market, which corresponds to a decrease of 8.5% compared to the previous year. Sales of new construction and mining equipment decreased by 367 units (-4.8%). Similarly, sales of new forklifts and engines decreased by 54 units (-20.8%) and 960 units (-26.3%), respectively. Sales of used construction and mining machinery and engines also declined by 303 units (-6.4%) and 11 units (-26.8%) respectively compared with the previous year. At 1,971 units, machines and forklift trucks placed on the market for the first time for rental purposes were up from the previous year's level (previous year 1,726 units).

Incoming orders for all group companies fell to EUR 3,596.3 million (previous year: EUR 4,019.8 million). This was due to falling demand, high prices as a result of inflation and initially long delivery times. At EUR 1,612.2 million, the order backlog at the end of the year was below the previous year (EUR 1,950.6 million) and stabilized in the context of improved delivery capacity. The Plant Engineering SBU accounted for EUR 547.9 million (previous year: EUR 613.9 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:

	12/31/2023	12/31/2022	Change %
Construction Equipment CE	2,947	2,852	3.3 %
Construction Equipment Nordics	758	713	6.3 %
Construction Equipment Eurasia	744	1,353	-45.0 %
Rental	2,322	1,997	16.3 %
Power Systems	1,009	956	5.6 %
Plant Engineering	1,824	1,791	1.8 %
Trainees and apprentices in the Group	392	376	4.3 %
Group[37]	**10,387**	**10,417**	**-0.3 %**

At the end of 2023, the Group employed 3,811 FTE in foreign companies. This was considerably less than in the previous year (4,212) and was due to the drastic reduction in Russia. The share of the total workforce thus amounts to 36.7% (previous year: 40.5%).

Information about the Proportion of Women

In accordance with the legal requirements (FüPoG I), targets were set at Zeppelin GmbH in 2018 to increase the proportion of women on the Supervisory Board, on the Management Board and at the top management level. In accordance with the amended legal requirements (FüPoG II), these target figures were increased in 2022 and expanded by the second management level below the Management Board.

The target for the proportion of women on the Supervisory Board is 33%, for the Management Board 25%, for the first management level below the Management Board 30% and for the second management level below the Management Board 36%. These target figures already apply to financial year 2023 and must be achieved by March 31, 2027.

As at the reporting date of December 31, 2023, a proportion of women of 33.3% was achieved for the Supervisory Board, 25% for the Management Board, 28.6% for the first management level and 35.0% for the second management level below the Management Board.

3 Important Activities During the Financial year

Sales Russia

The Construction Equipment Eurasia SBU and Power Systems SBU significantly reduced their working capital and fixed assets in 2023 compared to the end of 2022. Inventories of construction machines and engines, including the corresponding spare parts, were sold off in full and fixed assets were substantially reduced.

Realignment of the Construction Equipment SBUs

Russia's war against Ukraine has significantly changed the situation of the Construction Equipment Eurasia SBU in particular. Due to this ongoing situation, the strategic business units will be restructured as of January 1, 2024. Forthcoming, the previous Construction Equipment CE SBU, Construction Equipment Nordics and Construction Equipment Eurasia will be restructured into two construction equipment SBUs, thus consolidating the business activities and associated regions. On the one hand, the construction machine activities in particular of Zeppelin Baumaschinen GmbH (Germany) and Zeppelin Österreich GmbH will form the Construction Equipment Germany / Austria SBU (CGA SBU). On the other hand, all other construction machine activities, as well as the agricultural machinery business (including conveying systems in Poland), in Armenia, Denmark, Poland, Sweden, the Slovak Republic, Tajikistan, the Czech Republic, Turkmenistan, Ukraine and Uzbekistan will be consolidated in the Construction Equipment International SBU (CIN SBU). In

[37] Including Zeppelin GmbH, klickrent GmbH and Z Lab GmbH.

doing so, Zeppelin is focusing on the needs of customers in the various markets and taking account of the specific product portfolios. The new structure will also support process, application and digital solution harmonization, which is carried out in close coordination with the manufacturer partner Caterpillar. Downsizing to two construction equipment SBUs will also result in simplified communication, more balanced sales and employee numbers as well as reduced complexity.

IT PROJECTS OF THE ZEPPELIN GROUP

Implementation of the Group-wide CRM tool Salesforce will continue. In addition to Zeppelin Systems GmbH and Zeppelin Rental GmbH, the system will also be made available to Zeppelin Baumaschinen GmbH from 2024. In addition, preparations are underway to introduce Salesforce in other companies. An integrated solution for the future preparation of offers with Salesforce with a suitable calculation tool (CPQ system) is currently in the implementation phase at Zeppelin Baumaschinen GmbH and Zeppelin Systems GmbH.

The foundation for the standardization of processes was laid with the help of an integrative approach in the ERP project Z4ALL. In 2023, the Z4ALL program for the SAP S/4 HANA introduction was realigned to enable a more centralized template approach. The Group-wide ERP template will depict a large part of the harmonized company processes and be expanded in the respective rollouts to include country and company specifics. A cornerstone for this was establishing and nominating global process owners within the Construction Equipment Central Europe, Nordics and Power Systems SBUs, as well as centralized governance. The SAP program will be implemented using an agile approach, with the first step focusing on global core processes and functionalities. The SAP core will then grow gradually over the course of the program.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

As a foundation-owned company, the Zeppelin Group is committed to the principle of infinity and assumes responsibility in the areas of society, economy and ecology. Sustainable corporate governance is a prerequisite for Zeppelin to make an authentic long-term contribution to the economy and to society as a sustainable and economically successful company, based on the strength of the corporate culture. Zeppelin does not focus on short-term profit, but on long-term, sustainable commercial success, generating value for employees, customers, suppliers, and society.

The Corporate Social Responsibility Directive (in short: CSRD) significantly expands the reporting obligations in the area of sustainability. The aim is to increase the accountability of European companies on sustainability aspects, to significantly broaden the scope of the reporting obligation and to introduce binding reporting standards at EU level for the first time. The Zeppelin Group is required to report in accordance with the CSRD from January 1, 2025, meaning that non-financial information in accordance with the CSRD must be integrated into the management report for the first time for the 2025 financial year. As part of the preparations for the requirements of CSRD, the Zeppelin Group launched a "Ready for CSRD" project in 2023, defined the respective work packages and has already started implementation, such as the initial steps towards conducting the materiality analysis. Thus, the Group can draw on the preparatory work for the voluntary sustainability reporting that has been in place since the 2019 financial year.

Corporate Social Responsibility is an integral part of Zeppelin’s corporate strategy. As part of the strategy work, the existing CSR strategy was expanded in 2023 and Zeppelin's customers, products and services were consistently placed at the center, with other stakeholder groups, such as employees, suppliers and business partners, continuing to have a significant influence on the strategy work. In its CSR strategy, the Zeppelin Group is pursuing the vision to play a central role in transforming its relevant industries into sustainable economic sectors. In doing so, the Zeppelin Group aims to provide its customers with sustainable products, services and processes in order to support them as effectively as possible on their path to greater sustainability. An initial overview of the Zeppelin Group's sustainable product portfolio was compiled as part of the Impact project, with an eye to the upcoming EU taxonomy requirements.

Group financing with clear sustainability objectives has been a matter of course for Zeppelin since 2019. For example, in the summer of 2023, the Zeppelin Group placed great importance on integrating Group-wide sustainability goals into the syndicated loan agreement, the company’s most important financing instrument. Specifically, targets for reducing fresh water and energy consumption as well as reducing CO_2 emissions have been established. In addition to implementing efficiency and savings measures, an annual external audit of the non-financial key figures on energy and water consumption as well as CO_2 emissions is required for a successful target evaluation. In 2023, the first audit was carried out to confirm the 2022 data pool for considering the sustainability targets in the syndicated loan agreement. The first review of target achievement for the 2023 financial year will take place in 2024.

In view of the steadily increasing requirements of key stakeholders, the Zeppelin Group expanded its CO_2 accounting in 2023 and started recording indirectly caused CO_2 emissions along its entire value chain (so-called Scope 3 CO_2 emissions) for the first time. The direct CO_2 emissions (Scope 1) and indirect emissions (Scope 2) made by Zeppelin have already been part of the annual Sustainability Report since 2019. A detailed analysis of the CO_2 emissions from Scope 3 for selected areas and the definition of the future data collection process was developed by the end of 2023, with further optimization of data collection and full coverage of the product and range of services to take place in 2024.

At the end of 2023, Zeppelin dedicated a campaign week to CSR for the second time. In addition to several interactive campaigns for employees, the importance of CSR for Zeppelin as a foundation-owned company, the concrete sustainability goals, and the measures for achieving the goals were presented and explained in presentations and discussion rounds. The campaign week also focused on sustainable products and services from Caterpillar and Zeppelin as well as the importance of CSR in the human resources sector.

The Zeppelin Group has also assumed responsibility in the area of social commitment and supported a large number of social, cultural, and sporting organizations and institutions in Germany and abroad in 2023. For many years now, the Zeppelin Group has regularly supported Zeppelin University in Friedrichshafen, which was founded in 2003, and many other initiatives such as the aid organization “Home from Home”.

In 2023, the Zeppelin Group published its fourth sustainability report, which also documents the progress made as part of its UN Global Compact membership. The report was published completely digitally for the first time and is based on the internationally valid Global Reporting Initiative (GRI) standard and underlines Zeppelin's commitment to CSR. The report is available in German and English on the Zeppelin website (https://www.zeppelin.com/de/en/responsibility/sustainability//).

Act on Corporate Due Diligence Obligations in Supply Chains

After intensive preparation, Zeppelin implemented the legal requirements from the Act on Corporate Due Diligence Obligations in Supply Chains (LkSG) on January 1, 2023. In addition to the appointment of a person responsible for monitoring LkSG-related risk management, a complaints procedure (based on the Zeppelin Trust Line) was set up for human rights and environmental rights-related violations and a risk analysis of the direct suppliers and of the company’s own business area was carried out during the year. As part of the further development of internal processes in the area of supplier management, preventive measures were established in the event of human rights-related risks and remedial measures were defined in the event of legal violations at suppliers or in the company's own business area. In addition to training the company's own employees, which began in 2023, selected suppliers will be made aware of Zeppelin's expectations in the following year. The adoption of the declaration of principles for human and environmental rights by the Group Management Board marked the conclusion of the measures in the current year.

EU Taxonomy

Zeppelin must report in accordance with the EU Taxonomy from the 2025 financial year. The EU Taxonomy is a classification system for sustainable economic activities. The overarching objective is to promote sustainable investments to achieve the objectives of the EU Green Deal.

To fulfill the requirements, an interdisciplinary project team was put together in 2023. In addition, a project kick-off and initial assessments of the economic activities were carried out. In 2024, an implementation concept will be developed and the financial processes and systems adapted accordingly. This will ensure that the required data can be collected during operation or with minimal expense.

Modernization Strategy

The Zeppelin Group has set itself the goal of making its property locations climate-neutral in relation to the ongoing business operations of the properties by 2030. The CSR strategy adopted for this purpose is based on five key measures: insulating the exterior of the buildings, modernizing the building technology, using photovoltaic systems and (if possible) geothermal energy as well as electric mobility. Measures are also being implemented to reduce fresh water consumption. All upcoming new construction projects also follow the specifications of climate neutrality in their planning and implementation. As part of the CSR activities, the Smartmeter project was also launched to digitally record and evaluate all consumption data (electricity, water, gas) at the sites and further optimize consumption measurements.

New Head Office in Gothenburg

The construction of the new headquarters of the Swedish company is progressing largely according to plan. The planned move-in date for the workshop is June 2024, and for the office August 2024. The building will receive the BREEAM In Use sustainability standard. The site is prepared for the upcoming fleet electrification with increased capacity of the electrical infrastructure and charging stations and will be operated climate neutrally.

Magdalena Kitzmann GmbH

In 2021, Zeppelin Systems GmbH (ZSD) negotiated with Gräfe GmbH und Co. KG (GKG) the acquisition of 60% of the shares in the company Magdalena Kitzmann GmbH (MKG), which was first consolidated in the form of a joint venture with effect from January 2, 2022. Both shareholders (ZSD and GKG) decided to dissolve the joint venture in February 2024, which will result in the sale of the 60% shares of ZSD to Gräfe GmbH & Co. KG.

New Construction of Central Spare Parts Warehouse

The LOG25 project is responsible for the new construction of the central spare parts warehouse of Zeppelin Baumaschinen GmbH (ZBM) in Cologne. The new construction of this important element in the spare parts supply along the logistics chain from Caterpillar to the end customer is due, among other things, to the fact that the capacities in the existing warehouse are no longer sufficient in the medium term to meet customer needs with an unchanged high level of service. In 2023, most activities related to the acquisition of a new plot of land and detailed planning were carried out. The logistics strategy defined in advance was conceptually detailed with regard to layout, technical equipment and IT requirements. With the completion of the invitation to tender at the end of 2023, trades related to the new, (semi-)automated storage technology were awarded to an external implementation partner.

ACQUISITION OF CP APS

Zeppelin Danmark A/S, Denmark, acquired CP ApS, Viby Sjaelland, Denmark, with a purchase agreement dated March 31, 2023 and economic effect as of July 13, 2023. The acquisition strengthens the rental activities on the Danish market and pursues the strategic goal of further international expansion of the rental business. With effect from November 1, 2023, the rental business was separated from Zeppelin Danmark A/S and transferred to CP ApS. At the same time, CP ApS was renamed Zeppelin Rental Danmark ApS, which is a wholly-owned subsidiary of Zeppelin Danmark A/S and part of the Rental strategic business unit. By consolidating Zeppelin's rental activities in Denmark in an independent company and creating structures geared towards the rental business, the carve-out represents a further important step in the internationalization of the rental business and the further development of the market position in Denmark, where Zeppelin Rental Danmark ApS now operates as the third largest rental company on the market. To meet the demanding management tasks involved, the management of Zeppelin Rental Danmark has been strengthened and expanded to three members. The integration with topics such as rebranding, merging of IT systems and harmonization of processes is currently being implemented and is expected to be completed in 2024.

NEW WORK

Zeppelin's New Work project is a response to new requirements in the ever-changing world of work. The new workplace concept focuses on the needs of employees and features open-space environments including desk sharing, quiet spaces for concentrated work and project rooms for collaboration and cooperation. After the 2022 pilot phase and further adjustments to the concept, the project will move on to the next phase. In collaboration with their managers, employees at the Zeppelin headquarters decide on the best possible working environment for them. Reconstruction and relocation measures are planned for 2024.

OTHER IMPORTANT EVENTS FOR THE SBUS

Over the course of 2023, various changes were made to the organization of the **Construction Equipment CE SBU**. In Zeppelin Baumaschinen GmbH's Management Board, Fred Cordes and Thomas Weber, the former dual leadership of Zeppelin Baumaschinen GmbH, were joined by Dr. Andreas Kamm and Philip Wolters as Managing Directors at the beginning of 2023. The changes were made as part of Fred Cordes' appointment to the Management Board of Zeppelin GmbH as of January 1, 2023. On August 1, 2023, Fred Cordes stepped down as Chairman of the Management Board of Zeppelin Baumaschinen GmbH and Holger Schulz was appointed as his successor.

After bauma 2022, the year 2023 was characterized by many important trade fairs that Zeppelin used to present itself to a broad specialist audience. After the German Asphalt Days at the beginning of the year, the dual trade fair for active recycling and civil engineering live took place in Karlsruhe at the end of April. Zeppelin presented innovative solutions, for example, the Cat MH3022 and Cat MH3024 material handlers, which demonstrated the handling of scrap, metal, wood and biomass in live demonstrations. The latest generation of the ZM110 mobile excavator was also presented. Zeppelin also presented the Cat MH3040 material handler for timber handling with a towing capacity of up to 50 tons at the Ligna trade fair in Hanover in May 2023. Also on display was a new generation Cat 972 wheel loader, which supports the timber industry with reduced fuel consumption and higher productivity. In the late summer, Zeppelin presented various large Cat machines in live demos at the steinexpo at MHI Basaltsteinbruch Nieder-Ofleiden, including the Cat 323 tracked excavator, which was remotely controlled via Cat Command. Another focus was on the Cat 988 GC wheel loader, which was presented at the trade fair for the first time, as well as on sustainable drive concepts and new technologies, including assistance systems and the VisionLink 3.0 fleet management. Zeppelin Baumaschinen was able to present the Cat 320 tracked excavator, the M319 mobile excavator and the Cat 908 high-lift version at the NordBau construction trade fair in Neumünster. Agritechnica in Hanover in November, where the Cat 926 Agrar wheel loader was very well received, was an extremely successful conclusion to the 2023 trade fair year.

In 2023, Zeppelin Baumaschinen GmbH entered into a cooperation with a manufacturer of compact wheel loaders with operating weights of 2.5 to 6 tons. Models ZL25, ZL35, ZL45 and ZL60T will be sold in Germany from January 1, 2024. The four wheel loaders expand the product portfolio to meet the growing demand for compact construction machines in the construction and agriculture sectors. Zeppelin received the Growth Award from Caterpillar for the successful sale of Cat two-way technology. The Cat M323F two-way excavator sets new standards with innovative rail wheel drive, brake system and simple control system. The M323F offers advantages such as safe propulsion thanks to hydrostatic rail wheel drive, compact dimensions and high stability, which is particularly important in rail construction. Zeppelin was also certified by Caterpillar as one of the first dealers for the Cat Command remote control technology. Cat Command enables the operation of up to four different construction machines in real time from external control stands or control consoles outdoors via a network. Cat Command doesn't just provide safety features, it also offers the potential to work more efficiently in hazardous environments and address the industry's skills shortage. Caterpillar presented the new version 3.0 of VisionLink at Conexpo in Las Vegas. The aim of this fleet management solution for Cat and Non-Cat construction machines is to simplify the organization and management of the machine fleet. The cloud-based platform offers a redesigned user interface, comprehensive sorting and filtering capabilities, and detailed evaluations of machine operating data. As part of the environmental requirements and the deposit obligation for vehicle batteries anchored in the Battery Act (BattG), a deposit system has been introduced for batteries from Cat B construction machines and non-Cat batteries. The deposit is returned at Zeppelin branches or by regional disposal companies.

After a construction period of around 19 months, the new Zeppelin branch in Eschweiler was officially opened at the end of November. It covers almost 24,000 m² of office space, a workshop including washing hall, a rental store, outdoor washing and refueling areas as well as sufficient space. The branch and rental store is operated in a climate-neutral manner and is equipped with state-of-the-art technology to provide customers with the best possible service while conserving resources as much as possible. With the energetic modernization of the German branches in Freiburg, Rendsburg and Ulm as well as the Austrian branch in Villach, Zeppelin made an important contribution to achieving its sustainability targets. Electric charging infrastructure, LED equipment and PV systems complemented the energy modernization at the sites.

Digitization projects underwent a number of new developments in the reporting year. For example, the Sales Dispotool was successfully introduced. This has standardized the processes in the branches of Zeppelin Baumaschinen GmbH and the head office for the planning of machines and components. As a result, complete transparency has been achieved along the entire logistics chain, from the creation of the customer order through to invoicing. In addition, the introduction of the Sales Dispotool will significantly improve communication between distribution and service in the branches and simplify service order processing. Furthermore, Intecrity software was introduced as the successor to CMS-Link, which serves as a credit management solution for some companies in Germany. The maintenance planner was updated this year. The maintenance intervals and the date of the next due inspections are calculated based on the inspection history and the transmitted operating hours of the machines. Thanks to the update, the database and the extended interfaces offer innovations for digitized processes, such as fully automated spare parts ordering.

At the beginning of the year, klickparts GmbH merged with Zeppelin Baumaschinen GmbH. The klickparts brand will continue to exist and the klickparts.com online shop will continue to be operated by Zeppelin Baumaschinen GmbH. In future, the business with non-Cat spare parts will be the responsibility of Zeppelin Baumaschinen GmbH's service sales department and will be expanded in a sustainable manner.

SITECH Deutschland GmbH took over the business operations of CCS GmbH in Kleinmachnow near Berlin on January 1, 2023. With this important step, SITECH is expanding its sales and service presence for the existing Trimble product portfolio in the north-east region. For the past eight years, CCS GmbH has been the established and successful Leica sales partner in the Berlin, Brandenburg and Saxony-Anhalt regions for the fields of construction machine control, surveying and 3D scanning.

The order backlog of the **Construction Equipment Nordics SBU** continues to shrink and incoming orders remained weak at the end of the year. The background to this development is the limited availability of Caterpillar machines until mid-2023 and the partially unfavorable price policy compared to competitors on the market.

New machine deliveries continued to be strong as Caterpillar caught up on backlogs and increased original equipment capacities. Sales of used machines remained at a high level.

The SBU continues to implement the major projects defined as part of the strategy process. The utmost attention is paid to customer benefits and employee loyalty. In order to increase profitability and prepare for a slightly declining market for new machinery, the SBU is running the Service Excellence Program together with Caterpillar, which focuses on the growth of the spare parts business and enhanced digital services. In addition, growth programs for new machines are being prepared together with Caterpillar to win back the market in 2024.

The European Union's 10th sanctions package, which was issued on February 25, 2023, banned the sale of all construction machines and spare parts of the **Construction Equipment Eurasia SBU** in Russia, which the SBU was still allowed to sell up to that point in time. Within the framework of the special approval received from the Swiss State Secretariat for Economic Affairs (SECO), the SBU was given the opportunity to sell its fixed and current assets already located in Russia to non-sanctioned customers, subject to the complete and timely withdrawal from the Russian construction and mining machinery market. During 2023, the SBU sold all inventories of construction equipment and spare parts covered by the provisions of the special permit, as well as the majority of its fixed assets. At the same time, the SBU's workforce in Russia was significantly reduced and most of the branches were closed. Only five branches remain, which are required to operate the agricultural machinery service business.

The **Rental SBU** once again secured a top award in the rental industry in the financial year 2023. Following last year's Large Rental Company of the Year 2022 award, the European Rental Association awarded Zeppelin Rental GmbH the European Rental Award in the Best Initiative in People category. Zeppelin Rental GmbH was also awarded gold certification in the independent sustainability rating by EcoVadis for the first time. For the seventh time in a row, Zeppelin Rental Österreich GmbH & Co. KG was voted number one by readers of the Austrian magazine "Solid" in the Construction Logistics and Rental category.

The growth strategy of the Rental SBU was pursued further as part of acquisition projects.

For example, Zeppelin Denmark acquired one of the leading rental companies in Denmark, CP ApS.

As part of an asset deal, Zeppelin Rental GmbH took over the business operations of Bauhof Service GmbH, Pliensbach, with effect from August 1, 2023. The assets acquired mainly include construction equipment and accessories for setting up and managing the electricity and water supply of construction sites. The 25 employees acquired through the transfer of operations were integrated into the structures of the Energy, Climate and Water (EKW) business unit and support the expansion of this business unit in the Stuttgart region.

In addition, basware was introduced in Germany and Austria in the 2023 financial year as a tool for digital incoming invoice processing, which enables a more efficient procedure for processing supplier invoices.

With effect from July 19, 2023, the Supervisory Board of Zeppelin Rental GmbH was re-appointed and the member of the Supervisory Board elected from the workforce was appointed Deputy Chairman of the Supervisory Board. On October 18, 2023, there was a change in the Management board of Meton GmbH.

In 2023, the **Power Systems SBU** recorded very high overall incoming orders in both the new engine business and the service sector. In the service sector, demand and capacity utilization even reached record levels. In addition to the growing new business for large heat pumps and grid replacement systems, the international mega yacht service was the fastest growing market. Very promising developments were noted in both Germany and Denmark. Despite the extreme situation, positive results were also achieved in Ukraine. The loss of business in Russia and Belarus was fully compensated for by strengthening the European business.

External influences such as supply chain problems and limited material availability also affected Power Systems to a great extent, although the situation eased in 2023. However, engine overhauls were delayed due to a lack of spare parts.

In 2023, Caterpillar honored the quality of Zeppelin Power Systems Service with the Platinum certificate – the highest award for dealers for a high level of spare parts and service competence.

In 2023, Power Systems was responsible for one of the largest projects for innovative combined heat and power (CHP) – the entire planning and implementation of a large-scale heat pump system for the Stadtwerke Duisburg utilities – from civil engineering and building construction to plant engineering. This power generation plant is the largest combined heat and power plant connected to a sewage treatment plant in Germany.

The development of a new 2030 mission statement was also the focus of 2023. This forms the basis of communication for all external and internal stakeholders of the company and describes the SBU's credo and strategic orientation: "With our customized drive and energy systems, we are shaping the technological transformation towards decarbonization and digitalization."

The **Plant Engineering SBU** was able to largely cancel the risk provision formed in the previous year for a Russian order due to the possible reuse of the materials.

The SBU is also successfully active in the field of carbon capture. Direct Air Capturing (DAC) removes CO_2 directly from atmospheric air. For a customer in the USA, the SBU is supplying a partial system in which the required auxiliary materials can be conveyed and stored safely and in a non-destructive manner.

In the course of the successful completion of the world's largest malt production plant in Brazil (Agraria), the management team has decided to expand the Malts & Breweries market area as a permanent product area under Food and is currently applying for projects to be implemented in Europe and Asia.

With the introduction of Salesforce at all German sites – and the implementation planned in 2024 in all international subsidiaries – plant engineering is accelerating and optimizing its sales. With the first globally used sales platform for plant, product and after-sales business, all customer touchpoints worldwide are recorded and evaluated.

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 the reporting date is as follows:

EUR million	2023	2022	Change	Change %
Sales	3,934.7	3,838.2	96.5	2.5 %
Cost of sales	-3,333.0	-3,274.7	-58.2	1.8 %
Gross profit on sales	601.7	563.4	38.3	6.8 %
Selling expenses and general administrative expenses[38]	-451.9	-444.5	-7.4	1.7 %
Other income and expenses[39]	33.8	24.7	9.1	36.9 %
Profit before net financial result	183.6	143.6	40.1	27.9 %
Net financial result	-29.8	-8.9	-20.9	>100%
Net profit before tax	153.8	134.6	19.2	14.2 %
Income taxes	-53.7	-30.3	-23.5	77.6 %
Net profit after tax[40]	100.1	104.4	-4.3	-4.1 %

Business performance was positive overall. Despite the challenging conditions and the loss of business in Russia, Group sales increased by 2.5% compared to the previous year (EUR 3,934.7 million; previous year: EUR 3,838.2 million).

EUR million	2023	2022	Change %
Cost of materials	-2,610.2	-2,583.6	-1.0 %
Personnel expenses	-488.3	-454.7	-7.4 %
Depreciation and amortization	-61.8	-71.3	13.3 %
Other expenses	-172.6	-165.2	-4.5 %
Group cost of sales	**-3,333.0**	**-3,274.7**	**-1.8 %**

The cost of sales increased by 1.8% to EUR 3,333.0 million in the same period. The increase is due in particular to higher personnel expenses and a slight increase in the cost of materials. In contrast, there was a decline in depreciation and amortization. Gross profit rose by 6.8% to EUR 601.7 million. The gross margin of 15.3% was slightly above the previous year (14.7%).

At EUR 451.9 million, selling and general administrative expenses were EUR 7.4 million higher than in the previous year.

At EUR 33.8 million, the balance of other income and expenses was above the previous year's level (EUR 24.7 million). This resulted mainly from lower currency losses in Russia due to the significantly reduced business activity.

At EUR -29.8 million, the net financial result significantly deteriorated compared to the previous year (EUR -8.9 million). Interest result deteriorated by EUR 13.4 million (EUR -27.9 million; previous year: EUR -14.5 million) due to higher interest rates and higher commitment of funds. The other financial result also fell by EUR 7.5 million to EUR -1.9 million (previous year: EUR 5.6 million), mainly due to lower gains from the fair value measurement of interest rate derivatives not included in hedge accounting.

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[38] Including research and development costs.
[39] Including impairments on financial instruments and contract assets (net) as well as the result from companies accounted for using the equity method.
[40] Including non-controlling interests.

Changes to net profit before tax for the financial year, broken down into SBUs, are presented below:

EUR million	2023	2022	Change %
Construction Equipment CE	91.0	79.6	14.3 %
Construction Equipment Nordics	5.2	4.9	6.9 %
Construction Equipment Eurasia	2.9	10.6	-72.3 %
Rental	56.5	71.4	-20.9 %
Power Systems	24.2	17.3	40.0 %
Plant Engineering	15.2	-12.6	>100%
Consolidated net profit before tax[41]	**153.8**	**134.6**	**14.2 %**

Consolidated net profit before tax increased by EUR 19.2 million to EUR 153.8 million (previous year: EUR 134.6 million). The return on sales increased from 3.5% in the previous year to 3.9% in the financial year. The return on equity before tax[42] is 13.3%; the comparable return on assets is[43] 5.3%. The return on capital employed (ROCE) amounted to 6.4% and therefore increased slightly (previous year: 6.2%).

Income tax expenses amounted to EUR 53.7 million (previous year: EUR 30.3 million). Current taxes have increased significantly, in particular due to the increased business volume in the Zeppelin GmbH tax group. In addition, a tax provision was reversed in the previous year. Deferred tax income deteriorated due to valuation allowances on deferred tax assets in Russia, among other things. As a result, the tax rate increased from 22.5% to 34.9%. Consolidated net profit after tax was EUR 100.1 million. This was EUR 4.3 million below the previous year's result.

41 Including Zeppelin GmbH, klickrent GmbH and Z Lab GmbH as well as consolidation effects.

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

43 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	2023 IFRS	2022 IFRS
Balance sheet total in EUR million	**3,656**	**3,263**
Current liabilities		
Financial liabilities, trade payables, other financial liabilities	12.5 %	16.3 %
Contract liabilities	7.7 %	8.2 %
Employee benefits	3.1 %	3.5 %
Miscellaneous	5.7 %	6.4 %
Non-current liabilities		
Financial liabilities, trade payables, other financial liabilities	29.9 %	22.6 %
Contract liabilities	0.8 %	0.7 %
Employee benefits	3.3 %	3.5 %
Miscellaneous	4.6 %	4.2 %
Equity	32.4 %	34.6 %

Current liabilities amounted to EUR 1,065.6 million as of December 31, 2023 – a decrease of EUR 56.0 million. They consist primarily of financial liabilities (EUR 159.7 million; previous year: EUR 160.3 million), trade payables (EUR 165.9 million; previous year: EUR 235.0 million), other financial liabilities (EUR 133.1 million; previous year: EUR 137.9 million) and contract liabilities (EUR 283.1 million; previous year: EUR 267.7 million). The reduction is mainly due to the decrease in trade payables by EUR 69.0 million.

Non-current liabilities amounted to EUR 1,407.6 million as of December 31, 2023, an increase of EUR 394.6 million. They consisted primarily of financial liabilities (EUR 917.6 million; previous year: EUR 568.7 million), other financial liabilities (EUR 175.7 million; previous year: EUR 169.0 million) and employee benefits (EUR 120.0 million; previous year: EUR 113.0 million). The increase in financial liabilities results mainly from an increased use of the syndicated loan.

Equity increased by EUR 54.6 million to EUR 1,183.0 million in the financial year (taking into account negative currency translation differences of EUR 15.0 million attributable to Zeppelin (previous year: EUR +4.6 million)). The currency translation differences mainly resulted from changes in the exchange rates of the Russian ruble, the Chinese renminbi, the Czech koruna and the US dollar. The equity ratio[44] fell to 32.4% (previous year 34.6%) with the balance sheet total increasing by 12.0% to EUR 3,656.3 million. Total non-current financial resources of EUR 2,590.7 million (previous year: EUR 2,141.5 million) exceed non-current assets by EUR 600.6 million (previous year: EUR 446.4 million), which corresponds to asset coverage[45] of 130.2% (previous year: 126.3%). They therefore covered an additional 69.5% (previous year: 52.8%) of inventories.

SIGNIFICANT FINANCING INSTRUMENTS

At the end of 2023, the syndicated credit facility, which had been in place since 2011 and was renegotiated and increased in 2023, was available to the Group as a key financing instrument. The term of the syndicated credit facility is five years (ends on July 20, 2028) and includes a prolongation option of one year on two occasions. The credit facility is available for cash drawings (EUR 620.0 million) and the issuing of guarantees (EUR 250.0 million). At the end of 2023, it was utilized at 54.5% (previous year: 48.4%), with a total of EUR 474.6 million (of which EUR 146.3 million for guarantees). In addition, at the end of 2023 the Group had additional bank credit lines of around EUR 167 million, of which it had utilized EUR 92.5 million.

Furthermore, the Group finances itself over the long term through the issuance of bonded loans. At the end of the year, the total volume outstanding amounted to EUR 256.0 million (previous year: EUR 245.0 million). 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 2023. In September 2023, Creditreform Rating AG reaffirmed the Group's "A" rating and assigned it a stable outlook, once again attesting to Zeppelin's high creditworthiness and low default risk with this very good corporate rating. The decisive factor in the renewed rating is that the expected deterioration in the financial ratios for the 2022 financial year had already been taken into account in the previous year's rating through a corresponding adjustment. In addition, the risks and market losses that resulted on a wider scale from the Russian war of aggression against Ukraine are now regarded as largely addressed or manageable. Although the Zeppelin Group faced a considerable overall loss of sales and earnings in Russia, Ukraine, and Belarus in 2022, it succeeded in surpassing its sales in 2021 and closed the year significantly above its forecasts, producing a stabilizing effect.

The companies of the Construction Equipment CE, Construction Equipment Nordics, Construction Equipment Eurasia, 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 were financed in the 2023 financial year from current cash flow and balance sheet debt.

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

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

LIQUIDITY

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

EUR million	2023	2022
Cash flow from operating activities	-9.0	-42.8
+ Cash flow from investing activities	-159.8	-42.8
+ Cash flow from financing activities	204.7	27.0
= Changes in cash and cash equivalents	**35.9**	**-58.6**
+ Cash and cash equivalents at the beginning of the period	**157.0**	**211.4**
+ Foreign exchange rate differences and consolidation group-related changes in cash and cash equivalents	-9.8	4.2
= Cash and cash equivalents at the end of the fiscal year	**183.2**	**157.0**

Cash and cash equivalents increased by EUR 26.1 million compared to the previous year, which is due to a lower increase in inventories and the increased use of the syndicated loan.

Cash flow from operating activities increased by EUR 33.8 million to EUR -9.0 million (previous year: EUR -42.8 million). The main driver of this development is a less slightly increase in inventories (EUR -27.6 million, previous year EUR -258.0 million). In contrast, trade receivables increased (EUR -51.5 million, previous year EUR -4.4 million) and trade payables decreased (EUR -71.7 million, previous year EUR 82.0 million).

Cash flow from investing activities was significantly lower than in the previous year at EUR -159.8 million (EUR -42.8 million). The change is mainly due to the EUR 42.7 million increase in disbursements for investments in property, plant and equipment excluding rental fleet (EUR -88.5 million, previous year: EUR -45.8 million), but also from the acquisition of consolidated companies (-71.6; previous year: -2.4).

Cash flow from financing activities increased by EUR 177.6 million to EUR 204.7 million (previous year: EUR 27.0 million). This was due in particular to a EUR 112.4 million increase in long-term financial liabilities (EUR 249.2 million, previous year: EUR 136.8 million).

INVESTMENTS

EUR million	2023	2022	Change %
Intangible assets	17.3	8.5	> 100%
Land and buildings	57.4	23.6	> 100%
Operating and business equipment including technical equipment	50.5	40.7	23.9 %
Investments in financial assets	117.7	3.1	> 100%
Total investments excluding rental fleet	**242.9**	**76.0**	**> 100%**
Investments in the rental fleet	310.8	262.9	18.2 %
Total investments including rental fleet	**553.7**	**338.9**	**63.4 %**

Total investments in property, plant and equipment, financial assets and intangible assets of EUR 553.7 million (incl. EUR 310.8 million rental fleet) were offset by scheduled depreciation and amortization of EUR 201.8 million in the financial year, which thus covered 36.4% of total investments (previous year: 52.8%). The increase in investments is due in particular to the acquisition of Zeppelin Rental Danmark and the expansion of the rental fleet.

Net Assets

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

ASSETS Proportion in % of balance sheet total	2023 IFRS	2022 IFRS
Balance sheet total in EUR million	**3,656**	**3,263**
Current assets		
Cash and cash equivalents	5.0 %	4.8 %
Financial assets, trade receivables	14.3 %	14.2 %
Contract assets	0.8 %	1.5 %
Inventories	23.6 %	25.9 %
Miscellaneous	1.8 %	1.7 %
Non-current assets		
Financial assets, trade receivables	0.8 %	1.1 %
Intangible assets; property, plant and equipment	49.7 %	46.5 %
Miscellaneous	4.0 %	4.4 %

The balance sheet total of the Group increased in the financial year by EUR 393.2 million to EUR 3,656.3 million. This is due in particular to an increase in property, plant and equipment (EUR +265.0 million) and trade receivables (EUR +61.4 million). At 1.1 p.a., capital turnover[46] was slightly below the previous year (1.2 p.a.). At the end of 2023, the calculated range of trade receivables as of the balance sheet date had deteriorated to 40.4 days (previous year: 35.0 days).

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

Comparison of Current Situation with Forecast

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

EUR million	2023	2022	2022 Forecast
Sales	3,934.7	3,838.2	moderate decline
Net profit before tax	153.8	134.6	significant decline
ROCE	6.4 %	6.2 %	slight decline

Sales growth compared with the previous year was weak, which was due to the continued good construction economy and inflation-related price increases. While net profit before tax showed significant growth, ROCE was at the same level as the previous year. The forecast deviations in net profit before taxes and ROCE are due in particular to a better gross profit from sales and higher other income.

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

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

RESULTS OF OPERATIONS

Zeppelin GmbH's sales increased by EUR 3.2 million to EUR 58.8 million in 2023 (previous year: EUR 55.5 million). In particular, the onward charging of IT services and licenses rose by EUR 2.3 million to EUR 31.9 million. In addition, Zeppelin GmbH mainly generates revenue from land and building rental in the amount of EUR 19.4 million (previous year: EUR 18.5 million).

Other income decreased by EUR 6.2 million to EUR 4.2 million (previous year: EUR 10.4 million). The decline is mainly attributable to lower income from the reversal of provisions of EUR 1.2 million (previous year: EUR 7.2 million).

Income from participations amounted to EUR 31.5 million (previous year: EUR 23.9 million) and increased by EUR 7.6 million, due in particular to higher dividend distributions from Zeppelin International AG and Zeppelin CZ s.r.o.

At EUR 23.1 million, the expenses for purchased services were around EUR 5.9 million higher than in the previous year. This was due in particular to higher expenses for IT costs.

Compared to the previous year, personnel expenses increased by EUR 4.3 million to EUR 40.3 million (previous year: EUR 36.0 million), which is due, among other things, to the quantitative personnel increase and granting the inflation compensation bonus.

At EUR 12.1 million, amortization of intangible assets and depreciation of property, plant and equipment were around EUR 7.7 million lower than in the previous year (EUR 19.8 million). This is mainly due to an impairment loss on IT software in the previous year.

Other expenses increased by EUR 3.1 million to EUR 31.2 million (previous year: EUR 28.2 million).

The positive interest result in the financial year amounted to EUR 14.9 million and thus increased by EUR 12.3 million compared to the previous year (EUR 2.6 million). Interest income increased by EUR 28.2 million. Of this, EUR 25.3 million is attributable to affiliated companies. This was offset by interest expenses, which increased by EUR 15.9 million due to higher interest rates and increased utilization of credit lines.

The result from ordinary activities therefore increased year-on-year to EUR 123.9 million (previous year: EUR 102.2 million).

The net profit after tax for the year amounted to EUR 90.1 million (previous year: EUR 86.9 million). Income taxes amounted to EUR 33.5 million (previous year: EUR 14.9 million).

FINANCIAL POSITION

The financial strategy is derived from the business purpose of Zeppelin GmbH (the holding of participations, rental of land, buildings and technical equipment owned by the company to affiliated companies and the financing of the Group). The long-term commitment of funds in intangible assets as well as property, plant and equipment and financial assets (50.2% of assets) should correspond to financing with matching maturities on the liabilities side of the balance sheet. Here, the creation of equity from retained profits is an important source of funding.

Zeppelin GmbH's absolute equity increased to EUR 901.9 million (previous year: EUR 829.8 million) due to the increase in retained earnings in the reporting year and amounts to 55.0% of balance sheet total assets (previous year: 61.3%). Non-current funds amounted to EUR 532.5 million (32.4% of the balance sheet total) and mainly consist of provisions for pensions (EUR 31.4 million) and liabilities to banks (EUR 501.0 million)[47]. Current funds include provisions (EUR 21.9 million), liabilities to banks (EUR 81.3 million), trade payables (EUR 5.2 million), liabilities to affiliated companies (EUR 48.2 million, mainly from the cash investment of Group companies and cash pooling), other financial liabilities (EUR 28.7 million) and deferred income from the allocation of costs of an ERP system to affiliated companies (EUR 21.3 million).

In the 2023 financial year, EUR 53.3 million were invested (previous year: EUR 66.4 million). Of this, EUR 24.5 million relates to the increase of shares in affiliated companies. Investments in property, plant and equipment amounted to EUR 17.5 million, while investments in intangible assets amounted to EUR 11.3 million.

NET ASSETS

Zeppelin GmbH’s assets consist primarily of participations of EUR 578.2 million (previous year: EUR 553.7 million), loans to affiliated companies of EUR 80.3 million (previous year: EUR 100.3 million), land, buildings and assets under construction of EUR 124.6. million (previous year: EUR 116.0 million), and software of EUR 2.9 million (previous year: EUR 8.9 million). These assets thus corresponded to 47.9% (previous year: 57.5%) of the balance sheet total, which rose to EUR 1,641.0 million (previous year: EUR 1,353.9 million). Receivables from affiliated companies rose by EUR 221.6 million to EUR 773.6 million (previous year: EUR 552.0 million). In the same period, cash and cash equivalents (EUR 43.8 million) increased by EUR 41.5 million. Non-current assets of EUR 823.8 million (previous year: EUR 790.4 million) were offset by non-current liabilities of EUR 1,434.4 million (previous year: EUR 1,186.7 million) as of December 31, 2023. The latter consisted of equity, pension provisions, and non-current liabilities. Long-term asset coverage[48] increased from 150.1% to 174.1%. This is due in particular to the increased use of the syndicated loan.

Investments in property, plant and equipment amounted to

[47] Exclusively bond loans and syndicated credit facility.

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

EUR 17.5 million (previous year: EUR 13.1 million). Of this amount, EUR 16.6 million (previous year: EUR 11.6 million) relates to land, buildings and facilities 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, a significant decline in the net profit was forecasted under IFRS. With a net profit for the year according to IFRS of EUR 92.1 million (previous year: EUR 89.5 million), this decline did not occur, which is due in particular to a better gross profit on sales and a better interest result.

C Opportunity and Risk Report

1 Risk Report

Risk Management System

As a global company, the Group is exposed to several risks. The Group uses a comprehensive risk management system to counter these risks as well as current operational, market-related and legal requirements, such as the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz). 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 on limiting identified risks, improving risk prevention and avoiding risks that could jeopardize the company's continued existence.

A dedicated planning and reporting system 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 accordingly.

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 preventive measures taken and their efficiency over time.

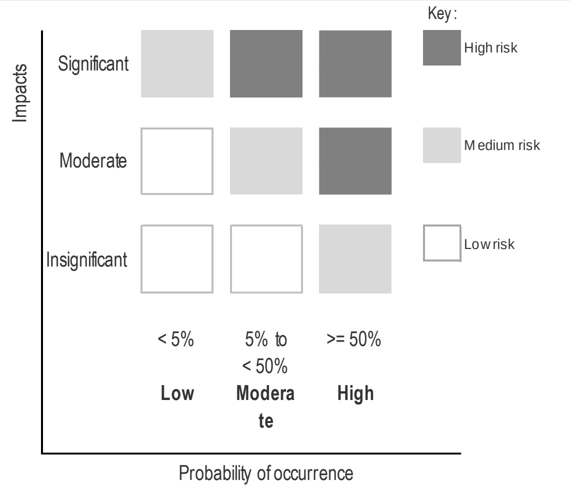
In addition, the ad-hoc risk reporting process ensures that adequate measures are initiated in a timely manner if material risks occur. The Risk Panel established within the Group is responsible for monitoring all risks and tracking the measures initiated.

At Zeppelin, country-specific risks are evaluated based on 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 specifically selected countries in which Zeppelin is active. This information also serves as the basis for controlling and the initiation of adequate measures to avoid risks.

Degree of impact	Definition of impact
Insignificant	Only insignificant, limited negative impacts on the financial performance (< EUR 10 million loss amount[49])
Moderate	Some negative impacts on the financial performance (>= EUR 10 million and < EUR 20 million loss amount[49])
Significant	Considerable negative impacts on the financial performance (>= EUR 20 million loss amount[49])

Probability of occurrence	Description
< 5%	Low
5% to < 50%	Medium
>= 50%	High

Evaluation matrix



Internal Audit and Internal Control System

In 2023, the Group auditing department conducted several standard audits. These were mainly carried out at the operating Group companies Zeppelin Systems Latin America Equipamentos Industriais Ltda., Zeppelin Österreich GmbH and Zeppelin GmbH (two audits). In addition, a total of five follow-up audits were carried out at the Group companies ABS Hydraulik Service GmbH, Zeppelin Polska Sp. z.o.o., Zeppelin Sverige AB, Zeppelin Power Systems GmbH, klickrent GmbH, Zeppelin LAB GmbH and the follow-up to a special audit of a large-scale, cross-company order in the Plant Engineering SBU. Furthermore, the group auditing department conducted a special audit and supported the Compliance & Data Protection unit in investigating a compliance case.

Additionally, a "cultural dialog" was conducted at Zeppelin Power Systems GmbH under the direction of the group audit department. This interdisciplinary project involved an examination of the business unit's non-financial areas of risk management, organization and culture.

In 2022, Zeppelin conducted an analysis of the Internal

[49] Per risk category.

Control System (ICS) for the relevant Group companies. Potential for improvement in the areas of automation, documentation and process efficiency was identified. Implementation of the identified improvement potential began in 2023 and will continue in subsequent years. Once fully implemented, the ICS is continuously developed to meet constantly increasing requirements.

RISKS

The following describes risks that can have a significant impact on the earnings, financial and net assets position of Zeppelin GmbH and the Group.

Risk category	Risk of occurrence	Impact on profit situation[50]	Risk assessment
Asset risks	High	Significant	High
Currency risks	Low	Insignificant	Low/moderate
Contract risks	Low	Insignificant	Low
Financial risks	Low	Insignificant	Low

Twelve risk areas are grouped into four risk categories:

- Asset risks (inventories/stocks, receivables, risks in the rental fleet, risks from agreements with financing companies (Rental Purchase Options/RPOs))
- 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)

Of these, only the main individual risks are described below.

ASSET RISKS

Russia and Ukraine Risks: The Russian war against Ukraine has noticeable effects on Zeppelin. While Russia, Belarus and Ukraine still accounted for 12% of Group sales, 14% of net profit before tax and around 12% of employees in the 2022 financial year, these figures were all significantly reduced in 2023. Zeppelin's net asset positions in Russia and Ukraine accounted for a mid-double-digit million euro amount at the end of the year, which was less than the previous year as a result of targeted risk provisions. Even a total loss of this risky sum would not jeopardize the continued existence of the company.

The equity investment in connection with the real estate investment in St. Petersburg and an associated loan were insured against political risks by guarantees from the Federal Republic of Germany for direct investments in other countries.

Inventory 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. To ensure delivery, it also maintains inventories to compensate for delivery bottlenecks and delays. The risks are minimized through international collaboration and management by the SBUs and ongoing inventory optimization. The disruption to international supply chains that existed in the previous year, which also affected the production of Caterpillar as the most important manufacturer partner, was largely resolved from the fall of 2022. In spite of a very high order backlog due to limited original equipment capacity, this led to a further increase in inventories above the high level of the previous year. The high commitment in working capital led to a corresponding burden on financial results in the context of the increased interest rate level. Appropriate loss allowances have also been made on inventories in accordance with the accounting policy. In view of the still high order backlog, no major risks are seen in inventories.

CONTRACT RISKS

Contract Risks: The ability to act financially at all times is ensured by the syndicated credit facility concluded in 2011 and renegotiated and increased in 2023 with a term until 2028 plus two one-year extension options. In addition, in order to diversify its outside capital structure, the Group issues bonded loans, maintains bilateral credit lines with third-party banks, and makes use of sales financing via several specialized institutions. Extensive facilities are also available for sale-leaseback/sale-hire-purchase-back transactions, particularly for financing the rental fleets.

In line with the Group's financial strategy of hedging around two thirds of average financial liabilities against interest rate risks, the Group uses interest rate swaps and refinances itself with fixed-interest bonded loans. Zeppelin GmbH is hedged against an increase in interest expenses for drawings under the syndicated credit facility and bonded loans to the extent described. The interest rate swaps mature in 2024 and 2025. The fixed-interest bond loans expire in 2025, 2026, 2029 and 2031. There is also a variable-interest bond loan, which has synthetic fixed-interest rate due to interest rate swaps, with a maturity in 2024.

FINANCIAL RISKS

Market 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.

The Group's geopolitical and economic risk situation changed significantly with Russia's war of aggression against Ukraine and the response to it. Further information on this is provided under asset risks.

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. Currency risks are taken into account by

[50] Per risk category.

means of hedging 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 the previous year, new markets were opened up in the field of battery mass production and plastics recycling. 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.

Order Backlog Risks: Zeppelin carries out activities within the framework of long-term/project contracts. Such contracts are common in the strategic plant engineering business units and power systems, such as for the construction of combined heat and power plants. Some of these contracts may provide for the assumption of risks associated with the completion of the project and with warranty obligations after acceptance of the project. Profit margins from fixed price contracts may differ from the original estimates due to changes in costs or productivity during the term of the contract. Failure to comply with contractual requirements may result in contractual penalties, liability for damages, refusal to pay or termination of the contract. Insurance policies have been taken out to cover the financial consequences while bearing limited risks. Special attention is paid to claims management and the related prevention of claims through precautionary measures.

Personnel-Related Risks: Societal developments such as the demographic change and the resulting shortage of skilled workers lead to the risk of bottlenecks. The lasting safeguarding of the company's success depends on the successful recruitment and retention of qualified personnel. Zeppelin focuses on work-life balance to ensure it remains an attractive employer in a competitive job market. Measures such as the Z FIT health initiative, flexible working hours and employee networks contribute to this. In addition, employer branding was strategically embedded in 2023 with the aim of continuing to position Zeppelin as an attractive employer and strengthening the employer brand.

Leadership plays a key role in maintaining employee motivation. Zeppelin's leadership principles provide a framework for a modern management culture. The 2023 global employee survey made it possible to collect feedback on topics that influence employee satisfaction and motivation. Identified action areas were worked on at team and company level.

Further development opportunities play an important role in employee recruitment and retention. To reduce the risk of employee turnover, target group-specific potential identification procedures as well as structured talent management and succession planning are implemented. Zeppelin offers a wide range of development options for managers and those with potential and continuously adapts them to current topics and internal requirements.

To adapt Zeppelin's services and products to market developments and take advantage of the opportunities offered by digitalization, the company is modernizing its processes and introducing IT tools. There may be a risk of adjustment if employees cannot adequately adapt to these developments. Zeppelin counters this risk by taking comprehensive change management measures in change processes. The goals and need for change are conveyed through target group-oriented communication. In addition, employees are trained on how to use new processes and tools.

Dependency on Suppliers: 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 nearly 70 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.

Cyber Risks: The situation in cyberspace remains critical in 2023 – and the threat from cybercrime is greater than ever. Advancing digitalization and increasing networking are broadening the attack surfaces and new, adapted attack methods seek to exploit them. For example, attacks based on artificial intelligence and the increasing level of professionalism with a service approach ("cybercrime-as-a-service") are worrying.

In addition, the changing geopolitical security architecture also presents a major challenge for German companies: Hacktivism attacks and cyber wars in the context of political crises present risks that are difficult to assess.

Threat number one, however, remains ransomware as a financially motivated cyber attack. It is not just the professionalization (with the "ransomware-as-a-service" service), but also the increased pressure on affected organizations that poses victims additional challenges. The affected systems are no longer "just" encrypted. Ransomware attacks are now associated with data outflow. For example, it is common practice for perpetrators to threaten the company concerned with the publication of the data in a second step (double extortion) and in a third step its business partners (triple extortion) and to demand hush money for this in addition to ransom.

Zeppelin therefore regularly reviews its existing information security measures to ensure they are adapted to the current threat level. Ensuring the availability, integrity, and confidentiality of data is an essential requirement for Zeppelin. Likewise, the resilience of the systems used and products provided against the threats described is essential.

Zeppelin strives to achieve and maintain these requirements through appropriate strategies. As part of the Group-wide information security management system, technical and organizational measures were therefore taken last year to counteract risks in a targeted manner.

Examples of this are the establishment of Group-wide IT service continuity management to maintain business-critical business processes in the event of cyber attacks and IT crises, as well as further awareness training to strengthen the security culture in the Group.

The dynamic of cyber risks is expected to continue to grow rapidly in the coming years, which means additional risks cannot be ruled out in this volatile environment despite preventive security measures.

Legislation at European level in the form of the NIS2 (Network and Information Security Directive) contributes to all of this. In particular, the responsible managing directors are included in the private liability. New measures and deadlines, such as the obligation to report suspicious incidents to the responsible authorities within 24 hours or applying common industry standards, aim to make companies more resilient.

The most common industry standard in Europe, ISO27001:2022, requires the use of technology such as data loss prevention, third-party management, detective and reactive measures. Some of these new ISO controls, such as Threat Intel and Monitoring Activities, can already be mapped by Zeppelin today.

Climate Risks: Various climate risks have the potential to affect Zeppelin's business activities.

Transitory climate risks can be associated with the transition to an environmentally friendly, carbon-free economy. Zeppelin has identified regulatory changes, for example due to new or stricter laws and requirements, as well as higher operating and investment costs, for example due to necessary technical retrofitting of plant and equipment or the energy-efficient refurbishment of existing properties, as risks and areas for action. Furthermore, it is expected that current sales markets will change because of the transformation of the economy, and that the demand for products that use fossil energy sources will decrease in the long term, and the need for environmentally friendly, low-emission products and services will rise significantly. As a sustainable company, Zeppelin is responding early to the changes brought about by the transformation to a more environmentally friendly economy and expects this to result in opportunities such as the development of new sales markets, the generation of new business models, improved competitiveness through changes to the product and service portfolio and increased resilience.

Physical climate risks can arise from the direct consequences of climate change, for example from an increase in extreme weather events, floods, forest fires, and periods of drought. Depending on the respective macro and micro situation, these environmental events can affect each of Zeppelin's locations with varying severity, probability, and extent of damage. Long-term changes, such as the increase in average temperatures, as well as indirect risks, such as restricted functionality of international supply chains due to local environmental damage, are also considered. At the same time, physical climate risks offer opportunities for Zeppelin, as these risks must be countered by appropriate structural measures such as the expansion of flood protection, irrigation and drainage systems and energy-efficient building refurbishment.

Caterpillar, as Zeppelin's most important business partner and supplier, is also committed to sustainability and thus contributes to a lower carbon future. Caterpillar demonstrates this, e.g. through progress in reducing greenhouse gas (GHG) emissions from its own operations, and its ongoing investments in new products, technologies, and services to help customers meet their climate-related goals. Caterpillar is developing a range of alternative power and propulsion solutions to support a lower-carbon future, including battery-powered construction machinery. Caterpillar has also acquired a company that specializes in carbon capture.

Zeppelin is counteracting potential climate risks at an early stage through sustainable corporate governance and a voluntary commitment to achieve self-imposed sustainability targets, such as the goal of being a carbon-neutral company in day-to-day operations by 2030. As in previous years, further climate risks and possible fields of action will be identified and prioritized in the coming years, and measures to reduce risks and identify opportunities will be defined as required.

CURRENCY RISKS

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. Foreign currency earnings developed positively in 2023 compared to the previous year, partly due to lower business activity in Russia and Ukraine. The extreme currency fluctuations in the first half of 2022 (war in Ukraine) have recovered.

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. The risk early warning system 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. For risks in connection with Russia and Ukraine as well as cyber and climate risks, please refer to the comments in the separate sections of this report.

2 Opportunities

Climate change, digitalization, a shortage of skilled workers, inflation, geopolitical conflicts and a tense economic situation in the markets relevant to Zeppelin – the challenges for Zeppelin in the 2023 financial year were diverse and will not diminish in the 2024 financial year. Zeppelin's goal is to continue to consolidate and expand its position as a leading and successful provider of forward-looking and powerful solutions in construction and mining machinery, agricultural machinery, rental, construction logistics and construction site management, drive and energy, plant engineering, and to develop new digital business models alongside Zeppelin's expertise. To continue to pursue this objective in a targeted manner in view of the economic and geopolitical challenges, the business strategies and business-supporting strategies, the associated strategic initiatives and a subsequent review were updated in the 2023 financial year as part of the "Structure follows Strategy" strategy process. In addition, a targeted adjustment of the corporate structure was decided to enable the efficient implementation of these strategies in the long term.

To meet the changing and increasing customer needs, the focus was primarily on future-oriented products and technologies. This includes drive and energy systems to improve the CO_2 footprint as well as technologies to improve work safety and efficiency. In the future, Zeppelin will continue to actively support its customers in the energy transition with the help of lower-carbon and more advanced energy technologies, fully electric construction machines, as well as the use of heat pumps. Important research activities in the field of fuel cells round off the existing product portfolio of our manufacturing partner Caterpillar. Unprecedented improvements in driving safety, machine availability and site productivity can be achieved by using semi-autonomous or autonomous systems via remote control. Customers gain the best overview of their operations by processing performance data and location data with the help of fleet management tools for equipment and engines. The diverse portfolio of future-oriented technologies secures Zeppelin's overall market position in the competitive environment and sets the course for future growth potential.

In addition to a good market position with customers from the construction industry and energy supply, Zeppelin Plant Engineering is also positioned in other, forward-looking and high-growth industries. Along with the food sector, this also includes the battery mass and recycling sectors, which are promising growth markets. In particular, Zeppelin's extensive experience in handling various bulk materials and recycled materials, from product-friendly conveying, precise dosing to adequate storage, should enable it to respond quickly to increasing demand in these growth markets. A decisive success factor could be the skill-based division of the individual value-added steps in the international network.

To further better integrate and advance internal and external processes and digitalization initiatives, the Zeppelin Group's Z Digit Management Center was realigned and subsequently renamed Group IT Services. This is accompanied by changes to the organizational structure aimed at further improving cooperation between the individual units and ensuring closer alignment with customers' wishes and needs. The new structure ensures an appropriate distribution of the responsibilities of the central Group IT Services department and the decentralized Business ITs of the SBUs, including in the development of digital products. This approach ensures the successful implementation of any digitalization initiatives for internal process optimization as well as the digitalization of sales channels via e-commerce.

Zeppelin has initiated a large number of activities and projects in the 2023 financial year with which it will continue to consistently pursue its growth strategy. These are located in the strategic business units on the one hand and also in the central functions of Zeppelin GmbH as a management holding company on the other. In addition to the market-oriented initiatives, there are also initiatives in the areas of human resources, sustainability and digitalization, which contribute to Zeppelin's attractiveness as an employer on the one hand and represent an important stability anchor for the entire organization on the other. In addition to organic growth, M&A activities are also being pursued that supplement and expand the product portfolio and also tap into interesting new market and customer segments.

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. Membership of the UN Global Compact underscores the Zeppelin Group's clear commitment to human rights and sustainable corporate management.

The Zeppelin Group's Code of Conduct for Business & Ethics forms the basis of the Compliance Program and the compliance culture that has been evolving for years. The Compliance Program is supported by compliance risk management, a policy organization, and regular communication. Against the backdrop of the evolving global political and economic situation, the compliance management of all business units was expanded and strengthened with regard to export controls, sanctions, and embargoes. Compliance trainings are supplemented by a multilingual compliance e-learning program. The "Compliance Basics" e-learning module is a mandatory program for all employees and teaches about the basics of compliance and corruption prevention and provides information on antitrust law.

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.

Employees can contact the internal compliance organization via the Zeppelin Intranet, a special email address, as well as in person. In addition, employees and third parties can use the Zeppelin Trust Line, an online whistleblower system freely accessible to everyone, to report suspected compliance cases – reports can also be made anonymously if desired. External trusted lawyers are also available as contacts in all dealer areas.

On September 28, 2023, an article was published in the German newspaper Handelsblatt in which compliance allegations were raised against Zeppelin in connection with its business relationship with the Uzbek state-owned company NMMC (Navoi Mining and Metallurgical Company JSC). Zeppelin has taken these allegations very seriously and, in cooperation with the Supervisory Board and our business partners, has taken various measures to investigate them. Among other things, a law firm specializing in the investigation of compliance cases was commissioned to fully clarify the allegations. The investigations have now been largely completed and have not yet confirmed any of the allegations raised against Zeppelin. The final report is expected by the end of March/beginning of April 2024. As things stand today, the Management Board of Zeppelin GmbH does not expect any different results from the investigations.

D FORECAST

The global economy will continue to face challenges in 2024. The development of the Chinese economy potentially poses a significant risk to the worldwide economy. This is mainly due to the high level of debt in the real estate sector and weak domestic demand. An unexpectedly sharp slowdown in Chinese growth is also likely to have a negative impact on Europe and the US. Furthermore, the geopolitical situation remains uncertain and tense, which has an impact on the global economy as a whole. Downside risks continue to prevail for economic development in the euro area. These include the risk of a renewed rise in inflation, the impact of monetary policy tightening on the overall economy and the risk to energy supply.[51] In Germany, the global crises, the high interest rates and the current fiscal crisis are exacerbating the situation. The dispute in the German Federal Government is causing uncertainty among companies and leads to reluctance to make investment decisions. The German construction industry expects a weak year in 2024.[52]

The International Monetary Fund forecasts GDP growth of 2.9% for the global economy in 2024. The forecast growth in the euro area and Germany is expected to be significantly weaker at 1.2% and 0.9% respectively. The GDP growth forecast for both Brazil and the US is 1.5%. China is expected to be the driving force behind worldwide economic growth at 4.2% and India at 6.3%. Among European countries, Sweden has the lowest growth forecast at 0.6% and Austria at 0.8%. An increase of 1.4% is expected for Denmark. The Czech Republic and Poland forecast growth of 2.3% and the Slovak Republic 2.5%. GDP growth in Russia is expected to be 1.1% lower than before. For Ukraine, on the other hand, greater growth is expected at 3.2%.[53]

The prospects for the construction industry as the core market of the **CGA SBU** are clouded. Declining incoming orders and falling construction prices suggest a decline in construction volume. In residential construction, new construction activity in particular is likely to continue to decline significantly, meaning that the German government's target of 400,000 newly built apartments per year recedes into the distance. Only civil engineering should grow and thus mitigate the slump.[54] Against this backdrop, the Central Association of the German Construction Industry (ZDB) expects a real sales decline of 3% to around EUR 154 billion (nominal) in the German main construction industry for 2024. The minus is due to housing construction. This is expected to fall by 13% in real terms, compared to approximately -11% in 2023. By contrast, commercial construction and public construction are expected to increase by a good 3% (in real terms).[55]

The discontinuation of further business areas and the loss of assets in Russia and Ukraine, as one of the consequences of Russia's war of aggression against Ukraine, cannot be ruled out in 2024. The **CIN SBU's** business in Russia was largely discontinued and is limited to the service of agricultural machinery with a low total volume. The business volume in Ukraine is expected to be around the level of 2023, but will depend largely on the further course of the war in the country. In Uzbekistan, the SBU expects a significant decline in incoming orders due to ongoing compliance investigations. The mining business in Armenia offers significant growth potential.

In Sweden and Denmark, the SBU expects increased machine and spare parts sales in 2024 despite the overall slight decline in the construction machine market. In the Czech Republic and the Slovak Republic, lower machine sales are expected due to the significant market decline, but growth in service business is anticipated.

According to the European Rental Association, the German rental market, which is particularly important for the **Rental SBU**, is expected to grow by 1.2% in 2024. Rental market growth in Austria is expected at 3.4% and in the Czech Republic at 10.5%. Sweden is expected to grow by 3.0% and Denmark by 3.6%.[56]

For the engine and systems sector, the German Engineering Federation expects a nominal decline in sales of -9% in 2024 compared to the previous year.[57] The dynamic price developments on the market, the continuing uncertain global political situation and the continued limited availability of spare parts pose numerous challenges for the **Power Systems SBU**.

A clear focus will be on digital solutions, alternative fuels and sustainable drive and energy systems in 2024. In

[51] Panel of experts: Annual expert report 2023/24, from November 8, 2022, p. 32-33 and 48.
[52] iwkoeln.de: "IW economic forecast: GDP will shrink by half a percent in 2024", from December 19, 2023.
[53] IMF World Economic Outlook Database, October 2023
[54] See file: 2024-01-10 DIW Wochenbericht 24-1.pdf
[55] See file: 2023-12-06 ZDB Rede Baukonjunktur Prognose 2024
[56] ERA Market Report 2023, October 2023.
[57] VDMA Forecast 2024, October 2023.

addition to fuel cell technology and large-scale heat pumps, this also includes the market of the future, hydrogen. The service sector is also of great importance, as it aims to tap into further growth potential. The further development of a future-proof organization and the design of a contemporary corporate culture will also be points of focus. The new mission statement serves as a guide and signpost to ensure the company remains fit for the future despite the many external influences. On the whole, the SBU is cautiously positive about 2024, primarily due to the high incoming orders in 2023, the very high capacity utilization in the service area and the growing new business in connection with large heat pumps and emergency power systems.

The Association of the Chemical Industry (VCI), which is important for the **Plant Engineering SBU,** laments the lack of recovery in its outlook for 2024. The recessionary mood still prevailing in the industry at the end of the year paints a negative picture for both the current business situation and expectations for the coming months. Fears of lack of orders in the chemicals business will cause production to shrink, and industry sales are expected to fall by 5%. According to recent surveys, member companies are not expecting an upturn in the short term, with just under half of all respondents expecting an improvement from 2025 at the earliest.[58]

However, the tense geopolitical situation and persistently high interest rates continue to hamper the willingness of international customers to invest. This applies equally to all consumer markets of plastics production as well as chemical and food processing. The lower order volume also increases competitive pressure and has a negative impact on margin quality. However, future trends such as electric mobility and the increasing need for a functioning circular economy are generating special demand for material processing plants, which partially compensate for the expected declines in demand for plant engineering.

The Association of German Machinery and Equipment Manufacturers (VDMA) agrees with the estimate and is adjusting its forecast for 2024 downwards with a production decline of up to 4%. Despite the initial tentative signs, an improvement is not in sight for the time being because the major markets such as the USA and China are not yet economically robust or remain weak for the time being. Emerging market growth in countries such as India or Mexico alone is not large enough to compensate for the declines in other regions. Investment activity in Germany will also remain weak for the time being. Nominally, the association expects a decline in production of EUR 2 billion to EUR 247 billion and a decline in sales of EUR 3 billion to EUR 239 billion.[59]

The SBU forecasts a rather modest overall volume for the plants in 2024, which will be far below the successes of previous years.

The outlook for incoming orders will lead to a critical capacity utilization situation in the product areas. Measures against the feared increase in capacity underutilization are being implemented.

For the 2024 financial year, the Group expects a weak decline in sales, a significant decline in earnings before taxes and a weak decline in return on capital employed (ROCE). Zeppelin GmbH expects a significant decline in the net profit according to IFRS for 2024. There are no major differences with respect to the net profit after tax in the individual financial statements for Zeppelin GmbH according to IFRS and the German Commercial Code.

E PROPOSED ALLOCATION OF PROFITS

The Management Board proposes to distribute a dividend of 18%, i.e. EUR 17,744 thousand, for financial year 2023 from the consolidated net profit for the year attributable to the shareholders of Zeppelin GmbH (EUR 98,577 thousand) and to carry forward the remaining net profit of EUR 682,877 thousand to new account.

[58] VCI Annual Press Conference 2023.

[59] VDMA Annual Press Conference 2023.

Friedrichshafen, February 29, 2024

The Management Board of Zeppelin GmbH

Peter Gerstmann	Fred Cordes	Christian Dummler	Alexandra Mebus

Consolidated Statement of Profit or Loss

of Zeppelin GmbH for the Period Dating January 1 to December 31, 2023

in kEUR	No.	2023	2022
Sales	1	3,934,667	3,838,152
Cost of sales	2	-3,332,953	-3,274,748
Gross profit on sales		601,714	563,404
Research and development costs		-3,554	-2,555
Selling expenses		-261,852	-261,112
General administrative expenses		-186,471	-180,853
Other income	3	81,005	88,669
Other expenses	4	-39,224	-58,952
Impairment of financial instruments and contract assets (net)		-8,005	-4,672
Share in the result of companies accounted for using the equity method		-1	-370
Profit before net financial result		183,612	143,558
Interest result	6	-27,932	-14,499
thereof, interest expenses	6	-41,098	-22,923
thereof, interest income	6	13,166	8,425
Other financial result	6	-1,882	5,571
thereof, other financial expenses	6	-10,330	-13,008
thereof, other financial income	6	8,448	18,579
Net financial result		-29,814	-8,927
Net profit before tax		153,798	134,631
Income taxes	7	-53,731	-30,261
Net profit after tax		100,067	104,370
thereof, attributable to non-controlling interests		1,490	4,247
thereof, attributable to the shareholders of Zeppelin GmbH		98,577	100,123

Consolidated Statement of Comprehensive Income

of Zeppelin GmbH for the Period Dating January 1 to December 31, 2023

in kEUR	2023	2022
Net profit after tax	100,067	104,370
Actuarial gains (-) and losses (+) from pension plans	-11,553	47,004
Income taxes	3,218	-12,971
Items that will not be reclassified to the consolidated statement of profit or loss	-8,335	34,032
Exchange differences on the translation of foreign operations	-16,099	4,203
Hedging gains or losses including transfer to profit or loss	849	66
Income taxes	-161	-7
Items that may be reclassified to the consolidated statement of profit or loss	-15,411	4,262
Other comprehensive income after tax	-23,746	38,294
Total comprehensive income	76,321	142,664
thereof, attributable to non-controlling interests	417	3,893
thereof, attributable to the shareholders of Zeppelin GmbH	75,904	138,771

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

OF ZEPPELIN GMBH AS OF DECEMBER 31, 2023

in kEUR	No.	12/31/2023	12/31/2022
Assets			
Current assets			
Cash and cash equivalents	9	183,151	157,044
Financial assets	10	21,632	22,467
Trade receivables	10	502,269	439,285
Contract assets	11	30,910	48,371
Other assets	12	57,427	51,091
Income tax receivables		6,823	4,782
Inventories	13	863,997	844,906
		1,666,209	1,567,946
Non-current assets			
Financial assets	14	20,708	27,655
Trade receivables	14	7,794	9,346
Contract assets	11	84	94
Other assets	12	52,488	53,230
Income tax receivables		0	53
Investments accounted for using the equity method	15	18,436	18,659
Intangible assets	16	130,994	95,793
Property, plant and equipment	17	1,684,979	1,419,983
Deferred taxes	7	74,572	70,319
		1,990,055	1,695,133
		3,656,264	3,263,079

in kEUR	No.	12/31/2023	12/31/2022
Equity and liabilities			
Current liabilities			
Financial liabilities	18	159,745	160,252
Trade payables	18	165,922	234,952
Other financial liabilities	18	133,076	137,948
Contract liabilities	11	283,099	267,731
Other liabilities	19	141,068	131,466
Income tax liabilities		16,752	15,430
Employee benefits	21	114,809	113,393
Other provisions	22	51,130	60,413
		1,065,601	1,121,585
Non-current liabilities			
Financial liabilities	20	917,613	568,703
Other financial liabilities	20	175,734	169,002
Contract liabilities	11	27,753	24,180
Other liabilities	19	96,051	79,497
Income tax liabilities		735	915
Employee benefits	21	119,978	113,032
Other provisions	22	5,462	5,574
Deferred taxes	7	64,294	52,111
		1,407,619	1,013,015
Equity			
Share capital	23	100,000	100,000
Capital reserves	23	60,000	60,000
Retained earnings	23	1,018,438	937,804
Accumulated other comprehensive income	23	-7,008	15,666
Equity attributable to the shareholders of Zeppelin GmbH		1,171,430	1,113,470
Non-controlling interests	23	11,615	15,008
		1,183,045	1,128,478
		3,656,264	3,263,079

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2023

				Accumulated other comprehensive income					
in kEUR	Share capital	Capital reserves	Retained earnings	Pension plan remeasure-ments	Exchange differences on the translation of foreign operations	Hedging gains or losses	Equity attributable to the shareholders of Zeppelin GmbH	Non-controlling interests	Equity
01/01/2022	100,000	60,000	858,445	-15,892	-6,682	-409	995,462	13,883	1,009,345
Net profit after tax			100,123				100,123	4,247	104,370
Other comprehensive income				34,032	4,557	59	38,648	-354	38,294
Total comprehensive income			100,123	34,032	4,557	59	138,771	3,893	142,664
Dividends			-20,640				-20,640	-3,034	-23,674
Changes in the consolidation group					0		0	267	267
Other changes			-123		0		-123	0	-123
12/31/2022	100,000	60,000	937,804	18,141	-2,125	-350	1,113,470	15,009	1,128,478
Net profit after tax			98,577				98,577	1,490	100,067
Other comprehensive income				-8,335	-15,026	688	-22,673	-1,073	-23,746
Total comprehensive income			98,577	-8,335	-15,026	688	75,904	417	76,321
Dividends			-18,022				-18,022	-3,811	-21,833
Changes in the consolidation group									
Other changes			78				78	0	78
12/31/2023	100,000	60,000	1,018,438	9,805	-17,151	338	1,171,430	11,615	1,183,045

CONSOLIDATED STATEMENT OF CASH FLOWS

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2023

in kEUR	2023	2022
Net profit after tax	100,067	104,370
Income taxes	53,731	30,261
Net profit before tax	153,798	134,631
Depreciation, amortization, impairments and reversals of impairment losses	301,082	282,757
thereof, intangible assets	16,657	24,083
thereof, property, plant and equipment excluding rental fleet	75,024	71,482
thereof, rental fleet	209,402	187,191
Share in the result of companies accounted for using the equity method	1	370
Change in post-employment benefit obligations	-4,594	-6,334
Change in long-term provisions	-267	-2,115
Unrealized foreign exchange rate gains/losses	1,678	-12,882
Interest income and expenses	27,932	14,499
Income from other participations	-1,008	-1,799
Other non-cash income/expenses	-8,351	-7,578
Income from asset disposals	-4,444	1,934
Change in inventories	-27,575	-258,038
Change in assets held for rental	-256,681	-222,690
Change in RPO assets held for rental	-72,104	-50,900
Change in trade receivables	-51,456	-4,406
Change in other receivables and assets	19,596	-5,669
Change in trade payables	-71,733	82,018
Change in other payables and other liabilities	35,934	35,924
Income taxes received	2,354	3,963
Income taxes paid	-53,178	-29,968
Change from assets held for sale	0	3,500
Cash flow from operating activities	-9,016	-42,783

in kEUR	2023	2022
Cash flow from operating activities	**-9,016**	**-42,783**
Payments for investments in		
Intangible assets	-15,463	-8,545
Property, plant and equipment excluding rental fleet	-88,474	-45,764
Financial assets	-119	-24
Proceeds from the sales of		
Intangible assets	10	273
Property, plant and equipment excluding rental fleet	8,270	4,137
Financial assets	80	1,841
Payments for the acquisition of consolidated companies	-71,596	-2,402
Proceeds from the sales of consolidated companies	0	384
Interest received	6,497	5,499
Dividends received	1,008	1,799
Cash flow from investing activities	**-159,788**	**-42,803**
Proceeds from non-current financial liabilities	249,167	136,787
Repayment of non-current financial liabilities	-72,526	-39,526
Proceeds from current financial liabilities	350,271	369,931
Repayment of current financial liabilities	-355,174	-344,385
Proceeds from the conclusion of SLB transactions	112,240	7,944
Payments for SLB liabilities	-1,314	-25,126
Payments for lease liabilities	-29,807	-37,957
Interest paid	-26,349	-16,961
Dividends paid to shareholders of Zeppelin GmbH	-18,022	-20,640
Distributions made to non-controlling interests	-3,811	-3,034
Cash flow from financing activities	**204,676**	**27,032**
Changes in cash and cash equivalents	**35,871**	**-58,554**
Cash and cash equivalents at the beginning of the period	**157,044**	**211,423**
Changes in cash and cash equivalents	35,871	-58,554
Consolidation group-related changes in cash and cash equivalents	308	255
Foreign exchange rate differences in cash and cash equivalents	-10,073	3,919
Cash and cash equivalents at end of the period	**183,151**	**157,044**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

OF ZEPPELIN GMBH FOR THE PERIOD DATING JANUARY 1 TO DECEMBER 31, 2023

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. Zeppelin GmbH is registered in commercial register B of the Ulm district court under the number HRB 630217.

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

The "Zeppelin Digit" Strategic Management Center, which is responsible for cross-SBU matters in the area of IT, digitalization and innovation, supplements the strategic business units.

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 of 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 financial 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 were authorized for submission to the shareholders and to the Supervisory Board of Zeppelin GmbH on February 29, 2024 by the Management Board. The Supervisory Board approves the consolidated financial statements. If no approval is given by the Supervisory Board, the shareholders' meeting must decide on the 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 financial year 2023:

IFRS 17 – Insurance contracts

IFRS 17 replaces the previously valid IFRS 4 – insurance contracts. In addition to insurance companies, non-insurance companies are also impacted by this standard, as the standard is geared towards a product-specific (i.e., the accounting and valuation of insurance contracts) and not a sector-specific (i.e., insurance companies) application. It has no impact on the Zeppelin Group, as amongst others IFRS 17.7 (a) explicitly excludes warrenties in connection with the sale of goods from the scope of application of the standard and the option of accounting in accordance with IFRS 15 is used for contracts that include a service for a fixed fee in accordance with IFRS 17.8.

IAS 8 – Accounting policies, changes in accounting estimates and errors

The amendment to IAS 8 introduces a definition of the term "accounting estimate". These are monetary amounts in the financial statements that are subject to measurement uncertainties. The IASB has thus clarified the distinction between changes in accounting policies and changes in estimates. While changes in estimates have to be applied prospectively to transactions and other events from the date of the change in estimate, changes in accounting policies must be applied retrospectively to past transactions and other events in the past. The amendment has no impact on the Zeppelin Group.

IAS 12 – Income taxes

The amendment to IAS 12 relates to the accounting for deferred taxes dealing with assets and liabilities that do not arise in connection with a business combination. For these, the obligation to recognize deferred taxes is excluded if the assets and liabilities have been recognized for the first time without an impact on profit or loss or tax. It was questionable whether leases (when a lessee recognizes an asset and a liability at the inception of the lease) and decommissioning liabilities (when an entity recognizes a liability and includes the cost of decommissioning in the cost of the asset) also fall under such an exception. The change restricts the scope of application for the recognition exception. Accordingly, the initial application exception does not apply to transactions in which deductible and taxable temporary differences in the same amount are offset upon initial recognition. This applies in particular to leases and decommissioning liabilities. The amendment has no impact on Zeppelin.

IAS 1 – Presentation of financial statements

The amendments to IAS 1 specify the extent to which accounting policies must be explained in the notes. In the future, it will no longer be necessary to focus on significant methods, but rather only on material ones. In this context, consideration should not only be given to the absolute amount, as materiality is also determined by the nature of the related transactions, other events or conditions. The accompanying IFRS Practice Statement 2 contains further examples and guidance on the application of the concept of materiality to disclosures on accounting policies. The modification has no significant effect on Zeppelin.

Standards not yet applied

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

Standard/Interpretation/Framework		First application	Brief summary
IAS 1	Presentation of Financial Statements	01/01/2024	The amendment to IAS 1 relates to the classification of liabilities (current and non-current) for which certain credit terms (covenants) have been agreed. A clarification is made that only those covenants a company must comply with on or before the balance sheet date affect the classification of a liability as current or non-current.However, covenants that are only to be complied with after the balance sheet date do not affect the classification. Instead of being taken into account as part of the classification, such covenants must be disclosed in the notes. This is intended to enable users of financial statements to assess the extent to which non-current liabilities could become repayable within 12 months. The amendment is not expected to have any impact on Zeppelin.
IFRS 16	Leases	01/01/2024	The amendments to IFRS 16 are intended to clarify, in particular, how a lease liability of the seller/lessee is to be presented in the subsequent measurement as part of a sale and leaseback transaction. The amendment to IFRS 16 requires that lease liabilities be measured in such a way that no gain or loss is generated in relation to the retained right of use on their subsequent measurement. This does not include the recognition of gains and losses in connection with the partial or complete termination of a lease. It does not result in any direct changes for the subsequent measurement of the right of use. The amendment is not expected to have any significant impact on Zeppelin.
IAS 12	Income Taxes	01/01/2024	The Zeppelin Group falls within the scope of application of the OECD model rules of Pillar Two, which will be implemented in national law from January 1, 2024.As the Pillar Two Rules have not yet been enacted by the reporting date, the Group is currently not subject to any tax

Standard/Interpretation/Framework		First application	Brief summary
			burden in this respect.With the amendment to IAS 12, a temporary exemption from the obligation to account for deferred taxes resulting from the implementation of the Pillar Two Rules and targeted disclosure requirements for affected entities are included in IAS 12. This is intended to ensure that the entities concerned apply the standard uniformly and that better information is available to users of financial statements before the Pillar Two Rules come into force. Zeppelin is working on implementing processes to meet the requirements of the Pillar Two Rules on time. Zeppelin expects to be able to utilize the temporary relief for the introduction period (so-called safe harbors) to the greatest extent possible. The impact of the Pillar Two Rules on the Group's taxes is estimated to be marginal as at the reporting date, according to current knowledge.
IAS 7 and IFRS 7	Statement of Cash Flows and Financial Instruments	01/01/2024	The amendments to IAS 7 and IFRS 7 relate to additional disclosure requirements in connection with supplier finance arrangements.These changes are intended to make the effects of such transactions on the company's recognized liabilities and cash flows as well as on the liquidity risks for the users of the information more transparent. These include specific disclosure requirements for supply chain financing transactions, such as the description of contractual terms and the balance sheet positions and carrying amounts at the beginning and end of the period. The amendments are not expected to have any impact on Zeppelin.
IAS 21	The Effects of Changes in Foreign Exchange Rates	01/01/2025	With the amendment to IAS 21, rules on currency translation were added, which are to be applied if a currency cannot be converted into another currency. IAS 21 did not previously contain any corresponding regulations. The amendments add detailed rules to IAS 21 to determine whether two currencies can be exchanged with each other and how to determine the exchange rates if there is a lack of exchangeability. In addition, disclosure requirements are introduced to enable users of financial statements to assess the actual or expected effects of the lack of exchangeability on the company's net assets, financial position, and results of operations. The modification has no significant effect on Zeppelin.

CONSOLIDATION GROUP

Subsidiaries

The following subsidiaries are included in the consolidated financial statements:

Name	Registered office		Equity share in %	
	Country	Location	12/31/2023	12/31/2022
Zeppelin GmbH	Germany	Friedrichshafen	-	-
AT Baumaschinentechnik Beteiligungs GmbH	Germany	Munich	100.0	100.0
IBH Ingenieurbüro Herzbruch GmbH	Germany	Schwelm	100.0	100.0
klickrent GmbH	Germany	Berlin	100.0	100.0
Klickparts GmbH (merged into Zeppelin Baumsschinen GmbH in 2023)	Germany	Hallbergmoos	-	100.0

Name	Registered office		Equity share in %	
	Country	Location	12/31/2023	12/31/2022
Magdalena Kitzmann GmbH	Germany	Lengerich	60.0	60.0
METON GmbH	Germany	Garching near Munich	100.0	100.0
SITECH Deutschland GmbH	Germany	Oberhausen	100.0	100.0
Zeppelin Aviation & Industrial Service GmbH	Germany	Friedrichshafen	100.0	100.0
Zeppelin Baumaschinen GmbH	Germany	Garching near Munich	100.0	100.0
Zeppelin Lab GmbH	Germany	Berlin	100.0	100.0
Zeppelin Power Systems GmbH	Germany	Hamburg	100.0	100.0
Zeppelin Power Systems Verwaltungs GmbH (merged into Zeppelin GmbH in 2022)	Germany	Hamburg	-	-
Zeppelin Rental GmbH	Germany	Garching near Munich	100.0	100.0
Zeppelin Systems GmbH	Germany	Friedrichshafen	100.0	100.0
Zeppelin Armenien LLC	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
SITECH Danmark A/S	Denmark	Horsens	100.0	100.0
Zeppelin Danmark A/S	Denmark	Brondby	100.0	100.0
Zeppelin Rental Danmark ApS (formerly CP ApS)	Denmark	Viby Sjælland	100.0	-
Zeppelin Systems UK Limited	England	Nottingham	100.0	100.0
Baltic Marine Contractors OÜ	Estonia	Tallinn	100.0	100.0
Zeppelin Systems France S.A.R.L.	France	Vénissieux Cedex	100.0	100.0
Smart Controls India Ltd.	India	Madhya, Pradesh	60.0	60.0
Zeppelin Systems India Pvt. Ltd.	India	Vadodara	100.0	100.0
Zeppelin Systems Italy S.p.A.	Italy	Reggio Emilia	100.0	100.0
SITECH Austria GmbH (consolidated for first time in 2023)	Austria	Steyr	100.0	100.0
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 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
Zeppelin Systems Gulf Co. Ltd.	Saudi Arabia	Al Jubail	100.0	100.0
SITECH Sverige AB	Sweden	Örebo	100.0	100.0
Zeppelin Sverige AB	Sweden	Mölndal	100.0	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. (liquidated in 2023)	Slovak Republic	Bratislava	-	100.0
Zeppelin SK s.r.o.	Slovak Republic	Banska 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

Name	Registered office		Equity share in %	
	Country	Location	12/31/2023	12/31/2022
Zeppelin CZ s.r.o.	Czech Republic	Modletice near Prague	100.0	100.0
Construction SITECH CZ s.r.o.	Czech Republic	Brno	100.0	100.0
Zeppelin Turkmenistan JV	Turkmenistan	Ashgabat	100.0	100.0
PJSC "Ukrcukorteploi-zolyaciya" (UCTI)	Ukraine	Vyshneve	100.0	100.0
Zeppelin Marine Service Ukraine LLC	Ukraine	Kiev	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

The following subsidiary is not included in the consolidated financial statements as its non-inclusion has no material impact on the presentation of the net assets, financial position, and results of operations. Zeppelin measures the shares in this company at fair value through profit or loss. The fair values largely correspond to the historical acquisition costs.

Name	Registered office		Equity share in %		Net profit/loss 2023 in kEUR[1]	Equity 12/31/2023 in kEUR
	Country	Location	12/31/ 2023	12/31/ 2022		
Levotec s.r.o.	Slovak Republic	Levoča	100.0	100.0	218	363

SITECH Austria GmbH, Steyr, Austria, acquired in 2012, was included in the consolidation group for the first time as of January 1, 2023. For further information, please refer to the section *"Business combinations"*.

Associates

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

Name	Registered office		Equity share in %	
	Country	Location	12/31/2023	12/31/2022
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.

Joint operations

Zeppelin Power Systems GmbH established a legally independent economic entity in 2020 in the form of a civil-law partnership together with a consortium partner. The consortium bears the name "Konsortium BHKW Oberhausen" and its purpose is the joint delivery, construction, and commissioning of a turnkey combined heat and power plant. The consortium was classified as a joint operation as the consortium had rights to the assets and obligations for the liabilities of the joint arrangement under the consortium agreement. Zeppelin had recognized the related assets and liabilities as well as expenses and income at the amount of the schedule of participation of 67.1%. The project was completed in financial year 2021 with the turnkey handover of the combined heat and power plant to the

[1] Local GAAP financial statements

customer. The consortium will continue to exist for the duration of the warranty period.

Together with another shareholder, Zeppelin Rental GmbH founded an umbrella working group in the form of a civil-law partnership. The umbrella working group bears the name “WIM A43 Emschertalbrücke” and has as its purpose the joint construction of a barrier/cradle system for the A43 Emschertal Bridge between Recklinghausen and Herne. The working group is classified as a joint operation as the shareholders have rights to the assets and obligations for the liabilities of the joint arrangement under the umbrella working group agreement. Zeppelin recognizes the related assets and liabilities as well as expenses and income at the amount of the provisional schedule of participation of 48.9%.

Subsidiaries with significant non-controlling interests

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

Name	Registered office		Equity share of non-controlling interests in %	
	Country	Location	12/31/2023	12/31/2022
Smart Controls India Ltd.	India	Madhya Pradesh	40.0	40.0
Zeppelin Systems China (Shanghai) Co. Ltd.	China	Shanghai	40.0	40.0
Magdalena Kitzmann GmbH	Germany	Lengerich	40.0	40.0

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

	Smart Controls India Ltd.	
in kEUR	12/31/2023	12/31/2022
Net assets		
Current assets	3,958	3,163
Non-current assets	1,595	534
Current liabilities	-2,158	-1,049
Non-current liabilities	-933	-322
	2,461	2,326
Share in %	40.0	40.0
	985	930

	Smart Controls India Ltd.	
in kEUR	2023	2022
Net profit after tax		
Sales	7,232	3,876
Net profit	237	77
Share in %	40.0	40.0
	95	31

	Smart Controls India Ltd.	
in kEUR	2023	2022
Cash flow from operating activities		
Cash flow from operating activities	387	-310
Share in %	40.0	40.0
	155	-124
Cash flow from investing activities		
Cash flow from investing activities	-341	18
Share in %	40.0	40.0
	-136	7
Cash flow from financing activities		
Cash flow from financing activities	-132	-26
Share in %	40.0	40.0
	-53	-11

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. 12/31/2023	12/31/2022
Net assets		
Current Assets	124,837	140,525
Non-current assets	1,392	984
Current liabilities	-90,137	-106,277
Non-current liabilities	-646	-459
	35,446	34,773
Share in %	40.0	40.0
	14,178	13,909

in kEUR	Zeppelin Systems China (Shanghai) Co. Ltd. 2023	2022
Net profit after tax		
Sales	119,033	107,626
Net profit	12,749	11,851
Share in %	40.0	40.0
	5,100	4,741
Cash flow from operating activities		
Cash flow from operating activities	-6,300	72,670
Share in %	40.0	40.0
	-2,520	29,068
Cash flow from investing activities		
Cash flow from investing activities	108	681
Share in %	40.0	40.0
	43	272

in kEUR	Zeppelin Systems China (Shanghai) Co. Ltd. 2023	2022
Cash flow from financing activities		
Cash flow from financing activities	-9,526	-7,585
Share in %	40.0	40.0
	-3,811	-3,034
Dividends	-3,811	-3,034

The tables below present the financial information on Magdalena Kitzmann GmbH before intra-Group eliminations:

in kEUR	Magdalena Kitzmann GmbH 12/31/2023	12/31/2022
Net assets		
Current assets	5,111	9,023
Non-current assets	5,048	8,567
Current liabilities	-17,885	-15,000
Non-current liabilities	-1,828	-3,052
	-9,555	-462
Share in %	40.0	40.0
	-3,822	-185

in kEUR	Magdalena Kitzmann GmbH 2023	2022
Net loss after tax		
Sales	16,139	21,499
Net loss	-9,092	-1,129
Share in %	40.0	40.0
	-3,637	-452

in kEUR	Magdalena Kitzmann GmbH 2023	2022
Cash flow from operating activities		
Cash flow from operating activities	2,602	2,374
Share in %	40.0	40.0
	1,041	949
Cash flow from investing activities		
Cash flow from investing activities	-53	0
Share in %	40.0	40.0
	-21	0
Cash flow from financing activities		
Cash flow from financing activities	-1,065	-2,957
Share in %	40.0	40.0
	-426	-1,183

Changes in the Consolidation Group

Acquisition of CP ApS and subsequent change of name

Zeppelin Danmark A/S, Denmark, acquired all the shares and associated voting rights in CP ApS, Viby Sjælland, Denmark, with a purchase agreement dated March 31, 2023 and with economic effect as of July 13, 2023. With effect from November 1, 2023, CP ApS, Viby Sjælland, Denmark was renamed Zeppelin Rental Danmark ApS, Viby Sjælland, Denmark.

As a specialist in construction site equipment, CP ApS primarily rents out modular room systems, but also construction machinery and equipment, and is also active in construction site management and planning. The total purchase price of the transaction is kEUR 68,819.

The initial consolidation was carried out at the fair value of the transferred assets and liabilities, which were as follows:

in kEUR	
Assets	
Current assets	
Other financial assets	312
Trade receivables	9,813
Other assets	449
Inventories	828
	11,402
Non-current assets	
Intangible assets	11,341
Property, plant and equipment	88,776
Deferred tax assets	1,322
	101,439
	112,841
Liabilities	
Current liabilities	
Financial liabilities	14,113
Trade payables	2,431
Other financial liabilities	1,590
Employee benefits	1,034
	19,168
Non-current liabilities	
Financial liabilities	39,116
Deferred tax liabilities	9,131
	48,247
	67,415
Net assets	45,426

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

As part of the purchase price allocation, a customer base with a useful life of 10 years was recognized. In addition, goodwill of kEUR 23,393 was capitalized. This reflects the expansion of the site network and the development of the product and service range.

Including the company from January 1 to December 31, 2023 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 45.3 million and additional earnings before interest and taxes of approximately EUR 5.3 million.

First-time consolidation of SITECH Austria GmbH

With effect from January 1, 2023, SITECH Austria GmbH, Steyr, Austria, which was previously not included in the consolidated financial statements for reasons of materiality, was included in the consolidation group for the first time. The fair value of the participation at the time of initial consolidation was kEUR 711.

The company was acquired in 2012.

The initial consolidation was carried out at the fair value of the transferred assets and liabilities, which were as follows:

in kEUR	
Assets	
Current assets	
Cash and cash equivalents	308
Other financial assets	9
Trade receivables	189
Other assets	18
Inventories	1,564
	2,088
Non-current assets	
Intangible assets	27
Property, plant and equipment	90
	117
	2,205
Liabilities	
Current liabilities	
Financial liabilities	900
Trade payables	272
Other financial liabilities	127
Tax liabilities	26
Employee benefits	169
	1,494
Net assets	711

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

Bauhof Service GmbH & Verwaltungs-Service Pliensbach UG (haftungsbeschränkt) [limited liability]

With the purchase and transfer agreement of July 28, 2023 and with effect from August 1, 2023, Zeppelin Rental GmbH acquired selected assets from Bauhof Service GmbH, Pliensbach, and Verwaltungs-Service Pliensbach UG (haftungsbeschränkt), Pliensbach, as part of an asset deal.

Bauhof Service GmbH leases power boxes for the construction site in Baden-Wuerttemberg, Bavaria and Hesse. The total purchase price of the transaction was kEUR 1,850.

The acquisition was carried out at the fair value of the transferred assets and liabilities, which were as follows:

in kEUR	
Assets	
Current assets	
Inventories	229
	229
Non-current assets	
Property, plant and equipment	747
	977
Net assets	977

As part of the purchase price allocation, goodwill of kEUR 874 was capitalized. This reflects improved supra-regional coverage in southern Germany.

Including the company from January 1 to December 31, 2023 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 2.2 million and additional earnings before interest and taxes of approximately kEUR 50.

CCS Construction Competence Shop GmbH

With the purchase and transfer agreement dated November 30, 2022 and with economic effect as of January 1, 2023, the assets and liabilities of CCS Construction Competence Shop GmbH, Kleinmachnow, essential for operations were acquired by SITECH Deutschland GmbH as part of an asset deal.

CCS Construction Competence Shop GmbH is a supplier of construction surveying, machine control and 3D point clouds, which is distinguished in particular by the sale, rental and service of Leica products. The total purchase price of the transaction is KEUR 1,315; this includes a contingent purchase price liability of KEUR 388.

The acquisition was carried out at the fair value of the transferred assets and liabilities, which were as follows:

in kEUR	
Assets	
Current assets	
Other financial assets	127
Other assets	4
Inventories	172
	303
Non-current assets	
Financial assets	
Intangible assets	445
Property, plant and equipment	25
	470
Net assets	773

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

As part of the purchase price allocation, a customer base with a useful life of 8 years was recognized. In addition, goodwill of kEUR 542 was capitalized. This reflects in particular the expansion of SITECH's geographical footprint in east Germany and the acquisition of new customers.

Upstream merger of klickparts GmbH

With the share purchase agreement of November 30, 2022 and with effect from December 31, 2022, all the shares in klickparts GmbH were sold by AT Baumaschinentechnik Beteiligungs GmbH to Zeppelin Baumaschinen GmbH.

Subsequently, klickparts GmbH merged with Zeppelin Baumaschinen GmbH with retroactive effect as of January 1, 2023. The merger has no effect in the Zeppelin Group.

Liquidation of DIMA service for plant engineering s.r.o.

With effect from December 9, 2023, DIMA service for plant engineering s.r.o., Bratislava, Slovakia, was liquidated.

C Accounting Policies

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

Consolidation and Participations

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.

If the proportion of equity held by non-controlling interests 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 participation 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.

Joint arrangements in which two or more parties have joint control over an activity are classified as either joint operations or joint ventures.

A joint operation exists when the parties involved in joint control (joint operators) have rights to the assets or obligations for the liabilities attributable to the arrangement. A joint operator recognizes its attributable assets, liabilities, income and expenses and its share of the joint assets, liabilities, income and expenses.

In a joint venture, however, the parties sharing in the joint control (venturers) have rights to the net assets of the entity. Associates are entities over which Zeppelin exercises significant influence and which are neither subsidiaries nor joint ventures.

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. The main foreign currencies are:

	12/31/2023	12/31/2022
Closing rate		
EUR/CZK	24.72	24.12
EUR/DKK	7.45	7.44
EUR/GBP	0.87	0.89
EUR/PLN	4.34	4.68
EUR/RUB	98.88	78.49
EUR/SEK	11.10	11.12
EUR/USD	1.11	1.07
EUR/UAH	42.15	39.24

	2023	2022
Average rate		
EUR/CZK	24.00	24.57
EUR/DKK	7.45	7.44
EUR/GBP	0.87	0.85
EUR/PLN	4.54	4.69
EUR/RUB	91.87	73.63
EUR/SEK	11.48	10.63
EUR/USD	1.08	1.05
EUR/UAH	39.75	34.24

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 rates are shown in the Notes to the Balance Sheet ("Intangible Assets" section). 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 at a point in time and over time. 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 financial 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 CE SBU

The business activities of the Construction Equipment CE 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 both at a point in time and over time.

Construction Equipment Eurasia SBU

The business activities of the Construction Equipment Eurasia 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. Following the termination of business activities in Belarus as a result of the embargo imposed by western countries, the business in Russia was completely discontinued in 2023, with the exception of agricultural machinery service.

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 both at a point in time and over time.

Construction Equipment Nordics SBU

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

Sales from the selling of construction machines and mining 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 both at a point in time and over time.

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 both at a point in time and over time.

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 both at a point in time and over time.

Sales from the project business are mainly recognized over time 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 over time 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 both at a point in time and over time.

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 reporting 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. This does not apply to transactions in which both deductible and taxable temporary differences of the same amount occur upon initial recognition of the assets and liabilities.

Zeppelin recognizes deferred tax assets only to the extent that it is probable that a 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 participations 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 rates which, according to current estimates, apply in accordance to 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 2023 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, 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 hedged item,
- 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 hedged item; 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 comprise 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 financial 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 financial 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.

Lease payments are discounted at the interest rate implicit in the lease. If this is not known or not available, the lessee's incremental borrowing rate is used.

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.

The uncertainties and the unknowns caused by Russia's war on Ukraine have an impact on the measurement of assets and liabilities, which are subject to a higher degree of discretion. This is reflected in particular in the loss allowances on property, plant and equipment and current assets as well as in the formation of provisions.

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 23.

Where observable fair values are not available, the fair value of assets and liabilities acquired in a business combination is measured using recognized valuation techniques, such as the residual value method. The measurement of value involves estimates by management. The result forecast on the basis of these estimates is influenced, for example, by interest rate movements, fluctuations in exchange rates, and the expected economic performance. They may also be influenced by current geopolitical and macroeconomic conditions.

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:

	2023								
in kEUR	Construction Equipment CE	Construction Equipment Eurasia	Construction Equipment Nordics	Rental	Power Systems	Plant Engineering	Holding company	Consolidation	Group
Sales									
Earthmoving equipment (new)	905,910	184,851	160,198	0	0	0	0	-4,449	1,246,511
Earthmoving equipment (used)	326,800	11,147	39,096	0	0	0	0	-3,569	373,474
Rental business and service	1,613	249	2,316	602,739	0	0	23,941	-6,494	624,362
Conveying systems	23,034	180	0	0	0	0	0	0	23,215
Power Systems	0	0	0	0	187,593	0	0	-9,477	178,116
Agricultural equipment	0	23,590	0	0	0	0	0	0	23,590
Production plants	0	0	0	0	0	168,239	0	0	168,239
Processing plants and mixers	0	0	0	0	0	181,573	0	0	181,573
Systems for the food industry and liquids handling	0	0	0	0	0	93,840	0	0	93,840
Components	0	0	0	0	0	14,507	0	0	14,507
Spare parts	301,397	80,378	59,635	0	194,307	0	0	-42,083	593,633
Customer service	135,899	8,521	44,354	0	79,204	59,969	0	-13,464	314,484
Sale of rental park assets and Miscellaneous	7,967	11	0	135,918	0	0	0	-45,969	97,927
Zeppelin GmbH	0	0	0	0	0	0	58,757	-57,560	1,197
	1,702,620	308,927	305,599	738,656	461,104	518,127	82,698	-183,066	3,934,667

in kEUR	2022 Construction Equipment CE	Construction Equipment Eurasia	Construction Equipment Nordics	Rental	Power Systems	Plant Engineering	Holding company	Consolidation	Group
Sales									
Earthmoving equipment (new)	775,983	274,326	149,277	0	0	0	0	-3,049	1,196,537
Earthmoving equipment (used)	290,619	41,082	35,175	0	0	0	0	-2,908	363,968
Rental business and service	1,490	866	2,195	546,462	0	0	12,580	-8,162	555,432
Conveying systems	20,759	428	0	0	0	0	0	0	21,187
Power Systems	0	0	0	0	193,279	0	0	-2,998	190,282
Agricultural equipment	0	22,113	0	0	0	0	0	0	22,113
Production plants	0	0	0	0	0	94,291	0	0	94,291
Processing plants and mixers	0	0	0	0	0	230,350	0	-57	230,293
Systems for the food industry and liquids handling	0	0	0	0	0	84,462	0	0	84,462
Components	0	0	0	0	0	16,879	0	-3	16,877
Spare parts	283,862	163,139	56,075	0	179,212	0	2,513	-39,925	644,876
Customer service	131,183	23,231	49,055	0	69,928	67,225	0	-10,691	329,930
Sale of rental park assets and Miscellaneous	12,458	0	0	119,856	0	0	0	-45,415	86,899
Zeppelin GmbH	0	0	0	0	0	0	55,529	-54,523	1,007
	1,516,354	525,184	291,778	666,318	442,419	493,207	70,622	-167,731	3,838,152

The sales of the Rental SBU initially reported under forklifts/conveying technology (kEUR 56,063), components (kEUR 71,155) and customer service (kEUR 113,695) in the previous year were reclassified to the rental business and services (kEUR 217,380) and sale of rental fleet assets and others (kEUR 23,533) due to a change in product allocation and to improve comparability. The associated effects from the consolidation were likewise reallocated.

A breakdown of sales by domestic and foreign entities is presented below:

in kEUR	2023	2022
Sales		
Domestic entities	2,361,815	2,131,555
Foreign entities	1,572,852	1,706,597
	3,934,667	3,838,152

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")[2] 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
12/31/2023	1,291,707	316,025	4,475	1,612,207
12/31/2022	1,703,557	240,285	6,718	1,950,559

[2] The order backlog in accordance with IFRS only includes contractual relationships with fixed remuneration agreements and secure remuneration agreements.

2 COST OF SALES

The cost of sales comprises:

in kEUR	2023	2022
Cost of sales		
Cost of materials	-2,610,241	-2,583,553
Personnel expenses	-488,271	-454,686
Depreciation	-61,797	-74,124
Other expenses	-172,644	-162,385
	-3,332,953	-3,274,748

3 OTHER INCOME

The other income comprises:

in kEUR	2023	2022
Other income		
Handling margin from SLB/SMB transactions	6,305	3,788
Reimbursements	8,210	10,548
Book gains from asset disposals	8,440	3,550
Release of provisions and other liabilities	7,801	6,731
Rents and leases	298	194
Exchange rate gains	12,085	26,507
Income from derecognized receivables	892	1,812
Insurance compensation and indemnity payments	19,025	16,433
Miscellaneous	17,948	19,106
	81,005	88,669

Other income fell, in particular due to lower exchange gains in Russia (sanction-related decline in business activity) and lower cost reimbursements for trade fair costs by Caterpillar (bauma). This is partly offset by increased book profits from the disposal of fixed assets (sale of fixed assets in Russia), the further increase in handling margins from newly concluded sale and rental back transactions, as well as income from insurance compensation. The latter is in line with the development of the rental business.

4 OTHER EXPENSES

Other expenses include:

in kEUR	2023	2022
Other expenses		
Losses from asset disposals	-3,995	-5,484
Exchange rate losses from foreign currency valuation	-11,619	-35,625
Expenses from the derecognition of financial instruments	-1,652	-568
Claims expenses for motor vehicles, machines, and other	-5,972	-4,793
Donations	-1,197	-803
Other taxes	-3,156	-3,075
Expenses for bank and guarantee fees, financial expenses	-2,134	-2,068
Miscellaneous	-9,499	-6,536
	-39,224	-58,952

The decline in other operating expenses is due in particular to lower currency losses in Russia (decline in business activities due to sanctions) and lower losses from asset disposals (sale of shares in Zeppelin Belarus OOO).

5 PERSONNEL EXPENSES

Personnel expenses include:

in kEUR	2023	2022
Personnel expenses		
Wages and salaries	-646,640	-605,965
Social security contributions	-131,371	-130,527
Post-employment benefits	-8,982	-8,732
	-786,993	-745,225

The average number of employees during the year was:

Full-time equivalents	2023	2022
Employees		
Sales, marketing	1,912	1,834
Service (spare parts and after-sales)	4,392	4,872
Engineering, order processing, materials management, logistics	1,279	1,194
Production, assembly, quality management	838	775
Administration	1,578	1,544
Trainees and apprentices	361	339
	10,361	10,557

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	2023	2022
Net financial result		
Interest result		
Interest income		
from financial instruments	6,379	5,488
from discounting	6,669	2,925
from loans to affiliates	118	4
from interest rate derivatives	0	8
	13,166	8,425
Interest expenses		
from financial instruments	-24,580	-17,118
from discounting	-6,442	-2,510
from lease agreements	-9,990	-3,295
from loans from affiliated	-86	0
	-41,098	-22,923
	-27,932	-14,499

in kEUR	2023	2022
Other financial result		
Other financial income		
Income from participations	1,008	1,799
Other income from financial instruments	7,440	16,781
	8,448	18,579
Other financial expenses		
Other expenses from financial instruments	-10,330	-13,008
Total other financial expenses	-10,330	-13,008
Total other net financial result	-1,882	5,571
	-29,814	-8,927

Interest and similar income from financial instruments includes investments in connection with the project business. The increase in income from discounting is mainly due to the discounting of contractual liabilities.

Interest and similar expenses from financial instruments included kEUR 21,037 (2022: kEUR 14,802) in interest expenses from bank loans.

Expenses from discounting include interest expenses from the subsequent measurement of long-term employee benefits in the amount of kEUR 2,186 (2022: kEUR 434), and the discounting of contract assets and liabilities amounting to kEUR 4,153 (2022: kEUR 1,950), from the unwinding of the discount and from other provisions in the amount of kEUR 103 (2022: kEUR 126).

The increase in expenses from the subsequent measurement of lease liabilities by kEUR 6,695 to kEUR 9,990 results from higher financing costs for sale-leaseback and sale-hire-purchase-back transactions.

The decline in other income and expenses from financial instruments is mainly due to lower income from the revaluation of interest rate derivatives that are not included in hedge accounting.

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

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

7 Income Taxes

The income tax expense is composed as follows:

in kEUR	2023	2022
Income taxes		
Current tax	-51,151	-31,354
Deferred tax	-2,580	1,093
	-53,731	-30,261

The income tax rate of 29.8% levied in Germany (previous year: 29.9 %) comprises corporation tax (15.0 %), trade tax (average 14.0 %; previous year: 14.1 %), and solidarity surcharge (5.5 %).

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

in kEUR	2023	2022
Net profit before tax	153,798	134,631
Tax rate %	29.84	29.88
Expected income tax expense	-45,900	-40,221
Different tax rates	5,128	5,640
Effect from tax rate changes	-37	-6
Taxes for previous years	-606	5,866
Other non-deductible expenses and taxes, and effects from changes in permanent differences	-6,304	-3,824
Tax-free income	4,093	6,078
Change in the assessment of whether deferred tax assets can be recognized	-10,081	-3,579
Miscellaneous effects	-24	-215
Actual income tax expense	-53,731	-30,261
Effective tax rate %	34.94	22.48

This results in the deferred tax assets and liabilities shown in the following table:

	12/31/2023		12/31/2022	
in kEUR	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	16	1	3	0
Other financial assets and receivables (current)	5,825	11,053	5,418	10,693
Inventories	12,689	9,018	16,811	10,051
Financial assets (non-current)	1,530	2,930	1,174	5,085
Other financial assets and receivables (non-current)	85	11,776	731	13,249
Intangible assets	2,902	7,692	1,672	7,588
Property, plant and equipment	2,797	213,889	3,741	167,771
Current liabilities	75,581	11,706	68,172	8,308
Current provisions	6,035	2,742	8,225	2,985
Non-current liabilities	162,960	0	128,190	232
Employee benefits	11,801	1,757	8,951	1,923
Non-current provisions	651	67	587	195
Loss carryforwards	12,552	0	7,597	0
Tax credits	100	0	973	0
	295,524	272,632	252,243	228,081
Valuation allowance	-12,614		-5,954	
Offsetting	-208,338	-208,338	-175,970	-175,970
	74,572	64,294	70,319	52,111

The change in deferred taxes includes differences from currency translation of kEUR -572, which resulted in particular from exchange rate changes of the Russian ruble.

The current portion of deferred tax assets amountes to kEUR 66,311 (12/31/2022: kEUR 68,464). The current portion of deferred tax liabilities amountes to kEUR 2,034 (12/31/2022: kEUR 1,616). There are temporary differences on interests in subsidiaries, associates, and joint ventures amounting to kEUR 13,270 (12/31/2022: kEUR 11,400), 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 participation, but no sale is intended in the foreseeable future.

Deferred tax assets of kEUR 1,322 (2022: kEUR 1,905) and deferred tax liabilities of kEUR 9,131 (2022: kEUR 1,915) from first-time consolidation were added in the financial year at fair value.

Deferred taxes recognized in equity amount to kEUR -3,802 (2022: kEUR -6,858).

In Germany, there are corporation tax loss carryforwards of kEUR 19,507 (12/31/2022: kEUR 9,434), and trade tax loss carryforwards of kEUR 19,265 (12/31/2022: kEUR 9,423). Overseas, there are loss carryforwards of kEUR 33,941 (12/31/2022: kEUR 28,373).

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

in kEUR	12/31/2023 Gross amount	12/31/2023 Value for tax purposes	12/31/2022 Gross amount	12/31/2022 Value for tax purposes
Deferred tax assets				
Deductible temporary differences	14,987	3,032	10,667	2,084
Tax loss carryforwards	56,991	9,582	23,723	3,869
thereof income tax and local income tax	38,824	7,029	14,797	2,615
thereof trade tax	18,168	2,553	8,926	1,255
	71,979	12,614	34,391	5,954

Due to existing uncertainties as a result of Russia's war against Ukraine with regard to the recoverability of deferred tax assets at companies in Russia and Ukraine, valuation allowances were made to the deferred tax assets on loss carryforwards and temporary balance sheet differences.

The unrecognized loss carryforwards expire as follows:

in kEUR	Amount	Indefinite	Expiry date: subsequent year	Expiry date: 2nd to 5th subsequent year	Expiry date: after the 5th subsequent year
12/31/2023	56,991	55,883	0	0	1,108
12/31/2022	23,723	22,678	0	0	1,045

For companies that closed the current or previous period with a loss, deferred tax assets of kEUR 19,327 were recognized after netting with deferred tax liabilities (12/31/2022): kEUR 13,432). 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 with 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	2023	2022
Scheduled depreciation		
in the cost of sales	-61,797	-63,400
in the selling expenses	-11,357	-11,145
in the administrative expenses	-15,959	-16,232
in the research and development costs	-310	-403
	-89,423	-91,180

F Notes to the Balance Sheet

9 Cash and Cash Equivalents

A breakdown of cash and cash equivalents is shown below:

in kEUR	12/31/2023	12/31/2022
Cash and cash equivalents		
Cash in hand and bank	183,151	157,044
	183,151	157,044

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

10 Current Financial Assets

Current financial assets include[3]:

in kEUR	12/31/2023 FVTPL	AC	Miscella-neous
Cash and cash equivalents		183,151	
Financial assets			
Derivatives	746	-	0
Continuing involvement	-	-	336
Other receivables	-	20,550	-
	746	20,550	336
Trade receivables	-	502,269	-

in kEUR	12/31/2022 FVTPL	AC	Miscella-neous
Cash and cash equivalents	-	157,044	-
Financial assets			
Derivatives	2,116	-	0
Loans	-	900	-
Continuing involvement	-	-	690
Other receivables	0	18,761	-
	2,116	19,661	690
Trade receivables	-	439,285	-

Positive market values of interest rate derivatives that are not included in hedge accounting are reported under derivatives. It also includes the positive fair values from the hedging of foreign currency loans granted by Zeppelin GmbH to subsidiaries.

Trade receivables in Russian companies were significantly further reduced in 2023 and are only of a minor amount now.

[3] 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.

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 and Valuation Policies”).

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 amounted to kEUR 2,060 in the past financial year (2022: kEUR 1,946). The nominal amount of receivables with risk sharing as of the balance sheet date was kEUR 11,402 (12/31/2022: kEUR 10,873). The maximum risk of loss resulting from these receivables was kEUR 3,770 (12/31/2022: kEUR 4,283). The carrying amount and fair value of the continuing involvement recognized for this purpose were each kEUR 3,764 (12/31/2022: kEUR 4,275). 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.

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	12/31/2023	12/31/2022
Contract assets		
Project business		
Gross inventory	31,570	49,323
Loss allowances	-764	-1,455
	30,806	47,868
Other contracts		
Gross inventory	188	598
Loss allowances	0	0
	188	598
	30,994	48,466

in kEUR	12/31/2023	12/31/2022
Contract liabilities		
from the project business	207,114	190,035
from service contracts	39,916	31,818
from warranty extensions	63,821	70,059
	310,851	291,912

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. The changes compared to the previous year amount to kEUR 13,383 (2022: kEUR -872) are attributable to adjustments of performance obligations met in previous periods. Furthermore, the reversal of a risk provision formed in 2022 for a plant engineering project in Russia, which was largely no longer required due to the reusability of the material, is also included here. For performance obligations included in contractual liabilities from prior periods, Zeppelin recognized sales of kEUR 101,940 (2022: kEUR 84,375).

The balance of contractual liabilities from service contracts represents the excess of service payments received from customers over the cumulative sales recognized from the provision of services. For performance obligations included in contractual liabilities from prior periods, Zeppelin recognized sales of kEUR 31,893 (2022: kEUR 28,088).

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. This has declined due to the complete discontinuation of business in Russia, among other things. For performance obligations included in contractual liabilities from prior periods, Zeppelin recognized sales of kEUR 52,227 (2022: kEUR 81,213).

12 Other Assets

A breakdown of other assets is shown below:

in kEUR	12/31/2023 Total	12/31/2023 thereof current	12/31/2022 Total	12/31/2022 thereof current
Other assets				
Refund claims and advance payments for other taxes	11,432	11,432	6,997	6,997
Excess of plan assets over the defined benefit pension plans	904	100	939	383
Advance payments for wages and salaries	1,867	1,867	1,684	1,684
Repurchase rights from RPO transactions	35,731	8,798	41,582	12,248
Advance payments for warranty extensions	34,508	14,231	32,974	14,119
Advance payments for purchased services	2,175	1,774	1,957	1,395
Other advance payments	23,298	19,225	18,189	14,266
	109,915	57,427	104,322	51,091

Prepayments for purchased services mainly relate to advance payments for maintenance services, insurance and bank charges as well as for short-term rents or rents for low-value assets. Other advance payments mainly relate to software licenses and software as a service.

13 Inventories

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

in kEUR	12/31/2023	12/31/2022
Inventories		
Raw materials, consumables, and supplies	37,845	41,173
Work in progress	68,494	59,110
Finished goods and merchandise	644,713	621,615
Advance payments on inventories	112,945	123,007
	863,997	844,906

kEUR 2,181,070 of inventories were recorded as material consumption (2022: kEUR 2,164,744). In the financial year, Zeppelin recognized impairment losses on inventories in the amount of kEUR 19,565 (2022: kEUR 26,064) and realized reversals of impairment losses on inventories amounting to kEUR 12,027 (2022: kEUR 8,345). Impairment losses on inventories were only reduced by the sale of inventories in Russia. Reversals of impairment losses on inventories result from disposals at prices that exceed the previously estimated net realizable value.

The inventory of machines, engines and spare parts in Ukraine and Russia was further reduced significantly in line with business development.

14 Non-Current Financial Assets

The carrying amounts and fair values of non-current financial assets are[4]:

	12/31/2023				
	FVTPL		AC		Miscella-neous
in kEUR	Carrying amount	Fair value	Carrying amount	Fair value	
Financial assets					
Derivatives	1,075	1,075	-	-	-
Shares in affiliates	11,285	11,285	-	-	-
Participations	6	6	-	-	-
Loans	-	-	518	518	-
Continuing involvement	-	-	-	-	3,421
Other receivables	-	-	4,403	4,401	0
	12,366	12,366	4,921	4,919	3,421
Trade receivables			7,794	7,794	

	12/31/2022				
	FVTPL		AC		Miscella-neous
in kEUR	Carrying amount	Fair value	Carrying amount	Fair value	
Financial assets					
Derivatives	2,881	2,881	-	-	-
Shares in affiliates	11,550	11,550	-	-	-
Participations	6	6	-	-	-
Loans	-	-	461	461	-
Continuing involvement	-	-	-	-	4,275
Other receivables	-	-	8,481	7,845	-
	14,438	14,438	8,942	8,306	4,275
Trade receivables	-	-	9,346	9,346	-

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.

[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.

The changes in shares in affiliates and participations are shown below:

in kEUR	Shares in affiliates	Participa-tions
Carrying amounts as of		
01/01/2022	12,885	6
Changes in fair value	49	0
Disposals	-4,007	0
Changes in the consolidation group	2,623	0
12/31/2022	11,550	6
Disposals	-57	0
Changes in the consolidation group	-209	0
12/31/2023	11,285	6

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 kEUR 11,276. The shares correspond to 10.0% of the subscribed capital of kEUR 35,000. The shares do not confer any dividend subscription rights and have restrictions on their resale.

The carrying amount of the participations relates to shares held by Zeppelin GmbH in Wirtschaftsförderung Bodenseekreis GmbH.

The information on the fair values of the shares in affiliates and participations corresponds to the total of the discounted cash flows. Discounting is carried out using the weighted average cost of capital. The valuation method falls under level 3 of the fair value hierarchy (see subsection "Fair Value" in the section "Financial Instruments" under "C Accounting Policies").

Changes in fair value are recognized in profit or loss in the financial result.

The weighted average cost of capital (WACC) and the growth rate of the terminal value (TV) are used as significant unobservable inputs in determining the fair value. A change in the two inputs would have the following effects on the fair value and the consolidated net profit after tax:

in kEUR	12/31/2023	12/31/2022
WACC		
+1.0%	-2,235	-2,349
-1.0%	2,976	3,224
Growth rate TV		
+1.0%	2,370	2,676
-1.0%	-1,788	-1,959

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	12/31/2023	12/31/2022
Investments accounted for using the equity method		
Associates	18,436	18,659
	18,436	18,659

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	12/31/2023	12/31/2022
Share of equity capital		
Net assets		
Current Assets	97,956	86,871
Non-current assets	36,666	33,251
Current liabilities	-64,617	-58,804
Non-current liabilities	-31,264	-21,342
	38,741	39,976
Share in %	49.0	49.0
Other adjustments	-547	-929
	18,436	18,659

in kEUR	2023	2022
Share in net profit after tax		
Sales	132,747	93,762
Net profit	-183	-756
Share in %	49.0	49.0
	-90	-370
Share of other comprehensive income		
Other comprehensive income	-453	577
Share in %	49.0	49.0
	-222	283
Dividends received	0	754

16 Intangible Assets

The changes in intangible assets are shown below:

in kEUR	Goodwill	Customer base	Software	Conces-sions, industrial property rights and technology	Internally generated intangible assets	Payments in advance	Total
Costs							
01/01/2022	98,381	42,450	89,643	10,082	3,619	10,704	254,878
Additions	0	0	3,767	15	0	4,763	8,545
Disposals	0	0	-2,762	-782	0	0	-3,544
Changes in the consolidation group	2,799	1,633	114	3,819	0	7	8,372
Currency translation	-153	-1,389	648	-48	0	-47	-988
Transfers	0	0	2,367	0	-1,730	-636	0
Reclassifications	0	0	0	0	0	0	0
12/31/2022	101,027	42,694	93,778	13,085	1,889	14,790	267,263
Additions	0	0	3,031	23	222	12,188	15,463
Disposals	-102	0	-10,124	-3	0	0	-10,229
Changes in the consolidation group	24,810	8,123	57	3,663	0	0	36,652
Currency translation	-299	-85	-1,567	-60	8	-3	-2,006
Transfers	0	0	-3,605	-3	0	3,609	0
Reclassifications	0	0	322	0	0	0	322
12/31/2023	125,436	50,732	81,891	16,705	2,119	30,584	307,466

in kEUR	Goodwill	Customer base	Software	Conces-sions, industrial property rights and technology	Internally generated intangible assets	Payments in advance	Total
Accumulative amortization and impairment losses							
01/01/2022	-61,784	-10,805	-67,483	-7,673	-1,889	-694	-150,327
Amortization	0	-4,823	-9,972	-2,262	0	0	-17,057
Impairments	-99	0	-269	0	0	-6,659	-7,027
Reversals of impairments	0	0	0	0	0	0	0
Disposals	0	0	2,748	782	0	0	3,530
Changes in the consolidation group	0	0	-70	0	0	0	-70
Currency translation	-336	342	-565	41	0	0	-519
Reclassifications	0	0	-1	0	0	0	-1
12/31/2022	-62,219	-15,285	-75,612	-9,112	-1,889	-7,353	-171,470
Amortization	0	-5,119	-7,805	-3,659	-74	0	-16,657
Reversals of impairments	0	0	2	0	0	0	2
Disposals	102	0	9,964	3	0	0	10,069
Changes in the consolidation group	0	0	-29	0	0	0	-29
Currency translation	250	1	1,401	51	-3	0	1,701
Transfers	0	0	1,954	1	0	-1,955	0
Reclassifications	0	0	-87	0	0	0	-87
12/31/2023	-61,867	-20,404	-70,212	-12,715	-1,965	-9,308	-176,472

The additions to the advance payments made mainly relate to the group-wide SAP project.

As of December 31, 2023, there were contractual obligations to acquire intangible assets amounting to kEUR 1,114 (12/31/2022: kEUR 290).

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

in kEUR	12/31/2023	12/31/2022
Goodwill		
Construction Equipment CE	11,058	10,581
Construction Equipment Nordics	6,861	6,846
Rental	39,593	16,366
Plant Engineering	6,056	5,016
	63,568	38,808

The increase in goodwill at the CGU Group Construction Equipment CE is attributable to the asset deal with CCS Construction Competence Shop GmbH in the amount of KEUR 542. In addition, goodwill in the CGU Group Rental increased due to the acquisition of shares in CP ApS (kEUR 23,393) and the asset deal with Bauhof Service GmbH (kEUR 874). (see section “Changes to the scope of consolidation” under “B Principles for the preparation of the consolidated financial statements”). Due to an internal Group restructuring, goodwill of kEUR 1,041 was no longer allocated to the Rental CGU Group but rather to plant engineering.

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. The growth rate reflects management’s expectations of future growth derived from the past.

The cost of capital rates after taxes are used to determine the present value. 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”). The growth rates and cost of capital rates used are shown in the table below:

	12/31/2023	
	Growth rate	Cost of capital
Goodwill		
Construction Equipment CE	1.00%	9.67%
Construction	2.00%	9.67%
Rental	1.00%	6.61%
Plant Engineering	1.00%	9.67%

	12/31/2022	
	Growth rate	Cost of capital
Goodwill		
Construction Equipment CE	1.00%	8.66%
Construction	2.00%	8.66%
Rental	1.00%	6.59%
Plant Engineering	1.00%	8.66%

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							
01/01/2022	635,059	85,442	249,427	386,776	973,162	18,500	2,348,367
Additions	21,549	4,068	34,829	117,146	262,913	16,647	457,153
Disposals	-17,529	-3,911	-27,174	-116,302	-107,183	-390	-272,490
Changes in the consolidation group	6,108	1,601	1,121	0	482	-8	9,304
Currency translation	1,582	1,110	302	-401	-2,577	-1,367	-1,352
Transfers	4,596	135	-3,198	0	6,707	-8,240	0
Reclassifications	234	-90	-150	0	-3,476	-1	-3,483
12/31/2022	651,600	88,356	255,157	387,219	1,130,027	25,140	2,537,499
Additions	36,645	6,415	41,372	136,545	310,154	49,234	580,366
Disposals	-16,349	-5,160	-25,349	-112,448	-110,161	-840	-270,307
Changes in the consolidation group	14,416	657	2,752	0	130,869	653	149,348
Currency translation	-5,714	-1,494	-3,363	-497	538	124	-10,406
Transfers	4,504	275	1,422	0	158	-6,359	0
Reclassifications	-33	0	-181	0	-2,006	0	-2,220
12/31/2023	685,070	89,050	271,810	410,820	1,459,579	67,952	2,984,280

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							
01/01/2022	-262,589	-58,248	-164,068	-94,705	-433,596	-5,400	-1,018,606
Depreciation	-33,684	-7,005	-33,752	-51,122	-124,418	0	-249,982
Impairments	-1,306	-699	-84	0	-652	0	-2,741
Reversals of impairments	1,619	0	1	0	14	2,552	4,186
Disposals	8,939	3,106	25,356	50,395	64,282	0	152,078
Changes in the consolidation group	-441	-979	-625	0	-270	0	-2,315
Currency translation	-498	-743	-838	61	335	363	-1,319
Transfers	138	6	605	0	-749	0	0
Reclassifications	-35	18	-8	0	1,207	0	1,183
12/31/2022	-287,855	-64,545	-173,413	-95,371	-493,847	-2,484	-1,117,516
Depreciation	-32,773	-6,641	-33,035	-49,914	-147,928	0	-270,291
Impairments	-1	0	-237	0	-283	-1,441	-1,963
Reversals of impairments	30	1	0	0	7	0	37
Disposals	10,114	4,570	23,284	48,377	57,391	0	143,736
Changes in the consolidation group	-1	-12	-97	0	-59,599	0	-59,710
Currency translation	1,917	1,146	2,429	127	-284	171	5,506
Transfers	33	21	-170	0	116	0	0
Reclassifications	-3	-25	-4	0	931	0	899
12/31/2023	-308,539	-65,485	-181,243	-96,782	-643,498	-3,754	-1,299,301

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 25.

In financial year 2023, Zeppelin received compensation of kEUR 18,567 for damaged property, plant and equipment (2022: kEUR 16,165).

As of December 31, 2023, there were contract obligations for Zeppelin to acquire property, plant and equipment amounting to kEUR 124,117 (12/31/2022: kEUR 212,596). The purchase commitment mainly related to orders for the rental fleet (RPO).

18 Current Financial Liabilities

Current financial liabilities include[5]:

in kEUR	FVTPL	AC	Miscellaneous
	12/31/2023		
Financial liabilities			
Borrowings	-	35,326	-
Bonded loans	-	26,692	-
Derivatives	3,410	-	-
Lease liabilities	-	-	93,981
Continuing involvement	-	-	337
	3,410	62,018	94,318
Trade payables	-	165,922	-
Other financial liabilities	-	133,076	-

in kEUR	FVTPL	AC	Miscellaneous
	12/31/2022		
Financial liabilities			
Borrowings	-	32,698	-
Bonded loans	-	41,637	-
Derivatives	288	-	-
Lease liabilities	-	-	84,938
Continuing involvement	-	-	691
	288	74,335	85,629
Trade payables	-	234,952	-
Other financial liabilities	-	137,948	-

Other financial liabilities mainly include liabilities from repurchase obligations (RPO transactions) in the amount of kEUR 62,657 (2022: kEUR 67,961).

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”).

[5] 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	12/31/2023		12/31/2022	
	Total	thereof current	Total	thereof current
Other liabilities				
Other tax liabilities	54,149	54,149	49,072	49,072
Deferred sales from RPO transactions	148,092	52,295	132,490	53,380
Liabilities for wages and salaries	2,497	2,271	2,376	1,995
Advance payments for services to be rendered	11,407	11,407	7,116	7,116
Other advance payments	20,974	20,947	19,909	19,903
	237,119	141,068	210,963	131,466

The advance payments received for services to be rendered relate to marketing support and rents, among other things.

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[6]:

in kEUR	12/31/2023				
	FVTPL		AC		Miscellaneous
	Carrying amount	Fair value	Carrying amount	Fair value	
Financial liabilities					
Borrowings	-	-	336,752	340,248	-
Bonded loans	-	-	230,852	215,074	-
Lease liabilities	-	-	-	-	346,581
Continuing involvement	-	-	-	-	3,427
	-	-	567,605	555,322	350,008
Trade payables	-	-	-	-	-
Other financial liabilities	-	-	175,734	174,502	-

[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.

in kEUR	12/31/2022 FVTPL Carrying amount	FVTPL Fair value	AC Carrying amount	AC Fair value	Miscellaneous
Financial liabilities					
Borrowings	-	-	170,746	169,523	-
Bonded loans	-	-	204,808	175,703	-
Derivatives	-	-	-	-	-
Lease liabilities	-	-	-	-	188,866
Continuing involvement	-	-	-	-	4,283
	-	-	375,554	345,226	193,149
Trade payables	-	-	-	-	-
Other financial liabilities	-	-	169,002	168,872	-

Loans increased compared to the previous year, in particular due to higher utilization of the syndicated loan.

The increase in lease liabilities resulted mainly from the conclusion of new sale-leaseback and sale-hire-purchase-back packages.

Other financial liabilities mainly include liabilities from repurchase obligations (RPO transactions) in the amount of kEUR 175,068 (2022: kEUR 167,484).

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

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	12/31/2023 Total	12/31/2023 thereof current	12/31/2022 Total	12/31/2022 thereof current
Employee benefits				
Short-term employee benefits				
Vacation and overtime	29,125	29,125	28,289	28,289
Variable salary components and bonuses	46,705	46,705	53,008	53,008
Commissions	7,603	7,603	7,301	7,301
Social contributions	9,632	9,632	9,269	9,269
Miscellaneous	11,672	11,672	5,662	5,662
	104,737	104,737	103,529	103,529
Net liability from defined benefit pension plans	120,664	7,231	114,162	7,352
Other long-term employee benefits				
Jubilee bonuses	3,401	504	3,435	505
Partial retirement	4,681	1,149	4,160	1,160
Miscellaneous	147	0	340	0
	8,228	1,653	7,935	1,666
Post-employment benefits	1,159	1,188	798	846
	234,787	114,809	226,424	113,393

Short-Term Employee Benefits

Liabilities for variable salary components and bonuses decreased compared to the previous year, in particular due to personnel reductions in Russia.

Provisions for Defined Benefit Pension Plans

Zeppelin provides participating employees 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.

The expenses for defined contribution plans amounted to kEUR 8,790 (2022: kEUR 8,445).

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, larger defined benefit pension obligations were taken over from the acquisition in Sweden in financial year 2019. The benefits under the pension plan are graduated according to different percentages depending on salary intervals.

As of the reporting date, for a total of 3,351 employees (12/31/2022: 3,317) there were obligations from defined benefit commitments, of which 940 are due to active employees (12/31/2022: 931), 745 to former employees with vested pension rights (12/31/2022: 724) and 1,666 to pensioners and surviving dependants (12/31/2022: 1,662).

Zeppelin has invested in 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	12/31/2023	12/31/2022
Net liability		
Provisions for pensions	133,853	126,242
thereof covered	15,798	14,982
thereof not covered	118,054	111,260
Fair value of plan assets	-13,516	-12,624
	120,337	113,617

The net liability includes KEUR 327 (2022: KEUR 545) of excess assets from a direct commitment (payment into a CTA).

in kEUR	Provisions for pensions	Plan assets	Net liability
01/01/2022	181,230	13,374	167,856
Service cost	2,126	0	2,126
Interest result	1,497	103	1,394
Benefits paid by company / plan	-9,359	-872	-8,487
Actuarial gains (-) and losses (+) from pension plans thereof	-47,004	-1,600	-45,404 0
from the change in demographic assumptions	-7,253	0	-7,253
from the change in financial assumptions	-40,996	0	-40,996
due to experience adjustments	1,245	0	1,245
Employee contributions	191	191	0
Employer contributions	-271	986	-1,257
Currency translation	-2,461	300	-2,762
Miscellaneous	293	142	151
12/31/2022	126,242	12,624	113,617

in kEUR	Provisions for pensions	Plan assets	Net liability
12/31/2022	126,242	12,624	113,617
Service cost	1,738	0	1,738
Interest result	4,016	334	3,681
Benefits paid by company / plan	-8,525	-602	-7,923
Actuarial gains (-) and losses (+) from pension plans thereof	11,553	-405	11,958
from the change in demographic assumptions	310	0	310
from the change in financial assumptions	7,947	0	7,947
due to experience adjustments	3,297	0	3,297
Employee contributions	174	174	0
Employer contributions	-286	1,035	-1,321
Currency translation	5,567	354	5,213
Miscellaneous	-6,626	0	-6,626
12/31/2023	133,853	13,516	120,337

For the following financial year Zeppelin expects payments for employer contributions to plan assets of kEUR 861 (12/31/2022: kEUR 596), and pension payments of kEUR 7,528 (12/31/2022: kEUR 7,620).

The valuation of provisions for pensions is based on actuarial assumptions. The assumptions weighted across the entire Group according to their relative share of the total obligation are presented below:

	12/31/2023	12/31/2022
Weighted actuarial interest rate	3.17%	3.19%
Weighted future wage and salary increases	2.28%	2.24%
Weighted future pension increase	1.16%	1.12%

The weighted interest rate of the previous year was adjusted to the changed calculation procedure of the current reporting year.

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

The average duration of provisions for pensions is between 3.0 and 27.4 years (12/31/2022: 4.0 to 35.1 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	12/31/2023	12/31/2022
Discount rate		
+0.25%	130,960	123,320
-0.25%	137,807	126,721
Life expectancy		
+1 year	139,779	132,290
-1 year	128,738	126,803

A breakdown of the plan assets is presented below:

	12/31/2023			12/31/2022		
in kEUR	Listed	Unlisted	Total	Listed	Unlisted	Total
Plan assets						
Cash	0	79	79	0	90	90
Equity instruments	2,354	0	2,354	2,127	0	2,127
Debt instruments	2,717	0	2,717	2,421	0	2,421
Real estate	0	1,312	1,312	0	1,222	1,222
Investment funds	0	2,122	2,122	26	1,702	1,728
Insurance policies	0	4,717	4,717	0	4,897	4,897
Miscellaneous	132	0	132	132	7	139
	5,285	8,231	13,516	4,706	7,919	12,625

22 Other Provisions

A breakdown of other provisions is presented below:

in kEUR	Warranties	Onerous contracts	Provisions	Loyalty bonuses and other price reductions	Legal fees	Miscella-neous	Total
01/01/2022	20,238	5,275	2,630	5,012	2,252	17,438	52,845
Addition	18,062	5,505	2,291	4,254	2,585	6,700	39,396
Utilization	-6,889	-450	-1,682	-2,757	-497	-3,530	-15,805
Reversals	-5,650	-742	-517	-201	-347	-2,392	-9,849
Discounting	-68	0	0	0	0	-492	-560
Changes in the consolidation group	145	0	0	0	0	49	194
Currency translation	-114	18	-142	1	121	-117	-233
12/31/2022	25,723	9,605	2,580	6,308	4,114	17,657	65,987

in kEUR	Warranties	Onerous contracts	Provisions	Loyalty bonuses and other price reductions	Legal fees	Miscella-neous	Total
12/31/2022	25,723	9,605	2,580	6,308	4,114	17,657	65,987
Addition	14,489	1,901	408	4,618	3,577	3,604	28,596
Utilization	-7,190	-3,147	-1,740	-3,511	-327	-1,992	-17,908
Reversals	-10,172	-4,018	-235	-162	-801	-3,018	-18,406
Discounting	-62	0	0	0	0	-708	-771
Unwinding of the discount	204	0	0	0	0	85	289
Currency translation	-794	-127	0	-2	-106	-166	-1,195
12/31/2023	22,198	4,213	1,013	7,251	6,457	15,460	56,592

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

in kEUR	12/31/2023		12/31/2022	
	Total	thereof current	Total	thereof current
Other provisions				
Warranties	22,198	19,340	25,723	22,686
Onerous contracts	4,213	4,167	9,605	9,595
Commissions	1,013	1,013	2,580	2,580
Loyalty bonuses and other price reductions	7,251	7,251	6,308	6,308
Legal fees	6,457	6,457	4,114	4,114
Miscellaneous	15,460	12,902	17,657	15,131
	56,592	51,130	65,987	60,413

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. Due to the substantially increased risk situation in Russia and Ukraine, appropriate provisions for pensions and risks were made under going concern aspects.

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. This item also includes provisions for legal costs related to sanctioned customers in Russia that were still reported as under warranty in the previous year.

23 EQUITY

The share capital of kEUR 100,000 (12/31/2022: kEUR 100,000) 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	12/31/2023	12/31/2022
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 kEUR 18,022 in financial year 2023 (2022: kEUR 20,640). The dividend is paid to the shareholders of Zeppelin GmbH in proportion to their shares.

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

A breakdown of retained earnings is presented below:

in kEUR	12/31/2023	12/31/2022
Retained earnings		
Shares in Luftschiffbau Zeppelin GmbH	11,276	11,276
First-time adoption of IFRS	15,954	15,962
Foreign currency translation differences	-37,417	-37,417
Other retained earnings	1,028,625	947,984
	1,018,438	937,804

The reserve for the initial 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 relate to the retained earnings.

The Management Board proposes to distribute a dividend of 18%, i.e. kEUR 17,744, for the 2023 financial year from the consolidated net profit for the year attributable to the shareholders of Zeppelin GmbH (kEUR 98,577) and to carry forward the remaining net profit of kEUR 682,877 to the new account.

The value of deferred taxes reported in accumulated other comprehensive income is kEUR -3,802(12/31/2022: kEUR -6,859).

in kEUR	12/31/2023		
	Before income taxes	Income taxes	After income taxes
Actuarial gains (-) and losses (+) from pension plans	13,480	-3,675	9,805
Hedge relationships	466	-88	378

in kEUR	12/31/2022		
	Before income taxes	Income taxes	After income taxes
Actuarial gains (-) and losses (+) from pension plans	25,033	-6,892	18,141
Hedge relationships	-383	73	-310

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 management. The control methods have not changed compared with 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:

	12/31/2023	12/31/2022
Debt ratio[7]	1.31	0.97
Equity ratio	32.4 %	34.6 %
Return on capital	6.4 %	6.2 %
Earnings before interest and income tax	181,730	149,129
Capital employed	2,834,378	2,416,482

The capital employed consists of fixed assets and working capital. The basis for calculating the ratios has not changed compared with the previous year.

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 11 and 724 months (12/31/2022: between 12 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 89 months (12/31/2022: between 2 and 89 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 concluded with a time lead corresponding to the manufacturers' delivery times.

The term of the lease agreements for office and business equipment is between 24 and 245 months (12/31/2022: between 1 and 254 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 18 and 60 months (12/31/2022: between 24 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	2023	2022
Interest expenses from lease liabilities	-9,990	-3,295
Expenses from short-term lease agreements	-14,391	-12,088
Expenses from lease agreements for low-value assets	-3,896	-2,884
Expenses from variable lease payments other than lease payments	-2,732	-2,537
Income from subleases	547	1,006
Cash outflow from leasing	-55,281	-81,001
thereof from lease liabilities	-31,120	-55,139
thereof from short-term leasing and low-value assets	-24,161	-25,862

Total fixed lease payments for contracts whose term had not yet begun as at the balance sheet date amounted to kEUR 21,162 (12/31/2022 kEUR 7,053). These are expected lease payments from vehicle leases which Zeppelin has entered into but whose terms do not begin until delivery of the vehicles after the reporting date.

[7] The debt ratio is equal to the financial debt divided by the earnings before interest, taxes, depreciation, and amortization.

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				
01/01/2022	197,172	6,853	42,802	13,959
Additions	17,027	1,167	13,135	1
Disposals	-16,714	-542	-9,592	-11,310
Changes in the consolidation group	2,907	187	766	0
Currency translation	-648	85	-241	-414
Transfers	-9	-4	-1,643	0
Reclassifications	234	0	-28	0
12/31/2022	199,969	7,746	45,199	2,237
Additions	26,838	2,130	16,224	0
Disposals	-15,805	-1,366	-8,197	-453
Changes in the consolidation group	0	626	0	0
Currency translation	-1,366	-86	-354	0
Transfers	0	0	-1,157	0
Reclassifications	-33	0	125	0
12/31/2023	209,603	9,050	51,841	1,783
Accumulative depreciation and impairment losses				
01/01/2022	-70,902	-3,492	-20,814	-4,167
Depreciation	-22,490	-1,551	-11,682	-2,056
Impairments	0	0	0	0
Reversals of impairments	0	0	0	0
Disposals	8,552	532	9,370	4,596
Changes in the consolidation group	-415	-92	-314	0
Currency translation	420	-57	205	109
Transfers	0	4	796	0
Reclassifications	-35	34	-2	0
12/31/2022	-84,870	-4,622	-22,441	-1,518
Depreciation	-21,634	-1,774	-11,728	-386
Impairments	0	0	0	0
Reversals of impairments	0	0	0	0
Disposals	9,718	1,330	8,116	453
Changes in the consolidation group	0	0	0	0
Currency translation	661	55	69	0
Transfers	0	0	604	0
Reclassifications	-3	-11	28	0
12/31/2023	-96,128	-5,021	-25,353	-1,451

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	2023	2022
Income from leases	635,287	482,255
thereof variable	17,249	2,305

In subsequent financial years, Zeppelin expects fixed payments from operating leases of:

in kEUR	12/31/2023	12/31/2022
Proceeds from operating leases		
In subsequent year	178,265	124,169
thereof SBU Rental order backlog	151,939	107,715
in 2nd subsequent year	3,995	4,622
in 3rd subsequent year	2,290	2,131
in 4th subsequent year	1,277	1,182
in 5th subsequent year	355	550
Thereafter	163	157
	186,345	132,810

Changes to the carrying amount of assets leased under operating leases are presented below:

in kEUR	Rental fleet (RPO)	Rental fleet (other)
Costs		
01/01/2022	386,776	973,162
Additions	117,146	262,913
Disposals	-116,302	-107,183
Changes in the consolidation group	0	482
Currency translation	-401	-2,577
Transfers	0	6,707
Reclassifications	0	-3,476
12/31/2022	387,219	1,130,028
Additions	136,545	310,154
Disposals	-112,448	-110,161
Changes in the consolidation group	0	130,869
Currency translation	-497	538
Transfers	0	158
Reclassifications	0	-2,006
12/31/2023	410,820	1,459,579
Accumulative depreciation and impairment losses		
01/01/2022	-94,705	-433,596
Depreciation	-51,122	-124,418
Impairments	0	-652
Reversals of impairments	0	14
Disposals	50,395	64,282
Changes in the consolidation group	0	-270
Currency translation differences	61	335
Transfers	0	-749
Reclassifications	0	1,207
12/31/2022	-95,371	-493,847
Depreciation	-49,914	-147,928
Impairments	0	-283
Reversals of impairments	0	7
Disposals	48,377	57,391
Changes in the consolidation group	0	-59,599
Currency translation differences	127	-284
Transfers	0	116
Reclassifications	0	931
12/31/2023	-96,782	-643,498

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	12/31/2023	12/31/2022
Financial assets		
AC	718,684	634,278
FVTPL	13,112	16,554
	731,796	650,832
Financial liabilities		
AC	1,104,355	991,791
FVTPL	3,410	288
	1,107,764	992,079

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	12/31/2023	12/31/2022
Derivatives		
Derivatives with positive fair value	1,821	4,997
Offsetting potential	-323	-288
	1,497	4,709
Derivatives with negative fair value	3,410	288
Offsetting potential	-323	-288
	3,086	0
	1,589	4,709
Cash at bank		
Cash at bank	183,151	157,044
Offsetting potential	-37,949	-20,440
	145,201	136,604
Borrowings		
Borrowings	372,078	203,443
Offsetting potential	-37,949	-20,440
	334,129	183,003

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	2023	2022
Financial assets		
AC	-1,106	-7,224
FVTPL	989	12,342
	-116	5,118
Financial liabilities		
AC	-24,062	-21,332
FVTPL	-3,344	-3,507
	-27,406	-24,839

The net results in the AC measurement category include expenses from the application of the effective interest method of kEUR -24,276 (2022: kEUR -17,110).

Hedge Accounting

In accordance with Group policies, Zeppelin uses derivative financial instruments only with a reference to the hedged item 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	31.12.2023	31.12.2022
Derivatives		
Cash flow hedging		
Derivatives for interest rate hedging	1,515	3,274
thereof in hedge relationships whose accounting had to be discontinued	1,515	3,274
Derivatives for currency hedging	-3,104	1,435
thereof in hedge relationships not reported in the balance sheet	-3,104	1,435
	-1,589	4,709
Fair value hedging		
Derivatives for interest rate hedging	0	0
thereof in hedge relationships reported in the balance sheet	0	0
	0	0
	-1,589	4,709

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. Hedge accounting is applied by Zeppelin for the currency hedging relationship of highly probable, firmly contracted cash inflows in the EUR/PLN foreign currency relationship.

Intercompany loans (CZK, USD, DKK and SEK) are hedged by entering into forward exchange contracts or 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.

Since financial 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
12/31/2023			
	9,428	9,910	3 to 6 years
12/31/2022			
	9,841	10,344	3 to 6 years

The nominal amount of these transactions is due as follows:

in kEUR	Subsequent year	2nd to 5th subsequent year	Thereafter	Total
12/31/2023				
	2,900	7,009	0	9,910
12/31/2022				
	3,027	7,316	0	10,344

A breakdown of the carrying amounts of these transactions (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	Accumulated change in value	Accumulated other comprehensive income
12/31/2023			
	9,428	902	488
12/31/2022			
	9,841	103	-384

The hedged items 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	Accumulated change in value
12/31/2023		
	9,910	-902
12/31/2022		
	10,344	-103

Changes to the amount recognized in accumulated other comprehensive income for currency risk hedges are as follows:

in kEUR	Carrying amount
01/01/2022	-502
Change in fair value	-226
Recycling due to realization of the hedged item	328
Recycling for losses that are no longer expected	0
12/31/2022	-400
Change in fair value	729
Recycling due to realization of the hedged item	159
Recycling for losses that are no longer expected	0
12/31/2023	488

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. As was the case in the previous year, 2023 saw 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 items are bonded loans and drawdowns under the syndicated credit facility. In 2023, no hedging relationships were designated as cash flow or fair value hedges.

Cash Flow Hedges

Interest rate swaps used to hedge cash flows from hedged items with variable interest rates have no longer been used since 2021 due to the termination of the hedging relationship for lack of effectiveness.

Changes to the amount recognized in accumulated other comprehensive income for interest rate hedges are as follows:

in kEUR	Carrying amount
01/01/2022	49
Change in fair value	0
Recycling due to realization of the hedged item	-49
Recycling for discontinued hedging relationships	0
12/31/2022	0
Change in fair value	0
Recycling due to realization of the hedged item	0
Recycling for discontinued hedging relationships	0
12/31/2023	0

As part of the fair value hedge, income and expenses from the subsequent measurement of derivatives amounting to kEUR 0 (2022: kEUR -60) were recognized. The carrying amount of the loans was adjusted in the amount of kEUR 0 (2022: kEUR -60) and amortization of the carrying value adjustments in the amount of kEUR 0 (2022: kEUR 49) was recognized.

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 the Group Management Board 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).

The Group Management Board 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 financial risk management methods and assumptions have not changed compared to the previous reporting period. In addition, they have proven to be appropriate and effective even in the challenging geopolitical and economic environment.

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	Repayment	Interest	Repayment	Interest	Repayment
12/31/2023						
Financial liabilities						
Borrowings	16,245	79,421	52,948	281,007	0	7,603
Bonded loans	5,803	25,000	14,656	121,000	2,011	110,000
Derivatives	0	172,255	0	0	0	0
thereof currency forwards	0	172,255	0	0	0	0
thereof interest rate derivatives						
Lease liabilities	0	94,197	0	303,532	0	75,513
	22,048	370,872	67,604	705,540	2,011	193,116
Trade payables	0	167,817	0	0	0	0
Other financial liabilities	394	134,278	543	181,200	0	4,576

in kEUR	In subsequent year		In 2nd to 5th subsequent year		Thereafter	
	Interest	Repayment	Interest	Repayment	Interest	Repayment
12/31/2022						
Financial liabilities						
Borrowings	4,028	33,286	6,759	170,295	0	0
Bonded loans	3,684	40,000	7,306	95,000	3,072	110,000
Derivatives	0	68,901	0	0	0	0
thereof currency forwards	0	68,901	0	0	0	0
thereof interest rate derivatives	0	0	0	0	0	0
Lease liabilities	0	85,324	0	174,869	0	17,867
	7,712	227,511	14,065	440,164	3,072	127,867
Trade payables	0	243,859	0	0	0	0
Other financial liabilities	294	137,903	415	173,094	5	161

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. Zeppelin Baumaschinen GmbH, Zeppelin Power Systems GmbH and Zeppelin Rental GmbH 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. By assigning Group credit limits, escalation processes and monthly reporting on the utilization of Group limits, Zeppelin harmonizes Group-wide credit management for customers who have business relationships with several Group companies at the same time.

The BM Nordics SBU uses the credit assessments of external service providers, who prepare credit assessments for new and current customers at regular intervals. 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. If credit limits are exceeded, the customer can no longer purchase products or services, although in individual cases transactions can be approved by authorized persons. The decision then made is either extended credit or an advance payment. However, the majority of new and used machines are sold on a pre-delivery payment basis. If sales financing partners are used for the sale of machines, they bear the risk of bad debts.

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 Eurasia 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. Since the outbreak of Russia's war against Ukraine, the majority of deliveries and services in these countries are only made for advance payment.

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. Cash at banks in China and Brazil results from advance payments from customers for projects in these countries.

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	Loss allowance	Gross value	Loss allowance	Carrying amount
12/31/2023					
Financial assets					
Loans	recoverable	Lifetime ECL	230	0	230
	Non-performing	Lifetime ECL	3,626	-3,339	287
Other receivables	recoverable	Lifetime ECL	24,841	0	24,841
	Non-performing	Lifetime ECL	320	-208	112
			29,018	-3,547	25,471
Trade receivables	Lifetime ECL – simplified approach		546,314	-36,251	510,062
Contract assets	Lifetime ECL – simplified approach		31,758	-764	30,994
Cash and cash equivalents					
Cash and cash equivalents	recoverable	12-month ECL	183,151	0	183,151
			183,151	0	183,151

in kEUR	Credit quality	Loss allowance	Gross value	Loss allowance	Carrying amount
12/31/2022					
Financial assets					
Loans	recoverable	Lifetime ECL	1,074	0	1,074
	Non-performing	Lifetime ECL	3,626	-3,339	287
Other receivables	recoverable	Lifetime ECL	27,208	0	27,208
	Non-performing	Lifetime ECL	254	-220	34
			32,162	-3,559	28,603
Trade receivables	Lifetime ECL – simplified approach		481,729	-33,098	448,631
Contract assets	Lifetime ECL – simplified approach		49,921	-1,455	48,466
Cash and cash equivalents					
Cash and cash equivalents	recoverable	12-month ECL	157,044	0	157,044
	Non-performing	Lifetime ECL	810	-810	0
			157,854	-810	157,044

In the case of financial instruments measured at fair value through profit or loss, the carrying amount reflects the maximum default risk.

in kEUR	12/31/2023	12/31/2022
Financial assets		
Derivatives	1,821	4,997
Shares in affiliates	11,285	11,550
Participations	6	6
	13,112	16,553

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 affiliates not included in the consolidation group.

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	
12/31/2023									
Trade receivables									
Gross	546,314	369,108	110,820	17,923	7,598	6,915	4,646	19,435	9,869
Loss allowance	-36,251								
	510,062								

in kEUR	Total	Not due	Days until overdue						Non-performing
			< 30	31 - 60	61 - 90	91 - 180	181 - 360	> 360	
12/31/2022									
Trade receivables									
Gross	481,729	308,576	105,616	18,571	15,300	7,462	5,215	14,290	6,699
Loss allowance	-33,098								
	448,631								

Changes to the balance of loss allowances on trade receivables and loss allowances on other receivables and contract assets are presented below:

in kEUR	Creditworthiness not impaired	Creditworthiness impaired	Total
01/01/2022	-9,849	-21,915	-31,763
Transfer	34	-34	0
Revaluation	-2,730	-7,613	-10,343
Derecognition	244	3,444	3,688
Reversal	758	3,105	3,863
Change in gross value	0	0	0
Change in creditworthiness parameters	56	-4	52
Changes in the consolidation group	0	85	85
Currency translation	-125	-230	-355
12/31/2022	-11,612	-23,162	-34,773
Transfer	11	-11	0
Revaluation	-2,946	-12,135	-15,081
Derecognition	558	7,653	8,212
Reversal	1,773	2,008	3,781
Change in gross value	0	0	0
Change in creditworthiness parameters	7	-302	-295
Changes in the consolidation group	0	-249	-249
Currency translation	365	818	1,183
12/31/2023	-11,844	-25,379	-37,223

The reconciliation includes non-performing receivables in the category "credit-impaired" in the amount of kEUR 3,547 (2022: kEUR 3,559).

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.

Currency risks from the currency pairs USD/UAH and USD/RUB have been substantially reduced due to the significantly lower business activities in these countries and therefore no longer have any significant impact on Group earnings. 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 receivables and other receivables, loans, bonded loans, trade payables and other financial liabilities) are denominated in the 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 of 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 euros to the Zeppelin companies in Russia are not included in the sensitivity analysis, as these loans are fully hedged with corresponding cash at bank in euros. 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 of the reporting date, this would have had the following effects on consolidated net profit after tax and the consolidated total comprehensive income:

				2023		2022	
in kEUR				Net profit for the year	Total compre-hensive income	Net profit for the year	Total compre-hensive income
Derivatives							
	EUR	USD	+10.0%	194	0	4,264	0
			-10.0%	-231	0	-4,799	0
Original financial instruments							
	EUR	USD	+10.0%	-753	0	-1,189	0
			-10.0%	920	0	1,454	0
Balance							
	EUR	USD	+10.0%	-558	0	3,075	0
			-10.0%	688	0	-3,345	0

				2023		2022	
in kEUR				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	122	0
			-10.0%	0	0	-150	0
Original financial instruments							
	EUR	PLN	+10.0%	-137	-601	-52	-627
			-10.0%	168	735	64	767
Balance							
	EUR	PLN	+10.0%	-137	-601	70	-627
			-10.0%	168	735	-87	767

Interest Rate Risk

Financial instruments sensitive to interest rates are subject to an interest rate risk. This exists either in the form of a fair value risk or a cash flow risk. The fair 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 in the yield curve for the euro area by +/- 100 basis points would have had the following effects on consolidated net profit after tax and consolidated total comprehensive income:

	2023		2022	
in kEUR	Net profit for the year	Total compre-hensive income	Net profit for the year	Total compre-hensive income
+100 BP	-1,261	0	792	0
-100 BP	1,245	0	-834	0

H Notes on Transactions with Related Parties

Zeppelin's related parties 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 affiliates 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:

	Affiliates		Associates		Participations	
in kEUR	2023	2022	2023	2022	2023	2022
Deliveries and services rendered						
Sale of goods	0	9	10,205	9,203	336	116
Other services	12	46	79	41	89	46
	12	55	10,284	9,244	425	162
Deliveries and services received						
Sale of goods	1,284	1,552	0	0	150	67
Other services	0	0	71	37	178	107
	1,284	1,552	71	37	328	174
Dividends received	2,966	1,598	0	0	0	0

in kEUR	LZ GmbH 2023	LZ GmbH 2022	ZF Group 2023	ZF Group 2022
Deliveries and services rendered				
Sale of goods	0	0	122	170
Other services	93	97	60	93
	93	97	181	263
Deliveries and services received				
Sale of goods	16	0	0	0
Other services	308	1,890	44	36
	324	1,890	44	36
Dividends received	0	0	0	0

in kEUR	Affiliates 12/31/2023	Affiliates 12/31/2022	Associates 12/31/2023	Associates 12/31/2022	Participations 12/31/2023	Participations 12/31/2022
Receivables	7	29	5,260	4,184	4	127
Payables	0	166	0	0	8	74

in kEUR	LZ GmbH 12/31/2023	LZ GmbH 12/31/2022	ZF Group 12/31/2023	ZF Group 12/31/2022
Receivables	13	0	28	93
Payables	0	0	0	0

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 amounted to kEUR 4,915 (2022: kEUR 3,882) for current employee benefits.The pension provisions of the members of the Management Board amounted to kEUR 4,318 (12/31/2022: kEUR 6,614).The management remuneration consists of a fixed salary, an individual target agreement and a performance-related component, with the amount of the variable remuneration components being limited and recognized as liabilities as of the end of the year in the amount of kEUR 3,200 (2022: kEUR 2,385).

The remuneration of the Supervisory Board for financial year 2023 was kEUR 692 (2022: kEUR 678) and consisted of a fixed bonus, expense allowances and attendance fees. As of the end of the year, obligations to the Supervisory Board amounting to kEUR 448 (2022: kEUR 440) were recognized as liabilities.

Pension payments amounting to kEUR 709 (2022: kEUR 630) were made to former members of the Management Board. The provision for pension payments to former members of the Management Board was kEUR 11,482 (12/31/2022: kEUR 11,155).

In addition, Group companies have not carried out 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

Changes to the carrying amounts of the financial liabilities included in the statement of cash flows are presented below:

in kEUR	Borrowings	Bonded loans	Lease liabilities
01/01/2022	69,980	250,800	310,560
Cash flow from financing activities	127,307	-4,500	-55,139
Changes in the consolidation group	2,895	0	3,027
Currency translation	3,261	0	-2,697
Changes in fair value	0	0	0
Other changes	0	145	18,052
12/31/2022	203,443	246,445	273,804

in kEUR	Borrowings	Bonded loans	Lease liabilities
12/31/2022	203,443	246,445	273,804
Cash flow from financing activities	160,738	11,000	81,119
Changes in the consolidation group	16,070	0	37,158
Currency translation	-6,392	0	30
Changes in fair value	0	0	0
Other changes	-1,782	99	48,450
12/31/2023	372,078	257,544	440,562

In addition to the cash flow from financing activities totaling kEUR 252,858 (2022: kEUR 67,668), interest of kEUR 26,349 (2022: kEUR 16,961) 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 25. Furthermore, the financial statements do not include any non-cash transactions.

29 Events After the Reporting Date

As of January 1, 2024, the strategic business units will be restructured due to the significant change in the situation of the Construction Equipment Eurasia SBU. The previous SBUs Construction Equipment CE, Construction Equipment Nordics and Construction Equipment Eurasia will in future be combined into two Construction Equipment SBUs (Construction Equipment Germany/Austria SBU and Construction Equipment International SBU) and will thus consolidate the business activities and associated regions.

In February 2024, Zeppelin signed a purchase and assignment agreement for a share of the business and two loans to Magdalena Kitzmann GmbH, Lengerich. Zeppelin's shares and loan receivables have been settled with the purchase price of kEUR 700. Implementation is expected to take place by March 31, 2024 at the latest.

No other significant events occurred after the end of financial year 2023 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 kEUR 752 in financial year 2023 (2022: kEUR 624) and are broken down as follows:

in kEUR	2023	2022
Auditor's fees		
Auditing services	547	524
Other services	205	100
	752	624

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. The auditing fee for the Zeppelin Group amounted to a total of kEUR 1,573 (2022: kEUR 1,526). Other audit firms from PwC's network and other audit firms 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 kEUR 30 for certification services and kEUR 175 for other services. Tax consulting services were not used this year.

31 Disclosure

Zeppelin GmbH prepares consolidated financial statements, which must be submitted to the Federal Gazette.

Zeppelin Baumaschinen GmbH, Garching near München, Zeppelin Systems GmbH, Friedrichshafen, Zeppelin Power Systems GmbH, Hamburg, Zeppelin Rental GmbH, Friedrichshafen, klickrent GmbH, Berlin, Zeppelin Aviation & Industrial Service GmbH, Friedrichshafen, SITECH Deutschland GmbH, Oberhausen, Meton GmbH, Hoppstädten-Weiersbach and Zeppelin Lab GmbH, Berlin, do not disclose their annual financial statements using the exemptions under § 264 para. 3 HGB.

32 CORPORATE BODIES

The members of the Management Board of Zeppelin GmbH are Mr. Peter Gerstmann (Chairman of the Management Board), Mr. Fred Cordes (Managing Director) since January 1, 2023, Mr. Christian Dummler (Managing Director) and Ms. Alexandra Mebus (Managing Director and Labor Director). Mr. Michael Heidemann (Deputy Chairman of the Management Board until December 31, 2022) retired on June 30, 2023.

The members of the Supervisory Board of Zeppelin GmbH are Mr. Andreas Brand (Chairman), Mr. Heribert Hierholzer (Deputy Chairman), Mr. Dr. Reinhold Festge, Mr. Dr. Werner Pöhlmann, Ms. Carolin Bautzmann, Mr. Univ.-Prof. Dr.-Ing. Dr.-Ing. e. h. Dr. h. c. Dieter Spath, Mr. Thomas Mann, Ms. Janine Heide, Ms. Dr. Kristin Neumann, Mr. Ralph Misselwitz, Ms. Prof. Dr. Yasmin Mei-Yee Weiß and Mr. Frederic Striegler.

Friedrichshafen, February 29, 2024

The Management Board of Zeppelin GmbH

Peter Gerstmann	Fred Cordes	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 31 December 31, 20223, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 31, 2022, and notes to the consolidated financial statements, including material accounting policy information. 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 1 January to December 31, 2022. 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 [Handelsgesetz-buch: German Commercial Code] (disclosure on the quota for women on executive boards).

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 § 315e Abs. 1 HGB 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 31, 2022, and of its financial performance for the financial year from 1 January to 31 December 2023, 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 (disclosure on the quota for women on executive boards) as an unaudited part of the group management 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 is to read the other information mentioned above and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report disclosures audited in terms of content or with our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE AUFSICHTSRAT 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 (i.e., fraudulent financial reporting and misappropriation of assets) 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 Aufsichtsrat 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 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 opinion 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 overriding of internal controls.
- 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 information 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 the internal control that we identify during our audit.

Munich, February 29, 2024

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Jürgen Schumann German Public Auditor	p.p. Bernhard Obermayr German Public Auditor

NOTES

ABOUT THIS PUBLICATION

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For annual reports and further information about Zeppelin, please visit our website at zeppelin.com.

The annual report was published in March 2024. It is also available in German.

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