AI CLOUD MOBILITY

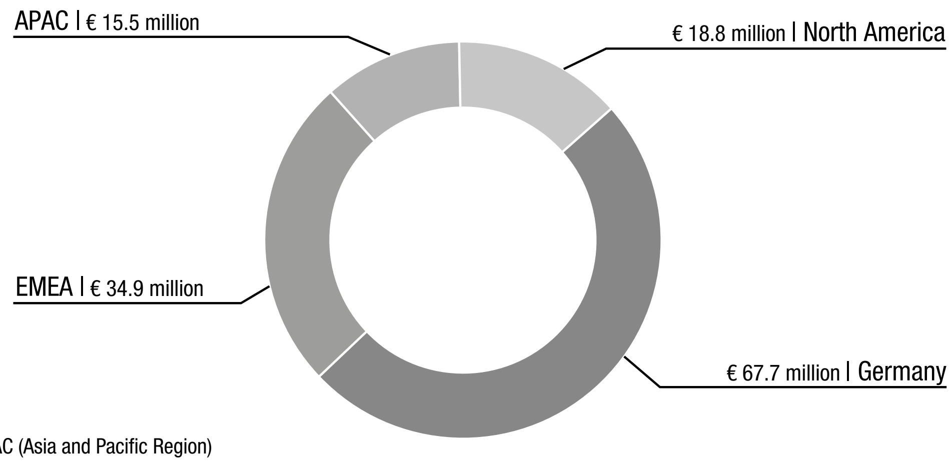
FIRST

RIB
running together

ANNUAL REPORT | 2018

RIB OVERVIEW

REGIONAL REVENUE BREAKDOWN 2018

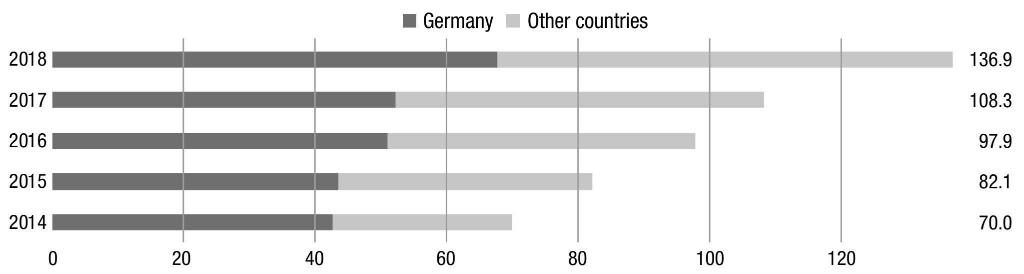


APAC (Asia and Pacific Region)

EMEA (Europe excl. Germany, Middle East and Africa)

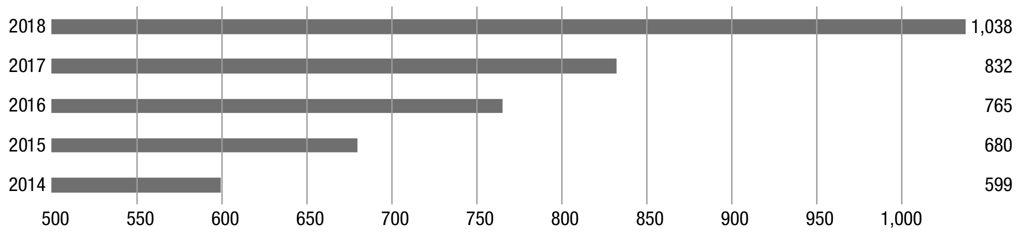
DEVELOPMENT IN REVENUES FIVE-YEAR COMPARISON

Figures in € million



AVERAGE NUMBER OF EMPLOYEES

Annual average



COMPANY PROFILE

RIB Software SE is an innovator in building and construction industry. The company creates, develops and offers cutting-edge digital technologies for construction enterprises and projects across various industries worldwide. iTWO 4.0, RIB's flagship cloud-based platform, provides the world's first enterprise cloud technology based on 5D BIM with AI integration for construction companies, industrial companies, developers and project owners, etc. With over 50 years of experiences in construction industry, RIB Software SE focuses on IT and engineering and becomes the pioneer in construction innovation, exploring and brining in new thinking, new working methods and new technologies to enhance construction productivity. RIB is headquartered in Stuttgart, Germany, and Hong Kong, China, and has been listed in the Prime Standard of the Frankfurt Stock Exchange since 2011. With over 1,200 talents in more than 30 locations worldwide, RIB is targeting to transform the construction industry into the most advanced and digitalized industry in the 21st century.

Further information can be found at **www.rib-software.com**

CONSOLIDATED FIGURES - OVERVIEW

€ million unless otherwise indicated	**2018**	**2017**	**2016**	**2015**
Revenue	136.9	108.3	97.9	82.1
Software licences	37.2	33.6	28.9	20.1
Software as a Service / Cloud	17.3	13.0	12.5	12.0
Maintenance	40.1	34.3	27.1	23.8
Consulting	32.9	19.9	22.7	20.0
E-commerce	9.3	7.5	6.6	6.2
Operating EBITDA*	**38.8**	**39.9**	**33.0**	**20.9**
as % of revenue	28.3 %	36.8 %	33.7 %	25.5 %
Operatives EBITDA* and adjusted for YTWO**	**36.7**	**32.1**	**25.3**	**20.9**
in % vom Umsatz	26.8 %	29.6 %	25.8 %	25.5 %
Operating EBT*	**30.5**	**29.2**	**23.2**	**12.4**
as % of revenue	22.3 %	27.0 %	23.7 %	15.1 %
Consolidated net profit of the year	21.9	18.4	14.4	10.5
Cash flow from operating activities	**30.6**	**22.8**	**51.5**	**19.4**
Average number of employees	1,038	832	765	680
Group liquidity***	238.2	134.8	135.4	177.0
Equity ratio	83.6 %	80.5 %	82.1 %	86.3 %
Research and development expenses	26.0	21.4	18.8	17.0
R&D ratio - iTWO segment	20.7 %	21.2 %	20.6 %	22.3 %
Annual average number of R&D-employees	395	336	307	269

* EBITDA and EBT adjusted by: Currency effects (2018: +0.3; 2017: -0.1; 2016: -0.4; 2015: +3.8) and one-off / special effects (2018: -1.2; 2017: +0.5; 2016: +0.1; 2015: +0.2).

** Operating EBITDA additionally adjusted for income in 2018 from the reversal of deferred revenue from software delivery to YTWO (+2.0) and income from software delivery to YTWO: 2017 (+7.8); 2016 (+7.7).

*** Cash and cash equivalents, time deposits and available-for-sale securities.

RIB HIGHLIGHTS 2018

Q1

JAN - MAR

The RIB Group announces its figures for the 2017 fiscal year. With revenues of € 108.3 million (+10.6%) and an EBITDA of € 40.3 million (+23.2%), the best fiscal year in the company's history is announced. Based on four Phase II contracts and the acquisition of 51% of the shares in Datengut GmbH to focus on the iTWO app development as well as the increase of the shares in Exactal Group Limited to 100%, a successful start into fiscal year 2018 has been achieved. In addition, a strategic alliance with Microsoft to establish the world's first vertical cloud platform "MTWO" for the construction and real estate industries is announced.

Q2

APR - JUN

At the official launch event in Hong Kong, RIB and Microsoft announced further details regarding the establishment of the leading vertical cloud for the construction and real estate industries "MTWO". The main objective of the collaboration is to make the most of Big Data in the planning, construction, operations, maintenance and management processes, including AI solutions. RIB will establish a partner network of Managed Service Providers (MSPs) to promote the global adoption of MTWO and offer MTWO through a network of experienced and agile service providers.

Q3

JUL - SEP

The RIB Group acquires 80% of IMS Gesellschaft für Informations- und Managementsysteme mbH, a leading provider of computer-aided facility management (CAFM). The shares of RIB Software SE have been included in the SDAX from 24 September 2018 in addition to the TecDAX membership. With ICS Support (Redmond, Washington) and the A2K Group (Brisbane, Australia) the first two Managed Service Provider partner agreements and strategic investments for the establishment of the global MTWO partner network can be concluded.

Q4

OCT - DEC

At the 6th iTWO World Conference, the world's first artificial intelligence engineer -McTWO- was introduced, marking an important milestone for the RIB Group after announcing its strategy for entering the artificial intelligence era at last year's conference. In the first nine months of fiscal 2018, the RIB Group generated currency-adjusted revenues of € 96.5 million, an increase of 18.1% year on year. At the end of financial year 2018, a total of 30 Phase II contracts and 3 MTWO MSP partnerships have been achieved. In addition, Prof. Dr. Rüdiger Grube, one of the most recognized German executives, has been appointed as a non-executive member to the RIB Administrative Board.

CONTENT

MTWO

FORGES AHEAD WITH A DISRUPTIVE CLOUD BUSINESS MODEL

In 2018, RIB began moving from desktop solutions to cloud solutions. To attract more users to the platform, RIB not only offered the solutions on a license basis, but also on a subscription basis.

Since its official launch in Hong Kong in April together with Microsoft, the vertical cloud MTWO has made great progress in every respect. In Research & Development, RIB and Microsoft have teamed up to form an MTWO Hackathon team to jointly develop cutting-edge technologies. The topics covered include artificial intelligence, voice recognition, smart analytics, etc. In Sales & Marketing, RIB participated in the Microsoft Inspire 2018 Partner Conference and carried out several joint activities to promote the MTWO concept. Consequently, three MTWO Phase-II enterprise agreements were signed. RIB has set itself a target of 30,000 users for 2019 and spares no effort to deliver ongoing professional support for the journey of digital transformation.

McTWO

BECOMES REALITY TO SUPPORT THE CONSTRUCTION INDUSTRY WITH ARTIFICIAL INTELLIGENCE

With the development of computers with high processing power, a high level of data availability and new algorithms, it is now possible to deploy artificial intelligence, which was previously mainly used in area of gaming, in industrial applications. Last year, RIB announced its strategy for entering the age of artificial intelligence. This year, RIB's R&D team presented McTWO - the first artificial intelligence assistant for the construction and real estate industries at the iTWO World 2018 with a live demonstration of key features such as chatbot, voice assistance, deep learning and machine learning. With the introduction of McTWO, the acceleration of digitization and production growth in the construction and real estate industries starts now.

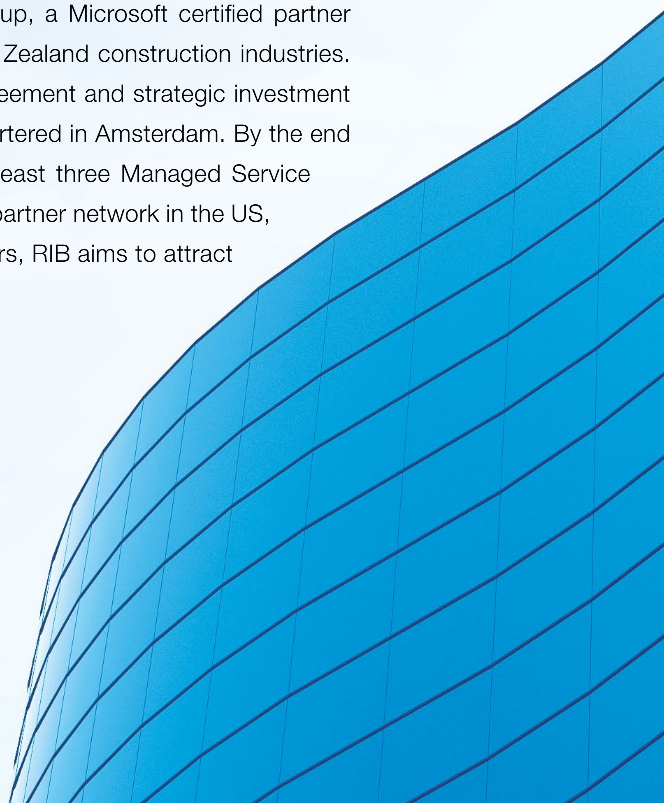
INVESTMENTS IN THE FUTURE

ENABLE COMPETITIVE ADVANTAGES THROUGH TECHNOLOGIES AND PARTNER NETWORKS

In 2018, the RIB Group successfully signed six investment agreements with a total investment volume of € 31.6 million in cash plus 680,000 RIB treasury shares (Exactal 100%, Datengut 51%, IMS 80%, ICS 40%, A2K Group 60% and SaaSplaza 100%).

Three technology acquisitions were made in the first half of the year. At the beginning of the year, RIB increased its stake in Exactal Group Limited from 75% to 100% in order to strengthen its market position in the area of calculation software. One month later, through the investment of DATENGUT in Leipzig, RIB intends to establish an iTWO competence center for mobility in the DACH region. The acquisition of IMS in July enables RIB to provide its customers with Total Cost of Ownership (TCO) information by integrating IMS Facility Management solutions with the cloud based iTWO 4.0 technology. Data-driven decision-making is thus supported at an early stage and used for simulations.

In the second half year of 2018, RIB focused its acquisition strategy on Managed Service Providers (MSPs). ICS, a Microsoft-certified partner in Redmond, USA, was the first MTWO partner to promote the spread of MTWO technology in August. In September, RIB signed the second MTWO MSP partnership agreement and strategic investment with the A2K Group, a Microsoft certified partner with the largest software customer base in the Australian and New Zealand construction industries. In November, RIB has signed the third MTWO MSP partnership agreement and strategic investment with SaaSplaza, a leading Microsoft Gold Certified Partner, headquartered in Amsterdam. By the end of the year, RIB has completed the committed investments of at least three Managed Service Providers from its capital increase in March 2018 and established a partner network in the US, APAC region and Europe. Together with its Managed Service Partners, RIB aims to attract 100,000 MTWO users in the short term by 2020.



MANAGING DIRECTORS

Tom Wolf | CEO

Responsible for: Corporate Strategy

Michael Sauer | CFO

Responsible for: Corporate Finance, M&A, Sales Germany

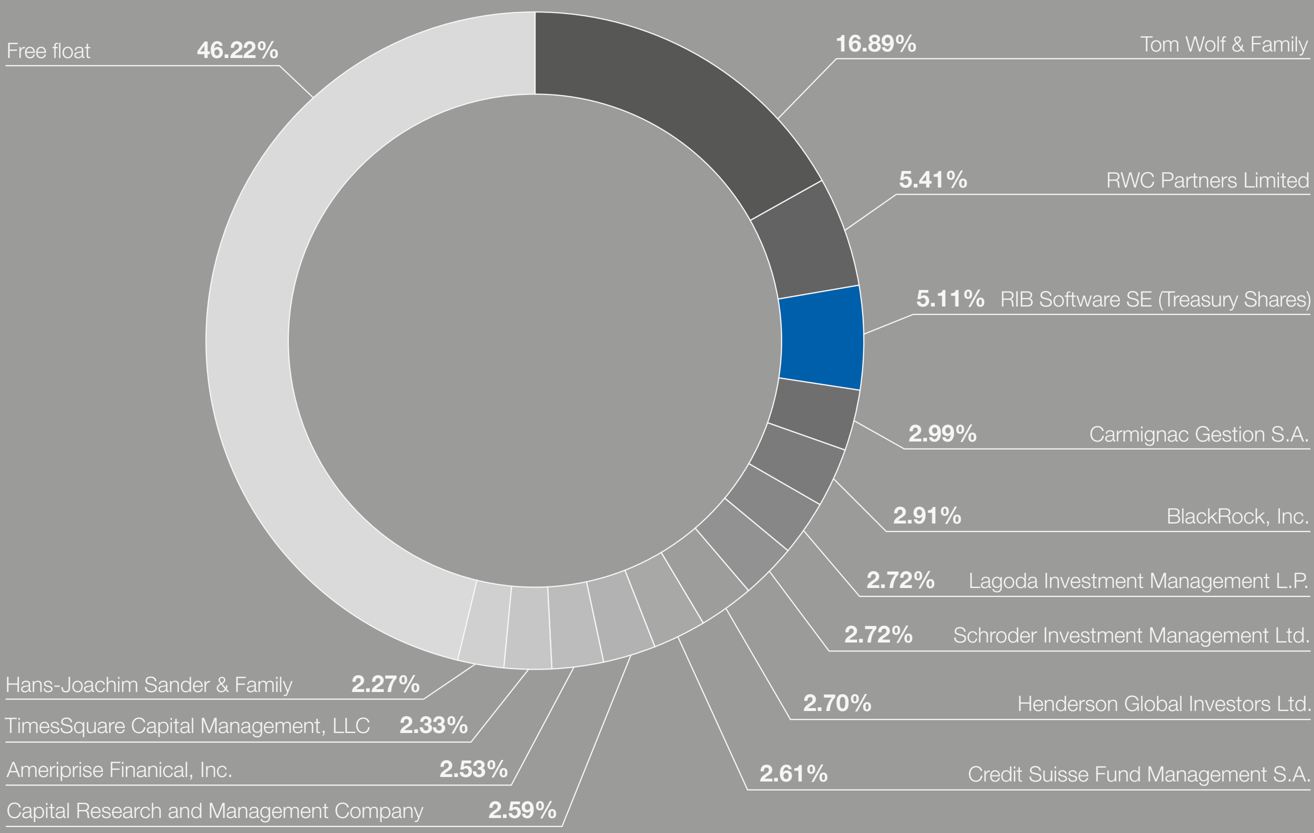
Mads Bording Rasmussen | COO

Responsible for: Group Sales & Operations

TO OUR SHAREHOLDERS

SHAREHOLDER STRUCTURE

As of 31 December 2018



LETTER TO OUR SHAREHOLDERS

Tom Wolf, Chairman of the Administrative Board, CEO

DEAR SHAREHOLDERS,

The RIB Group thanks all investors for your support in the last year. The year 2018 was marked above all by high investments in personnel, new technologies such as AI, cloud and mobility, investments in MSP partner companies and new initiatives with top players such as Microsoft. In 2018, the RIB management team **has outperformed the ambitious revenue guidance following an increase during the year** and built the foundation for the launch of the iTWO 4.0 and MTWO cloud platform. For 2019, we expect to achieve our targets and meet our forecasts as in previous years.

Industry experts describe the **"re-platforming" business of the software stack towards a true cloud platform** to be potentially worth trillions of dollars. The standard valuation applied on software Venture Capital rounds in this field has moved from tenfold revenue valuations to up to twentyfold valuations, reflecting increased market expectations and confidence about the future of the cloud platform business.

With 5G, AI, Cloud and Mobility First, the next generation of revolutionary technologies and infrastructures has entered the building and construction vertical. 5G mobility solutions enable people, machines and materials to be connected and exchange data five thousand times faster.

I have introduced the midterm strategy and targets of the RIB Group on our website in March 2019. Our top 100 management team has set itself the target to double the existing 500,000 convertible users to 1 million and to win 1 million additional convertible users out of RIB‘s planned 50

MSP investments over the next 36 months. With 2 million new and migrated cloud users in the midterm, we believe we can also defend our leading market position in the global cloud enterprise business of our vertical industry in the long term which is estimated to reach 15 Trillion USD global construction GDP by 2025, with IT spending accounting for approximately 3%.

In the enterprise software business (iTWO / MTWO), the EBITDA margin is around 30% and the Gross Profit margin is around 70%. The 40% expenses are mainly wage costs. In the midterm, the monthly revenue per user for enterprise software could be estimated in a price range of 50-500 USD per user which must be offset with the user benefits and savings. We believe the AI (McTWO) can be the main driver for our pricing in the future. **In the midterm, we are targeting to reach monthly revenue of up to 100 USD per user**, however 50 USD revenue per user per month would also be a great success for RIB if we manage to reach the 2 million user milestone at the same time.

We are targeting in the midterm to generate up to 20 USD EBITDA per user per month out of **E-commerce** and **Supply Chain Management** services (xTWO / YTWO), transactions and success-based fees. And we think 10 USD EBITDA per user per month would also be a great success for RIB.

Our vision and mission is to transform the building, infrastructure and real estate industries to one of the most advanced industries in the word to support the development of next generation of living, and to create millions of new jobs and affordable housing in the cities of many countries.

In enterprise software business, companies need to have a detailed 5-year strategy in place, because of the long-term R&D investments and intensive, multi-year market launch. In the coming years, we will have to forecast not only the IT infrastructure, e.g. 5G, but also the legal, political, economic, social, environmental and financial market conditions over the same period.

Based on our midterm planning, we need to estimate the funds, products, services and related headcounts. As an example, 40% of revenues divided by 100,000 USD give an initial idea of the future demand for global workforce. We know from the construction industry that a solid foundation is essential for building a skyscraper. The same applies to every business. For that undertaking, we need a strong team of leaders to execute the project. Not least for this reason, we are delighted that Prof. Dr. Rüdiger Grube, a world-class top manager, decided last year to join the Administrative Board of RIB.

We need to check our position quarterly and monitor the ever-changing market conditions to be able to adjust our strategy and to achieve our targets within the planned time frame and budget. Therefore, I sincerely suggest our shareholders to follow our messages and check our website timely, pay close attention especially to our investor and AGM presentations, and keep an eye on our updated definitions to understand our current strategy. Technology markets are moving extremely fast; thus, IT companies are forced to act with highest agility.

Dear shareholders, the **"re-platforming race"** of the software stack in the building and infrastructure industry **is on**.

2019 is a significant year for our investment phase and we are look forward to "running together" and outperforming our revenue targets in 2019 as in the previous years

Yours sincerely

Tom Wolf

REPORT OF THE ADMINISTRATIVE BOARD

ON THE 2018 FINANCIAL YEAR TO THE ANNUAL GENERAL MEETING OF RIB SOFTWARE SE ON 15 MAY 2019

DEAR SHAREHOLDERS,

In the financial year 2018, RIB Software SE continued its successful development and achieved excellent results. In the coming years, software distribution will change from pure “on-premise” offers to “SaaS” (Software as a Service). This change is associated with a strategic reorientation of RIB Software SE. In addition to the license model iTWO 4.0 and the transaction model YTWO, MTWO, as a subscription model, will play an important role in the further development of the Company. In February 2018, a pioneering strategic partnership with Microsoft was announced, with a view to developing a vertical Cloud for the international construction industry. The MTWO Cloud Service comprises three components: SaaS (Software as a Service), PaaS (Platform as a Service) and IaaS (Infrastructure as a Service). Our objective is to steadily increase the number of users.

The Administrative Board of RIB Software SE fully performed its duties arising from legal provisions, the Articles of Association and the Rules of Procedure. The body advised and supervised the Managing Directors in the management of the Company and assisted them with decisions and questions regarding the further development of the Company. The cooperation within the Administrative Board was always constructive and based on trust. Decisions which were important for the Company were made in the Administrative Board based on an open culture of discussion. The Managing Directors informed the Administrative Board in a regular, timely and comprehensive manner, both in writing and verbally, about the development of the Company, the course of business and the strategic development of RIB Software SE and the Group. Based on these reports, the business development, as well as important corporate decisions and events, were discussed in detail and decisions on measures requiring approval were taken. Outside Administrative Board meetings, its members were also in regular contact. The Managing Directors provided real-time information about current developments and significant individual issues in conversations, by telephone and in writing by e-mail. Whenever decisions of material importance were taken, the Administrative Board as a whole was involved comprehensively and at an early stage. If, pursuant to law, the Articles of Association or the Rules of Procedure, individual measures taken by the Managing Directors required resolutions by the Administrative Board, these were passed in accordance with the law and in an appropriate manner. In the financial year 2018, such resolutions included:

- resolution on the capital increase from the “Authorized Capital 2015” subject to exclusion of subscription rights

- resolutions on acquisitions and investments in companies (DATENGUT - Leipzig, IMS - Dinslaken, ICS - USA, A2K - Australia and New Zealand, SaaSplaza - Amsterdam)

- resolution on the takeover of shares in YTWO from FLEX

- resolution on the 2018 Share Buyback Program.

Composition of the Administrative Board

According to Section 6 (1) of the Articles of Association, the Administrative Board of RIB Software SE is composed of eight members. In the financial year 2018, the Administrative Board comprised the following members: Mr Mads Bording (from 15 May 2018), Prof. Martin Fischer, Prof. Dr Rüdiger Grube (from 23 November 2018), Klaus Hirschle, Sandy Möser (Deputy Chairwoman), Dr Matthias Rumpelhardt, Michael Sauer, Helmut Schmid (until 31 March 2018), Steve Swant (until 13 August 2018), Thomas Wolf (Chairman).

The members of the Administrative Board wish to express their gratitude to the colleagues who left in the financial year 2018 for their very good cooperation.

Meetings of the Administrative Board and key areas

The Administrative Board held six meetings in the financial year 2018. There were three meetings (14 February 2018, 2

August 2018 and 12 December 2018) at which one of the members of the Administrative Board was prevented from attending; All other meetings were attended by all members of the Administrative Board. No member of the Administrative Board attended only half or fewer of the meetings of the Administrative Board or of the committees on which they serve. Mr Mads Bording regularly attended the meetings of the Administrative Board as a guest until his election to the Administrative Board by the Annual General Meeting of *15 May 2018*.

Whenever personnel matters of the Managing Directors were discussed, this was done without their participation.

The members of the Administrative Board regularly prepared for upcoming resolutions by consulting documentation provided in advance by the Managing Directors.

A key component of all Administrative Board meetings in the financial year 2018 constituted the reports provided by the Managing Directors on the business situation, with detailed information on sales and earnings development, opportunities and risks of business development, financial and liquidity position, the status of business units with strategic partners (MTWO and YTWO), planned and implemented acquisition projects, as well as the current status of R&D projects.

At the meeting on *14 February 2018*, the Administrative Board discussed the acquisition of DATENGUT, Leipzig, and approved the transaction structure proposed by the Managing Directors. Another resolution passed concerned the redefinition of targets for the proportion of women on the Administrative Board, at the Managing Directors level and at the management level below the Managing Directors, in accordance with Section 22 (6) of the German Act Implementing the SE Regulation (SEAG) in conjunction with Section 111 (5) of the German Stock Corporation Act (AktG). For the Administrative Board, a target for the proportion of women in accordance with Section 22 (6) of the SEAG in conjunction with Section 111 (5) of the German Stock Corporation Act (AktG) was set at 16.67%, to be achieved by 14 February 2023; at the Managing Directors level and the management level below the Managing Directors, the adopted targets are 0% each. Mr Schmid also explained the reasons for his premature departure from the Administrative Board and as a Managing Director of RIB Software SE as of 31 March 2018, and the Administrative Board approved the contractual arrangements regarding the termination of Mr Schmid's employment.

The focus of the meeting on *21 March 2018* was on the discussions and resolutions related to the Annual Financial Statements and the Consolidated Financial Statements as at 31 December 2017, the Consolidated Management Report for RIB Software SE and the RIB Group, as well as the proposal of the Managing Directors regarding the appropriation of retained earnings. The Annual Financial Statements of RIB Software SE as at 31 December 2017 were approved and thus adopted. The Consolidated Financial Statements for the financial year 2017 were endorsed by the Administrative Board. In addition, the Report by the Administrative Board for 2017, the agenda and proposed resolutions for the 2018 Annual General Meeting were adopted. The consultation and resolutions passed also concerned the personnel matters of the Managing Directors, as well as issuing an updated version of the Declaration of Compliance with the German Corporate Governance Code.

At the Administrative Board meeting on *15 May 2018*, the Managing Directors outlined the key financial indicators for the financial year 2017 and for the first quarter of 2018. The discussions also concerned the report to the Annual General Meeting on the significant events in the financial year 2017 and the explanations relating to the individual items of the agenda. At this meeting, the Administrative Board also passed a resolution on the allocation of stock options to Managing Directors, management staff and employees of the Group as part of the 2015 Stock Option Plan.

At the meeting on *02 August 2018*, the Administrative Board was informed of the resignation of its member, Steve Swant, with effect from 13 August 2018 and the reasons for this. The Managing Directors reported on the current business development and the results achieved in the second quarter of 2018. The Administrative Board authorized the Managing Directors to take all necessary steps to enter into a purchase agreement for shares in Integrated Computer Systems Support, Inc. (ICS, Redmond, Washington, USA) within the framework of a transaction structure described by the Managing Directors.

In addition to reports on the current position of RIB Software SE and the Group, the Managing Directors informed in the meeting on *17 October 2018* about the negotiations with FLEX regarding the different possibilities of reorganizing the shareholding structure of the joint venture YTWO. Another matter which was reported and discussed was the revision of RIB Software SE's global Code of Conduct as a set of rules for employees and management staff worldwide. The Managing Directors also proposed an investment in SaaS-plaza International B.V., headquartered in Amsterdam, with several offices worldwide. The investment, within the framework of a transaction structure described by the Managing Directors, was approved by the Administrative Board. In addition, due to a court decision in proceedings under section 30 (2) of the SEAG, the Administrative Board dealt with filling in the vacancy on the Administrative Board and decided to propose to the court that Prof. Dr. Rüdiger Grube be appointed as a new member. Other discussions and resolutions at this meeting concerned the establishment and execution of the 2018 Share Buyback Program based on the authorization granted by the Annual General Meeting of 15 May 2018, a capital increase at RIB Ltd., Hong Kong, the further financing of the development of RIB Software SE's international business and the acquisitions related to this development.

On *12 December 2018*, the Administrative Board of RIB Software SE convened for its last ordinary meeting in the financial year 2018. The discussions focused on the budget submitted by the Managing Directors for 2019. The budget was explained in detail, discussed, and subsequently adopted. Among other things, the 2019 budget includes detailed sales, earnings, financial and investment planning. A resolution was passed to amend the Articles of Association due to the issuance of shares from the conditional capital, and another resolution concerning the establishment of SGTWO - an innovative E-commerce platform for building materials, which is intended as a 50/50 joint venture with a strategic partner.

Between the meetings of the Administrative Board, necessary resolutions were passed by a written circulation procedure. In each case, such resolutions were adopted based on detailed information provided by the Managing Directors regarding the respective subject of the resolution. Circular resolutions in the financial year 2018 concerned:

- the acquisition of the remaining 25% of the shares in EXACTAL Group Ltd.,
- the investment in DATENGUT GmbH, Leipzig,
- the capital increase against cash contribution from the Authorized Capital 2015,
- the investment in IMS Gesellschaft für Informations- und Managementsysteme mbH, Dinslaken,
- the investments in A2K Technologies Pty Ltd. (Australia), A2K Technologies Ltd. (New Zealand) and Phoenx PLM Pty Ltd. (Australia),
- the increase in shares in YTWO, and
- the increase of the 2018 Share Buyback Program.

Committees of the Administrative Board

The Administrative Board has formed two committees, the Audit Committee and the Nomination and Remuneration Committee. They prepare resolutions and issues to be considered in the Administrative Board's plenary sessions.

The **Audit Committee** deals, in particular, with the monitoring of the accounting and the accounting process, the effectiveness of the internal control system, the risk management system and the audit. The Chairperson of the Audit Committee, Dr Matthias Rumpelhardt, as an independent member of the Administrative Board, has expertise in the areas of accounting and auditing in accordance with Section 107 (4) and Section 100 (5) of the German Stock Corporation Act (AktG). Other members of the Audit Committee are Mr Klaus Hirschle and Ms Sandy Möser.

The Audit Committee met twice in 2018 - on 20 March and 11 December 2018. Both meetings were attended by all Committee members.

At the Committee meeting on *20 March 2018*, the statutory auditor reported in detail on its audit of the Individual and Consolidated Financial Statements of RIB Software SE for the financial year 2017, including the Consolidated Management Report, in particular, explaining the main areas of focus and results of its audit, and discussing them with the Audit Committee. The statutory auditor's report also included the results of the audit of the internal control system and the early risk detection system, which it considers appropriate for the timely identification of developments that could jeopardize the continued existence of the Company.

In the year under review, following its election by the Annual General Meeting, BW PARTNER Bauer Schätz Hasenclever Partnerschaft mbB Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft (hereinafter: BW PARTNER), Stuttgart, was commissioned to audit the Individual Financial Statements of RIB Software SE and the Consolidated Financial Statements as at 31 December 2018 and was thus appointed as the statutory auditor. The main areas of focus of the audit, including key audit matters and audit content, were discussed with BW PARTNER and determined by the Audit Committee at its meeting on *11 December 2018*.

The **Nomination and Remuneration Committee** is composed of the following members: Ms Sandy Möser (Chairperson), Mr Klaus Hirschle and Dr Matthias Rumpelhardt.

The Nomination and Remuneration Committee met twice in the financial year 2018 - on 21 March and 14 May 2018. Both meetings were attended by all Committee members.

At its meeting on *21 March 2018*, the Committee discussed and adopted a resolution with recommendations for adoption by the Administrative Board regarding the nomination of Mr Mads Bording for election by the Annual General Meeting as a member of the Administrative Board, and another resolution concerning the determination of bonuses to be paid to the Managing Directors for the financial year 2017. In addition, the Commission defined targets for the variable remuneration of the Managing Directors for the financial year 2018, to be adopted by the Administrative Board.

The subject of the Committee meeting on *14 May 2018* was the preparation and adoption of a recommendation to be approved by the Administrative Board regarding the annual allocation of stock options to the Managing Directors, management staff and employees of RIB Software SE and its affiliates.

Corporate governance and Declaration of Compliance

The Administrative Board attaches great importance to ensuring good corporate governance. In March 2018, it therefore dealt with the implementation of the recommendations and suggestions of the revised German Corporate Governance Code (version dated 7 February 2017) and, in its meeting on *21 March 2018*, the Administrative Board resolved to update its Declaration of Compliance in accordance with Section 161 of the German Stock Corporation Act (AktG). RIB Software SE complies with the recommendations of the German Corporate Governance Code to the greatest possible extent. The complete Declaration of Compliance is published on the Company's website at

https://www.rib-software.com/en/group/home/ - Investor Relations - Corporate Governance

An important part of good corporate governance is the independence of the non-executive members of the Administrative Board and their freedom from conflicts of interest. In the opinion of the Administrative Board, four out of five of its non-executive members are classified as "independent" within the meaning of the German Corporate Governance Code.

In the financial year 2018, there were no conflicts of interest of the Managing Directors or members of the Administrative Board which required immediate disclosure during the plenary sessions and notification to the Annual General Meeting.

Annual and consolidated financial statements 2018

The Annual General Meeting of 15 May 2018 elected BW PARTNER Bauer Schätz Hasenclever Partnerschaft mbB Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Stuttgart (hereinafter: BW PARTNER), as the statutory auditor and the Group's statutory auditor. Prior to this, BW PARTNER had issued a declaration of independence and explained the scope of non-audit services provided for the

Group in the previous financial year or of those contractually agreed for the following year. It was agreed with the auditor that they would promptly inform the Audit Committee and the Administrative Board of any reasons for exclusion or prejudice arising during the audit, as well as any findings and events of material significance to the duties of the Administrative Board, which may arise during the audit. Furthermore, it was agreed that the auditor should inform of any facts discovered during the audit which rendered incorrect the Declaration of Compliance with the GCGC issued by the Administrative Board and record this fact in the audit report. Having audited the Annual Financial Statements of RIB Software SE prepared in accordance with the rules of the German Commercial Code (HGB), the Consolidated Financial Statements prepared in accordance with IFRS pursuant to Section 315e of the German Commercial Code (HGB) and the Consolidated Management Report and Management Report of RIB Software SE, BW PARTNER issued them with unqualified audit opinions. Thereby, the auditor confirmed that in its opinion and based on the findings made during the audit, the Annual Financial Statements and the Consolidated Financial Statements for the financial year 2018, taking into account the applicable financial reporting framework, represented a true and fair reflection of the net assets, financial position and results of operations of RIB Software SE and the Group. Furthermore, the auditor confirmed that the Consolidated Management Report and the Management Report were consistent with the Annual / Consolidated Financial Statements and that they gave a true and fair view of the position of RIB Software SE and the Group, while appropriately presenting the opportunities and risks.

The Annual and Consolidated Financial Statements, including the Consolidated Management Report and the Management Report, which were issued with the auditor's certificates on 15 March 2019, were submitted to the Administrative Board for the purposes of their own audit.

During the meeting of the Audit Committee on *27 March 2019*, the aforementioned documents and the Managing Directors' proposal regarding the appropriation of retained earnings were examined in detail. The competent statutory auditor provided a detailed report on the audit and its results and explained the audit report. The auditor also informed that its audit of the internal control system and early risk detection systems had revealed that the Administrative Board had taken the appropriate measures required by Section 22 (3) sentence 2 of the SEAG (in particular, regarding the establishment of a monitoring system), and that the monitoring system is suitable to ensure the early detection of any developments that could jeopardize the continued existence of the Group. The questions of the Committee members were answered in full.

The audit reports of the statutory auditor were submitted to all members of the Administrative Board and were discussed in detail during the financial statements meeting of the Administrative Board on 28 March 2019. The Chairperson of the Audit Committee provided a full report on the Committee's audit of the Annual and Consolidated Financial Statement, the Consolidated Management Report and Management Report, including the non-financial statement contained therein, and the audit of the proposal for the appropriation of retained earnings. The auditor was available to provide explanations and answer questions.

The Audit Committee also informed the Administrative Board that there were no indications whatsoever of any prejudice of the statutory auditor and it informed the Administrative Board of non-audit services provided by BW PARTNER. In accordance with § 321 (4a) of the German Commercial Code (HGB), the auditor confirmed that it had complied with the applicable independence requirements in its audit. It also stated, in accordance with Article 6 (2) (a) of the "EU Regulation on specific requirements regarding statutory audit of public-interest entities", that the audit firm and partners, senior managers and managers, conducting the statutory audit, were independent from the audited entity.

The Administrative Board approved the results of the audit of the Financial Statements based on the report and recommendation of the Audit Committee, and since it had no objections to raise after the result of its own audit, the Administrative Board endorsed the Annual Financial Statements and Consolidated Financial Statement as at 31 December 2018, as well as the Consolidated Management Report and Management Report. The Annual Financial Statements were thus adopted.

The Managing Directors proposed that the earnings retained as at 31 December 2018 be used to pay a dividend of € 0.18 per eligible share, and that the remaining amount be carried forward to new account. The Administrative Board approved this proposal.

The Administrative Board would like to sincerely thank all employees of the RIB Group worldwide for their motivation, loyalty and for their joint efforts and services performed to the benefit of the Company and its shareholders.

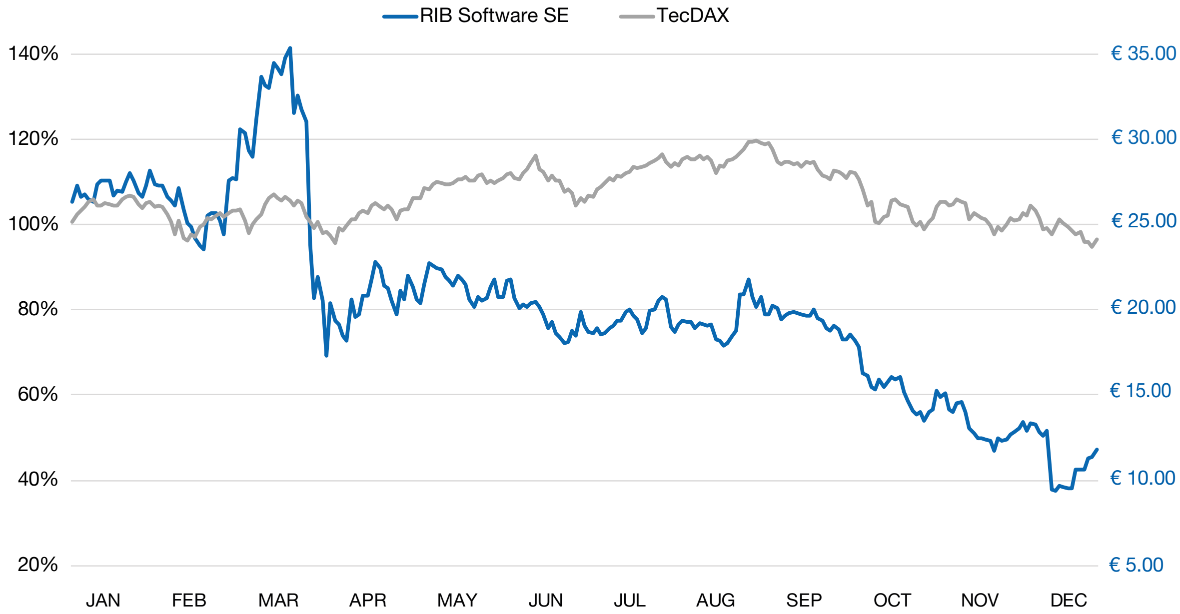
Stuttgart, 28 March 2019

On behalf of the Administrative Board

Tom Wolf
Chairman

RIB ON THE CAPITAL MARKET

RIB SHARE PRICE DEVELOPMENT 2018



The RIB stock started the financial year in 2018 on 02 January at a share price of € 25.00 and reached the year's high of € 36.10 per share in mid-March. Following the capital increase executed at the end of March to support the company's acquisition strategy, the RIB share price developed below the TecDAX level. The RIB Software SE share closed the fiscal year on 28 December 2018, at a closing price of € 11.83. RIB Software SE's market capitalization at the end of fiscal 2018 was around € 612 million.

RIB SOFTWARE IN THE TECDAX AND SDAX

In addition to the TecDAX membership, the company's shares were also included in the SDAX as from 24 September 2018. The simultaneous membership in both indices is based on the reform of the Dax index family with regard to the removal of the separation into the Tech and Classic segments. TecDAX stocks can now also be listed in the MDAX and SDAX at the same time.

DIVIDEND PAYMENT OF € 0.18 PER SHARE

We strive to achieve the objective of a result-oriented and continual dividend policy. At the Annual General Meeting to be held this year on 15 May 2019, the Administrative Board will suggest that in the financial year of 2019, the shareholders are paid a dividend of € 0.18 per share for the previous financial year. This would correspond to a payout sum of approx. € 8.6 million. In financial year 2018, a dividend of € 0.18 per share was paid out.

SHARE FACTS

Figures in €, if not otherwise indicated	2018	2017
Earnings per share - basic	0.43	0.41
Earnings per share - diluted	0.42	0.40
Dividend per share*	0.18	0.18
Share price at the beginning of the report period	25.00	12.40
52-week high	36.10	25.37
52-week low	8.88	11.41
Share price at the end of the report period	11.83	24.82
Authorised capital at the end of the reporting period	51,741,410.00	46,845,657.00
Issued shares in circulation at the end of the reporting period	49,230,111.00	45,287,075.00
Share change at end of the reporting period	-52.68%	100.16%

* Suggestion by the Administrative Board to the annual general meeting of RIB Software SE on 15 May 2019

RIB Software SE is registered with the commercial register of the District Court of Stuttgart (Amtsgericht Stuttgart), Germany under registration number HRB 760459.

Share capital as of 30 November 2018	€ 51,741,410.00
Number of shares as of 30 November 2018	51,741,410
Class of shares	Ordinary shares
Initial trading	08 February 2011
International Securities Identification Number ISIN:	DE000A0Z2XN6
German Securities Identification Number WKN	A0Z2XN
Ticker symbol	RIB
Ticker symbol Reuters	RIB.DE
Ticker symbol Bloomberg	RIB:GR
Index Membership since 22 September 2014	TecDAX
Index Membership since 24 September 2018	SDAX
Transparency level	Prime Standard
Market segment	Regulated Market

Detailed information concerning the shares can be found on our website **www.rib-software.com/investors/**.

There you will find annual and interim reports as well as further information about RIB Software SE.

CORPORATE GOVERNANCE

A. CORPORATE GOVERNANCE REPORT

In accordance with the recommendation of Section 3.10 of the German Corporate Governance Code, the Administrative Board of RIB Software SE hereby submits its Corporate Governance Report:

Responsible corporate governance

RIB Software SE is committed to the principles of good and responsible corporate governance. In particular, this includes close, constructive and trustful cooperation between the Administrative Board and the Managing Directors which focuses on sustainable value creation, as well as a culture of open corporate communication and intensive customer care.

The Administrative Board of RIB Software SE largely complies voluntarily and with conviction with the principles of good corporate governance as expressed in the recommendations of the German Corporate Governance Code. Insofar as the Administrative Board has decided to deviate from the recommendations of the German Corporate Governance Code, reference is made to RIB Software SE's Declaration of Compliance and the reasons contained therein.

Furthermore, the German Corporate Governance Code contains suggestions that do not require a declaration of compliance. Neither these nor the recommendations contained in the German Corporate Governance Code are binding. Nevertheless, the Administrative Board complies with the suggestions of the German Corporate Governance Code to the extent that it considers this to be expedient and in the interests of the Company and its shareholders. The German Corporate Governance Code in the version of 7 February 2017, applicable at the time this report was prepared, was published by the Federal German Ministry of Justice and Consumer Protection on 24 April 2017 in the official section of the Federal Gazette and is publicly accessible on the website **www.dcgk.de**.

Avoidance of conflicts of interest

The Administrative Board comprises – in its opinion – an appropriate number of independent members who have no business or personal relationship with the Company, its executive bodies, a controlling shareholder or an affiliated company that could give rise to a material and not merely temporary conflict of interest. No member of the Administrative Board exercises a board function or advisory functions with a major competitor of RIB Software SE or of the Group. No advisory or other service agreements or work contracts are in existence between the members of the Administrative Board and the Company.

Deductible for D&O insurance

RIB Software SE has taken out financial loss liability insurance (so-called D&O insurance) for the members of the Administrative Board; no deductible is provided for in connection with the D&O insurance for the reasons stated in the Declaration of Conformity.

Composition and remuneration of the Managing Directors

The Administrative Board ensures a long-term succession planning. Although it does not pursue a particular diversity concept, the Administrative Board will also take into account diversity aspects when appointing Managing Directors and, in particular, will seek to take appropriate account of women. However, the Administrative Board is aware that there are currently only few women in senior management positions in German companies, especially in the industry of RIB Software SE, who may be regarded as suitable candidates for a position as Managing Director. From the perspective of the Administrative Board, a high target for the quota of women in the level of the Managing Directors would therefore entail the risk that it could not be met from the outset. Against this background, the Administrative Board has set a target of 0%, which is to be achieved by 14 February 2023.

The remuneration of the members of the Managing Directors is disclosed in accordance with legal requirements as set out in the Declaration of Compliance.

Elections to the Administrative Board and targets for its composition

Elections to the Administrative Board are held on an individual basis. Proposals for the Chairman of the Administrative Board will be made known to the shareholders.

Proposals for the election of members of the Administrative Board are made with regard to the composition of the Administrative Board in order to ensure that its members possess the knowledge, skills and professional experience necessary for the proper performance of their duties. Although the Administrative Board does not pursue a separate diversity concept for its own composition, it will take into account to the specific situation of the Company, the international activities of the Company, potential conflicts of interests, diversity and an appropriate representation of women when selecting the candidates. The Administrative Board has set a target for the quota of women in the Administration Board of 16.67%, which is to be achieved by 14 February 2023.

Annual General Meeting

Shareholders exercise their rights before or during the Annual General Meeting within the scope of the possibilities provided for in the Articles of Association and can speak there on all items on the agenda as well as ask questions relating to the Company's affairs and propose relevant motions. The Annual General Meeting resolves on all matters determined by law with binding effect for all shareholders and the Company. The Administrative Board presents the annual financial statements, the consolidated financial statements and other reports and documents required by law to the Annual General Meeting. The Annual General Meeting resolves on the appropriation of profits and on the formal approval of the actions of the members of the Administrative Board and the Managing Directors. As a rule, it elects the members of the Administrative Board and the auditor. Furthermore, the Annual General Meeting resolves, in particular, on amendments to the Articles of Association and on major corporate measures such as company agreements and conversions, on the issue of new shares or the authorisation to issue new shares, convertible bonds and option bonds as well as on the authorisation to purchase treasury shares. When new shares are issued, shareholders generally have a subscription right corresponding to their share in the share capital.

Each share of the Company entitles the holder to one vote. Every shareholder who has been entered in the share register on the day of the Annual General Meeting and who has given notice of attendance in due time is entitled to participate in the Annual General Meeting. Shareholders who are not able to participate in person may have their voting rights exercised by a credit institution, a shareholders' association, the proxy appointed by the Company and bound by voting instructions or another proxy of their choice.

The Annual General Meeting is generally chaired by the Chairman of the Administrative Board or, if he does not chair the Annual General Meeting, by another member of the Administrative Board to be determined by the Administrative Board. The Chairman ensures that the Annual General Meeting is conducted in an expeditious way and is guided by the suggestion of Section 2.2.4 of the German Corporate Governance Code, whereby an Annual General Meeting should be concluded after four to six hours at the latest.

The invitation to the Annual General Meeting and the reports and documents to be made available to the Annual General Meeting are published in accordance with the provisions of the German Stock Corporation Act (AktG) and, including the Annual Report, are made available on the Company's website.

Risk management and compliance

The responsible handling of business-related risks is one of the principles of good corporate governance. The Administrative Board ensures adequate risk management and risk controlling within the Company. Detailed information about risk management is provided in the Risk Report on pages 77 to 82 of the Annual Report. This also contains the report on the accounting-related internal control and risk management system.

The compliance activities of the Company serve to comply with and observe the legal provisions applicable to the business activities of RIB Software SE and its group companies, the recommendations of the German Corporate Governance Code and the Company's internal guidelines and instructions. The compliance management system of RIB Software SE comprises a large number of internal company measures and processes. It serves the claim to act in accordance with ethical principles and to comply with all applicable laws, internal company guidelines and voluntary commitments. In addition to the general compliance fields, the Company pays particular attention to compliance with the special compliance fields of data protection, IT security, competition and corruption. In addition to risk management, compliance is part of RIB Software SE's internal control system. The effectiveness of the compliance management system is continuously reviewed and adapted to developments, changed risks and new legal requirements. The constant adjustment and improvement of compliance as well as risk management remain a permanent task of the management.

In the past fiscal year, the company began to revise its Code of Conduct, which contains the minimum standards that apply to all employees and executive bodies within the RIB Group worldwide. The revised Code of Conduct was made available to the addressees at the beginning of 2019. In addition, all employees are currently participating in online training on compliance. The aim of the training is to ensure that employees are informed about new laws and guidelines, such as best practices on data protection, and about RIB Group guidelines, such as the Code of Conduct.

Transparency

RIB Software SE informs shareholders, analysts, investors and the public regularly and up to date about the situation of the Company and significant business changes. The Annual Report, the half-yearly financial report and the quarterly reports are published timely. Press releases and, where applicable, publications of inside information (ad hoc announcements) pursuant to Article 17 of Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse ("**Market Abuse Regulation**") provide information on current events and new developments.

A central information platform is the website h**ttps://www.rib-software.com/en/group**. In addition to the Articles of Association and information about the Administrative Board and the Managing Directors, documents relating to the Annual General Meeting, financial reports and details of business activities are posted on this website. The dates of the regular financial reports are contained in the Annual Report, posted sufficiently in advance on the Company's website (**https://www.rib-software.com/en/group** – Investor Relations – Financial Calendar) and forwarded to the Frankfurt Stock Exchange as well as a national and international media bundle.

Events not publicly known that could have a significant impact on the price of the RIB share are announced immediately in ad hoc announcements, unless the Company is exempt from the publication obligation in individual cases. All persons who work for the Company and have access to inside information as intended are and will be informed about the obligations arising from insider law. If the Company is notified that a person acquires, exceeds or falls below 3, 5, 10, 15, 20, 25, 30, 50 or 75 percent of the voting rights in the Company by purchase, sale or in any other way, the Company shall disclose this information without undue delay. The same applies if the Company receives notifications from holders of instruments which (1) grant the holder either (a) an unconditional right to acquire the shares in the Company at maturity, or (b) a discretion with respect of his/her right to acquire such shares, or (2.) relate to the Company's shares and have an economic effect comparable to that of the instruments mentioned under (1.) and through which the holder reaches, exceeds or falls below the thresholds of 5, 10, 15, 20, 25, 30, 50 or 75 percent of the voting rights in the Company.

Directors' dealings

In accordance with Article 19 of the Market Abuse Regulation, persons discharging managerial responsibilities (in particular members of the Administrative Board and the Managing Directors), as well as persons who are closely associated with them, are obliged to report proprietary transactions with financial instruments of RIB Software SE to the Company and BaFin. This obligation applies irrespective of the remuneration and the type of acquisition as soon as a threshold value of € 5,000 per calendar year is reached or exceeded. Insofar as the Company has been notified of such transactions, this information has been duly published in the company register.

The transactions reported to RIB Software SE in the past fiscal year have been duly published and are available on the Company's website at **https://www.rib-software.com/en/group/investor-relations/news/**.

Accounting and audit of the financial statements

The accounting of the RIB Group follows the international financial reporting standards (IFRS) as applicable in the European Union. The annual financial statements of RIB Software SE are prepared in accordance with the provisions of the German Commercial Code (HGB). The annual financial statements and the consolidated financial statements are prepared by the Managing Directors and reviewed by the auditor and the Administrative Board. The quarterly reports and the half-year financial report are discussed by the Audit Committee with the Administrative Board prior to publication. The consolidated financial statements are published within 90 days of the end of the financial year, the interim reports are made accessible within 45 days of the end of the reporting period.

BW PARTNER Bauer Schätz Hasenclever Partnerschaft mbB Wirtschaftsprüfungsgesellschaft, Steuerberatungsgesellschaft, Stuttgart, audited the consolidated financial statements and the annual financial statements. The auditor is independent. The focal points of the audit were determined in consultation with the auditor and it was agreed, among other things, that potential grounds for disqualification or lack of impartiality arsing during the audit would be eliminated or reported immediately. The Administrative Board has also agreed that the auditor shall report, without undue delay, on all findings and events material to the duties of the Administrative Board which arise during the performance of the audit and that the auditor shall inform the Administrative Board or make a note in the Audit Report if, during the performance of the audit, he or she discovers facts which indicate an inaccuracy in the Declaration of Compliance with the German Corporate Governance Code issued by the Administrative Board.

B. DECLARATION OF COMPLIANCE BY THE ADMINISTRATIVE BOARD WITH THE GERMAN CORPORATE GOVERNANCE CODE

The Administrative Board (*Verwaltungsrat*) of RIB Software SE declares pursuant to Art. 9 para. 1 lit. c) (ii) of the Council Regulation (EC) no. 2157/2001 of 8 October 2001 on the Statute of a European Company (SE) (the SE-Regulation, "SE-VO"), Sec. 22 para. 6 of the Law for the Implementation of the SE-VO of 22 December 2004 (the Implementation Act, "SEAG") in connection with. Sec. 161 German Stock Corporation Act (*Aktiengesetz*) that, since the last declaration of compliance was made, RIB Software SE has complied with the recommendations of the "Government Commission on the German Corporate Governance Code" in the version dated 5 May 2015, effective since 12 June 2015, and will comply with the recommendations of the version dated 7 February 2017, effective since 24 April 2017 (the "Code"), in each case under consideration of the particularities of the one-tier board system of RIB Software SE described under no. 1 with the exceptions described under no. 2, and to the extent not complied with, why not.

1. Particularities of the one-tier corporate governance system

Pursuant to Art. 43–45 SE-VO in connection with Secs. 20 et. seq. SEAG, the one-tier corporate governance system is characterized by the fact that the guidance of the SE is incumbent upon a uniform body, the Administrative Board, see para. 7 of the preamble of the Code. The Administrative Board directs the Company, establishes the general principles of its business and supervises their implementation by the Managing Directors (*Geschäftsführende Direktoren*). The Managing Directors manage the business of the Company and represent the Company in dealings with third parties. They are bound by instructions given by the Administrative Board.

RIB Software SE generally applies the recommendations of the Code relating to the Supervisory Board of a German Stock Corporation (*Aufsichtsrat*) to its Administrative Board and relating to the Management Board of a German Stock Corporation (*Vorstand*) to its Managing Directors. The following exceptions apply in terms of the statutory rules of the one-tier corporate governance system:

- Deviating from Sec. 2.2.1 sent. 1 of the Code, the Administrative Board submits the financial statements as well as the consolidated financial statements to the general meeting, Sec. 48 para. 2 sent. 2 SEAG.
- Deviating from Secs. 2.3.1 sent. 1 and 3.7 para. 3 of the Code, the Administrative Board is responsible for the convocation of the general meeting, Secs. 48 and 22 para. 2 SEAG.
- The responsibilities of the Management Board set out in Secs. 2.3.2 sent. 2 (proxy-voter bound by instructions), 3.7 para. 1 (opinion to a public take-over offer) und para. 2 (behaviour during a public take-over offer) as well as 3.10 (Corporate Governance report), 4.1.3 (Compliance) und 4.1.4 (risk management and -controlling) of the Code are incumbent upon the Administrative Board of RIB Software SE, Sec. 22 para. 6 SEAG.
- The responsibilities of the Management Board contained in Secs. 4.1.1 (direction of the Company) and 4.1.2 in connection with 3.2 half sentence 1 (development of the strategic direction of the Company) of the Code are incumbent upon the Administrative Board, Sec. 22 para. 1 SEAG.
- Deviating from Secs. 5.1.2 para. 2 of the Code, the Managing Directors, other than the members of the Management Board, are not subject to a maximum term of office, Sec. 40 para. 1 sent. 1 SEAG.
- Deviating from Secs. 5.4.2 sent. 2 and 5.4.4 of the Code, members of the Administrative Board can be appointed as Managing Directors as long as the majority of the members of the Administrative Board consists of non-managing members, Sec. 40 para. 1 sent. 2 SEAG.

2. Deviations from the Recommendations of the Code

- Section 3.8 para. 3 GCGC: The D&O insurance for the members of the Administrative Board does not include a deductible. In the opinion of the Administrative Board, the agreement of a voluntary deductible is neither suitable nor necessary in order to ensure that the members of the Administrative Board duly perform the duties incumbent upon them.

- Section 4.1.3 sent. 3 GCGC: Employees shall be given the opportunity to report, in a protected manner, suspected breaches of the law within the company; third parties should also be given this opportunity. The establishment of an institutionalised whistleblowing system for legal infringements is not considered necessary at present. In the event of indications of legal violations within the company, the company‘s employees may at any time contact the Compliance Department or the Managing Directors directly at any time. However, the company will examine and consider whether the introduction of such a whistleblowing system could be reasonable and appropriate in the future.

- Section 4.2.2 para. 2 GCGC: The Administrative Board does not consider, as for which compensation of the Managing Directors is appropriate, the relationship between the compensation of the Managing Directors and that of senior management and the staff overall, nor in terms of its development over time. The Administrative Board does consequently not determine how senior managers and the relevant staff are to be differentiated. The corresponding recommendation of the Code appears to be impracticable and, in addition, not suitable to ensure that the compensation of the Managing Directors is appropriate in each case.

- Section 4.2.3 para. 2 GCGC: The variable remuneration for the Managing Directors does not reflect potential negative developments in such a way that the income might also be subject to real losses. This does not appear necessary in view of the compensation structure for the Managing Directors in order to ensure that the Managing Directors do not take any undue risks when managing the company.

  To the extent the Managing Directors receive share options as a variable component of their remuneration, such component is limited with respect to the number of options but not according to amount. Since the exercisability and the value of the options depend on the achievement of ambitious performance targets, a maximum limit according to amount would run contrary to the purpose of this remuneration component to provide a special performance incentive.

- Section 4.2.3 para. 4 GCGC: The contracts for the Managing Directors do not provide for a severance cap in the event of early termination. Such an arrangement does not appear necessary in addition to the statutory provisions applicable in cases of early termination in order to protect the interests of the company and its shareholders.

- Section 4.2.5 GCGC: The remuneration of the Managing Directors is disclosed in accordance with the statutory provisions. More comprehensive disclosure in a remuneration report, which outlines or itemises the remuneration system for the Managing Directors and the nature of any fringe benefits provided by the company in a manner that goes beyond the statutory requirements does not appear necessary to satisfy the justified information interest of the shareholders and investors to the due extent.

- Section 5.1.2 para. 2 GCGC: The Administrative Board has not fixed an age limit for the Managing Directors. Setting an age limit is not in the interests of the company and its shareholders, since there is no compelling connection between a Managing Director‘s age and his performance.

- Section 5.4.1 paras. 2 and 3 GCGC: With the exception of the determination of target quotas for the portion of women among the members of the Administrative Board, the Administrative Board does not specify concrete goals for its composition and does not publish them and the status of their implementation in the Corporate Governance report. The Administrative Board is of the opinion that in its composition, due attention should be paid in particular to the company-specific situation, the company‘s international activity, potential conflicts of interest, diversity and an adequate involvement of women and shall also bear this in mind in its proposals to the responsible electoral bodies. However, the Administrative Board should in each case be optimally staffed. The specification of concrete goals for its composition, further to those required under mandatory law, would appear neither suitable nor expedient to achieve this.

The Administrative Board does not set a general limit for the length of membership in the Administrative Board. Setting a limit for the length of membership in the Administrative Board is not in the interest of the company and its shareholders, since there is no compelling connection between the term of service on the Administrative Board and the occurrence of conflicts of interests or the independence of the board members.

- Section 5.4.1 para. 4 GCGC: The Administrative Board does not disclose the personal and business relations of each candidate with the enterprise, the bodies of the company and any shareholder having a significant share in the company when making its election proposals. The recommendation of the Code implies more than merely insignificant legal risks; hence, to comply with it, is not in the interest of the company.

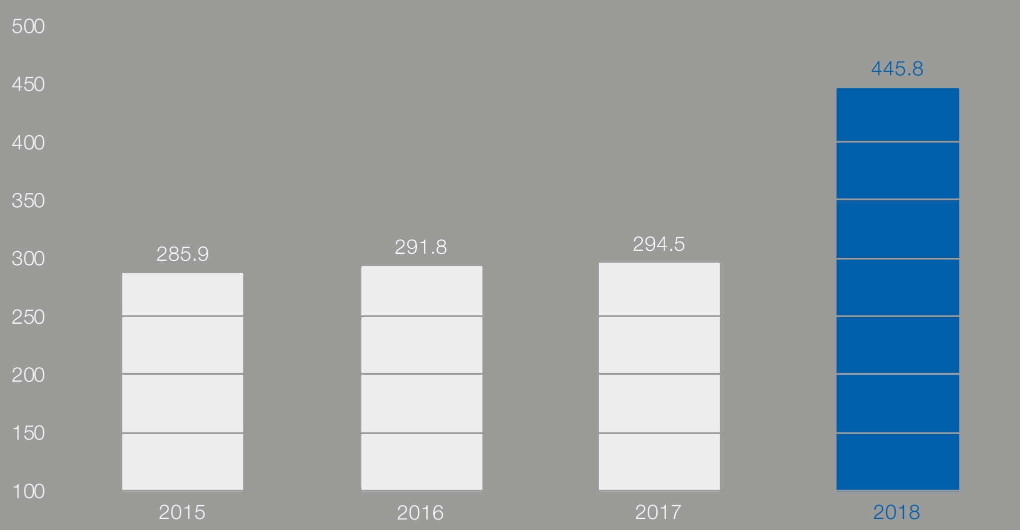
In case of doubt, the German version of this declaration shall be binding.

Stuttgart, March 2018

RIB Software SE
The Administrative Board

CHANGES IN EQUITY 2015 - 2018

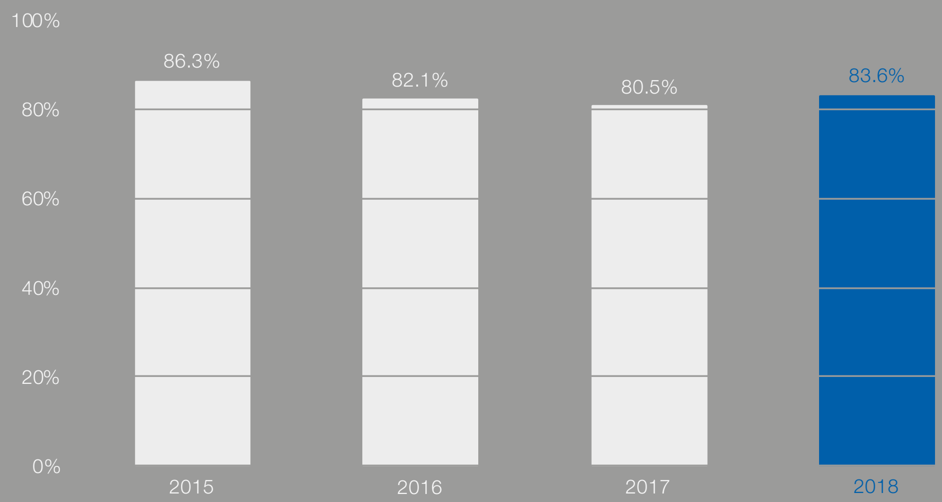
Figures in € million



CONSOLIDATED GROUP MANAGEMENT REPORT

AND MANAGEMENT REPORT FOR THE FINANCIAL YEAR 2018

EQUITY RATIO 2015 - 2018



A. BUSINESS AND GENERAL ENVIRONMENT

A.1 OVERVIEW

The RIB Group is active in the software market for the building and construction industry, plant construction as well as infrastructure management and enjoys great global success. The parent company, RIB Software SE, is headquartered in Stuttgart. RIB Software SE has subsidiaries in Germany, Europe, the Middle East, the US, Australia, and Asia.

The core activities of the RIB Group include the production and sale of software, provision of consulting and training services for implementation projects, and E-commerce as well as the provision of digital platforms for the electronic execution of business processes.

Our software is designed to simplify the planning of construction projects, increase the efficiency of project management, minimize cost and deadline risks, and increase construction quality. Our software provides our customers the possibility to plan and manage essential cost- and revenue-relevant processes over the entire project life cycle, end-to-end, in a model-based manner.

Customers can implement electronic purchase processes over our digital platforms and manage and monitor supply chains. For this purpose, they can determine needs from, for example, 5D building models. Our software and E-commerce solutions form an integrated and comprehensive B2B platform over which our customers can plan, implement, and manage acquisition processes together with their business partners.

More than 650,000 users worldwide

With more than 100,000 customers and more than 650,000 users all over the world, we are one of the leading providers of business software for the construction industry. Our clients include large construction groups, medium-sized construction firms, the public sector, architecture and engineering companies as well as major industrial and plant engineering companies. More than 85,000 customers use our online services such as iTWOtx or our collaboration and project management platform iTWOcx to communicate with all project participants on the basis of an industry-specific internet forum.

For the purpose of corporate management, the Group's structure includes a reporting segment arrangement:

Reporting segment iTWO
In the reporting segment iTWO, we grant our customers non-exclusive, open-ended software usage rights based on licensing agreements ("licensing model"). As an alternative, we also deliver our software in customer-owned IT infrastructures (private clouds) or computer centers operated by third parties (public clouds) for a fee and with a time limit. Independent of the chosen utilization model, our customers can also conclude contracts for additional hotline services and the provision of the latest software versions (maintenance) or hire consulting and training services in connection with the software implementation. The services offered in the reporting segment iTWO do not include the operation of the IT infrastructure. Customer contracts which also include managed services are recorded in the MTWO reporting segment. Please refer to the relevant explanations in the **Section "Reporting segment MTWO"**.

Reporting segment YTWO
In the reporting segment YTWO, we offer our customers web-based platforms for the electronic mapping of business processes. This reporting segment covers the two business segments YTWO (SCM) and xTWO (E-commerce):

a.) YTWO (SCM)

In the YTWO (SCM) business segment, the RIB Group's business model consists in providing its customers with the YTWO platform, which is built on iTWO 4.0 technology, for a fee. The platform aids the model-based procurement of construction products. The platform is provided on the basis of two different revenue models. Customers with a high purchase volume are charged transaction fees for using the YTWO platform ("transaction model"), which are calculated on the basis of the procurement volume of the construction products purchased by the customer via the YTWO platform. The transaction fees also include monthly fees for the provision of the platform charged as part of a SaaS agreement.

Until the acquisition of the shares in YTWO Ltd. by the RIB Group, the "Just in Time" delivery of the goods procured via the platform to the construction site was also organized through the joint venture partner Flex on the basis of separate agreements between Flex and the customers of YTWO Ltd. Given that Flex, as a Silicon Valley-based manufacturer with extensive operations in China and Mexico, may be affected by America First policy and the associated changes in international trade relations, the RIB Group invested in the acquisition of new industrial partners in the financial year 2018 in order to be able to continue the YTWO (SCM) business with new business partners following the acquisition of the Flex shares. In light of this, a Memorandum of Understanding was signed in June 2018 for a strategic partnership with a publicly-traded electrical engineering group engaged in the digital transformation of energy management and automation in homes, buildings, data centers, infrastructure and the manufacturing industry.

b.) xTWO (E-commerce)

While the YTWO platform focuses on business customers (B2B) through the conceptualized integration of iTWO 4.0 as an integrated end-to-end procurement platform and strategic emphasis on companies with large procurement volumes, xTWO is aimed at the the consumer sector (B2C) and aids the online organization of procurement and delivery of construction products.

Reporting segment MTWO

New reporting segment MTWO in fiscal year 2018

In the first quarter of 2018, MTWO was established as a new reporting segment. MTWO is designed as a cloud-based BIM 5D software platform, based on "software-as-a-service" (SaaS) and built on iTWO 4.0 technology. Following a cooperation agreement signed between RIB and Microsoft during the reporting period, the solutions offered by RIB on the MTWO platform have been expanded to include Microsoft products and IT services.

In particular, this includes the ability to provide RIB customers with the MTWO platform as an end-to-end enterprise solution on the Microsoft Cloud Azure Platform. The provision of hardware and system-related software is a service performed by the cooperation partner Microsoft. Related services, such as network services, software deployment, operational monitoring, and storage or security services (managed services) are provided by managed service providers (MSPs). The type and quality of the services to be provided are coordinated between the end customer and the provider on the basis of Service Level Agreements (SLAs).

The business model consists in both RIB and Microsoft charging fees for the subscription to their software and services provided on the MTWO Cloud ("subscription model"). In this context, the RIB Group pursues the goal of establishing a global partner network for the marketing of MTWO and iTWO 4.0 through strategic investments in managed service providers, value added resellers or software companies whose solutions and services complement the offer on the MTWO platform in order to offer the customers of the RIB Group a comprehensive and high-quality range of products and services under the brand name MTWO.

Several development centers worldwide

We have organized our **research and development activities** in a decentralized manner. The RIB Group has development centers worldwide.

The German versions of iTWO 5D and iTWO 4.0 are developed under the leadership of RIB Software SE and the international versions under the leadership of RIB Limited, Hong Kong. To this end, the companies use the development capacities of RIB Information Technologies AG and a Chinese subsidiary as well as other subsidiaries in the US, Denmark, Austria, Spain, and Australia.

In German-speaking countries (the DACH region), we organize **product sales** under the umbrella of RIB Software SE via two German subsidiaries, RIB Deutschland GmbH and RIB Engineering GmbH. International sales are managed under the umbrella of RIB Limited via subsidiaries in China, Asia, Australia, the Middle East, the UK and the US.

Since the financial year 2018, we have been providing **consulting services** in the German-speaking countries through our German subsidiary, RIB COE Europe GmbH, based in Stuttgart. In this context, the service organization was restructured both in the previous year and during the reporting period and all consultants operating in the DACH region were brought together under the responsibility of RIB COE.

A.2 BUSINESS DEVELOPMENT AND POSITION OF THE RIB GROUP

A.2.1 Market conditions

Increasing globalization, the internet and the growing significance of smart communication technologies have led to the creation of a new generation of enterprises, which develop joint business processes with their business partners in a way that is integrated and interactive. The associated digital linking of people and enterprises has triggered a social and economic revolution with significant consequences for the global economy.

AI in the focus of several industries

In future, artificial intelligence (AI) will enable a computer to process tasks which would otherwise require human intelligence. As the most important IT-based innovation and research objective of the future, artificial intelligence has become the focus of universities, start-ups, software and hardware vendors, car makers, banks and insurance companies. Intelligent computer programs will in future understand exactly what we are saying, and will autonomously provide their own solution proposals. Cars equipped with artificial intelligence will be able to drive independently, even in difficult traffic situations. Artificial intelligence will help in the treatment of diseases, make investing more profitable, optimize the consumption of energy and much more. Artificial intelligence could revolutionize our lives in the next 10 to 20 years to an extent never seen before.

These new developments and the increasing digitalization of building processes mean that virtual construction and digitally networked business processes have evolved into a new mega trend within the construction industry. Artificial intelligence will doubtlessly become ever more important in this area too. As in other industries, where the state-of-the-art already includes virtual reality and where AI technology provides support with complicated maintenance or assembly works, in future, simply by looking at a technical component of a built structure through VR glasses, the relevant information will be visualized. The observer will be informed how the components are to be assembled during the construction phase, how much they cost, what they are made of, and how they will subsequently need to be maintained and repaired during the use phase.

With our end-to-end enterprise platform, iTWO 4.0, and growing number of intelligent iTWO 4.0 apps, we are providing a solution fully in keeping with the current technological trends. It is our belief that digitally networked, integrated and virtual planning, production and operating processes, as well as the industrial prefabrication of components and artificial intelligence, have the potential to significantly impact the future development of the construction sector, and we anticipate an increasing willingness to invest in web-based digital software platforms in this area, or to use them on a software-as-a-service basis and to utilize AI technology. Also in this area, we are very well positioned thanks to our new MTWO platform.

Future-proof enterprise platform iTWO 4.0

In addition to these framework conditions, which are favorable for us, our target groups' willingness to invest also depends on the general economic conditions. According to the OECD Economic Outlook for 2018, the global economy is in troubled waters. Though global GDP growth is strong, it has already peaked. In many countries, unemployment has fallen significantly and labor shortages are making themselves felt. However, trade and investment have slowed down under the impact of higher bilateral tariffs and many emerging economies are facing capital outflows and devaluation of their currencies. According to OECD projections, global GDP growth will decelerate from 3.7% in 2018 to 3.5% in 2019-2020.

The OECD considers the slowdown in GDP growth to be in line with the subdued outlook for investment in many economies. Investment incentives will be hampered by factors such as increased policy uncertainty, lower expectations for future global GDP growth, and slowing reform efforts to reduce anti-competitive regulations on the product market. In this context, according to the OECD, growth in business investment is projected to slow from over 4% per annum in the 2017-2018 period to just over 3% in the 2019-2020 period.

Risks arising from growing protectionism in the US, as well as the still unclear terms of the UK‘s withdrawal from the EU (Brexit), may lead to even less favorable developments and further weaken GDP growth and corporate investment growth.

In view of this, the willingness of our target groups and markets to invest, especially in Europe and the US, might develop somewhat cautiously despite a positive trend of digitizing processes in the construction sector and of making the associated investments in IT.

A.2.2 Business development

As in previous years, our business continued to develop very positively in the financial year 2018. Total revenues increased by 26.4% to € 136.9 million (previous year: € 108.3 million).

Group revenues rise to € 136.9 million (+26.4%)

Revenues from software licenses and software as a service / cloud of € 54.5 million were 17.0% higher than in the previous year (€ 46.6 million). Maintenance revenue increased by 16.9% to € 40.1 million (previous year: € 34.3 million). Consulting revenue rose by 65.3% to € 32.9 million (previous year: € 19.9 million). E-commerce revenue increased from € 7.5 million to € 9.3 million (+24.0%).

A.2.3 Key performance indicators of RIB Software SE

Revenues increased by 1.8% to € 55.3 million (previous year: € 54.3 million). The operating EBITDA of € 15.7 million was 9.2% lower than in the previous year (€ 17.3 million).

Below, the reconciliation of earnings after taxes to operating EBITDA*:

Figures in € million	2018	2017
Earnings after taxes	**16.2**	**12.9**
plus taxes on income and earnings	4.3	5.1
plus interest and related expenses	0.1	0.2
plus write-downs of financial assets	0.0	1.1
less other interest and similar income	-0.5	-0.1
less income from participating interests	-7.1	-5.0
plus depreciation and amortization	0.3	1.7
plus expenses from currency conversion	0.0	1.5
less income from currency conversion	-1.9	0.0
plus expenses for capital increase	4.3	0.0
Operating EBITDA	**15.7**	**17.3**

A.2.4 Key performance indicators of RIB Group

Group revenues increased significantly by 26.4% to € 136.9 million (previous year: € 108.3 million). The operating EBITDA** of € 38.8 million was 2.8% down on the previous year (€ 39.9 million). The operating EBITDA margin reached 28.3% (previous year: 36.8%).

Below, the reconciliation of earnings before income taxes to operating EBITDA***:

Figures in € million	2018	2017
Earnings before income taxes	**29.6**	**29.6**
plus the share of earnings from participations accounted for using the equity method	3.6	3.5
plus financial expenses	0.5	0.2
less financial income	-9.4	-3.7
plus depreciation and amortization	13.5	10.7
plus expenses from currency conversion	1.6	1.8
less income from currency conversion	-1.9	-1.7
plus expenses / less income from the subsequent valuation of purchase price liabilities	1.2	-0.5
Operating EBITDA	**38.8**	**39.9**

Revenue in reporting segment iTWO rises by 20.5%

In our high-margin **reporting segment iTWO**, revenues rose significantly by 20.5% to € 121.5 million (previous year: € 100.8 million). The operating EBITDA**** amounted to € 41.3 million and was thus at the previous year's level (€ 40.9 million). Accordingly, the operating EBITDA margin of 34.0% was below the last year's value of 40.6%.

*) The presentation in € million can result in rounding differences when the amounts displayed are added up.

**) When additionally adjusted for earnings in the reporting period from the reversal of deferred income in connection with the software delivery to YTWO (amounting to € 2.0 million) and adjusted for earnings from software delivery to YTWO in the previous year (amounting to € 7.8 million), the operating EBITDA was € 36.7 million (previous year: € 32.1 million). This represents an increase of 14.3% compared to the previous year.

***) The presentation in € million can result in rounding differences when the amounts displayed are added up.

****) Currency effects (2018: earnings of € 0.3 million / 2017: expenses of € 0.1 million); Special effects: earnings/expenses from the adjustment of purchase price liabilities (2018: expenses of € 1.2 million / 2017: earnings of € 0.5 million).

Same as in the previous year, in the **reporting segment YTWO**, the business area YTWO (SCM), which is currently under development, did not register any material investment income from transaction fees in the financial year 2018. An investment result of € -3.6 million was generated due to the start-up costs connected with the development of the YTWO platform (previous year: € -3.7 million). This value is within our earnings forecast for 2018. An investment result of up to € -6 million was budgeted. In the xTWO (E-commerce) business area, the revenue increased by 24.0% to € 9.3 million (previous year: € 7.5 million). The operating EBITDA amounted to € -0.3 million and was thus significantly better than in the previous year (€ -1.0 million).

In the new **reporting segment MTWO**, total revenues of € 6.0 million were achieved. Revenue of € 5.8 million result from the companies acquired in the reporting period and, thus, it is essentially attributable to the expansion of the scope of consolidation. Additional sales revenue of € 0.2 million was reported, which is attributable to SaaS Cloud sales from the first customer contracts concluded in the reporting period for the use of iTWO 4.0 via the MTWO platform, which are settled monthly. The total volume of the SaaS / Cloud revenues from these deals, totaled over a three-year period, each correspond to a larger Phase II contract. Total expenses of € 8.4 million include start-up costs for the development of MTWO amounting to around € 2.5 million. Accordingly, operating EBITDA in the reporting segment amounted to € -2.3 million.

Total revenues of € 6.0 million in the reporting segment MTWO

A.3 KEY EVENTS IN THE REPORTING PERIOD

A.3.1 RIB Software SE carries out a capital increase from authorized capital

On 22-23 March 2018, the Administrative Board of RIB Software SE resolved to increase the Company‘s share capital by up to € 4,684,565.00, from € 46,845,657.00 to a maximum of € 51,530,222.00, by issuing up to 4,684,565 new registered no-par-value shares with a nominal value of € 1.00 each (the “new shares“) by way of partial utilization of the authorized capital in return for cash contributions. The new shares are fully entitled to dividend from 01 January 2018.

The placement of the new shares was successfully completed on 23 March 2018. The placement price was € 28.00 per new share. The placement generated gross offering proceeds of approx. € 131.2 million. With a view to achieving rapid development of the MTWO market, significant portions of this amount will be used for strategic investments in managed service providers, value added resellers or software companies whose solutions and services complement the offer on the MTWO platform. In this context, not only should business shares in the companies be acquired, but the companies should also be provided with capital so that they can build up the necessary sector-specific industry expertise. The acquired companies should serve as a multiplier for iTWO technology and open up new growth paths for the RIB Group, especially in the new MTWO segment.

A.3.2 RIB Software SE decides to buy back treasury shares

The Annual General Meeting of 15 May 2018 authorized RIB Software SE to acquire treasury shares up to a total of 10% of the Company‘s share capital at the time of the resolution by 14 May 2023. The transactions on the basis of this authorization may be executed by the Company in whole or in part, once or several times; they may also be executed by the Group companies or by third parties for the Company’s or their own account.

In light of this, the Administrative Board decided in two meetings, on 17 October 2018 and 17 December 2018, to buy back up to 3,000,000 treasury shares. The acquisition was continuous and was expected to end on 31 October 2019, unless the limit of 3,000,000 shares were to be reached prior to that date. In fact, this number had been reached by the time the annual/consolidated financial statements were prepared for the reporting period and the share buyback program was thus terminated. The shares were bought back at prices within the range of € 8.88 to € 15.00, as set by the Administrative Board.

By 31 December 2018, 1,686,000 treasury shares had been acquired at a cost of € 17.9 million, of which 320,000 shares were not yet the property of the Company under civil law as of the reporting date.

A.3.3 Restructuring of the ownership of YTWO Ltd.

In view of the emerging changes in global trade policy, whereby greater regionalization of supply chains may be expected, in December 2018, RIB and Flex agreed on a new ownership structure for the joint venture YTWO Ltd. Accordingly, the RIB Group took over 50% of the shares in YTWO Ltd. from Flex and now holds 100% of the shares in YTWO Ltd.

Now that all of its shares have been taken over by the RIB Group, YTWO intends to strengthen its supplier base and expand its catalogues by adding other brands and high-quality building materials. We believe the new structure of YTWO will contribute to the improvement of the YTWO brand positioning and attract more users to the YTWO platform thanks to a greater variety of products.

A.3.4 Acquisition of 100% of the shares in the Exactal Group

In 2016, the RIB Group acquired a 25% interest in Exactal Group Limited, the parent company of the Exactal Group (hereinafter: Exactal). Due to the positive business development of Exactal, we increased our shareholding initially to 75% in November 2017, and then to 100% in January 2018. Exactal, headquartered in Brisbane, was established in Australia in 2003 and it primarily develops and distributes quantity determination and costing software. Exactal has enterprise sites in Australia, the United Kingdom, New Zealand, USA, Malaysia, Singapore and Hong Kong. Its main product, CostX, complements the product portfolio of the RIB Group very well and, following its integration into iTWO 5D, it should now also be integrated into the iTWO 4.0 platform.

Extensive investments in new technology partners

A.3.5 Acquisition of 51% of the shares in Datengut GmbH

In February 2018, the RIB Group acquired 51% of the shares in Datengut GmbH (hereinafter: Datengut). Datengut has an operating site in Zwenkau (near Leipzig) and focuses on the development and further development of database-supported mobile smartphone apps which are specially tailored to the construction industry and linked to iTWO technology. By holding an interest in Datengut, within the RIB Group, we intend to establish a competence center for mobility applications for the DACH region. The focus here is on the development of iTWO apps.

A.3.6 Acquisition of 80% of the shares in the IMS Group

In July 2018, the RIB Group acquired 80% of the shares in the IMS Group, whose parent company is IMS Gesellschaft für Informations- und Managementsysteme mbH, Dinslaken. The IMS Group (hereinafter: IMS) has operating sites in Berlin, Dinslaken, Philippsburg and Zurich. By combining IMS cloud-based facility management solutions with iTWO 4.0 cloud-based technology, we are increasing the continuity of our solution, which will now span from planning and construction all the way to operation. As a result, when our customers are in the phase of planning and managing the profitability of a construction project, we will be able to provide them with total cost of ownership (TCO) information for the entire life-cycle of a piece of infrastructure, including not just manufacturing costs but also maintenance costs.

A.3.7 RIB and Microsoft agree to collaborate to build the first vertical cloud solution for the construction industry

RIB and Microsoft agree on strategic cooperation

In February 2018, RIB and Microsoft entered into a cooperation agreement to jointly establish a world-leading vertical cloud for the construction and real estate industries under the brand name MTWO. MTWO is a cloud solution specifically tailored to the needs of the construction and real estate industries for Building Information Modeling and model-based management of construction projects. It is hosted on Azure Virtual Machines and is built on RIB and Microsoft technology.

MTWO will integrate the RIB Group's iTWO 4.0 technology with Microsoft's AI-based BoT Solutions, Azure IoT Suite and mixed-reality solutions with Microsoft's HoloLens and harness them for use in the construction and real estate industries. Through regular hackathons of Microsoft and RIB R&D teams, a joint go-to-market strategy of the two companies' sales teams in the target areas (China, the US and Europe) and joint presentations of the MTWO solution at events, workshops and in the Microsoft Experience Centers worldwide, MTWO is set to utilize the global R&D, sales and marketing capacities of both companies.

In order to quickly tap into the high strategic potential that arises for the RIB Group from this cooperation, substantial portions of the offering proceeds from the capital increase carried out during the reporting period will be used to acquire companies and technologies that will help MTWO accelerate its market development. This will open up new sales channels and growth paths for the RIB Group which will serve as a multiplier for the RIB Group's iTWO technology by covering new regions, strengthening the position of the RIB Group in existing markets and offering an expanded range of solutions and services.

Through the acquisition of shares in ICS in the US, A2K Group in Australia and the SaaSplaza Group in the Netherlands, the first three strategic MTWO investments were successfully completed during the reporting period.

A.3.8 Acquisition of 40% of the shares in ICS Integrated Computer System Support Inc., Redmond, Washington, USA.

In August 2018, the RIB Group acquired 40% of the shares in ICS Integrated Computer System Support, Inc. (hereinafter: ICS). As a result, ICS has joined the MTWO partner network as one of Microsoft's leading managed services partners on the US West Coast with a proven business concept in the field of digital transformation. ICS will be the first MTWO partner to promote the dissemination of MTWO technology on the US West Coast.

A.3.9 Acquisition of 60% of the shares in the A2K Group, Brisbane, Australia

In September 2018, the RIB Group initially took over 40% of the shares in the A2K Group, with another 20% taken over in November 2018. The A2K Group is headquartered in Brisbane with additional offices in Sydney, Melbourne, Adelaide and Perth in Australia and Auckland in New Zealand. As the existing customers of the A2K Group include major construction companies in Australia and New Zealand, the investment in A2K is an efficient way to quickly attract new customers to MTWO in this region.

Strategic investments for the promotion of MTWO technology

A.3.10 Acquisition of 100% of the shares in the SaaSplaza Group, Netherlands

In November 2018, the RIB Group acquired 100% of the shares in the SaaSplaza Group (hereinafter: SaaSplaza). The Group's parent company is SaaSplaza International Ltd, Amsterdam, which is a leading provider of Microsoft Azure and Dynamics Services cloud solutions. Since 2008, SaaSplaza has successfully built a global cloud services business in Europe, South East Asia, China, the Pacific, Canada, the United States and Latin America. SaaSplaza has offices in Amsterdam, Munich, Toronto, San Diego, Shanghai, Singapore and Sydney and has customers in 80 countries.

With RIB as shareholder, SaaSplaza's position as a global provider of cloud services will be strengthened, producing a variety benefits for SaaSplaza partners and customers. The RIB Group intends to leverage SaaSplaza's global presence and expertise as a managed service provider for Microsoft Azure and Dynamics 365 to accelerate the rollout of the MTWO platform. SaaSplaza can provide MTWO users with comprehensive managed services such as performance monitoring, data backup and recovery, 24/7 support, incident handling, environment maintenance and iTWO 4.0 update services including data migration.

A.4 MANAGEMENT SYSTEM

A.4.1 Corporate management

The corporate management of the RIB Group is based on a business strategy coordinated between the Managing Directors and the Administrative Board. It encompasses the definition of the product portfolio, the target markets and target groups, and medium-term sales and earnings expectations.

Based on the strategic goals, specific quantitative and qualitative targets are derived for product development and sales of our products and broken down to the profit center level of the operating Group companies. The consolidated annual planning is coordinated together with the Administrative Board in a special meeting.

The business targets and Group companies are monitored and managed throughout the year based on indicators and a detailed report on the sales, cost, and revenue situation.

The main financial indicators, both at the individual RIB Software SE company level and at Group level, are the sales revenue and the operating EBITDA (adjusted for currency effects).

Both indicators are also used at company and segment level for monitoring and managing the individual companies and the segments.

Aside from that, other revenue indicators are used at Group and company level for management and monitoring purposes. These include, in particular, software revenue (software licences and SaaS/Cloud), maintenance and consulting revenue, each structured by reporting segment, region, and target group.

The cost indicators at the Group, business, and profit centre level include, in particular, the production costs of the services performed in order to achieve the sales revenue and the costs of research and development, each structured by reporting segments.

We also use additional indicators to control and monitor our profit centers in the areas of sales, development and consulting. They are derived from the essential indicators and compared to quantitative and qualitative targets resulting from our strategic business goals.

A.4.2 Sales management

The sales management is based on detailed market and target group analyses both in national and international sales regions. Based on the specified sales strategies for the individual markets, we derive annual, quarterly, and monthly plans for the defined market and target group segments. We make a distinction between sales processes in the areas of key account and mass market, and within these areas, we make a further distinction between activities performed for new customers and existing customers.

Potential and existing customers are represented in a central CRM system that creates the necessary transparency at all business levels. The management of the company has access to all historical data and the agreed annual, quarterly, and monthly targets for each sales segment / region for a continuous TARGET / ACTUAL comparison. This ensures that, in addition to the sales pipeline, the resulting individual sales activities, the bid forecast and the customer sales achieved are monitored and controlled. In key account sales, the CRM system documents sales processes which provide detailed information about the current status of the ongoing sales processes, the planned next steps, and the target data for contractual negotiations / contract conclusions.

Clear signature and approval regulations for bids, contracts, and orders ensure that the specified sales and price strategies of the Company are followed and documented. All sales employees have significant success-dependent income components which ensure the short, medium and long-term goals of the Company.

A.4.3 Development management

The RIB Group consults its national and international major customers when developing technical concepts for new software solutions. Existing construction market trends are analyzed together with the customer, and the resultant specialist or technical software performance requirements are defined. The requirements are implemented into the finished product in accordance with the process models of agile software development method (scrum). The list of these requirements is recorded in a Product Backlog and implemented step-by-step at four-week intervals, known as sprints. A Product Increment is produced at the end of each sprint, ready for testing internally or externally by the customer. The test results provide a basis for reviewing the product, the requirements and the procedure, with these aspects developed further during the next sprint. On this basis, the RIB Group is able to determine the time and resources required for developing new software solutions according to the relevant need. The annual business planning coordinates the software projects that can be implemented using the available development resources and which have the greatest market potential. If not all planned projects can be implemented, we either budget the costs for additional development resources and any additional technical equipment needed and include these in our business planning, or we decide not to authorize the implementation of projects with lower sales potential or postpone their implementation. By taking these measures, the RIB Group ensures that it has adequate technical, financial, and other resources to complete the development.

the RIB Group uses professional electronic planning and monitoring systems in order to monitor and manage the development projects. The rendered development services are recorded for each project on the basis of the man-days required. On this basis, the RIB Group is able to reliably measure the intangible assets during the development phase. The costs incurred by the development areas are posted to the relevant cost centers.

A.5 RESEARCH AND DEVELOPMENT

The number of employees in the research and development centers of the RIB Group increased to an annual average of 395 (previous year: 336).

395 R&D employees

In particular, the additional manpower recruited for the iTWO 4.0 area and the first-time consolidation of companies acquired during the reporting period resulted in an increase in R&D expenditures of 21.5% (total R&D costs capitalized and recognized as expenses) during the reporting period to € 26.0 million (previous year: € 21.4 million).

At € 9.3 million, capitalized development costs were 20.8% higher than in the previous year (€ 7.7 million). At 35.8%, the capitalization ratio (ratio of capitalized R&D costs to total R&D costs) remained with 35.8% at the previous year's level (36.0%). At 20.7%, the R&D ratio (total of R&D costs capitalized and recognized as expenses in relation to revenues) in the reporting segment iTWO is almost at the previous year's value (21.2%) despite the increase in revenues of 20.7% and thus remains at a high level.

The amortization of capitalized development costs amounted to € 6.2 million in the reporting period and was thus 10.7% higher than the previous year's figure (€ 5.6 million).

A.5.1 Further development of iTWO 5D

In 2018, the development focus was on a fundamental extension of the 5D processes for the target group of major clients and cost planners.

In order to allow more efficient billing in projects that are subject to cost sharing regulations and are thus allocated to different cost units (e.g. the federal government, the federal state, municipality), the order and billing methods were significantly extended. In addition to these main areas of focus, a large number of technical extensions to specific sub-processes were developed. These are primarily:

Extensive developments in the iTWO 5D area

- Integrated sending of e-mails in many sub-processes of iTWO 5D
- Integration of iTWO Site Control (mobile applications)
- Automation of the iTWO 5D application “Servers”
- A range of project views for the transparent processing of large projects
- Performance determination based on a range of criteria, such as component, process, position, controlling element, etc.
- Consistent benchmark evaluations
- Functionalities integrated with iTWO 4.0

A.5.2 iTWO civil

In the reporting period, much of the development capacity was again invested in new and future-oriented quantity take-off methods. In addition to traditional methods based on service specifications, a completely new and transparent BIM-based quantity take-off method was developed. All quantities are displayed in a clear and structured manner, while also representing the current ACTUAL state of the project. Selected customers participated in the implementation, which was presented to the interested public at the most important fair for road construction and civil engineering, the INTERGEO 2018.

As part of the BuildingSMART Alliance, the data exchange of axis information was integrated into iTWO civil based on the IFC Alignment data format. This format forms the basis for further format definitions, e.g. IFC Road and IFC Bridge, which play a major role in road construction and civil engineering.

Point cloud processing was enhanced with digitizing functions in order to simplify the construction in the 3D view. To facilitate a quick review of planning alternatives, a dynamic route mapping feature was developed, which allows interactive changes to an axis design and which runs automatic processes up to the predefined quantity take-off and the specific data prepared in BIM.

The data transfer from and to the construction site was enhanced to support machine control systems by other manufacturers. From the point of view of Construction 4.0, in order to ensure a safe and transparent construction process, the construction project execution process must support systems provided by almost all manufacturers.

A.5.3 iTWO 4.0

iTWO 4.0 constitutes a complete web-based end-to-end solution for the digitization of the entire value chain of a construction project which prevents cost and schedule overruns and makes construction more sustainable by interlinking virtual and real construction activities. As with “Industry 4.0”, the “Smart” production of intelligent components (“Smart Factory”), which receive their production specifications directly from 5D models, is to be made possible in construction factories in the future.

During the reporting period, the focus was on the further development and completion of the modules for resource management and the further optimization of usability. In collaboration with the technology partners from the construction industry, new solutions for the planning and control of resources in all phases of construction have been and are being created on the basis of the integrated iTWO 4.0 planning system. This enables a new form of work calculation based on real resources and allows cross-project management of all resources on the timeline according to the “line of balance” method (LOB).

Further development of modules for the iTWO 4.0 platform

Another main area of focus was the further development and finalization of the mobile iTWO applications. In collaboration with the Datengut experts in the area of mobile applications and with our technology partners from the construction industry, we focused on creating a complete mobile solution for all target groups and trades in the construction sector. It is a single application (consisting of a web interface and an app) which enables all its users to access all project-relevant data in an integrated digital process while on the construction site.

Events on the construction sites are documented directly using tablets or smartphones and are immediately available to all project participants for further processing and evaluation. Thanks to offline availability, continuous working with the information from the digital file (plans, photos, defects, construction diary, meeting minutes, tasks, etc.) is possible.

Alongside upgrading iTWO 4.0 into a standardized industry solution, the development of regionally specific content and customizing for important target markets will continue. This will take place through the development of country-specific functions, as well as through the accumulation of market-specific model data (3D content), reports and user interfaces.

A.5.4 MTWO

MTWO combines the RIB Group‘s iTWO 4.0 technology with Microsoft‘s AI-based BoT, Azure, Luis, IoT and mixed reality solutions, thus being the first vertical cloud in the construction and real estate industries. For this purpose, the RIB and Microsoft R&D teams held regular hackathons during the reporting period. By merging these technologies, new models are being developed for construction site digitization based on the latest AI solutions.

MTWO - the first vertical cloud for the construction and real estate industries

In this context, iTWO 4.0 was enhanced and expanded specifically for the purpose of offering the additional features provided by Microsoft Azure. For example, instead of the classic SQL server, SQL services provided by Azure are used. The integration of Azure Active Directory - the cloud-based variant of Microsoft‘s Active Directory service - gives administrators the freedom to decide what information stays in the cloud, who can manage or use the information, and which services or applications can access the information. This makes administration in the cloud easy for MTWO users. Following the integration of MS Power BI, the state-of-the-art evaluation tools for big data analyses are now also available.

As part of these new developments, special AI-based functions based on iTWO 4.0 technology were derived and further developed. First versions of these integrated and shared technologies are already available in MTWO.

B. EARNINGS, FINANCIAL AND ASSETS POSITION OF THE RIB GROUP

B.1 REVENUE SITUATION

Total revenues increased in the reporting period by 26.4% to € 136.9 million (previous year: € 108.3 million), broken down by region as follows:

Strong growth both domestically and abroad

- **Domestic sales:** sales in Germany rose by 29.3% to € 67.6 million (previous year: € 52.3 million).
- **Foreign sales:** following strong growth in the previous year, foreign sales revenue once again increased by 23.6% to € 69.2 million (previous year: € 56.0 million). In the reporting period, the share of sales generated outside Germany in total sales was 50.5% (previous year: 51.7%).

Software license revenue increased by 10.7% to € 37.2 million (previous year: € 33.6 million). In the key account area, software license revenue generated with iTWO, amounting to € 8.5 million, was significantly lower than in the previous year (€ 13.4 million). The decline is mainly attributable to the fact that no new Phase III contract could be completed in 2018, whereas in 2017, for the first time ever, three Phase III contracts, generating software license revenue of € 8.3 million, were secured in a single financial year. The decline in Phase III contracts was only partially offset by a strong increase in software license revenue from Phase II contracts, which rose to € 8.5 million (previous year: € 5.1 million). In the mass market area, software license revenue generated with iTWO, which had posted significant growth in previous years, amounted to € 13.3 million and was thus slightly above the previous year's level (€ 12.7 million). This is largely due to the fact that most of the business partners of the existing major customers of iTWO (e.g. the contractors of Deutsche Bahn) have switched from ARRIBA to iTWO and are now able to deliver the required model-based project data in the iTWO format. Software license revenues from other product lines increased significantly by 105.3% to € 15.4 million (previous year: € 7.5 million), which was mainly due to the expansion of the scope of consolidation completed in the reporting period.

SaaS / Cloud sales up 33.1%

Sales of Software as a Service / Cloud increased by 33.1% to € 17.3 million (previous year: € 13.0 million). The growth of € 4.3 million was mainly attributable to the expansion of the scope of consolidation, which resulted in approx. € 4.0 million.

Maintenance revenue, which is based on recurring annual contracts, grew by 16.9% to € 40.1 million (previous year: € 34.3 million). This is mainly due to changes in the scope of consolidation (€ 4.1 million). The remaining increase results from organic growth.

Consulting revenues rise to € 32.9 million (+65.3%)

Consulting revenue increased by 65.3% to € 32.9 million (previous year: € 19.9 million). The increase of € 13.0 million is attributable to a significant rise in consulting revenue in the US (€ +3.5 million) and in the area of IT projects for the design and implementation of computer-controlled planning and production processes in precast plants (Smart Factory) (€ +2.7 million). Furthermore, the increase of approximately € 5.8 million results from consulting services provided by the companies which were fully consolidated for the first time in the reporting period.

E-commerce revenue increased by 24.0% from € 7.5 million to € 9.3 million.

Cost of production amounted to € 58.1 million, and was thus 35.1% higher than in the previous year (€ 43.0 million). Cost of production mainly comprises the expenses for purchased goods, personnel expenses and cost of materials of the Support and Consulting areas, as well as amortization of internally generated software and procured technology.

Gross profit increased by € 13.4 million, or 20.5% to € 78.7 million (previous year: € 65.3 million). **Gross margin** fell by 2.8 percentage points to 57.5% (previous year: 60.3%). The main reason for this is the change in the revenue mix from software and consulting revenue. Software revenue (licenses, maintenance, SaaS/Cloud) accounted for 69.1% of total revenue in the reporting period (previous year: 74.8%), while consulting revenue accounted for 24.0% (previous year: 18.4%). Despite a sharp increase to 26.4% (previous year: 20.1%), consulting margins remain significantly lower than those in software, resulting in an overall lower gross margin in the reporting period.

At 72.3%, the gross margin in our high-margin business areas License/Software and Software as a Service/Cloud was at the previous year's level (74.7%).

The gross margin in the consulting area amounted to 26.4% and was thus 6.3 percentage points up on the previous year (20.1%). This is mainly attributable to the fact that in the reporting period all consolidated Group companies taken together were able to account for a higher average number of service days per consultant than in the previous year. This is partly the result of higher project volume in line with sales growth and partly due to projects from the financial year 2017 being postponed until the reporting period.

The gross margin in the xTWO (E-commerce) area continued to develop positively and, at 17.5%, was significantly higher than in the previous year (11.4%).

Sales and marketing expenses increased by 20.7% to € 26.2 million (previous year: € 21.7 million). Previous year's expenses included € 1.9 million resulting from the write-down of receivables from a major British customer. The receivables had to be written down because the customer unexpectedly filed for insolvency in January 2018. Adjusted for this item, sales and marketing expenses increased by 32.3% compared to the previous year, which corresponds to the increase in sales revenue and largely results from the expansion of the scope of consolidation.

Due to the significantly increased volume of business activity, **administrative expenses** increased by 42.1% to € 15.2 million (previous year: € 10.7 million). Of this amount, € 2.4 million is attributable to the companies acquired during the reporting period.

R&D expenditures increased by 21.9% to € 16.7 million (previous year: € 13.7 million). When capitalized expenditures for internally generated software are taken into account, the R&D expenditures of € 26.0 million (previous year: € 21.4 million) are 21.5% higher than in the previous year. This increase is mainly due to the scheduled expansion of personnel development capacity in the iTWO 4.0 area and the consolidation of companies acquired during the reporting period.

Other operating income of € 8.0 million is € 4.8 million lower than in the previous year (€ 12.8 million). The decline is mainly due to the fact that the previous year's figure included income from the sale of software licenses to the joint venture YTWO in the amount of € 7.8 million.

Conversely, income from the remeasurement of performance obligations to the former joint venture YTWO Ltd. amounting to € 2.0 million had a positive effect. In addition to the sale of the contractually agreed number of licenses, under certain conditions, the RIB Group had undertaken to supply the joint venture YTWO Ltd. with further licenses free of charge. When the transaction was initially recognized, the total number of licenses to be delivered was estimated using the expected value method, with the performance obligation measured in this way recognized under current liabilities as deferred income. On the basis of newly gained measurement-related findings, the estimate was updated with no essential changes to the methodology used. Accordingly, deferred income had to be reduced, resulting in earnings of € 2.0 million.

In addition, the item includes income from currency differences in the amount of € 1.9 million (previous year: € 1.7 million) and income from the leasing of investment property amounting to € 1.0 million (previous year: € 0.8 million).

Other operating expenses amounted to € 4.3 million and were thus significantly higher than in the previous year (€ 2.4 million). This increase results, in particular, from the measurement of purchase price liabilities from company acquisitions after recognition, which amounted to € 1.2 million.

At € 0.3 million, the **balance of foreign exchange gains and losses** was slightly higher than in the previous year (€ -0.1 million). It includes foreign exchange gains of € 1.9 million (previous year: € 1.7 million) and foreign exchange losses of € -1.6 million (previous year: € -1.8 million). As in the previous year, foreign exchange gains and losses result in particular from the measurement of cash and cash equivalents held by the Group companies in currencies other than their respective local currency. Currencies with the most significant impact in this regard are, in particular, the euro, the US dollar and the Hong Kong dollar.

Financial income of € 9.4 million (previous year: € 3.7 million) mainly includes income of € 8.6 million (previous year: € 3.5 million) resulting from the remeasurement of interests previously accounted for using the equity method, which were accounted for at fair value in the context of successive company combinations. Of this amount, € 8.5 million is attributable to the former joint venture, YTWO Ltd.

Operating EBITDA margin of 28.3%

Operating EBITDA of € 38.8 million was 2.8% lower than in the previous year (€ 39.9 million). The operating EBITDA margin reached 28.3% (previous year: 36.8%). This decline results from several factors that are deliberately accepted as part of our growth strategy. The operating EBITDA margin of the reporting segment iTWO amounted to 34.0% and thus failed to reach the previous year's level of 40.6%. As explained above, this mainly results from changes in the revenue mix. In addition, this development results from the expansion of the partner network (MSP) in the reporting segment MTWO. In doing so, start-up costs of approx. € 2.5 million were incurred. The average EBITDA margin of the MSP companies is currently only around 10%. The RIB Group's medium-term target is to develop the EBITDA margin of the MSP companies (MTWO integration phase) to an EBITDA margin of more than 20%.

The **consolidated net profit** of € 21.9 million was 19.0% up on the previous year (€ 18.4 million). When the components of the Group's consolidated statement of comprehensive income not recognized as expenses or income are included, the resulting total consolidated earnings amount to € 27.8 million (previous year: € 3.6 million). The considerable increase compared to the previous year results from the translation of the consolidated financial statements of foreign subsidiaries and joint ventures into the functional currency of the Group. We refer to our relevant explanations regarding the financial position of the RIB Group set out in **Section B.3** below.

Development of reporting segments

Reporting segment iTWO

Total revenues generated with iTWO increase by 20.5% to € 121.5 million.

iTWO revenue rises to € 121.5 million (+20.5%)

In the high-margin reporting segment iTWO, revenues in the reporting period increased by € 20.7 million (+ 20.5%) to € 121.5 million (previous year: € 100.8 million). These include revenues of € 7.1 million generated by companies consolidated in the reporting segment for the first time. Although no new Phase III contract could be completed in 2018, software license revenue (including maintenance) increased by 13.1% to € 76.8 million (previous year: € 67.9 million). The previous year's figure included high key account software license revenue from three Phase III contracts in the amount of € 8.3 million.

SaaS/Cloud revenues increased by 3.1% to € 13.4 million (previous year: € 13.0 million).

Consulting revenue increased by 57.8% to € 31.4 million (previous year: € 19.9 million). The increase of € 11.5 million is attributable to a significant rise in consulting revenue in the US (€ +3.5 million) and in the area of IT projects for the design and implementation of computer-controlled planning and production processes in precast plants (Smart Factory) (€ +2.7 million), as well as approx. € 4.4 million from consulting income generated by companies consolidated for the first time in the reporting period.

The gross margin of 61.6% was again at a high level (previous year: 63.9%). The gross margin in the License/Software and SaaS/Cloud area amounted to 73.9% (previous year: 74.7%), while in the Consulting area, it was 26.3% (previous year: 20.1%).

License / Software & SaaS / Cloud gross margin at 73.9%

Costs of research and development increased by € 2.2 million to € 15.9 million (previous year: € 13.7 million), sales and marketing expenses by € 1.9 million to € 22.5 million (previous year: € 20.6 million), while administrative expenses increased by € 2.6 million to € 12.4 million (previous year: € 9.8 million), which was mainly due to manpower recruitment and first-time consolidation.

The balance of other operating income and expenses decreased from € 10.4 million to € 3.2 million. In the previous year, other operating income included software license revenue of € 7.8 million, which resulted from the sale of the iTWO 4.0 licenses to the joint venture YTWO.

The operating EBITDA in the reporting segment iTWO of € 41.3 million was at the previous year's level (€ 40.9 million). At 34.0%, the operating EBITDA margin did not reach the previous year's level of 40.6%, which mainly results from the previously explained changes in the revenue mix.

Reporting segment YTWO
During the reporting period, the YTWO (SCM) business area developed according to plan. No transaction fees had yet been generated with the YTWO platform. Owing to the investments in the development of the business area, a negative investment result of € -3.6 million had to be recognized (previous year: € -3.7 million), which remained below the budgeted loss of up to € -6.0 million.

In the xTWO (E-commerce) area, sales revenue rose by € 1.8 million to around € 9.3 million (previous year: € 7.5 million). Operating EBITDA of € -0.3 million (previous year: € -1.0 million) was within the planned range.

Reporting segment MTWO
€ 5.8 million of the revenues in the new reporting segment MTWO resulted from companies acquired in the reporting period and it is thus essentially attributable to the expansion of the scope of consolidation. Additional sales revenue of € 0.2 million were reported, which are attributable to SaaS/Cloud sales from the first customer contracts concluded in the reporting period for the use of iTWO 4.0 via the MTWO platform, which are settled monthly. The total volume of the SaaS/Cloud revenues from these deals, totaled over a three-year period, each correspond to a larger Phase II contract.

Expenses of € 8.4 million include cost of production of € 3.5 million as well as sales, marketing and administrative expenses totaling € 2.1 million, which are directly attributable to companies acquired during the reporting period. Moreover, as budgeted, start-up costs for the development of MTWO were incurred in the amount of around € 2.5 million.

Accordingly, operating EBITDA in the reporting segment was € -2.3 million as planned.

B.2 FINANCIAL POSITION

Capital structure

Equity ratio of 83.6% for the RIB Group

The capital structure of the RIB Group is still defined by a very high equity capital share of 83.6% of the balance sheet total (previous year: 80.5%). During the reporting period, equity increased by 51.4% from € 294.5 million to € 445.8 million.

This increase mainly resulted from the capital increase carried out at RIB Software SE in the reporting period, which amounted to € 128.2 million.

The changes in the asset structure compared to the previous year were mainly due to the capital increase and the company acquisitions made. As of the balance sheet date, non-current assets amounted to € 246.0 million (previous year: € 198.6 million) and thus constituted 46.1% (previous year: 54.3%) of the balance sheet total. The investments made in the reporting period were fully self-financed. As of the balance sheet date, current assets amounted to € 287.5 million (previous year: € 167.4 million) and thus constituted 53.9% (previous year: 45.7%) of the balance sheet total.

Cash flow from operating activities

Cash flow from operating activities amounted to € 30.6 million (previous year: € 22.8 million).

What had a positive effect on the cash flow was the fact that, unlike previous year, the reporting period was not as affected by non-periodic income tax payments. Income tax payments totaled € 9.8 million in the reporting year and were thus € 2.6 million down on the previous year (previous year: € 12.4 million). Adjusted for interest and income tax payments, cash flow from operating activities amounted to € 40.0 million and was thus 13.3% up on the previous year (previous year: € 35.3 million).

Cash flow from investing activities, excluding cash inflows and outflows from short-term securities and financial investments, amounted to € -30.8 million (previous year: € -14.0 million).

The main reason for the significant increase on the previous year in cash outflows from investing activities are net cash outflows (i.e. cash outflows less acquired cash and cash equivalents) for the acquisition of consolidated companies, which amounted to € 20.0 million (previous year: € 4.3 million). These net cash outflows are mainly attributable to the acquisition of the SaaSplaza Group (€ 12.6 million), the IMS Group (€ 5.5 million) and the A2K Group (€ 4.5 million). Cash outflows for the increase in shares in YTWO Ltd. from 50% to 100% amounted to € 42.8 million. From the Group‘s point of view, these cash outflows are compensated by the addition of all cash and cash equivalents of YTWO Ltd. in the amount of € 48.1 million, which, on balance, leads to the net cash outflows for the acquisition of consolidated companies presented on the cash flow statement being reduced by € 5.3 million.

In addition, the item contains cash outflows for investments in internally generated software in the amount of € 9.8 million (previous year: € 7.8 million). These are attributable, in particular, to the further development of the iTWO 5D and iTWO 4.0 products.

Cash flow from financing activities

Cash flow from financing activities amounted to € 101.8 million (previous year: € -1.3 million).

During the reporting period, a capital increase was carried out at RIB Software SE, resulting in the receipt of gross proceeds of € 131.2 million. After deducting the costs of the capital increase (€ 4.3 million), the transaction resulted in an inflow of net offering proceeds of € 126.9 million for the RIB Group.

The share buyback program launched in the financial year 2018 resulted in cash outflows of € 14.2 million in the reporting period. In addition, treasury shares amounting to a total of € 3.7 million had been acquired by the balance sheet date, whose purchase price was paid shortly after the balance sheet date. Since no payment had been made as of the balance sheet date, the acquisition of these shares did not affect the cash flow of the reporting period.

Another significant element of this item are the dividend payments to the shareholders of RIB Software SE, which amounted to € 9.1 million and were thus € 1.9 million higher than in the previous year (€ 7.2 million).

Cash and cash equivalents at the end of the period

Cash and cash equivalents at the end of the reporting period amounted to € 238.1 million (previous year: € 134.8 million). It includes cash and cash equivalents of € 205.2 million (previous year: € 100.5 million) and time deposits with banks in the amount of € 32.9 million (previous year: € 34.3 million) made as part of short-term cash management.

Cash and cash equivalents of € 238.1 million as of 31.12.2018

With the exception of one bank loan, which was valued at € 5.2 million as of the balance sheet date (previous year: € 5.6 million), no credit lines were used during the reporting period. The RIB Group was able to service its payment obligations at all times throughout the reporting period.

With regard to the presentation of the Group's financial management principles and objectives, we refer to the Notes to the Consolidated Financial Statement, **Note (43)**.

B.3 ASSET SITUATION

As of the balance sheet date, the balance sheet total amounted to € 533.5 million, which represents a considerable increase of € 167.5 million compared to the previous year (previous year: € 366.0 million).

In the reporting period, positive translation differences of € 6.0 million (previous year: negative differences of € -15.0 million) had to be recognized on the consolidated statement of comprehensive income, which resulted from the translation of the assets and liabilities of the consolidated foreign companies from the local currencies into the Group's functional currency. This was due, in particular, to the development of the local currencies in relation to the euro of the subsidiaries in Hong Kong and the USA as well as of the former joint venture, YTWO Ltd. Because the euro depreciated in relation to these currencies during the reporting period, the value of the net assets of these companies in euro at the balance sheet date of 31.12.2018 was higher than at the beginning of the reporting period. On the liabilities side of the consolidated balance sheet, the currency translation reserve recognized in consolidated equity increased correspondingly from € -3.1 million to € 3.0 million.

The carrying amounts of goodwill totaled € 103.3 million and were significantly higher than in the previous year (€ 85.0 million), thus amounting to 19.4% (previous year: 23.2%) of the balance sheet total. The increase is attributable to the intensified acquisition activity of the RIB Group during the reporting period.

As a result, the carrying amount of other intangible assets also rose sharply compared to the previous year and amounted to € 115.5 million as of the balance sheet date (previous year: € 54.7 million). This item thus makes up 21.6% (previous year: 14.9%) of the balance sheet total. Due to company acquisitions, intangible assets totaling € 63.2 million were recognized in the reporting period (previous year: € 6.6 million).

The most significant individual item here were reacquired software rights as part the acquisition of YTWO Ltd., which amounted to € 25.5 million. In the financial years 2016 and 2017, the RIB Group had sold the software licenses for iTWO 4.0 to the former joint venture for a total purchase price of € 42.6 million, thus generating income totaling € 15.5 million (after taking into account consolidation measures) in its consolidated financial statements for 2016 and 2017. Since the economic and contractual terms of this sale of software licenses were associated with the RIB Group's interest in the joint venture, in previous years, this income was not reported under sales revenue generated with customers, but was instead recognized as other operating income. As part of the full consolidation of the former joint venture, which was performed for the first time in the reporting period, in its consolidated financial statements, the RIB Group had to recognize the software rights as "reacquired rights" according to the definition given in IFRS 3.29. As a result, the reacquired software rights are subject to scheduled amortization over the remaining useful life of the technology.

Moreover, additions in the reporting period are attributable, in particular, to customer relationships that were recognized as part of the acquisition of the A2K Group (€ 16.8 million) and the SaaSplaza Group (€ 11.3 million).

Property, plant and equipment amounting to € 19.4 million (previous year: € 17.3 million) includes, in particular, the commercial property of RIB Software SE at its headquarters in Stuttgart, the EOC II property located in China and used by the Group's local development company, including the part used by the Group itself, a property acquired in the previous year in Atlanta, USA, as well as a commercial property in Madrid, Spain, which was also acquired in the previous year and which is used by the subsidiary, RIB Spain.

Property held as a financial investment relates to EOC I, which is located in the direct vicinity of EOC II, as well as the part of the property in Atlanta, USA, which is leased to third parties.

As of the last balance sheet date, the carrying amounts of interests accounted for using the equity method included only the shares in the former joint venture YTWO Ltd. (€ 31,2 million). As part of the accounting for the company acquisition completed in the reporting period, these shares were fully derecognized.

Trade receivables increased sharply and amounted to € 37.8 million as of the balance sheet date (previous year: € 24.1 million). The sharp increase is attributable to the fact that the item includes carrying amounts of € 12.0 million as of the balance sheet date from companies acquired in 2018.

Other current financial assets mainly consist of time deposits with banks, made for the purposes of short-term cash management (€ 32.9 million; previous year: € 34.3 million). We refer to our explanations on cash and cash equivalents in **Section B.2** above.

Other current provisions amounting to € 1.0 million (previous year: € 1.8 million) included provisions for legal disputes in the amount of € 0.9 million in the previous year. The largest single item contained here was connected with a corporate acquisition which we considered during the reporting period but which ultimately did not take place. In November 2017, the potential seller informed us that, in its opinion, we had terminated the negotiations in an unlawful manner. On this basis, the seller asserted claims for damages against RIB Software SE, which we rejected as unfounded following a legal review. Nevertheless, we had anticipated that RIB Software SE would not emerge from the case without incurring financial costs, and for this reason we had formed a provision, which was completely released during the reporting period. Now that the target company has been bought by a competitor, we expect no further claims from the seller. Conversely, we are currently carrying out a legal review as to whether we can assert claims for damages against the sellers, as we incurred costs of around € 0.3 million in connection with the failed purchase of the shares.

The sharp decline in deferred income to € 12.5 million (previous year: € 19.7 million) is mainly the result of the derecognition of the obligation to provide free software licenses to YTWO Ltd., in the amount of € 6.0 million, which had previously been recognized as deferred income. The deferred item had to be derecognized as part of the accounting for the acquisition of the company carried out in the reporting period. The derecognition was recorded as a reduction in the purchase consideration and therefore had no effect on the consolidated result.

B.4 NON-FINANCIAL PERFORMANCE INDICATORS

For us, being successful in business means ensuring and maintaining a close and cooperative working relationship between our employees and customers. Only in this way are our employees able to develop and successfully distribute marketable solutions, and implement these for our customers. This is how we generate added value for our customers, our employees and our shareholders, thus securing the sustainable economic success of the RIB Group.

The majority of our employees are highly qualified university graduates with training profiles in line with our business activities, such as engineers, IT specialists and business management experts. Because of our tremendous innovative, entrepreneurial and financial strength, we are able to offer them secure and interesting long-term employment positions. We offer flexible working hours, variable target-based remuneration structures and in-house continuous training programs. The available courses vary from one region to the next, and are aligned to specific requirements. For example, through our subsidiary, RIB Limited, we are able to offer our ever-increasing number of international employees wide-ranging educational and training programs in a Center of Excellence dedicated to this purpose.

Our customer base includes all partners involved in construction projects, from investors to architecture studios and engineering firms right across to building contractors. Thanks to iTWO 4.0, more and more large companies from the stationary industry are becoming our customers, provided that they are planning the construction of new production sites or the maintenance of their existing plants themselves and that they monitor the construction work. We offer our customers target-group-focussed solutions based on a fully integrated, model-based technology platform. Our software is designed to simplify the collaboration between the various project participants, increase the efficiency of project management, while minimizing the risk of cost overruns and delays, and enhancing the economic efficiency and quality of the construction work. The highly professional and technical quality of our services has enabled us to establish long-term and stable customer relationships, and to continually grow our customer base, both nationally and internationally.

In order to secure our innovative strength in the long term, we not only work closely with customers, but also participate in various funded research projects and maintain close contact with universities in Germany and abroad.

C. EARNINGS, FINANCIAL AND ASSETS POSITION OF RIB SOFTWARE SE

C.1 REVENUE SITUATION

Revenues of € 55.3 million at RIB Software SE

Revenue amounted to € 55.3 million, and was thus 1.8% up on the previous year (€ 54.3 million). The vast majority of this amount, € 44.9 million or 81.2%, is attributable to our main product, iTWO, which corresponds to an increase in sales of 11.1% (previous year: € 40.4 million). As in previous years, revenue generated with the other product groups amounting to € 9.2 million (previous year: € 9.9 million) declined slightly, which was mainly due to the fact that the further development of the former main product, ARRIBA, had been discontinued.

Software revenue (software licenses and software as a service/cloud) increased by 3.0% to € 24.3 million (previous year: € 23.6 million). This modest increase is mainly due to opposing sales development of iTWO in the key account and mass market areas. While software revenue generated with iTWO in the mass market area increased by around 14% to € 13.5 million (previous year: € 11.8 million), the key account area posted a decrease of around 10% to € 6.9 million (previous year: € 7.7 million). This decline is mainly attributable to the fact that the previous year's figure included a Phase III contract with a major customer in the DACH region with software revenue of around € 4.2 million. By contrast, the key account area was positively impacted by a strong increase in software license revenue from Phase II contracts of 97.1% to € 6.9 million (previous year: € 3.5 million). This partially compensated for the absence of a Phase III contract.

SaaS / Cloud revenue increased by 7.7% to € 2.8 million (previous year: € 2.6 million).

Maintenance revenue increased by 11.4% to € 23.4 million (previous year: € 21.0 million). This growth is higher than in previous years. It corresponds to the continuous growth of software revenue in recent years and is also associated with the Phase III contract completed in the previous year.

Consulting revenue increased over-proportionally by 14.0% to € 6.5 million (previous year: € 5.7 million). This is mainly due to the Phase II and Phase III iTWO 4.0 contracts completed in the last two years. The iTWO 4.0 software is much more configurable than iTWO 5D due to its high flexibility in terms of design, and therefore regularly generates a slightly higher consulting revenue during its implementation.

This sales revenue included licence fees from affiliated companies in the amount of € 0.4 million (previous year: € 3.2 million). All of this revenue relates to RIB Ltd., Hong Kong, which operates the international iTWO software business based on a licence agreement with RIB Software SE.

Other operating income of € 5.2 million is € 2.8 million higher than in the previous year (€ 2.4 million). The increase is mainly due to higher income from currency translation in the amount of € 1.9 million (previous year: € 0 million) and the release of other provisions in the amount of € 0.7 million (previous year: € 0 million). As in the previous year, this item essentially includes expenses reimbursed by affiliated companies in the amount of € 2.2 million (previous year: € 2.0 million).

Compared to the previous year, cost of materials increased by 18.4% to € 18.7 million (previous year: € 15.8 million).

The item includes cost of goods sold in the amount of € 2.6 million (previous year: € 1.5 million), which mainly relates to expenses for external software purchased from third parties and from affiliated companies. The increase is particularly attributable to the purchase of products of the subsidiaries, RIB Cosinus GmbH (€ 0.6 million; previous year: € 0.3 million) and Datengut (€ 0.5 million; previous year: € 0.0 million).

In addition, cost of materials includes expenses for purchased services, which increased by 12.6% to € 16.1 million (previous year: € 14.3 million). This includes, in particular, expenses for software development services provided by subsidiaries in the amount of € 12.2 million (previous year: € 12.3 million).

Personnel expenses in the reporting period amounted to at € 2.8 million and were thus slightly down on the previous year (€ 3.2 million). Personnel expenses of approx. € 0.4 million (previous year: € 0.5 million) result from the granting of share options to the Managing Directors and employees of RIB Software SE as part of stock option plans.

The previous year was the last year in which amortization of intangible assets included € 1.4 million for the scheduled amortization of goodwill from the merger of RIB Bausoftware GmbH into RIB Software SE, which was carried out in the financial year 2003. As a result of amortization, the item decreased by € 1.4 million to € 0.3 million during the reporting period.

Other operating expenses increased by approx. € 4.0 million to € 25.9 million (previous year: € 21.9 million). The increase is mainly attributable to bank commissions and cost of legal advice, totaling € 4.3 million, which were incurred in connection with the cash capital increase carried out in the reporting period.

In addition, other operating expenses mainly include sales commissions of € 16.2 million, which were paid to the subsidiaries responsible for sales in the German-speaking market in the reporting period (previous year: € 15.3 million).

At € 7.5 million, the financial result is significantly higher than in the previous year (€ 3.8 million). The main reason for the increase is higher dividend income from subsidiaries in the reporting period amounting to € 7.1 million (previous year: € 5.0 million). In addition, the previous year's financial result was affected by impairment losses on the shares in the subsidiary xTWO GmbH in the amount of € 1.1 million.

The operating EBITDA in the reporting period amounts to € 15.7 million and is thus 9.2% down on the previous year (€ 17.3 million). In this context, reference is made to the transition from earnings after taxes to operating EBITDA explained in **Section A.2.3**.

The net profit for the year amounted to € 16.2 million (previous year: € 12.8 million).

Taking into account the profit carry-forward from the previous year (€ 6.2 million) as well as the income from the sale of treasury shares (€ 3.9 million) and the expenses from the acquisition of treasury shares (€ 16.3 million), the balance sheet profit as of the balance sheet date amounted to € 10.0 million (previous year: € 15.3 million).

C.2 FINANCIAL AND ASSET SITUATION

Capital structure

Equity ratio of 95.7% at RIB Software SE

The capital structure of RIB Software SE continues to be characterized by a very high equity ratio of 95.7% of the balance sheet total (previous year: 95.0%). The company is thus almost completely self-financed.

As of the balance sheet date of 31 December 2018, the balance sheet total amounted to € 400.2 million and was thus € 138.0 million higher than in the previous year (€ 262.2 million). On the asset side, the increase essentially results from:

a) additions to financial assets amounting to € 30.4 million. The additions mainly relate to a capital increase at RIB Ltd. in the amount of € 17.5 million, the acquisition of 51% of the shares in Datengut (€ 4.8 million) and the acquisition of 80% of the shares in IMS (€ 8.1 million).

b) increase in receivables from affiliated companies of € 46.5 million, which is mainly due to a loan of € 42.4 million granted to RIB Ltd. for interim financing of the acquisition of 50% of the shares in YTWO Ltd. The loan had been fully repaid by the time the annual/consolidated financial statements for the reporting period were prepared.

c) increase in cash and cash equivalents of € 57.2 million. The increase is mainly due to the capital increase carried out in the reporting period.

The increase on the capital side mainly results from the cash capital increase carried out at RIB Software SE during the reporting period.

Non-current assets amounted to € 202.4 million as of the balance sheet date (previous year: € 172.0 million) and accounted for 50.6% of the balance sheet total (previous year: 65.6%).

Investments

Cash flow from investing activities amounted to € -69.8 million (previous year: € -10.5 million). Of this amount, € -42.4 million resulted from the granting of a short-term loan to the subsidiary RIB Ltd. The loan was granted for interim financing of the acquisition of shares in the former joint venture YTWO Ltd.

In addition, cash flow from investing activities includes cash outflows for investments in financial assets of € 28.2 million (previous year: € 0.2 million). This relates, in particular, to deposits made as part of a capital increase at the subsidiary RIB Ltd. (€ 17.5 million) and cash outflows for the acquisition of shares in the IMS Group (€ 8.1 million) and in Datengut (€ 2.6 million).

Liquidity

At € 11.9 million, cash flow from operating activities was slightly higher than in the previous year (€ 11.3 million).

The liquidity situation was significantly improved by cash flow from financing activities in the amount of € 113.8 million (previous year: € 2.2 million). The item includes net offering proceeds of € 126.9 million from the capital increase carried out during the reporting period.

In addition, RIB Software SE received proceeds from the sale of treasury shares to subsidiaries in the amount of € 10.5 million (previous year: € 4.0 million). The treasury shares were used by the subsidiaries to pay the purchase price in the context of company acquisitions.

Disbursements in the area of financing were made, in particular, for the acquisition of treasury shares (€ 14.2 million) and for dividend payments to the shareholders (€ 9.1 million; previous year: € 7.2 million).

Cash and cash equivalents

Cash and cash equivalents as of the balance sheet date amounted to € 134.0 million (previous year: € 76.8 million). The item contains the cash funds amounting to € 103.2 million (previous year: € 45.4 million), comprising € 98.2 million in cash in hand and cash at bank (previous year: € 40.4 million) and € 5.0 million in cash equivalents (previous year: € 5.0 million). Cash and cash equivalents also included liquid funds invested for the purposes of short-term cash management in the amount of € 30.8 million (previous year: € 31.4 million). The latter are time deposits with banks.

With the exception of one bank loan, which was valued at € 5.2 million as of the balance sheet date (previous year: € 5.6 million), no credit lines were used during the reporting period. RIB Software SE was able to service its payment obligations at all times throughout the reporting period.

Other information on net assets

Current assets increased by € 107.3 million to € 196.9 million (previous year: € 89.6 million), firstly, due to the increase in receivables from affiliated companies of € 46.5 million to € 48.3 million (previous year: € 1.8 million), which mainly resulted from the loan granted to RIB Limited, and secondly, due to the increase in liquid funds of around € 57.2 million to € 129.0 million (previous year: € 71.8 million).

The Company has hidden reserves in the form of non-capitalized internally generated software.

The decrease in other provisions to € 1.5 million (previous year: € 2.2 million) is mainly attributable to the release of a provision for legal disputes recognized in the previous year in relation to a company acquisition which did not eventually take place. The provision had to be released once the reasons for its created had ceased to apply. For further details, please refer to our explanations regarding the net assets of the RIB Group in **Section B.3** above.

As of the balance sheet date of 31 December 2018, liabilities increased sharply to € 11.6 million (previous year: € 7.0 million). The increase is related to the share buyback program launched in the financial year 2018. As part of the program, RIB Software SE had acquired treasury shares for a total of € 17.9 million by the balance sheet date. Of this amount, treasury shares worth € 3.7 million were paid for shortly after the balance sheet date. Therefore, as of the balance sheet date, the purchase price liability is reported under other liabilities.

D. GENERAL STATEMENT ON THE BUSINESS PERFORMANCE AND POSITION OF THE RIB GROUP AND RIB SOFTWARE SE

Strong market position through innovative product portfolio

Based on the high level of innovative, economic, and financial strength of RIB Software SE and the companies of the RIB Group, the Management of the RIB Group assume that the companies are very well positioned in the market thanks to their range of solutions and services. With iTWO, the RIB Group was again able to clearly strengthen its market position in Germany and abroad. In addition to the further successful development of iTWO sales, the Management of the RIB Group also take a positive view on the favorable market reactions to our new SaaS / Cloud product generation iTWO 4.0 and the platforms YTWO (SCM) and MTWO (SaaS), which are based on iTWO 4.0 technology and integrated partner solutions. Thanks to these products, we have an innovative and modern solution package that fully satisfies the needs arising from the ever more important digitization and industrialization of the construction industry. Thanks to the continuing high level of cash and cash equivalents, the RIB Group has the necessary financial reserves to finance its further growth.

E. TAKEOVER-RELEVANT INFORMATION AND EXPLANATORY REPORT

E.1 INFORMATION ABOUT THE CAPITAL OF THE RIB SE

The share capital of RIB Software SE amounts to € 51,741,410.00 and is divided into 51,741,410 ordinary shares with a par value of € 1.00 each. The shares are registered shares. Each share grants one vote and has the same rights and obligations. The shareholders' right to the securitization of their shares and to any dividend warrants and renewal coupons is excluded.

As of the balance sheet date, the company had civil law ownership of 2,478,846 treasury shares. Pursuant to Section 71b of the German Stock Corporation Act (AktG), treasury shares do not entitle RIB Software SE to any voting rights. The exercise of voting rights from the shares concerned is precluded by law in the cases where Section 136 of the German Stock Corporation Act (AktG) applies. Otherwise, there are no restrictions regarding the voting rights or the transfer of shares. There are no shares with special rights that confer controlling powers or voting right controls for employees who hold interests in the capital. Employees who hold shares in RIB Software SE, like other shareholders, exercise their control rights directly in accordance with statutory provisions and the Articles of Association.

As far as we are aware, based on the notifications we have received pursuant to the German Securities Trading Act (WpHG), as of the balance sheet date, only the Chairperson of the Administrative Board of RIB Software SE, Mr Thomas Wolf, Hong Kong, held direct or indirect interests in the capital share RIB Software SE in excess of 10% of the voting rights. Interests notified in accordance with Section 33 (1) or (2) of the German Securities Trading Act (WpHG) are listed in **Section E.5.** "Notification under the German Securities Trading Act" of the Notes to the Consolidated Financial Statements of RIB Software SE in accordance with Section 160 (1) no. 8 of the German Stock Corporation Act (AktG) .

The Company has a one-tier corporate governance structure as defined in Art. 38 lit. b) of the SE Regulation. The members of the Administrative Board are appointed by the Annual General Meeting in accordance with Art. 43 (3) of the SE Regulation, Section 6 (3) of the Articles of Association for a maximum term of six years. Reappointments are allowed. On the basis of Article 43 (4) of the SE Regulation, Section 40 (1) of the German Act Implementing the SE Regulation ("SEAG"; hereinafter: "Implementing Act"), Section 12 of the Articles of Association, the Administrative Board is responsible for appointing one or more Managing Directors. Pursuant to Art. 9 (1) of the SE Regulation, Section 40 (5) sentence 1 of the Implementing Act in conjunction with Section 12 (5) of the Articles of Association of RIB SE, Managing Directors may only be dismissed for good cause as defined in Section 84 (3) of the German Stock Corporation Act (AktG) or when their employment contract ends, whereby each case requires a resolution of the Administrative Board adopted with a three-quarter majority of the votes cast.

In accordance with Art. 9 (1) of the SE Regulation, Section 51 of the Implementing Act, Section 12 (6) of the Articles of Association and Section 179 (1) of the German Stock Corporation Act (AktG), amendments to the Articles of Association are resolved by the Annual General Meeting by a majority of at least three quarters of the share capital represented when the resolution is adopted.

Pursuant to the resolution of the Annual General Meeting of 15 May 2018, the Administrative Board was authorized to increase the share capital of the company by 14 May 2023, once or several times, by a total of € 13,670,219.00 by issuing a maximum of 13,670,219 new registered shares each with a par value of € 1.00 per share in exchange for cash and/or non-cash contributions ("Authorized Capital 2018"). The new shares must be offered to the shareholders for subscription, though they may also be acquired by banks or by companies operating pursuant to Section 53 (1) sentence 1 or Section 53b (1) sentence 1 or (7) of the German Banking Act (KWG) on condition that they offer them to the shareholders for subscription. However, the Administrative Board is authorized to exclude the shareholders' legal subscription right,

(1) insofar as necessary to compensate for residual amounts;

(2) where suitable, to acquire companies, portions of companies or interests in companies or other capital assets, including receivables, in return for the transfer of shares;

(3) to the extent that, in the case of a cash capital increase, the proportion of the share capital attributable to the new shares for which the subscription right is excluded does not exceed ten percent of the share capital both at the time the authorization takes effect and at the time the authorization is exercised, and the issue price of the new shares is not significantly lower than the stock exchange price of the shares of the company with the same features as defined by Sections 203 (1) and (2), 186 (3) sentence 4 of the German Stock Corporation Act (AktG); this ten percent limit shall include (i) the proportion of the share capital attributable to treasury shares which are sold at the time of the authorization on which Authorized Capital 2018 is based coming into effect in indirect or analogous application of Section 186 (3) sentence 4 of the German Stock Corporation Act, and (ii) the proportion of the share capital attributable to shares subject to conversion and/or option rights or conversion obligations arising from bonds and other instruments covered by Section 221 of the German Stock Corporation Act (AktG) which are issued subject to exclusion of the subscription right as per Section 186 (3) sentence 4 of the German Stock Corporation Act (AktG).

The total proportion of the share capital attributable to the new shares for which the subscription right is excluded according to paragraphs (1) to (3) above may not exceed twenty percent of the share capital of the Company both at the time the authorization takes effect and at the time it is exercised. To be deducted from this twenty percent limit with regard to all possibilities of excluding the subscription right pursuant to paragraphs (1) to (3) above are shares (i) that are used after 15 May 2018 on the basis of the authorization to use treasury shares in accordance with Section 71 (1) no. 8 sentence 5 and Section 186 (2) sentence 4 of the German Stock Corporation Act (AktG) subject to exclusion of a subscription right, i.e. in a manner other than selling them on the stock market or by way of an offer addressed to all shareholders, or (ii) that refer to the conversion and/or option rights or conversion obligations arising from bonds and other instruments covered by Section 221 of the German Stock Corporation Act (AktG), which are to be issued from 15 May 2018 subject to exclusion of subscription rights.

Furthermore, the Administrative Board shall decide on all other matters related to the issuance of the new shares, the content of the share rights and the terms of the share issue.

The Administrative Board are authorized to adapt the wording of the Articles of Association to the extent of the capital increase from the authorized capital;

The share capital of the Company shall be conditionally increased by a maximum of € 1,337,428.00 by issuing a maximum of 1,337,428 new registered shares with a par value of € 1.00 per share (“Conditional Capital 2015/I”). Pursuant to the 2011 Stock Option Plan in accordance with the resolution of the Annual General Meeting of 20 May 2011 (in the version of the resolution of the Annual General Meeting of 04 June 2013) or pursuant to the 2015 Stock Option Plan in accordance with the resolution of the Annual General Meeting of

10 June 2015, the conditional capital increase shall only be carried out to the extent that subscription rights are issued, the holders of the subscription rights make use of their exercise right and that the Company does not grant any treasury shares to fulfill the subscription rights, whereby the Administrative Board is exclusively responsible for granting and handling subscription rights to members of the Executive Board of the former RIB Software AG as well as for granting and handling subscription rights to the Managing Directors. The new shares shall participate in profit from the beginning of the financial year in which the shares are issued.

The share capital is also conditionally increased by up to € 5,153,022.00 by issuing up to 5,153,022 new registered shares with a par value of € 1.00 each ("Conditional Capital 2018"). The conditional capital increase shall serve to issue registered shares to the holders or creditors of convertible bonds and/or option bonds, participating bonds and/or profit participation certificates (or combinations of such instruments) issued by the Company or domestic or foreign companies in which it has a direct or indirect majority interest, by virtue of the authorization resolved by the Annual General Meeting of 15 May 2018 under agenda item 11 and to grant or establish a conversion and/or option right to, or a conversion obligation arising from, new registered shares of the Company. Said conditional capital increase shall only be carried out to the extent that option rights or conversion rights are exercised or that holders and/or creditors who are obligated to effect conversion satisfy their conversion obligation or that shares are offered subject to pre-emptive tender rights on the basis of substitution powers of the Company and to the extent that treasury shares or new shares under an authorized capital are not employed for this purpose. The new registered shares shall participate in profit from the beginning of the financial year in which they arise through the exercise of option and/or conversion rights or through the fulfillment of conversion obligations or the exercise of pre-emptive tender rights. The Administrative Board are authorized to determine the further details of the implementation of the conditional capital increase.

By resolution of the Annual General Meeting of 15 May 2018, the Company is authorized to purchase treasury shares representing up to 10% of the Company's share capital at the time of the resolution by 14 May 2023. The authorization may not be used by the Company for the purpose of trading in its treasury shares. The details are specified in the resolution proposals published in the German Federal Gazette dated 05 April 2018 under agenda item 9.

E.2 INFORMATION ABOUT APPOINTMENT OR RECALL OF THE MANAGING DIRECTORS AND CHANGES TO THE ARTICLES OF ASSOCIATION

Regarding the appointment and dismissal of Managing Directors, reference is made to Section 40 of the German Act Implementing Council Regulation (EC) No 2157/2001 of 08 October 2001 on the Statute for a European company (SE) (the SE Regulation) of 22 December 2004 (the "Implementing Act"). Furthermore, Section 12 (1) of the Articles of Association of RIB Software SE states that the Administrative Board shall appoint one or more Managing Directors. The Administrative Board may appoint one of the Managing Directors to be the Chief Executive Officer and one or two Managing Directors as Deputy Chief Executive Officer(s). The Administrative Board may also appoint Deputy Managing Directors. Pursuant to Section 12 (5) of the Articles of Association of RIB Software SE, Managing Directors may only be dismissed for good cause as defined in Section 84 (3) of the

German Stock Corporation Act (AktG) or when their employment contract ends, whereby each case requires a resolution of the Administrative Board adopted with a three-quarter majority of the votes cast.

Pursuant to Art. 9 (1) lit. c) (ii) of the SE Regulation, the provisions for amending the Articles of Association are set out in Sections 133, 179 of the German Stock Corporation Act (AktG). The Administrative Board is authorized to adopt amendments to the Articles of Association that concern the wording only (Section 8 (3) of the Articles of Association of RIB Software SE).

E.3 TAKE-OVER RELATED INFORMATION

RIB Software SE has not concluded any material agreements that are subject to regulation regarding a change of control.

However, the Company has concluded compensation agreements with the Managing Directors covering the event of a change of control. The members of the Administrative Board and the Managing Directors, Thomas Wolf and Michael Sauer, have a special right of termination of their respective employment contracts in the event of a change of control. This special right of termination only exists for one month from the day of the execution of the relevant takeover or mandatory bid within the definition of the German Securities Acquisition and Takeover Act (WpÜG) or if no such bid has been made, from the time that the de facto change of control becomes known. A “change of control” for the purpose of this provision takes place if a third party or two or more third parties acting jointly, through the acquisition of shares or by other means, together account for at least 30% of the voting rights within the definition of Sections 29, 35 (1) sentence 1 of the German Securities Acquisition and Takeover Act (WpÜG), or account for a number of voting rights which results in a majority of more than 50% of the votes present or represented at this Annual General Meeting, and thereby vote against the resolutions proposed by the Administrative Board. Section 22 (1) and (2) of the German Securities Acquisition and Takeover Act (WpÜG) applies accordingly. If Thomas Wolf or Michael Sauer exercise their special right of termination, they shall be entitled to a settlement, which shall amount to three times the value of the total average annual remuneration (including all flexible remuneration elements) for the last three full financial years of the Company.

Furthermore, if they exercise the aforementioned special right of termination, Thomas Wolf and Michael Sauer shall not forfeit their options under the 2015 Stock Option Program, but may instead use their exercisable options and the not-yet exercisable options within the general exercise time limits, providing that the performance targets are subsequently achieved.

F. NON-FINANCIAL STATEMENT

Different reporting requirements, including materiality, arise from the CSR Directive Implementation Act and the Sustainability Reporting Guidelines. As a result, the RIB Group has waived the legal option to apply a guideline when preparing its non-financial statement. Details concerning the non-financial aspects of our business activities have already been disclosed at other points in this Management Report, and which are referred to as follows:

Subject area	Chapter reference
Business model	A.1.
Employee matters	B.4.
Material risks resulting from business activities	I.4.
Material risks resulting from business relationships	I.4.
Significant non-financial indicators	B.4.

In addition, the following disclosures are also made:

Environmental issues

Because the core activities of the RIB Group encompass the production and sale of software, the provision of consulting and training services for implementation projects, as well as the operation and marketing of E-commerce platforms, environmental issues do not constitute a significant aspect of our value-added process. No concepts are therefore implemented with the objective of directly taking account of environmental issues.

Employee matters

The main employee matters are governed in the employment contracts, in accordance with the relevant statutory regulations. These are based on a uniform RIB Group standard, insofar as this is made possible by the local legislation in the respective countries. The Code of Conduct of the RIB Group also states that all employees must be treated equally, regardless of their nationality, religion, cultural and ethnic background, gender, sexual orientation or age. In addition, there are employee representative bodies at national and European level, which represent the interests of workers in dialogue with the relevant competent managers and Managing Directors.

Social concerns

In all of the regions in which it operates, the RIB Group encourages the individual cultural diversity of employees, by deliberately forming multi-cultural teams - such as in the areas of development and consulting - and harnessing this resource for success of the enterprise. The focus is on using the totality of the employees with all their differences and commonalities, in order to leverage creative potential and encourage new mindsets within the company. In this respect, multi-cultural teams are then composed solely on the basis of the professional qualifications of the employees. Neither gender, religion, nor ethnic background or membership of a local community have any role to play in this process. The social concerns of employees taken into consideration alongside the business activities, shall be in conformity with the regional social regulations and company standards. The protection and the development of local communities does not constitute a criterion for the composition of multi-cultural teams. It is for this reason that the RIB Group does not currently have any concepts for engaging in dialogue with regional institutions aimed at improving or protecting the social concerns of local communities.

Respect for human rights and combating corruption and bribery
The Code of Conduct of the RIB Group contains guidelines for the protection of human rights and for combating corruption and bribery, which are binding on every employee worldwide:

Respect for human rights
Every employee must respect the cultures and ethical values of the countries in which the RIB Group operates, and they are prohibited from engaging in unlawful and/or criminal practices. All employees shall enjoy parity of esteem, regardless of their nationality, religion, cultural and ethnic background, gender, sexual orientation or age. Employees shall engage with their colleagues and third parties in a fair and open manner, and demonstrate understanding and tolerance.

Combating corruption and bribery
In connection with business activities of every kind, no employee of the RIB Group may directly or indirectly extend advantages to business partners, their employees or any other third parties, if the nature and scope of these advantages are capable of inappropriately influencing the actions and decision-making of the recipient. The employees of the RIB Group are prohibited from soliciting, accepting promises of or receiving such advantages in business dealings with third parties.

The Managing Directors and management staff of the RIB Group are responsible for identifying, exploring, preventing and, if necessary, sanctioning misconduct. In case of uncertainty, the competent managers, in consultation with the responsible Managing Director, shall decide what actions are appropriate and in accordance with the relevant laws and regulations.

G. STATEMENT ON BUSINESS MANAGEMENT

G.1 DECLARATION PURSUANT TO SECTION 161 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

The Administrative Board of RIB Software SE most recently issued the following Declaration of Compliance in March 2018:

The Administrative Board (Verwaltungsrat) of RIB Software SE declares pursuant to Art. 9 para. 1 lit. c) (ii) of the Council Regulation (EC) no. 2157/2001 of 08 October 2001 on the Statute of a European Company (SE) (the SE-Regulation, “SE-VO”), Sec. 22 para. 6 of the Law for the Implementation of the SE-VO of 22 December 2004 (the Implementation Act, “SEAG”) in connection with. Sec. 161 German Stock Corporation Act (Aktiengesetz) that, since the last declaration of compliance was made, RIB Software SE has complied with the recommendations of the “Government Commission on the German Corporate Governance Code” in the version dated 05 May 2015, effective since 12 June 2015, and will comply with the recommendations of the version dated 07 February 2017, effective since 24 April 2017 (the “Code”), in each case under consideration of the particularities of the one-tier board system of RIB Software SE described under no. 1 with the exceptions described under no. 2, and to the extent not complied with, why not.

Particularities of the one-tier corporate governance system

Pursuant to Art. 43–45 SE-VO in connection with Secs. 20 et. seq. SEAG, the one-tier corporate governance system is characterized by the fact that the guidance of the SE is incumbent upon a uniform body, the Administrative Board, see para. 7 of the preamble of the Code. The Administrative Board directs the Company, establishes the general principles of its business and supervises their implementation by the Managing Directors (Geschäftsführende Direktoren). The Managing Directors manage the business of the Company and represent the Company in dealings with third parties. They are bound by instructions given by the Administrative Board.

RIB Software SE generally applies the recommendations of the Code relating to the Supervisory Board of a German Stock Corporation (Aufsichtsrat) to its Administrative Board and relating to the Management Board of a German Stock Corporation (Vorstand) to its Managing Directors. The following exceptions apply in terms of the statutory rules of the one-tier corporate governance system:

a) Deviating from Sec. 2.2.1 sent. 1 of the Code, the Administrative Board submits the financial statements as well as the consolidated financial statements to the general meeting, Sec. 48 para. 2 sent. 2 SEAG.

b) Deviating from Secs. 2.3.1 sent. 1 and 3.7 para. 3 of the Code, the Administrative Board is responsible for the convocation of the general meeting, Secs. 48 and 22 para. 2 SEAG.

c) The responsibilities of the Management Board set out in Secs. 2.3.2 sent. 2 (proxy-voter bound by instructions), 3.7 para. 1 (opinion to a public take-over offer) und para. 2 (behaviour during a public take-over offer) as well as 3.10 (Corporate Governance report), 4.1.3 (Compliance) und 4.1.4 (risk management and -controlling) of the Code are incumbent upon the Administrative Board of RIB Software SE, Sec. 22 para. 6 SEAG.

d) The responsibilities of the Management Board contained in Secs. 4.1.1 (direction of the Company) and 4.1.2 in connection with 3.2 half sentence 1 (development of the strategic direction of the Company) of the Code are incumbent upon the Administrative Board, Sec. 22 para. 1 SEAG.

e) Deviating from Secs. 5.1.2 para. 2 of the Code, the Managing Directors, other than the members of the Management Board, are not subject to a maximum term of office, Sec. 40 para. 1 sent. 1 SEAG.

f) Deviating from Secs. 5.4.2 sent. 2 and 5.4.4 of the Code, members of the Administrative Board can be appointed as Managing Directors as long as the majority of the members of the Administrative Board consists of non-managing members, Sec. 40 para. 1 sent. 2 SEAG.

Deviations from the Recommendations of the Code

a) Section 3.8 para. 3 GCGC: The D&O insurance for the members of the Administrative Board does not include a deductible. In the opinion of the Administrative Board, the agreement of a voluntary deductible is neither suitable nor necessary in order to ensure that the members of the Administrative Board duly perform the duties incumbent upon them.

b) Section 4.1.3 sent. 3 GCGC: Employees shall be given the opportunity to report, in a protected manner, suspected breaches of the law within the company; third parties should also be given this opportunity. The establishment of an institutionalised whistleblowing system for legal infringements is not considered necessary at present. In the event of indications of legal violations within the company, the company‘s employees may at any time contact the Compliance Department or the Managing Directors directly at any time. However, the company will examine and consider whether the introduction of such a whistleblowing system could be reasonable and appropriate in the future.

c) Section 4.2.2 para. 2 GCGC: The Administrative Board does not consider, as for which compensation of the Managing Directors is appropriate, the relationship between the compensation of the Managing Directors and that of senior management and the staff overall, nor in terms of its development over time. The Administrative Board does consequently not determine how senior managers and the relevant staff are to be differentiated. The corresponding recommendation of the Code appears to be impracticable and, in addition, not suitable to ensure that the compensation of the Managing Directors is appropriate in each case.

d) Section 4.2.3 para. 2 GCGC: The variable remuneration for the Managing Directors does not reflect potential negative developments in such a way that the income might also be subject to real losses. This does not appear necessary in view of the compensation structure for the Managing Directors in order to ensure that the Managing Directors do not take any undue risks when managing the company.

To the extent the Managing Directors receive share options as a variable component of their remuneration, such component is limited with respect to the number of options but not according to amount. Since the exercisability and the value of the options depend on the achievement of ambitious performance targets, a maximum limit according to amount would run contrary to the purpose of this remuneration component to provide a special performance incentive.

e) Section 4.2.3 para. 4 GCGC: The contracts for the Managing Directors do not provide for a severance cap in the event of early termination. Such an arrangement does not appear necessary in addition to the statutory provisions applicable in cases of early termination in order to protect the interests of the company and its shareholders.

f) Section 4.2.5 GCGC: The remuneration of the Managing Directors is disclosed in accordance with the statutory provisions. More comprehensive disclosure in a remuneration report, which outlines or itemises the remuneration system for the Managing Directors and the nature of any fringe benefits provided by the company in a manner that goes beyond the statutory requirements does not appear necessary to satisfy the justified information interest of the shareholders and investors to the due extent.

g) Section 5.1.2 para. 2 GCGC: The Administrative Board has not fixed an age limit for the Managing Directors. Setting an age limit is not in the interests of the company and its shareholders, since there is no compelling connection between a Managing Director‘s age and his performance.

h) Section 5.4.1 paras. 2 and 3 GCGC: With the exception of the determination of target quotas for the portion of women among the members of the Administrative Board, the Administrative Board does not specify concrete goals for its composition and does not publish them and the status of their implementation in the Corporate Governance report. The Administrative Board is of the opinion that in its composition, due attention should be paid in particular to the company-specific situation, the company‘s international activity, potential conflicts of interest, diversity and an adequate involvement of women and shall also bear this in mind in its proposals to the responsible electoral bodies. However, the Administrative Board should in each case be optimally staffed. The specification of concrete goals for its composition, further to those required under mandatory law, would appear neither suitable nor expedient to achieve this.

The Administrative Board does not set a general limit for the length of membership in the Administrative Board. Setting a limit for the length of membership in the Administrative Board is not in the interest of the company and its shareholders, since there is no compelling connection between the term of service on the Administrative Board and the occurrence of conflicts of interests or the independence of the board members.

i) Section 5.4.1 para. 4 GCGC: The Administrative Board does not disclose the personal and business relations of each candidate with the enterprise, the bodies of the company and any shareholder having a significant share in the company when making its election proposals. The recommendation of the Code implies more than merely insignificant legal risks; hence, to comply with it, is not in the interest of the company.

G.2 INFORMATION ON BUSINESS MANAGEMENT PRACTICES

The trust of our business partners and shareholders in our Company and our image is critically determined by the conduct of our employees who work for us all over the world. Each employee directly contributes to the way in which our Company lives up to the responsibilities and values described here and to the complete fulfilment of the positive expectations associated with the RIB brand.

In order to provide our employees with guidance in fulfilling these criteria, we have drawn up our Code of Conduct that is binding on every employee of our company worldwide. It is designed to help them to successfully deal with the legal and ethical challenges they encounter in their day-to-day work, to provide guidance and to promote confidence in the efficiency and integrity of our Company. We expect our executives to conduct all transactions efficiently and in compliance with the Code of Conduct. We also expect them to create the required working conditions for employees and to ensure that the provisions of the Code of Conduct are adhered to.

G.3 DESCRIPTION OF THE WORKING PRACTICES OF THE ADMINISTRATIVE BOARD AND THE MANAGING DIRECTORS AS WELL AS THE COMPOSITION AND WORKING PRACTICES OF THE COMMITTEES

RIB Software SE has a one-tier corporate governance structure. The corporate bodies of RIB Software SE are the Administrative Board (the administrative organ) and the Annual General Meeting. RIB Software SE also has Managing Directors, who manage the day-to-day business of the Company.

The **Administrative Board** of RIB Software SE is responsible for managing the Company, defining the strategies for its activities and supervising their implementation. The Administrative Board acts in accordance with the applicable laws, the Articles of Association and its Rules of Procedure. It supervises the Managing Directors, issues them with rules of procedure, and has the power to issue instructions to all or some of the Managing Directors. The Administrative Board is responsible for appointing and dismissing the Managing Directors. Members of the Administrative Board may be appointed as Managing Directors, provided that the majority of the Administrative Board continues to consist of non-executive members. In accordance with the Articles of Association, the Administrative Board consists of eight members, who are appointed by the Annual General Meeting without any obligation to a particular nomination. At least one independent member of the Administrative Board must have expertise in the areas of finance, accounting or auditing. The members of the Administrative Board are each appointed for a period up to the end of the Annual General Meeting resolving discharge for the third financial year following the beginning of the term of office (the financial year in which the term of office begins is not counted) and shall end no later than six years after the respective Administrative Board member was appointed. Members of the Administrative Board are eligible for re-election. For some time during the reporting period, the Administrative Board of RIB Software SE had seven members only. Please refer to the appointments and dismissals of the Managing Directors and the Administrative Board boards members reported in Chapters H.1 and H.2.

The Rules of Procedure of the Administrative Board of RIB Software SE primarily regulate the working practice of this body. Its members have equal rights and duties. At the end of the Annual General Meeting during which the Administrative Board members were newly elected, the Administrative Board - chaired by its oldest member - shall elect a Chairperson and a Deputy Chairperson from among its members, by way of a majority vote. Administrative Board meetings shall be convened by the Chairperson, and must be held at least once every three months. Meetings must also be convened if necessary for the good of the Company or if so demanded by an Administrative Board member. In 2018, the Administrative Board met a total of 6 times. If ordered by the Chairperson, or by the Deputy Chairperson in the event that the former is unable to attend, resolutions made be adopted outside of meetings of the Administrative Board in writing, by fax, by email, over the telephone or by means of electronic media or by any combination of the aforementioned means of communication. The decisions of the Administrative Board generally require a majority of the votes cast, unless other majorities are stipulated by law. In the event of a voting tie, the vote of the Chairperson shall be counted double, unless they are unable to vote for factual or legal reasons, in which case the vote of the Deputy Chairperson shall be counted double. The Administrative Board constitutes a quorum if more than half of its members, including the Chairperson (or the Deputy Chairperson, in the event that the former is unable to attend) take part in the vote personally or by way of a written submission of the vote.

The Rules of Procedure of the Administrative Board provide that the Administrative Board forms a Nomination and Remuneration committee, an Audit Committee, and additional committees as necessary depending on the specific circumstances of the Company. The term of office of the committee members corresponds to their term of office as members of the Administrative Board, unless a shorter term is specified by the Administrative Board at the time of their appointment. The respective committee elects one member of the committee to be the Chairperson of the Committee, and another to be their Deputy, unless otherwise stipulated by law or the Rules of Procedure. The committees constitute a quorum if more than half of the members of the respective committee take part in the resolution vote. The committee shall also constitute a quorum if one or more members take part in the resolution vote by telephone or via video conference.

In order to fulfil its responsibilities, the Administrative Board has established a Nomination and Remuneration Committee and an Audit Committee, which regularly report on their work to the Administrative Board.

The **Nomination and Remuneration Committee** consists of three members. It makes proposals to the Administrative Board regarding the election of Administrative Board members by the Annual General Meeting, and its provides the Administrative Board with recommendations regarding the appointment and dismissal of Managing Directors and the Chief Executive Officer. It also develops and provides the Administrative Board with proposals regarding the remuneration system for the Managing Directors, and on the employment agreements and other contractual provisions concerning the Managing Directors (including the exercise of contractual rights and the issue of declarations of consent). The Nomination and Remuneration Committee consisted of the following members in the reporting period:

- Sandy Möser (Chairwoman),
- Klaus Hirschle,
- Dr. Matthias Rumpelhardt.

The **Audit Committee** consists of three members. The Chairperson of the Audit Committee should be independent, and have expertise in the areas of accounting or auditing. The Audit Committee is responsible, in particular, for monitoring the financial reporting process, the external accounting and reporting, the provision of a corresponding draft resolution for the Administrative Board and the analysis and monitoring of the internal control and finance monitoring system, the risk management system and the internal audit system. Moreover, it is also responsible for monitoring and compliance with the relevant rules of the German Corporate Governance Code, monitoring the work of the statutory auditor, especially their independence, and monitoring the additional services performed by the statutory auditor, and for dealing with questions concerning compliance.

The Audit Committee consisted of the following members in the reporting period:

- Dr. Matthias Rumpelhardt (Chairman),
- Klaus Hirschle,
- Sandy Möser.

The **Managing Directors** manage the day-to-day business of the Company applying the standards of care of a prudent and diligent businessman, in accordance with the law, the Articles of Association of RIB Software SE, the Rules of Procedure for the Managing Directors, the Schedule of Responsibilities, the instructions of the Administrative Board and their employment contracts. They are required to report to the Administrative Board regularly, promptly and comprehensively, particularly regarding the proposed business policy and other fundamental issues concerning the corporate planning, the profitability of the business, the anticipated overruns or shortfalls in revenue or profit planning, as well as on business activities that could potentially be of significant importance for the profitability or liquidity of the Company.

The Administrative Board is responsible for appointing one or more Managing Directors. The number of Managing Directors is determined by the Administrative Board. Three Managing Directors are currently appointed. The Administrative Board may appoint one of the Managing Directors to be the Chief Executive Officer and one or two Managing Directors as Deputy Chief Executive Officer(s). The Company is represented by two Managing Directors or by a Managing Director together with an Authorized Signatory. If only one Managing Director is appointed, they are the sole representative of the Company. The Administrative Board may grant individual Managing Directors the right of sole representation of the Company, as well as release individual Managing Directors from the limitations of Section 181 of the German Civil Code (BGB) (alternative version).

The Rules of Procedure for the Managing Directors of RIB Software SE mainly regulate the foundation of business management, cooperation with the Administrative Board, especially transactions requiring consent, and the cooperation between the Managing Directors.

The Managing Directors adopt resolutions with a simple majority. Every Managing Director has one vote. In the event that the votes of the Managing Directors are tied during a resolution vote, the Chief Executive Officer (or their Deputy Chief Executive, in the event that the former is unable to attend) shall have the casting vote.

G.4 COMMITMENTS TO PROMOTE THE PARTICIPATION OF WOMEN AND MEN IN MANAGEMENT POSITIONS

For the first time, on 09 June 2015, the Supervisory Board of RIB Software AG made commitments to promoting the balanced participation of women and men in management positions. After expiry of the deadline for reaching the respective target values on 30 June 2017, the Administrative Board of RIB Software SE initially did not set any new targets and deadlines for the subsequent period. On 14 February 2018, the Administrative Board of RIB Software SE set new targets and deadlines in relation to the proportion of women and men in the Administrative Board, at the Managing Directors level and at the management level below the Managing Directors. The participation of women and men in management positions was thus regulated as follows:

Pursuant to Section 22 (6) of the Implementing Act in conjunction with Section 111 (5) of the German Stock Corporation Act (AktG), the target for the proportion of women in the Administrative Board was set at 16.67% and, at the Managing Directors level, the target for the proportion of women was set at 0%. For the management level below the Managing Directors, a target for the proportion of women pursuant to Section 22 (6) of the Implementing Act in conjunction with Section 76 (4) of the German Stock Corporation Act (AktG) was set at 0%. All targets must be reached by 14 February 2023. Although the Administrative Board of a listed company must, in principle, set targets for the proportion of women in the first two management levels below the Managing Directors, due to the fact that RIB Software SE has a small number of employees and a flat management structure, there is only one management level below the Managing Directors, so a target has been set for this management level only.

The target for the proportion of women in the Administrative Board had not yet been reached in the financial year 2018: There is one woman in the Administrative Board of RIB Software SE, Ms Sandy Möser, Deputy Chairperson. The proportion of women in the number of Administrative Board members prescribed by the

Articles of Association (eight) is thus 12.5%. The failure to meet the target is attributable to the fact that the Administrative Board of RIB Software SE consists of eight members, while the Supervisory Board of RIB Software AG had only six members. There was one woman in the Supervisory Board of RIB Software AG, Ms Sandy Möser. The proportion of women in the number of Supervisory Board members prescribed by the Articles of Association applicable at the time (six) was thus 16.67%. The reason why no other women women were appointed to the Administrative Board is the fact that, besides the members of the Supervisory Board of RIB Software AG, the only other persons appointed to the Administrative Board of RIB Software SE were the members of the Executive Board of RIB Software AG. All of these persons were male. Furthermore, no suitable female candidate was found for the election of a new member of the Administrative Board at the 2018 Annual General Meeting. As the percentage of women in the Administrative Board was less than 30% when the target was set on 14 February 2018, the target was no longer allowed to be less than the previously achieved proportion of 16.67% (the so-called “no deterioration concept”).

At the Managing Directors level and the management level below the Managing Directors, there were no women in the financial year 2018, meaning that the proportion of women was thus 0%. The targets for the proportion of women at the Managing Directors level and at the management level below the Managing Directors were thus achieved.

G.5 DESCRIPTION OF THE DIVERSITY CONCEPT

RIB Software SE does not pursue a dedicated diversity concept regarding the composition of the Administrative Board and the Managing Directors. Equality of opportunity and the rigorous rejection of every form of discrimination are firmly anchored in the corporate policy of RIB Software SE. Against this background, the sole considerations when staffing the management organs are the specialist qualifications and skills of the candidates. Aspects such as gender, race, age, skin colour, religion, family status, sexual orientation, background, physical or mental impairments of the individual in question are not taken into consideration in this respect.

H. REMUNERATION REPORT

H.1 REMUNERATION REGULATIONS FOR THE MEMBERS OF THE ADMINISTRATIVE BOARD

The members of the Administrative Board receive fixed annual remuneration (Remuneration 1). The Chairperson of the Administrative Board receives double the amount of this remuneration, while their Deputy receives one-and-half times this amount. The members of a committee of the Administrative Board also receive additional annual remuneration (Remuneration 2), provided that the committee has met at least once during the financial year; if a member sits on several committees, they shall receive this remuneration for each committee. Chairmanship of a committee is remunerated at twice the aforementioned amount. Members of the Administrative Board who only sit in the Administrative Board or one of its committees for part of the financial year, receive remuneration in proportion of the duration of their membership to the entire financial year. The Company may arrange adequate directors & officers liability insurance (D&O) for the members of the Administrative Board.

The Company has undergone a change of form from RIB Software AG into a *Societas Europaea* (SE). The change of form became effective upon its entry into the Commercial Register on 03 April 2017. The aforementioned remuneration regulations for the members of the Administrative Board have been in effect since the change of form came into force. Prior to that, the remuneration of the members of the Supervisory Board was essentially subject to similar regulations. The members sitting on the Company's Supervisory Board at the time of the change of form were appointed as members of the Administrative Board of the SE during the course of the change.

The remuneration of the individual members of the Administrative Board for the financial years 2018 and 2017 is as follows:

2018 (figures in € thousands)	Remuneration 1	Remuneration 2	Total remuneration
Sandy Möser	21.6	11.3	32.9
Dr. Matthias Rumpelhardt	14.4	11.3	25.7
Klaus Hirschle	14.4	7.5	21.9
Prof. Martin Fischer	14.4	0.0	14.4
Steve Swant (until 13.08.2018)	9.0	0.0	9.0
Prof. Dr. Rüdiger Grube (from 23.11.2018)	1.5	0.0	1.5
Total Remuneration	**75.3**	**30.0**	**105.3**

2017 (figures in € thousands)	Remuneration 1	Remuneration 2	Total remuneration
Sandy Möser	22.2	9.7	31.9
Dr. Matthias Rumpelhardt	15.3	9.7	25.0
Klaus Hirschle	13.8	6.6	20.4
Prof. Martin Fischer	13.8	0.0	13.8
Steve Swant	13.8	0.0	13.8
Total Remuneration	**78.9**	**26.0**	**104.9**

Insofar and for as long as a member of the Administrative Board is simultaneously a Managing Director, their remuneration as a member of the Administrative Board shall be suspended. This was the case for Mr Thomas Wolf, Mr Michael Sauer, Mr Mads Bording Rasmussen and Mr Helmut Schmid (until 31 March 2018), who were appointed as Managing Directors as well as being members of the Administrative Board. Therefore, they did not receive any separate remuneration for their membership of the Administrative Board.

H.2 REMUNERATION REGULATIONS FOR THE MANAGING DIRECTORS

The remuneration of the Managing Directors consists of a fixed element (Remuneration 1), a performance-based element (Remuneration 2), and a share-based element (Remuneration 3). The fixed element includes the basic salary and other taxable salary components such as a company car. The performance-based element depends on the achievement of targets. These targets have both short-term as well as medium-term components.

The amount of the performance-based element is based on the operating EBITDA of the RIB Group, the development of the Group revenue, the number of Phase II and III contracts, the acquisition of MTWO users, the conclusion of acquisitions and the development of the share price.

The long-term remuneration components geared towards sustainable corporate development relate to the growth rate of the RIB Group's operating EBITDA for the period from 01.01.2017 to 31.12.2019. For the growth rate, two thresholds have been set, above which the Managing Directors receive the one-off payments shown in the table below (whereby no cumulative payments are made if the upper threshold is exceeded):

(figures in € thousands)	Thomas Wolf	Michael Sauer	Mads Bording Rasmussen	Total
Exceeding lower threshold	75.0	75.0	60.0	210.0
Exceeding upper threshold	150.0	150.0	120.0	420.0

The short-term targets are calculated after submission of the audited Consolidated Financial Statements for the respective financial year. The target profit shares are added on reaching several targets. The long-term targets will be calculated after submission of the audited Consolidated Financial Statements for the financial year 2019.

With respect to the structure of the share-based remuneration program applied in the financial years 2013 and 2015, we refer to the explanations in **Section C.5** of the Notes to the Annual Financial Statement of RIB Software SE and to **Note (29)** of the Notes to the Consolidated Financial Statements. Within the scope of this program, the members of the Executive Board or the Managing Directors were offered subscription rights in accordance with the conditions of the existing stock option plan, which were accepted by all the members of the Executive Board / all Managing Directors.

The Company has undergone a change of form from RIB Software AG into a *Societas Europaea* (SE). Employment contracts stipulating the above remuneration regulations have been in effect since the change of form came into force. Prior to that, the remuneration of the named persons, while still members of the Executive Board, was essentially subject to similar regulations. The members sitting on the Company's Executive Board at the time of the change of form were appointed as Managing Directors of the SE during the course of the change.

The remuneration paid to the Managing Directors in the financial years 2018 and 2017 is as follows:

2018 (figures in € thousands)	**Remune-ration 1**	**Remune-ration 2**	**Remune-ration 3**	**Total remuneration**
Thomas Wolf*	395.0	250.0	705.9	1,350.9
Michael Sauer	317.0	250.0	494.1	1,061.1
Helmut Schmid (until 31.03.2018)	58.0	0.0	466.6**	524.6
Mads Bording Rasmussen*	172.6	160.0	141.2	473.8
Total remuneration	**942.6**	**660.0**	**1.807.8**	**3,410.4**

2017 (figures in € thousands)	**Remune-ration 1**	**Remune-ration 2**	**Remune-ration 3**	**Total remuneration**
Thomas Wolf*	373.7	300.0	434.5	1,108.2
Michael Sauer	298.8	300.0	304.1	902.9
Helmut Schmid	225.9	90.0	173.8	489.7
Mads Bording Rasmussen* (since 03.04.2017)	115.5	180.0	86.9	382.4
Total remuneration	**1,013.9**	**870.0**	**999.3**	**2,883.2**

* Mr Thomas Wolf received his remuneration from RIB Ltd., while Mr Mads Bording Rasmussen received his remuneration from RIB A/S.

** On the occasion of his departure from the Company, it was agreed with Mr. Helmut Schmid that 20,000 share options, which had been granted to him during his employment and which would have expired in absence of any further regulation, may continue to be exercised as compensation for a non-competition clause. At the time of the agreement, the fair value per option was € 23.33. Remuneration 3 paid in the reporting period thus amounted to € 467 thousand.

The share-based remuneration of the Managing Directors is as follows:

2018 (units or € thousands)	**Thomas Wolf**	**Michael Sauer**	**Helmut Schmid**	**Mads Bording Rasmussen**
Options granted in the reporting period (units)	47,826	33,478	0	9,565
Options exercised in the reporting period (units)	45,000	45,000	0	0
Options outstanding at the end of the reporting period (units)	145,652	116,956	20,000	19,130
Share in the recognised total cost of the share-based remuneration (€ thousands)	288.3	240.3	26.4	32.0

I. FORECAST, OPPORTUNITY AND RISK REPORT

I.1 TARGET ACHIEVEMENT OF FORECASTS FOR FISCAL YEAR 2018

I.1.1 Target achievement of revenue forecast for the RIB Group

Due to the significantly increased demand for our software and SaaS/Cloud solutions in recent years, we had again identified good growth opportunities for the RIB Group for 2018, and had initially forecast revenues of between € 117 million and € 127 million. When we published our interim report for the period from January to September, we adjusted the revenue forecast on 31 October 2018 on the basis of current circumstances and increased it to a range of € 124 million to € 130 million. Due to continued positive business development in the last two months of the fourth quarter as well as further company acquisitions, in the financial year 2018, the upper expected value was once again slightly exceeded by € 6.9 million, with revenues amounting to € 136.9 million. The key success factors were:

Revenue guidance for 2018 slightly exceeded

a) In the reporting period, revenue from the sale of software licenses and SaaS/Cloud services increased from € 46.6 million to € 54.5 million. This corresponds to an increase of 17.0% and a share of 39.8% of total sales. The decline in Phase III contracts was partially offset by strong growth in software license revenue from Phase II contracts. As a result, revenue from the sale of software licenses and SaaS/Cloud services exceeded our expectations.

b) In the area of maintenance, we assumed that the stable growth seen recent years will continue in the financial year 2018. Growth of 17.0% was achieved, which is within our expectations.

c) In terms of consulting revenue, we had expected a moderate increase in revenues in 2018, corresponding to the growing number of existing and new implementation projects. Consulting revenue increased by 65.3% to € 32.9 million in the reporting period (previous year: € 19.9 million), which corresponds to a share of 24.0% of total revenues and clearly exceeds our expectations.

d) With regard to xTWO (E-commerce), we assumed that the growth seen in the financial year 2017 will continue. With revenue growth of € 7.5 million to € 9.3 million (+24.0%), the E-commerce area continued to perform well in 2018. The growth achieved exceeded the growth of the previous year (+13.6%) and thus exceeded our expectations.

e) Regarding MTWO, we had not expected any significant sales revenue yet during the financial year 2018, though we had anticipated the first deals with reference customers. Three SaaS/Cloud deals were achieved with iTWO 4.0, which are settled monthly. This resulted in SaaS/Cloud sales of € 0.2 million. The total volume of the SaaS/Cloud revenues from these deals, totalled over a three-year period, each correspond to a larger Phase II contract. This slightly exceeded our expectations. Overall, total revenues of € 6.0 million were achieved in the reporting period. A share of € 5.8 million resulted from deliveries and services performed by companies acquired during the reporting period and had not been included in the planning.

The segments account for the following sales shares:

a) The iTWO segment achieved revenues of € 121.5 million (previous year: € 100.8 million), which corresponds to an increase of 20.5% and a share of 88.8% of total revenues. Since no Phase III contract was completed during the reporting period, this is significantly above our expectations.

b) In the reporting segment YTWO, total revenues of € 9.3 million were achieved in the xTWO (E-commerce) business segment. The increase in revenues from € 7.5 million to € 9.3 million (+24.0%) is above the growth of the previous year (+13.6%), thus exceeding our expectations.

I.1.2 Target achievement of the operating EBITDA forecast for the RIB Group

Operating EBITDA within guidance for 2018

For the financial year 2018, we had anticipated operating EBITDA of the RIB Group of between € 33 and € 43 million. This included a negative contribution to earnings from the reporting segment MTWO amounting to up to € 3 million. The achieved operating EBITDA of € 38.8 million is within the guidance and corresponds to our expectations.

The segments account for the following operating EBITDA shares:

a) In the reporting segment iTWO, operating EBITDA of € 41.3 million was at the same level as in the previous year (€ 40.9 million) and thus in line with our expectations.

b) In the reporting segment YTWO, we had planned operating EBITDA of between € 0 million and € -1.0 million for the xTWO (E-commerce) business segment. The achieved operating EBITDA of € -0.2 million (previous year: € 0.1 million) was within the expected range.

c) In the reporting segment MTWO, operating EBITDA of € -2.3 million was significantly below the budgeted value of € -6.0 million (the budgeted value included costs of € 3.0 million resulting from the reallocation of resources from other segments, which were expected not to have an additional negative impact on the operating EBITDA of the RIB Group). Due to the rollout phase being extended, the start-up losses actually incurred in the reporting period are below our expectations.

I.1.3 Target achievement of the revenues forecast and the operating EBITDA forecast for RIB Software SE

For RIB Software SE, we planned revenues and operating EBITDA on a par or slightly down on the previous year, depending on whether we again succeeded in achieving a Phase III contract conclusion in the financial year 2018, and were able to invoice significant parts of such an order with effect on sales and earnings. Revenues of € 55.3 million were achieved (previous year: € 54.3 million) and operating EBITDA of € 15.7 million (previous year: € 17.3 million). In light of the fact that no Phase III contract was completed during the reporting period, the revenues achieved exceeded our expectations, while the EBITDA achieved was within our expectations.

I.1.4 Target achievement for the investment result from the YTWO Joint Venture

For the former YTWO joint venture, same as in the year before, no significant revenue from transaction fees was yet planned for the financial year 2018. Due to the scheduled development of resources, we had forecast an investment result of up to € -6 million. An investment result of € -3.6 million was achieved (previous year: € -3.7 million). This value is within our earnings forecast for 2018.

I.2 FORECAST REPORT FOR THE FISCAL YEAR 2019

The RIB Group has grown continually over recent years thanks to its innovative range of software and SaaS/ Cloud solutions. We are assuming that this trend will also continue in 2019. Our iTWO 4.0 is an end-to-end enterprise solution based on state-of-the-art web technologies, which is the first such product to deliver 5D models in the Cloud for the continuous handling of business processes in the construction sector. The technical design of iTWO 4.0 makes it possible to market the software via a license model, a transaction model or a subscription model. (see **Section A.1**) The high flexibility of the possible marketing models of iTWO 4.0 opens up very promising short, medium and long-term growth potential for the RIB Group. In the future, in addition to the traditional sale of software licenses, the leasing of software and the operation of infrastructure within the framework of SaaS offers (MTWO), as well as fee-based use of software and infrastructure as part of a transaction model (YTWO) will become increasingly important.

Against this background, we make the following forecasts for the financial year 2019:

I.2.1 Revenue and operating EBITDA forecast for the RIB Group

Group revenue of € 180 to 200 million planned for 2019

For the RIB Group, we forecast **revenues** in the range of € 180 to 200 million. **Operating EBITDA**[*****] is expected to be in a range of € 36 million and € 46 million.

This forecast is based on the following assumptions:

a) In the **reporting segment iTWO**, we expect revenues in the financial year 2019 to be slightly higher than in the previous year and operating EBITDA to remain at the previous year's level.

b) In the **reporting segment YTWO**, we expect revenues in the xTWO (E-commerce) segment to be slightly higher than in the previous year. For the business segment YTWO (SCM), we still do not expect any significant transaction revenue in 2019, since the RIB Group needs to establish new partner structures following the takeover of 100% of the shares in YTWO Ltd. For the business segment xTWO (E-commerce), we expect the operating EBITDA to remain at the previous year‘s level. As a result of the planned additional development investments in the business segment YTWO (SCM), we expect total negative operating EBITDA of up to € 5.0 million in the reporting segment YTWO.

c) In the **reporting segment MTWO**, we expect strong growth in revenues in 2019, mainly due to the companies already acquired in the reporting period and the acquisition of further MSPs planned for 2019. In this respect, we intend to invest only in companies with positive operating EBITDA. Moreover, we expect further deals with reference customers and a significant increase in SaaS/Cloud revenue generated with iTWO 4.0. Against this background, for 2019, we forecast a positive operating EBITDA of up to € 5.0 million for the reporting segment MTWO.

I.2.2 Revenue and operating EBITDA forecast for RIB Software SE

For RIB Software SE, we are forecasting revenues and operating EBITDA on a par or slightly up on the previous year, depending on whether we succeed in achieving a Phase III contract conclusion in the financial year 2019, and are able to invoice significant parts of such an order with effect on sales and earnings.

*****) The key indicator "operating EBITDA" used in the following forecasts has been calculated in accordance with the adjustments described in Section A.2.4 of this Management Report.

I.3 OPPORTUNITY REPORT

The RIB Group identifies opportunities for positive business development and the expansion of our market position as leading providers of integrated BIM 5D solutions, through an even stronger focus on internationalization and further strategic acquisitions. Furthermore, the growth of the RIB Group should be sustainably increased in existing and new markets thanks to iTWO 5D and our fully integrated web-based end-to-end enterprise platform iTWO 4.0, the Cloud-based complete solution MTWO, as well as our existing cloud platforms iTWO tx and iTWO cx. We have identified the following main areas of focus in this respect:

Migration of existing customers to RIB iTWO and iTWO 4.0. The conversion of our ARRIBA customers to iTWO 5D is not yet complete, meaning that good sales potential in replacement business is still realizable with iTWO 5D in the DACH region. Additional opportunities in the existing customer area have recently emerged due to the fact that the first iTWO 5D customers have now decided to migrate to iTWO 4.0. This not only has a positive effect on the replacement business in the DACH region, but also in all the other sales regions of the RIB Group in which iTWO 5D has already been sold.

Internationalization. One major strategic objective planned by the RIB Group is to intensify its existing foreign business relationships, establish itself in existing foreign markets, and enter into new markets. In this respect, the RIB Group pursues a key account strategy designed to particularly acquire customers in the form of major construction companies, general contractors, investors, and consultants from the top 1000 of the respective target groups. This can lead to the secondary introduction of many subcontractors and smaller service providers as business partners of these major companies to the software products of the RIB Group, in order to ensure that collaborations proceed smoothly. In addition, in conjunction with setting up the MTWO platform in existing and new foreign markets, the RIB Group intends to build a partner network of MSP partners in order to accelerate its market entry in these regions.

Innovations. The RIB Group has highly modern and innovative software solutions, in particular, for technical and business management processes in the construction sector and plant engineering. With iTWO 4.0, we offer a solution that supports digitally networked integrated virtual planning, production, and operating processes, together with the industrial prefabrication of components with a high process depth. In this area, we expect an increasing willingness to invest on the part of our customers. With iTWO 4.0, the already existing Cloud software solutions, and our new mobility apps, we have a comprehensive and modern solution package in our product portfolio, which eminently meets the current technology trends of 5D and Cloud computing. Following a cooperation agreement signed between RIB and Microsoft during the reporting period, the solutions offered by RIB on the MTWO platform will be expanded by new innovative products. The RIB Group intends to integrate iTWO 4.0 technology, Microsoft's AI-based BoT solutions, Azure IoT Suite, and mixed reality solutions with Microsoft's HoloLens in order to provide our customers with a highly attractive complete package of state-of-the-art technologies on the MTWO platform.

Strategic acquisitions. Through targeted strategic acquisitions, the RIB Group also intends to gain access to regional markets and to expand its international customer basis. With the net offering proceeds from the capital increase carried out in the reporting period, the RIB Group is very well positioned to finance the necessary investments mainly using its own funds. The focus here is on opening up new customer groups and establishing the software of the RIB Group as standard software in further markets. Some of our objectives for 2019 include the integration of the companies and interests acquired in the past two financial years into the Group and to secure major customer orders for iTWO, YTWO and MTWO in the respective markets of these companies and interests, as well as the further expansion of the international partner network through targeted acquisitions of value-added resellers and Microsoft solution providers. Moreover, in the future, we want to tap into the mass market internationally through our partners. Our objective is to significantly increase the number of users and to establish iTWO 4.0 as a leading platform for the global construction industry.

Opportunities specific to particular reporting segments. Due to the increasing acceptance of model-based working methods in the construction sector, which is also supported by an increasing number of corresponding government initiatives, we see good opportunities for continued growth in our markets in the reporting segment iTWO with our iTWO 5D and iTWO 4.0 technology. In light of the fact that YTWO Ltd., which now operates as a wholly owned subsidiary of the RIB Group, acquired the sixth major customer for the YTWO platform in the reporting period, we continue to expect good growth opportunities in the business segment YTWO (SCM) in the medium to long term. There continue to be very good growth opportunities in the new reporting segment MTWO in the medium to long term. This reporting segment may well develop into one of the RIB Group's most important revenue drivers over the long term.

Overall view of the opportunity situation. With its innovative strength and its comprehensive range of cutting-edge technology-based solutions, the RIB Group is very well positioned within its markets. With topical areas such as 5D, iTWO 4.0, the YTWO platform and MTWO, conceived in partnership with Microsoft as the first vertical Cloud solution for the construction sector, the RIB Group has positioned itself as a pioneer in the construction industry, both nationally and internationally. Against this background, we believe that the RIB Group has very good opportunities to further expand its market position.

Opportunities through modern technologies and international cooperations

I.4 RISK REPORT

I.4.1 Risk management and internal control system

The RIB Group operates a risk management system for the early detection, assessment and handling of risks in a targeted manner. The basis of this system is the uniform company definition of risk, i.e., when a situation could significantly hinder the RIB Group's ability to achieve its corporate objectives and fulfil its duties right now or at some point in the future. Our early risk detection system is specifically tailored to the needs of the RIB Group. Therefore, we have waived the legally granted option to use one of the guidelines available nationally and internationally.

Identifying risks at an early stage and taking any necessary countermeasures is the general responsibility of the Managing Directors. The senior management supports the Managing Directors in performing this task.

The individual risks identified in the respective risk areas are classified as follows within the scope of a quantitative and qualitative risk analysis:

Probability of occurrence		
4	highly probable	>= 90%
3	probable	>= 65%
2	possible	>= 35%
1	improbable	< 35%

Severity of loss		
4	severe	>= € 1,000 thousand
3	significant	>= € 250 thousand
2	medium	>= € 100 thousand
1	minor	< € 100 thousand

Because a quantitative assessment is not possible in many cases, the need for action is derived from a coordinate system. This is presented as follows:

highly probable	5	6	7	8
probable	4	5	6	7
possible	3	4	5	6
improbable	2	3	4	5
	minor	medium	significant	severe

> 5	high need for action
> 3	medium need for action
< 3	no need for action

The need for action is derived from this assessment, and appropriate countermeasures are developed. The individual assessments are aggregated with weightings applied, in order to assess the overall risk position of the Company. The loss severity levels are also partly quantified. In this case, the severity levels are assigned values in % or €. The possible losses are then determined by multiplying them by the probability of occurrence.

The functionality of the early risk recognition system is continuously monitored. The Managing Directors receive a quarterly report on identified risks in the form of cumulative risk overviews. The Managing Directors and Administrative Board discuss the risk situation of the Company and the Group at regular intervals, and continually monitor the further development of the control and early risk detection system. Insofar as the risks cannot be consciously accepted, an attempt shall be made to counteract the risks by means of suitable countermeasures.

The established risk management system and the internal control system also encompass risks that could impact on the financial reporting process and therefore on the accuracy of the financial statements of the RIB Group. This particularly concerns risks of errors and violations, risks in connection with data capture and security, risks of the circumvention of existing internal controls, and the inaccurate assessment of facts and scopes for discretion.

The essential rules and measures for managing financial-reporting-related risks consist of the clear allocation of responsibilities in the preparation of quarterly and annual financial statements, the issuance of binding guidelines for the accounting for business transactions, and the use of consolidation software that supports the monthly analysis and control of the figures received from all reporting units.

In particular, the process of sales recognition is strictly controlled from the very contract initiation phase. All customer contracts pass through an approval process. Deviations from standardized regulations must be approved in advance by the Executive Board of the parent company, if specified thresholds are exceeded.

The updating of risks and monitoring of countermeasures are continuous processes. The countermeasures listed in the risk reports are checked for compliance, and then implemented. Risks are formally logged and summarized as soon as there are changes, no matter how minor, compared to the previous year.

I.4.2 Overview of individual risks

The following risk areas have been defined as part of our risk management system:

- Development risks (number range 100)
- Financial risks (number range 200)
- Sales risks (number range 300)
- Cooperation risks (number range 400)
- Acquisition risks (number range 500)
- Other risks (number range 600)

When viewed overall, the recorded risks appear in the Risk Heat map as follows (updated end of 2018):

1	highly probable			110	
2	probable	303		105	
21	possible		101 | 113 | 115 202 | 308 | 309 402 |	102 | 103 | 104 | 107 | 112 201 | 304 | 310 | 313 | 315 502 |	106 | 111 | 114
24	improbable	203 | 211 | 212 306 |	207 | 213 | 209 305 | 311	116 | 117 204 | 208 307 | 506 |	205 | 206 | 210 | 301 | 302 | 312 | 314 505 | 601 |
48		**minor**	**medium**	**significant**	**severe**
		5	12	19	12

Severe risks form the permanent focus of the monitoring performed by senior management, and they are actively monitored using appropriate risk controls. As in the previous year, we identified all severe or significant risks to which a high need for action was assigned exclusively in the area of development.

Development risks (number range 100)

The RIB Group is exposed to strong competition when it comes to development and rollout times. In order to retain its competitive edge, the RIB Group needs to invest heavily in product development and product rollouts, using both financial and human resources. The risk here, one that has a high need for action (no. 105), is that the functional scope of the software will require expensive adaptation with respect to the legal framework. This area also encompasses the most significant individual risk, one with a high need for action (no. 110), that development capacities may be inhibited by individual customer requirements, whereby this could delay the supply of new products.

The RIB Group has integrated or combined other products with the products in its portfolio. In this connection, there exists the risk, with a high need for action (no. 106), that the RIB Group could be made liable for third-party content, and that this could have a negative effect on the reputation of the RIB Group.

The economic success of the RIB Group is critically dependent on the success of our best-selling software solution iTWO 5D and on our new software platform iTWO 4.0. In this connection, there exists the risk, with a high need for action (no. 111), that the software will not be well received in the markets into which we wish to expand. This could have a material adverse effect on our net assets, financial position and results of operations.

If not examined closely, the unrealistic deadlines and high functional or technical demands of customers (external) or product management (internal) could result in high costs and unnecessary efforts. In this connection, there exists the risk, with a high need for action (no. 114), that this could have a material adverse effect on our net assets, financial position and results of operations.

During the reporting period, the individual risks were repeatedly reviewed. With regard to the total amount of losses, the assessment of the risk situation has not changed significantly compared to the previous year.

Financial risks (number range 200)

Financial risks concern risks with only a medium need for action or no need for action at all. However, there are three risks with major loss severity levels. These relate to the macroeconomic risks (no. 210), bad debt risks in projects with major customers (no. 205) and bad debt risks concerning banks regarding our securities and liquid funds (no. 206).

The risk situation in the area of financial risks was adjusted and reassessed in 2018 in line with changes in capital, sales, interest rates and other influencing factors. The development of possible and assessed amounts of losses corresponds to the current asset and business development of the RIB Group.

All financial risks have been reassessed, resulting in an increase in the quantifiable total amount of losses compared to the risk assessment of the previous year, which is in line with the growth in sales.

Regarding other explanations concerning the financial risk management and policies of the RIB Group, we refer to the corresponding explanations set out in the Notes to the Consolidated Financial Statement.

Sales risks (number range 300)
Sales risks concern risks with only a medium need for action or no need for action at all. Sales risks: The possible amount of losses arising from customer satisfaction (No. 301), order processing (No. 302), performance of sales partners (No. 312), and customer satisfaction with operability and performance (No. 314) were reassessed in the reporting period due to increased maintenance, consulting and sales revenue, while retaining the same probability of occurrence.

Sales risks have been reassessed, resulting in an increase in the quantifiable total amount of losses compared to the risk assessment of the previous year, which is slightly over-proportional to the growth in sales.

Cooperation risks (number range 400)
In the previous year, a cooperation risk (No. 401) with a medium need for action was recorded to allow for the possibility that the YTWO joint venture may not develop positively over the following few years. Due to the acquisition of 100% of the shares in YTWO Ltd. by the RIB Group in December 2018, cooperation risk no. 401 no longer applied in the reporting period. New cooperation risks for the reporting segment YTWO are recorded and assessed accordingly upon new cooperation agreements taking effect.

If, contrary to expectations, the cooperation with Microsoft regarding the MTWO platform for the construction industry, which took effect in February, does not develop positively over the next few years, there is a risk with a medium need for action that could have an adverse effect on future return expectations. This new risk (No. 402) was recorded and assessed in the reporting period.

Cooperation risks have been reassessed, which has resulted in no changes in the quantifiable total amount of losses compared to the risk assessment of the previous year.

Acquisition risks (number range 500)
Acquisition risks concern risks with only a medium need for action or no need for action at all. However, there does exist a risk with a major loss severity level (no. 505) that the future value of a purchased company will be lower than the contractually agreed purchase price. This could have adverse effects on the net assets and financial position of the RIB Group.

Acquisition risks have been reassessed following the company acquisitions in the reporting period, resulting in an increase in the quantifiable total amount of losses compared to the risk assessment of the previous year, which is slightly over-proportional to the growth in revenues.

Other risks (number range 600)

The entry into force of the GDPR, with effect from 25 May 2018, has created new risks for the RIB Group. These have been taken into account as risks due to legal uncertainties regarding the application of the GDPR (No. 601) under “Other risks” - a category newly introduced in the reporting period. The possible loss severity level arising from violations of the GDPR can be major, the probability of occurrence is considered low.

I.4.3 Summarised description of the risk situation

Same as in previous years, there are no major risks that are likely or very likely to occur. We do not currently see any going concern risks.

Notes on forecasts

This Section of the Management Report contains forward-looking statements and information about events which may arise in the future. These forward-looking statements can be recognized by formulations such as “should”, “will”, “expect”, “intend”, “plan”, “estimate”, “in the opinion of the RIB Group” or similar expressions. Such forward-looking statements are based on current expectations and certain assumptions. They are therefore subject to a number of risks and uncertainties. A large number of factors, many of which are beyond the control of the RIB Group, influence the business activities, performance, business strategy, and results of the RIB Group. These factors could cause the actual results, performance and achievements of the RIB Group to be materially different from those expressed or implied by such forward-looking statements regarding future results, performance or achievements.

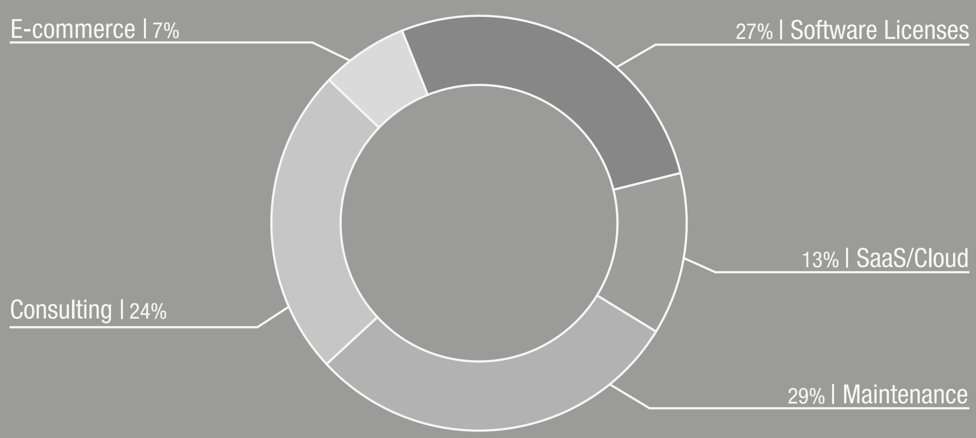
Stuttgart, 15.03.2019

RIB Software SE

The Managing Directors

Thomas Wolf | Michael Sauer | Mads Bording Rasmussen

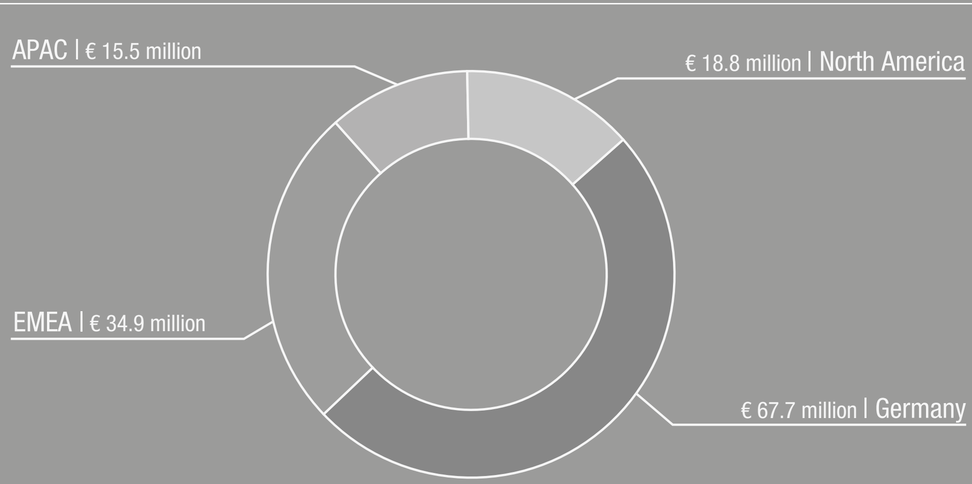
ANALYSIS OF REVENUE 2018



CONSOLIDATED FINANCIAL STATEMENTS

FOR THE FINANCIAL YEAR 2018

REGIONAL REVENUE BREAKDOWN 2018



APAC (Asia and Pacific Region)

EMEA (Europe excl. Germany, Middle East and Africa)

CONSOLIDATED INCOME STATEMENT FOR THE 2018 FINANCIAL YEAR

€ thousand unless otherwise indicated	Notes	2018	2017
Revenue	**(9)**	**136,874**	**108,286**
The production costs of services for revenue generation	(10)	-58,128	-42,977
Gross profit		**78,746**	**65,309**
Other operating income	(11)	7,994	12,813
Marketing and distribution costs		-26,246	-21,740
General administrative expenses		-15,215	-10,665
Research and development expenses		-16,659	-13,689
Other operating expenses	(12)	-4,292	-2,413
Financial income	(14)	9,427	3,668
Finance costs	(14)	-534	-241
Share of profit and losses of of investments accounted for using the equity method	(20)	-3,613	-3,469
Profit before tax		**29,608**	**29,573**
Income taxes	(15)	-7,757	-11,125
Consolidated net profit for the year		**21,851**	**18,448**
Profit attributable to non-controlling interests		523	0
Profit attributable to owners of the parent company		21,328	18,448
Result per share on the basis of the share of earnings of the sharehol-ders of RIB Software SE:			
basic	**(16)**	**0.43 €**	**0.41 €**
diluted	**(16)**	**0.42 €**	**0.40 €**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE 2018 FINANCIAL YEAR

Figures in € thousand	2018	2017
Consolidated net profit for the year	**21,851**	**18,448**
Components reclassified in subsequent periods with no effect on profit and loss:		
Revaluations	3	210
Other consolidated comprehensive income after taxes for components that are reclassified with no effect on profit and loss	**3**	**210**
Components reclassified in subsequent periods with an effect on profit and loss:		
Exchange differences	5,965	-15,018
Other consolidated comprehensive income after taxes for components that are reclassified with an effect on profit and loss	**5,965**	**-15,018**
Other consolidated comprehensive income after taxes	**5,968**	**-14,808**
Total comprehensive income for the year	**27,819**	**3,640**
of which attributable to non-controlling interests	400	0
of which attributable to owners of the parent company	27,419	3,640

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS OF 31 DECEMBER 2018

Figures in € thousand	Notes	31 December 2018	31 December 2017
Goodwill	(17)	103,266	84,993
Other intangible assets	(18, 19)	115,451	54,712
Property, plant and equipment	(18)	19,435	17,266
Investment properties	(18, 21)	5,548	7,036
Investments accounted for using the equity method	(20)	0	31,226
Prepaid land use lease payments	(22)	899	926
Other financial assets	(23)	779	418
Deferred tax assets	(15)	620	2,019
Total non-current assets		**245,998**	**198,596**
Inventories	(25)	2,796	2,303
Trade receivables	(26)	37,773	24,071
Income tax assets		3,467	2,278
Other financial assets	(23)	34,014	35,145
Other non-financial assets	(24)	4,203	3,107
Cash and cash equivalents	(27)	205,245	100,459
Total current assets		**287,498**	**167,363**
Total assets		**533,496**	**365,959**

Figures in € thousand	Notes	31 December 2018	31 December 2017
Subscribed capital	(28)	51,741	46,846
Capital reserves	(28)	316,734	187,168
Retained earnings	(28)	85,246	72,982
Other equity components	(30)	2,635	-3,456
Treasury shares	(28)	-22,378	-9,015
Equity attributable to owners of the parent company		**433,978**	**294,525**
Non-controlling interests	(31)	11,780	0
Total equity		**445,758**	**294,525**
Pension provisions	(33)	3,456	3,569
Bank liabilities		4,800	5,200
Other provisions	(35)	223	299
Other financial liabilities	(38)	5,381	1,934
Deferred tax liabilities	(15)	18,772	12,926
Total non-current liabilities		**32,632**	**23,928**
Bank liabilities		400	400
Trade payables	(34)	10,137	2,273
Income tax liabilities		2,566	3,454
Other provisions	(35)	1,018	1,775
Deferred liabilities	(36)	10,858	5,701
Deferred income	(37)	12,532	19,681
Other financial liabilities	(38)	6,572	8,669
Other liabilities	(39)	11,023	5,553
Total current liabilities		**55,106**	**47,506**
Total liabilities		**87,738**	**71,434**
Total equity and liabilities		**533,496**	**365,959**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE 2018 FINANCIAL YEAR

Figures in € thousand	Subscribed capital	Capital reserves	Retained earnings
Notes	(28)	(28)	(28)
As of 01 January 2017	**46,846**	**182,284**	**62,021**
Consolidated net profit for the year	-	-	18,448
Other comprehensive income for the year	-	-	-
Total comprehensive income for the year	**0**	**0**	**18,448**
Disposal of treasury shares	-	3,500	-
Dividend payment	-	-	-7,196
Transactions with non-controlling interests	-	-	-123
Other changes	-	-37	-168
Share-based remuneration	-	1,421	-
As of 31 December 2017 and 01 January 2018	**46,846**	**187,168**	**72,982**
Consolidated net profit for the year	-	-	21,328
Other comprehensive income for the year	-	-	-
Total comprehensive income for the year	**0**	**0**	**21,328**
Disposal of treasury shares	-	8,192	-
Acquisition of treasury shares	-	-	-
Dividend payment	-	-	-9,064
Capital increases	4,684	123,485	-
Transactions with non-controlling interests	-	-	-
Additions of financial liabilities from company acquisitions	-	-3,692	-
Share-based remuneration	211	1,581	-
As of 31 December 2018	**51,741**	**316,734**	**85,246**

Other equity components					
Currency translation reserve	Revaluation reserve	Treasury shares	Equity attributable to owners of the parent company	Non-controlling interests	Equity according to consolidated statement of financial position
(30)	(30)	(28)		(31)	
11,925	**-573**	**-10,597**	**291,906**	**-123**	**291,783**
-	-	-	18,448	-	18,448
-15,018	210	-	-14,808	-	-14,808
-15,018	**210**	**0**	**3,640**	**0**	**3,640**
-	-	1,545	5,045	-	5,045
-	-	-	-7,196	-	-7,196
-	-	-	-123	123	0
-	-	37	-168	-	-168
-	-	-	1,421	-	1,421
-3,093	**-363**	**-9,015**	**294,525**	**0**	**294,525**
-	-	-	21,328	523	21,851
6,088	3	-	6,091	-123	5,968
6,088	**3**	**0**	**27,419**	**400**	**27,819**
-	-	4,581	12,773	-	12,773
-	-	-17,944	-17,944	-	-17,944
-	-	-	-9,064	-	-9,064
-	-	-	128,169	-	128,169
-	-	-	-	11,380	11,380
-	-	-	-3,692	-	-3,692
-	-	-	1,792	-	1,792
2,995	**-360**	**-22,378**	**433,978**	**11,780**	**445,758**

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE 2018 FINANCIAL YEAR

Figures in € thousand	Notes	2018	2017
Cash flow from operating activities:			
Profit before tax		**29,608**	**29,573**
Adjustments for:			
Depreciation of property, plant and equipment	(13)	1,449	1,150
Amortisation / adjustments of intangible assets	(13)	11,933	9,387
Depreciation of investment property	(13)	151	140
Change in valuation allowances on trade receivables		553	1,893
Other non-cash items		13,057	14,010
Interest expense and other finance costs	(14)	534	241
Financial income	(14)	-9,427	-3,497
		47,858	**52,897**
Working capital adjustments:			
Increase/decrease(-) in provisions and deferred liabilities		968	2,154
Increase(-)/decrease in receivables and other assets		-5,871	-10,235
Increase/decrease(-) in received payments	(39)	1,162	-15,267
Increase/decrease(-) in liabilities from trade payables and other liabilities		-4,129	5,712
Cash generated from operations		**39,988**	**35,261**
Interest paid		-151	-190
Interest received		535	106
Income taxes paid		-9,786	-12,372
Net cash flow from operating activities		**30,586**	**22,805**
Cash received from the sale of non-current assets		98	5
Payments made for the acquisition of tangible assets		-1,133	-2,510
Acquisition/production of intangible assets		-9,849	-7,810
Payments made for the acquisition of investment properties		0	-2,219
Payments made for the acquisition of consolidated companies less cash acquired		-19,956	-4,316
Disposal of consolidated companies less cash disposed		0	2,878
Purchase(-)/sale of available-for-sale securities		5	6
Payments received from financial investments as part of current treasury management		34,283	18,922
Payments made for financial investments as part of current treasury management		-32,907	-34,283
Net cash flow from investing activities		**-29,459**	**-29,327**
Payments received from capital increase		131,167	0
Payments made for the costs of the capital increase		-4,316	0
Payments received from taking out bank loans	(13)	0	6,000
Payments made for the repayment of bank loans	(13)	-400	-400
Dividends paid		-9,064	-7,196
Payments received from the exercise of stock options		211	0
Dividends received from companies accounted for using the equity method		0	397
Payments made for redeeming other financial liabilities	(13)	-1,514	-150
Payments made for the acquisition of treasury shares		-14,249	0
Net cash flow from financing activities		**101,835**	**-1,349**
Change in cash and cash equivalents impacting cash flow		**102,962**	**-7,871**
Cash and cash equivalents at the beginning of the period		100,459	116,401
Currency-related change in cash and cash equivalents		1,824	-8,071
Cash and cash equivalents at the end of the period		**205,245**	**100,459**
Composition of cash and cash equivalents:			
Liquid funds, unrestricted		202,627	97,360
Liquid funds, restricted		2,618	3,099
Cash and cash equivalents at the end of the period		**205,245**	**100,459**

NOTES TO THE 2018 CONSOLIDATED FINANCIAL STATEMENTS

1. CORPORATE INFORMATION

RIB Software SE (the "Company") and its subsidiaries (together the "Group") are principally engaged in the design, development and sale of software solutions for the construction industry, software maintenance and the provision of consulting and support services for its customers.

The Company was incorporated in Germany on 07 October 1999 as a stock corporation and has been listed on the regulated market of the Frankfurt am Main Stock Exchange since February 2011. The Company was added to TecDAX, the stock index for the technology sector, on 22 September 2014. On 24 September 2018, the Company was also added to the SDAX.

The Company is registered in commercial register B (local court of Stuttgart) under the number HRB 760459. The Company's registered address is Vaihinger Strasse 151, D-70567 Stuttgart, Germany.

The Company's financial year is the same as the calendar year. The consolidated financial statements were drawn up in euro. In the absence of any note to the contrary, the amounts are rounded to the nearest thousand euro (€ thousand) and stated as such. Rounding differences may arise for individual items due to the fact that the figures are presented in € thousand.

The consolidated financial statements and group management report of RIB Software SE were released to the Administrative Board by the Managing Directors on 15 March 2019.

2. ACCOUNTING AND REPORTING PRINCIPLES

The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union during the financial years under review.

The additional disclosures required pursuant to § 315e HGB (German Commercial Code) are included in the notes to the consolidated financial statements with references to the corresponding paragraphs.

The IASB has passed some new or revised standards that will become mandatory for the fiscal years starting on January 1, 2018. These new or revised IFRS affect the information in our consolidated annex. However, they do not have a significant impact on the revenue, asset and financial situation of the group. For the purpose of preparing and compiling the financial report for the periods considered, the group has applied uniform accounting principles. All accounting principles described under Item 4. (see below) were consistently applied for the entire period under consideration. Unless specifically stated otherwise, the consolidated financial report was compiled based on amortized historical acquisition and production costs.

3. EFFECT OF NEW OR REVISED IFRS

The following already published standards and interpretations were applied for the first time in the fiscal year as their application is mandatory and could have impacted our consolidated financial statements:

- **IFRS 15 "Revenue from Contracts with Customers"**
  IFRS 15 "Revenue from Contracts with Customers" replaces the previous standards IAS 18 and IAS 11 as well as a number of revenue-related interpretations. The standard contains a five-step model, according to which the sum expected as payment for goods or services rendered to the customer is recognized as sales revenue. It was adopted into EU law on 22 September 2016. This standard became mandatory for the first time for financial years beginning on or after 01 January 2018. Earlier application was permitted. The regulations contained in IFRS 15 concerning the income realization for multi-component contracts, i.e. when selling software solutions in combination with providing training and maintenance or other services is of particular importance to the RIB consolidated financial report. We have applied IFRS 15 retrospectively, effective from 01 January 2018 (modified retrospective approach). In doing so, we applied the simplification regulation of only applying the standard to contracts that were not yet fulfilled as of 01 January 2018. In our judgement, the initial application of IFRS 15 did not result in any significant changes, so that it was not necessary to recognize cumulative changes in the profit reserves for 01 January 2018. There were insignificant changes in the income realization of customer-specific production orders that were previously accounted for pursuant to IAS 11. While in individual cases the regulations of the IFRS 15 led to revenue being recognized later than before, this area is of minor importance for the RIB Group, so that this had no significant effects on the revenue, financial, and asset situation of the Group.

- **IFRS 9 "Financial Instruments"**
  IFRS 9 "Financial Instruments" replaces IAS 39 and covers the classification and valuation of financial assets and financial liabilities as well as regulation for the accounting of hedging transactions. Accordingly, financial assets and financial liabilities will in the future be either classified and evaluated at the amortized acquisition cost or the fair value. It was adopted into EU law on 22 November 2016. This standard became mandatory for the first time for financial years beginning on or after 01 January 2018. In keeping with our expectations, there were no significant effects from the application of IFRS 9 on the revenue, financial, and asset situation of the Group. In accordance with the transitional provisions, the Group has made use of the option to continue to present comparative information in accordance with IAS 39. For additional comments on for the transition from IAS 39 to IFRS 9 we refer to our comments in **Note (43.D.)**.

The following standards and interpretations that are already published may have an impact on our consolidated financial report in the future. The standards and interpretations have not yet been applied in this consolidated financial report, as their application is not yet mandatory, or they are yet to be recognized in the EU:

- **IFRIC 23 "Uncertainty over Income Tax"**
  IFRIC 23 "Uncertainty over Income Tax" was published in June 2017. IFRIC 23 was adopted by the EU in October 2018. IFRIC 23 must be applied no later than to fiscal years that start on or after 01 January 2019. Earlier application is permitted. We do not expect the application of IFRIC 23 to have any significant effects on the revenue, financial, and asset situation, since our previous accounting practices were already aligned to the interpretation.

- **IFRS 16 "Leasing"**

  The IASB published IFRS 16 "Leasing" on 13 January 2016. IFRS 16 regulates the treatment of lease arrangements and replaces the previously valid IAS 17 as well as the three leasing-related interpretations IFRIC 4, SIC-15, and SIC-27. It was adopted into EU law on 09 November 2017. The standard is mandatory from 01 January 2019. Its application is mandatory for all IFRS users and, in principle, applies to all leases. Exceptions to this are leases under IAS 38, IAS 41, IFRIC 12, or IFRS 15. The significant changes in IFRS 16 affect the accounting of the lessee. For instance, IFRS 16 thus abolishes the previous classification of Operating and Finance Leases for lessees. In its place, IFRS 16 introduces a uniform accounting model. For all lease relationships, the lessee must thus recognize assets for acquired rights-of-use (so-called "right-of-use" concept) and liabilities for outstanding payment obligations. IFRS 16 also grants an option for the application to waive the recognition of the rights-of-use and leasing liabilities for short-term lease relationships with a term of up to 12 months and lease relationships for low-value assets (so-called "low value" leases).

  The rights-of-use are recognized as acquisition costs minus cumulative depreciation and, if applicable, required impairments. The acquisition costs of the rights-of-use are given by the present value of all future lease payments plus lease payments made before the start of the lease relationship. The ancillary closing costs for the contract and the costs for dismantling or costs for restoring the original state of the lease object must also be added to the acquisition costs; all types of discount are subtracted.

  If the lease relationship contains a transfer of ownership of the underlying asset at the end of the term, the depreciation is over its economic useful life. Otherwise, the right-of-use is depreciated over the term of the lease relationship. The liabilities for die undertaken payment obligations of the lease relationship are determined as the present value of the payable lease payment minus already performed advance disbursements. In the measurement after recognition, the paid lease instalments reduce the lease liability without affecting net income. The interest paid for the lease liability is recognized through profit or loss. Thus, IFRS 16 changes the types of expenditures that are associated with lease relationships, which leads to a division of the expenditures into a depreciation and an interest portion.

  The accounting of the lessor pursuant to IFRS 16 largely corresponds to the previous regulations of IAS 17.

  An early application of IFRS 16 was permitted if IFRS 15 "Revenue from Contracts with Customers" was already applied. The RIB Group will first apply IFRS 16 starting on 01 January 2019. The changed accounting for lease relationships in which the RIB Group is the lessee will have an impact on the consolidated financial report. In particular, rights-of-use obtained from the lease of vehicles and real estate are recognized as liabilities under assets and liabilities for payment obligations made. In agreement with the transition regulations, the RIB Group will forego the adjustment of the figure from the previous year and identify the transition effects cumulatively in the profit reserves.

  The RIB Group will largely apply the exemptions of IFRS 16 for initial application. For instance, the initial direct costs in the valuation of the rights-of-use are not considered at the time of the initial application. In addition, lease contracts that end in the 12 months following the initial application date are considered as short-term lease contracts. For the calculation of the term of lease contracts that contain extension and termination options, current insights are taken into account. For simplification, no adjustment is made for lease relationships with a low value.

Based on the findings from the preparation for the implementation, the initial application of IFRS 16 due to the recognition of rights-of-use and lease liabilities leads to an increase of the balance sheet total of the RIB Groups of around € 10 million. The EBITDA of the RIB Group is expected to be positively impacted by around € 4 million for a full fiscal year, as we will record part of the costs previously classified as rental or leasing expenses as interest expenses and depreciation. No significant changes are expected for the EBIT.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries.

Subsidiaries are fully consolidated as of the date of acquisition, being the date on which control is obtained, and continue to be consolidated until the date when such control ceases. For financial reporting purposes, the financial statements of the subsidiaries are prepared uniformly in accordance with the accounting policies used by the parent company. All income, expenses and unrealised gains and losses resulting from intra-group transactions are eliminated in full in the context of the consolidation.

A change in the ownership interest of a subsidiary without involving the loss of control is accounted for as an equity transaction.

Subsidiaries

A subsidiary is an entity over which RIB Software SE has control. The Company is considered to have control of a subsidiary if it has power of disposition over it. In other words, the Company has rights that grant it a current ability to steer and control the subsidiary's key activities. Such activities are those that have a significant impact on the subsidiary's returns. Furthermore, the Company is exposed to fluctuations in returns resulting from its involvement in the subsidiary, or is entitled to such returns, and has the ability to influence these returns by exercising its power of disposition over the subsidiary.

Joint ventures and associated companies

A joint venture is a joint agreement whereby the parties that jointly exercise control have rights to the net assets of the agreement. Joint management is the contractually agreed jointly exercised management of an agreement. This is only possible if decisions on the relevant activities require the unanimous consent of the parties involved in the joint management.

An associate is an entity over which RIB Software SE has significant control. Significant control means the ability to influence the financial and business policy decisions of the company in which the interest is held. In doing so, there is neither control nor joint control over the decision-making processes.

The results, assets and liabilities of joint ventures and associates are presented in these annual financial statements in accordance with the equity method. According to this method, shares in joint ventures and associates must be included in the consolidated statement of financial position at their acquisition costs that are carried forward by the changes in the share of the Group in the gains and losses in the other income of the associate or the joint venture.

The regulations of IFRS 9 are used in order to determine whether there are indications that the value of the shares in associates or joint ventures has reduced. If an impairment test is to be undertaken, the carrying amount of the investment is tested for impairment in accordance with the regulations of IAS 36. For this purpose, the recoverable amount, i.e. the higher amount of the value in use and fair value less selling costs is compared with the carrying amount of the investment. The resulting amount of the impairment is offset against the carrying amount of the investment.

Companies included at amortised cost

Non-consolidated subsidiaries, associates, joint ventures and joint operations that are individually and collectively of minor importance for the Group and for the presentation of a true and fair view of its results of operations, net asset and financial position, owing to their dormant or low level of business activity, are always included in the Consolidated Financial Statements at amortised cost.

Consolidated group

The Consolidated Financial Statements are based on the individual financial statements of all consolidated companies drawn up in accordance with national commercial law, taking into account financial reporting adjustments pursuant to IFRS. Taking into account these adjustments, the financial statements of all consolidated companies are based on uniform accounting and valuation principles.

The balance sheet date of all included companies was 31 December 2018.

	Domestic	Abroad
Fully consolidated companies	15	60
Joint ventures	1	0
Associated companies	1	0
Companies that are not consolidated due to their minor importance	1	6

The balance sheet totals of the companies that were not consolidated due to insignificance were in total less than 1% of the Group balance sheet total. Total of the income and earnings after taxes also amounted to less than 1%. These companies were of little importance, individually and in total, in contributing to a picture of the revenue, financial, and asset situation of the Group corresponding to the actual situation.

Note (48) provides an overview of all companies included in the consolidated financial report and their asset share pursuant to § 313 Para. 2 HGB.

Goodwill

Goodwill generated by the acquisition of entities represents the difference between the purchase price and the pro rata Group's interest in the net fair value of the available assets, liabilities and contingent liabilities as of the date of the acquisition.

Goodwill arising on acquisition of an entity is recognised in the consolidated statement of financial position as an asset, initially measured at cost and subsequently at cost less any impairment losses due to losses in value.

The carrying amounts of all goodwill are reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amounts may be impaired. The Group performs its annual impairment tests of goodwill in the fourth quarter of each financial year. For the purpose of impairment testing, the respective goodwill acquired at the time of acquisition of an enterprise, from the acquisition date, is allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from synergy effects, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the (group of) cash-generating unit(s) to which the goodwill has been allocated. If the recoverable amount of the cash-generating unit or group of cash-generating units falls short of its carrying amount, an impairment loss is recognised. Any impairment losses recognised as goodwill are not reversed in subsequent periods.

If goodwill forms part of a cash-generating unit or group of cash-generating units and part of the operation within the unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

Impairment testing of non-financial assets other than goodwill

When an indication of impairment exists, or when annual impairment testing for an asset is required (for assets other than goodwill, financial assets and deferred tax assets), the asset's recoverable amount is determined. The recoverable amount of an asset is the higher of value in use or fair value less costs to sell. If an asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, the fair value is to be determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market risks, the inflation rate and risks specific to the asset. An unscheduled impairment loss is charged to the income statement in the financial year in which it arises.

An assessment is also made at the end of each financial year as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indications exist, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is only reversed if there has been a change in the factors applied to determine the recoverable amount of that asset. The upward appreciation in value is limited to the carrying amount that would have been determined (net of any depreciation or amortisation) had no impairment loss been recognised for the asset in prior years. Reversals of such impairment losses are recognised in profit or loss in the financial year in which they arise.

Related companies and persons

A company or a person is treated as related if the following conditions are met:

a) If the party is directly or indirectly controlled by one or more intermediaries, (i) the reporting company is controlled by him, or is under common control; (Ii) owns a share of the reporting company that has a significant influence on the company; or (iii) is involved in the joint management of the enterprise;

b) If the party is an associated company or a joint venture;

c) If the party has a key position in the reporting company or its parent company;

d) If the party is a close relative of a natural person according to (a) or (c);

e) If the party is a company controlled by a natural person referred to under (c) or (d), the party is subject to, is significantly influenced by, or directly or indirectly holds a majority of the voting rights in that company.

Property, plant and equipment and depreciation

Property, plant and equipment are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended. Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is recognised in the consolidated income statement in the financial year in which it is incurred. If significant parts of property, plant and equipment must be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciation.

Items of property, plant and equipment, other than assets under construction, are depreciated on a straight-line basis over their estimated useful life. The estimated useful lives of property, plant and equipment are as follows:

Land and buildings	25 - 50 years
Furniture, fixtures and fittings	2 - 20 years
Office and technical equipment	2 - 20 years
Vehicles	3 - 6 years

Fully depreciated assets are retained in asset accounting until they are disposed of. No further depreciation is charged on these assets.

Where parts of an item of property and equipment have different useful lives, the cost of that item is allocated among the parts and each part is depreciated separately.

Residual values, useful lives and the depreciation methods used are reviewed and adjusted as necessary at least as of each financial year end.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use. Any gain or loss arising from disposal or scrapping (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated income statement in the year when the asset is derecognised.

Intangible assets (other than goodwill)

All of the Group’s intangible assets have useful lives that are limited in time. Intangible assets are amortised on a straight-line basis over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method are reviewed at each financial year end at the latest.

Rights reacquired during business mergers, which were recognized as intangible assets, are depreciated over the residual contractual term of the agreement giving rise to these rights. If the estimated residual technological or economic useful life is shorter, the depreciation is made over this period.

Capitalised development costs

Research costs are recognised through profit or loss. Expenditure incurred on projects to develop new software is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of technical and financial resources to complete and the ability to measure reliably the expenditure during the development phase. Development costs which do not meet these criteria are expensed.

The capitalised software development costs are amortised on a straight-line basis over the estimated economic life of the software of five or ten years, commencing from the date on which the product is commercially released.

The carrying amount of internally created software is tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If impairment indications arise, the recoverable amount is estimated and an impairment loss is recognised through profit or loss if the recoverable amount is lower than the carrying amount. Impairment testing is performed annually for internally created software that is not yet ready for use.

Gains or losses arising from the disposal of an intangible asset, calculated as the difference between the net disposal proceeds and the carrying amount of the intangible asset, are recognised in the income statement on disposal of the asset.

Purchased technology

Technology purchased as part of a business combination are amortised over their estimated useful life of five years on a straight-line basis.

Purchased software

Purchased software reflects the cost of computing software used by the Group internally and not to generate revenue; It is capitalised at the costs incurred to acquire and commission the purchased software and amortised over its estimated useful life of three to five years on a straight-line basis.

The cost of maintaining computer software programs is expensed as incurred.

Reacquired software rights

The reacquired software rights lists the acquisition costs for software that the Group reacquired in connection with the business combination YTWO. We refer to **Note (7.F.)**. The asset value of the reacquired software is depreciated over the estimated residual technological useful life of 8 years and 6 months.

Customer relationships

Customer relationships acquired in business combinations are amortised over their estimated useful lives of eight to nine years on a straight-line basis.

Lease agreements

Leases that transfer all the substantial risks and rewards of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalised at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under finance lease relationships are included in property, plant and equipment and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs are allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Leases are accounted for as operating leases where all substantial rewards and risks of ownership of assets remain with the lessor. Where the Group is the lessee, rentals payable under operating leases, net of any incentives received from the lessor, are charged to the consolidated income statement on a straight-line basis over the lease term.

Costs for prepaid land lease payments under operating leases are deferred and subsequently recognised on a straight-line basis over the respective lease term.

Investment properties

Land and buildings not used, or only used to a minor extent, for commercial or administrative purposes which are owned to generate rental income and/or capital gains are classified as “Investment Property” under IAS 40. This also applies to properties for which the future usage is presently uncertain. Not included are properties under operating leases.

Investment property per IAS 40 is measured at cost on addition. Any directly attributable transaction costs are capitalised with same. Upon acquisition, property cost is broken down into land and buildings respectively. Subsequent costs are capitalised if they give rise to additional future benefit; maintenance expenses are immediately recorded in consolidated profit and loss.

The measurement after recognition of investment property is done uniformly, applying the cost model. Scheduled depreciation of investment property begins from the date the property in question is in the operational condition intended by management. Impairment testing is performed for investment property given concrete indications of impairment. If the recoverable amount is less than the carrying value, an unscheduled impairment is recorded.

Inventories

Merchandise listed as inventories is recognised at the cost of acquisition as per IAS 2. On the balance sheet date, merchandise is measured at the cost of acquisition or the net realisable value, whichever is lower. The net realisable value is the revenue expected to be earned from the sale, less directly attributable costs to sell incurred up until the point of sale. If the net realisable value is lower than the cost of acquisition, the inventories are devalued. If the reasons that led to the devaluation no longer apply, the devaluation is reversed accordingly.

Financial Instruments

A financial instrument is a contract that simultaneously leads to a financial asset in one company and a financial liability in another company or an equity capital instrument. It is initially recognized at the time at which the Group became a party to the contract. Financial assets and financial liabilities are generally itemized separately. For the usual purchase or sale of financial assets, the Group refers to the trading day for both the initial balance sheet recognition and the balance sheet de-recognition.

Financial instruments are initially recognized at fair value. For subsequent valuation, the financial instruments must be classified at the time of the initial record. Based on the business model of the Group for the control of financial assets and the characteristics of the contractual payment streams, financial assets are assigned to the following valuation categories of IFRS 9 “Financial Instruments”: (i) financial assets valuated at amortized acquisition costs, (ii) financial assets valuated at fair value not affecting income, and (iii) financial assets valuated at fair value through profit or loss. They are not reclassified after the initial recording unless the Group changes its business model for the control of financial assets. If a financial asset is valuated at fair value as not affecting net income, the directly attributable transaction costs are considered in the determination of the book value.

Financial assets

Financial assets of the Group include in particular money market and investment funds, business loans, trade account receivables, other receivables, time deposits, other financial investments, and cash and cash equivalents.

The business model is determined at the portfolio level depending on the intentions of the management and the treatment of transactions in the past. The audit of the payment streams is based on the individual financial assets.

Financial assets valued at amortized acquisition costs

Financial assets are valued at amortized acquisition costs if the objectives of the business model consist only in holding the financial asset to collect contractual payments (business model “holding”) and the contractual conditions of the financial asset at specified times lead to payment streams that consist exclusively of repayment and interest payments for the outstanding nominal amount. The valuation at amortized acquisition costs after the initial recognition applies the effective interest method minus impairments. Interest earned, exchange rate differences, and impairments are recognized through profit or loss. Income of expenditures from derecognition is recognized through profit or loss.

Financial assets measured at fair value with no effect on profit or loss

Financial assets are evaluated at fair value with no effect on profit or loss if the objectives of the business model consist in holding the financial asset to collect contractual payments or selling the financial assets (business model “holding and sale”) and the contractual conditions of the financial asset at specified times lead to payment streams that consist exclusively of repayment and interest payments for the outstanding nominal amount. This category also includes equity instruments that are not held for trading purposes and for which the option to recognize fair value changes in other earnings has been exercised. After the initial recognition, the valuation is made at fair value as not affecting net income and unrealized profits and losses are recognized in other earnings. If the financial assets are debt instruments, interest earned calculated using the effective interest method, exchange rate differences, and impairments are recognized through profit or loss. For the derecognition of a debt instrument, the cumulative other earnings are reclassified through profit or loss. If the financial asset is equity instruments, the dividends are recognized through profit or loss at the time the legal claim arises. When disposing of equity instruments, the cumulative profits and losses are reallocated from the other earnings to the profit reserves as not affecting net income.

Financial assets measured at fair value with an effect on profit or loss

Financial assets are valuated at fair value through profit or loss if the contractual conditions do not lead to payment streams at specified times that consist exclusively of repayments and interest payments for the outstanding nominal amount. This also includes financial assets that are not allocated to the “holding” or “holding and sale” business models. The Group did not exercise the option of designating a financial asset at fair value through profit or loss.

Impairment of financial assets

Impairments are recognized on every balance sheet effective date starting from the initial recognition of the financial asset based on the expected credit losses. Impairments are recognized for financial assets valuated at amortized acquisition costs and financial assets from debt instruments that are valuated at fair value not affecting income.

The recognition of the expected credit losses uses a three-level procedure to allocate valuation adjustments:

Level 1 covers all financial assets without significant increase of the default risk since the initial recognition. These are contracts whose payments are less than 30 days overdue. In assessing whether the default risk has increased significantly, the Group considers fair and reliable information that is relevant and available with appropriate time and cost. In particular, a debt instrument has a low default risk if its credit risk rating meets the world-wide definition of “investment grade”. For a financial asset in this level, a valuation adjustment of the amount of the expected 12-month credit loss is made. This corresponds to the expected credit loss resulting from default events that appear possible within 12 months of the financial report effective date or earlier.

If a significant increase of the default risk of a financial asset has been found, it is categorized in level 2. A default of more than 30 days can indicate a significant increase of the default risk. However, this does not adversely affect the credit rating. The expected credit losses are recognized as valuation adjustment that are determined for possible payment defaults over the whole term of the financial asset. For trade account receivables, the Group applies the simplified recognition, according to which these receivables are already classified as level 2 in the initial recognition. Accordingly, no estimate has to be made for a significant increase of the credit risk.

If the credit rating of a financial asset has deteriorated or lapsed, it is classified as level 3. The expected credit losses are recognized as valuation adjustment over the whole term of the financial asset. Objective indications that the credit rating of a financial asset has deteriorated include a default of more than 90 days and other information about significant financial difficulties of the debtor.

When measuring the expected credit losses, a neutral and probability-weighted amount, the fair value of the money, and fair and reliable information available on the balance sheet effective date without unreasonable cost and time expenditures must be considered. Expected credit losses are the estimated credit losses weighted with probabilities and are valuated as present value of the payment defaults. The payment defaults are measured as the difference between the payments that the Group is owed per contract and the payments that the Group is expected to collect. Expected credit losses are discounted with the effective interest rate of the financial asset.

Impairments for expected credit losses are recognized through profit or loss and deducted from the gross carrying amount of the financial asset in the balance sheet. Debt instruments valuated at fair value not affecting income are recognized in other earnings as not affecting net income.

Derecognition of financial assets

Financial assets are derecognized if the Group does not expect in its reasonable assessment that the financial asset can be realized completely or partially. After derecognition, the Group does not expect significant collection of the derecognized amounts. However, in accordance with the Group guideline, derecognized financial assets may be subject to enforcement measures for collection.

Financial liabilities

The financial liabilities of the Group include in particular derivative financial liabilities connected to business acquisitions, trade account liabilities, other financial liabilities and bank liabilities.

All financial liabilities are valuated at fair value at their initial recognition, minus any directly attributable transaction costs. For the purposes of measurement after recognition, a classification is made at the initial recognition of a financial liability. For this purpose, financial liabilities are assigned to the following valuation categories of IFRS 9 “Financial Instruments”: (i) Financial liabilities valuated at amortized acquisition costs and (ii) financial liabilities valuated at fair value through profit or loss.

Financial liabilities valuated at amortized acquisition costs

In general, all financial liabilities are valuated at amortized acquisition costs after the initial recognition, applying the effective interest method. The resulting interest expenditures and income as well as exchange rate differences are recognized through profit or loss in the profit and loss statement as “financial expenditures” / “financial income”.

Financial liabilities valuated at fair value through profit or loss

Financial liabilities recognized at fair value through profit or loss include financial liabilities held for trading purposes. Derivatives are classified as held for trading purposes if they are not included as a hedging instrument in hedge accounting. All profits and losses from financial liabilities that are held for trading purposes are recognized through profit or loss.

The Group‘s liabilities recognized at fair value through profit or loss are exclusively derivatives connected with purchase price liabilities and conditional compensation from business mergers. We refer to our comments in **Note (38)**.

Derecognition of financial liabilities

The Group derecognizes a financial liability when the contractual obligations are met, suspended, or expired. If an existing financial liability is replaced with another liability to the same creditor at significantly different contractual conditions or the conditions of an existing liability are changed significantly, this exchange or modification is treated as the disposal of the original liability and acquisition of a new liability and the difference between the respective book values recorded in the profit and loss statement.

Offsetting financial instruments

Financial assets and liabilities are offset and stated as net amount in the Group's balance sheet if at the given time there is an enforceable legal claim to offsetting the recorded amounts with each other and the intention is to either balance the amounts on a net basis or dissolving the associated liability at the same time the respective asset is converted.

Fair value of financial instruments

The fair value of financial instruments that are traded on an active market is determined using the listed buying prices or price listing of dealers (buying price for buying positions and asking price for selling positions) without deducting transaction costs.

Cash and cash equivalents

For the purposes of the Group's cash flow statement and the Group's balance sheet, the cash and cash equivalents include cash and demand deposits including time deposits and securities with a term of less than three months.

Equity

An equity instrument is a contract that establishes a residual claim to the assets of a company after deduction of all the related liabilities. Equity instruments are recognised in the amount of the issue proceeds received less directly attributable issuing costs.

Third-party and equity instruments issued by a Group company are classified as financial liabilities or equity according to the economic content of the contractual agreement. For the RIB Group, this classification is of significance in particular when transferring treasury shares in the context of company acquisitions. Taking into account the regulations of IAS 32.21 et. seq., contractual obligations are classified as equity instruments if the Group is obligated to deliver a fixed number of treasury shares in fulfilment of an obligation. If the obligation is to deliver a variable number of treasury shares the amount of which is measured such that the fair value of the Group's equity instruments to be delivered corresponds to the amount set out in the contractual obligation, the agreement is recognised as a financial liability.

Treasury shares

Treasury shares are not shown as assets, and instead are deducted from equity. This is done by showing the item separately in the amount of total cost (one-line adjustment). The purchase, sale, issuance and redemption of treasury shares is accounted for without effect on profit or loss. The subsequent re-issuance of treasury shares is treated as a new issue of shares. Proceeds from the re-issuance of treasury shares are recorded in the previous cost amount, offsetting the deduction from equity. Any additional proceeds are allocated to capital reserves. If proceeds of the re-issuance are less than the previous cost, capital reserves are reversed proportionately. The Group cannot exercise voting rights on treasury shares. Nor do any dividends accrue on these.

Non-controlling interests

In business combinations, the non-controlling interests shall be measured at fair value or the proportionate share of the acquiree's identifiable net assets at the acquisition date. The Group decides separately which valuation method to apply for each business combination.

Provisions
Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the effect of the time value of money is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the present value of the provision due to the passage of time is recognised in the income statement.

Income taxes
Income tax expense comprises current and deferred tax. Income tax in connection with items recognised outside profit or loss is also recognised outside profit or loss, either in other comprehensive income or directly in equity.

Actual tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities based on the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is recognised using the balance sheet-oriented “temporary concept” on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- where the deferred tax liability arises from goodwill or the initial recognition of an asset or liability and affects neither the accounting profit nor taxable profit or loss at the time of the transaction; and

- in respect of deferred tax liabilities associated with investments in subsidiaries, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not be reversed in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, carry-forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry-forward of unused tax credits and unused tax losses can be utilised, except:

- where the deferred tax asset arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of deductible temporary differences associated with investments in subsidiaries, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will be reversed in the foreseeable future and taxable profit will be available against which the deductible temporary differences can be utilised.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred taxes are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled. Tax rates (and tax laws) are applied that are effective or announced as effective as of the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Value-added tax

Revenue, expenses and assets are recognised net of the amount of VAT except:

- when the VAT incurred on a purchase of assets or services is not recoverable from the taxation authority. In such a case the VAT is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable, or

- receivables and payables that are stated with the amount of VAT included.

The net amount of the value added tax to be refunded by or to be paid to the tax authorities is presented under assets or liabilities in the consolidated statement of financial position.

Revenue realization

The Group records revenue from contracts with customers connected with the sale or transfer of goods and the provision of services to customers as the amount of the remuneration that is likely to be received in exchange for these goods or services.

Revenue from the sale of software solutions often also include combinations of the sale of software and the provision of training and maintenance or additional services. If the sale price of a software solution also contains an amount for not yet provided services, this amount is accrued and recognized as revenue for the period in which the services were provided. The accruable amount is determined by allocation of the transaction price to the identified service obligations in proportion to their individual sale prices. If it is necessary for the customer to accept the goods or services, the income is collected at the time of acceptance by the customer but no later than the acceptance deadline.

In addition to these general criteria, there are specific guidelines concerning the income realization for each of the main sales areas, i.e. the sale of software as software licenses and software as a service / cloud, the provision of maintenance services, the provision of consulting and support services, and E-commerce.

(a) Sale of software licenses

The income arises from the license fees obtained by the sale of software licenses to the customer. The income is recognized at the time at which the customer acquires the right of disposal over the acquired software licenses. Due to the non-time-limited right to use of the software granted, the customer obtains the right of disposition as soon as he gains access to the software licenses purchased.

In relation to the sale of third-party software solutions as so-called reseller, the Group appears as an agent as defined in IFRS 15.B34 et seq. and only collects that part of the compensation of the customer as income that remains after deducting the payment to the software manufacturer.

In general, we invoice fees for software licenses after contract conclusion and completed delivery. Within major contracts with key accounts payment plans are in some cases agreed with customers.

(b) Sale of software as a service / Cloud

The Group achieves income from the timeframe-based provision of cloud software and the associated services. The contracts concluded for this purpose allow customers to use software functions through the contractual term, but not to operate the software permanently on their own systems. Income from the sale of cloud software is collected for the time period in which the services are provided. Based on the right to access to the cloud software granted for the usage term, we collect the income in instalments over the period of the contract as our service obligations are delivered.

In general, we invoice fees for cloud software annually or quarterly in advance. The advance fee payments represent contractual liabilities and are listed under deferred income.

(c) Provision of maintenance services

The Group receives income for providing maintenance services to customers who purchased non-time-limited software licenses from the Group. The concluded contracts grant customers in particular the right to use hotline services and the latest relevant software versions. The customer thus enjoys the benefits of our maintenance services along with our other services. The Group recognizes the income for providing maintenance services in instalments over the period of the maintenance contract based on the elapsed time.

In general, we invoice fees for maintenance services annually or quarterly in advance. The advance fee payments represent contractual liabilities and are listed under deferred income.

(d) Software consulting and support services

The Group provides consulting and support services to support of its customers with the implementation of the software. These consulting and support services are usually based on project contracts with customers, which specify the prices and timeframe for the provision of services. In addition, the Group provides consulting services connected to the planning and management of construction and infrastructure projects. The Group generally recognizes earnings from the provision of software consulting and support services over the period in which the services were provided.

Where work contracts have been concluded with the customers, these contracts are recognized using the percentage-of-completion method. The basis for this is the ratio of the contract costs incurred to this point to the estimated total costs necessary to complete the project. If it becomes probable that the total costs of a contract will exceed the total income, the expected losses are immediately recognized as expenditures. The determination of progress using the above method leads to a true picture of the transfer of the services to the customer, since the relevant costs are in particular internal personnel costs and costs for external companies that deliver the agreed services. In determining the expected necessary total costs, we consider our experience from similar projects already completed.

In general, we invoice fees for software consulting and support services after the services have been provided or based on contractual payment plans. Received advance payments represent contractual liabilities and are listed under deferred income, unless they are offset against contractual assets when applying the percentage-of-completion method.

(e) Sale of merchandise
In the business segment xTWO (E-commerce), the Group gains earnings through the sale of construction materials, in particular in the sanitary segment. These earnings are recognized after the ordered goods have been delivered. At this time, the Group has met its service obligations. Return rights of the customers are considered by decreasing the sales income by an experience-based, estimated return rate.

In general, we bill fees for merchandise after completed delivery. If we collect down payments for received orders, these contractual liabilities are recognized under the other liabilities.

(f) Significant financing components
If the time between the transfer of promised goods and services to the customers and the agreed payment deadline is more than one year, we take into account the financing component when determining the transaction price of the transferred goods and services. The interest earned resulting from the financing component is recognized pro rata, applying the effective interest method.

(g) Additional costs for the procurement of a contract
For the capitalization of additional costs for contract procurement, we take advantage of the exemption and record it directly as expenditure, since the depreciation period for these costs does not regularly exceed the depreciation period of one year. These costs are of minor significance to the revenue, financial and asset situation of the Group.

(h) Contractual assets
Contractual assets from the fulfilment of contractual service obligations for work contracts and before an unconditional claim for receipt of remuneration arises are listed under the other non-financial assets.

Contractual liabilities concern the deferred income item and the received down payments for orders, which are recorded under the other liabilities. The deferred income includes sales earnings and – in some cases – other income from services of the Group that were already invoiced to the customers or paid by the customers, but that cannot yet be recognized through profit and loss since the services had not yet been provided at the end of the reporting periods.

Government grants
Government grants are recognised where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognised in profit or loss as an expense on a systematic basis over the periods necessary to match the grant to the Company's costs that it is intended to compensate.

Foreign currencies

The consolidated financial statements have been prepared in euro (€), the functional and presentation currency of the Group. Each entity in the Group (Group company) determines its own functional currency. In the annual financial statements of the Group companies, transactions in currencies other than the functional currency of the Group company (foreign currency) are translated at the exchange rate valid on the date of the transaction. At the end of the reporting period, monetary items in foreign currency are translated to the functional currency at the exchange rate on the reporting date. Any resulting translation differences are recognised through profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date when the fair value is determined.

The functional currencies of some foreign Group companies and associates are currencies other than the euro. As of the end of the financial year, the assets and liabilities of the Group companies are translated to the Company's reporting currency at the exchange rates on the reporting date. Income and expenses are translated at the weighted average exchange rate of the financial year. The resulting translation differences are recognised in other comprehensive income and accumulated in the reserve for exchange differences.

On disposal of a foreign operation, the component of other comprehensive income relating to that particular operation is reclassified in the income statement.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the fair value of identifiable assets and liabilities are treated as assets and liabilities of the foreign operation and translated at the closing rate. Any resulting translation differences are recognised in other comprehensive income and accumulated in the reserve for exchange differences.

Employee benefits

(a) Pensions and similar obligations

The Group has both defined benefit and defined contribution plans for its employees.

The provisions recognised in the consolidated statement of financial position in respect of defined benefit pension plans are recognised at the present value of the defined benefit obligation at the balance sheet date.

The defined benefit obligations are calculated by independent actuaries using the projected unit credit method. The present value of the defined benefit obligations is determined by discounting the estimated future cash outflows using interest rates of high quality fixed interest-bearing securities/corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity that match the terms of the related pension liability. In accordance with IAS 19, "remeasurements" are recognised immediately in other comprehensive income. Remeasurements include all actuarial gains/losses from changes in the obligation. Also included are routine settlements originally provided for in the benefits plan which are different from the projected amounts calculated.

According to IAS 19, the "remeasurements" item consists of:

- actuarial gains/losses, plus
- the portion of actual returns on plan assets exceeding the assumed interest rate of the plan assets, plus

- the change in an asset ceiling, to the extent different from the assumed interest rate.

Under the rules of IAS 19, the defined benefit expense in profit or loss is broken down into (i) service cost and (ii) net financing expense or income.

Service cost here includes current service cost, i.e. the cost of new benefits accruing in the reporting period, all plan changes affecting past service cost and all plan curtailment effects (curtailments).

The term “plan curtailments” per IAS 19 means reductions in the number of plan participants. Also included in service cost are gains/losses from settlements which were not provided for in the plan or assumptions.

Net interest is calculated by applying the discounting interest rate used for measuring the pension obligation to the carrying value (generally the difference between obligation and plan assets), adjusted for payments made during the year.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as an employee benefit expense when they fall due. Prepaid contributions are recognised as an asset to the extent that a refund or a reduction in the future payments is available.

(b) Other post-employment benefits
These post-employment benefits concern defined benefit plans according to which employees receive fixed-rate compensation payments after the end of the employment relationship. The amount of the compensation payments depends on the length of service, as well as on whether the employment relationship was terminated by the employee or the employer.

A reserve is recognised for obligations from defined benefit plans as soon as the employee is granted an entitlement from which the Group cannot then withdraw. Measurement of the obligations is based on short-term fulfilment. The reserves are therefore recognised in the amount of the estimated cash outflows not discounted. The change in reserves recorded during the reporting period was fully recognised as service cost.

(c) Other non-current employee benefits
Other non-current employees benefits relate to severance obligations as a part of employee dismissals or redundancies and exits. The amount of the obligation depends on the duration of the employment relationship and after a three-year service period amounts to two months’ salary, after a five-year service period three months’ salary up to a maximum 12 months’ salary for 25 years of service. The payment is due immediately upon termination of the employment relationship in the amount of a maximum of three months’ salary. Any further employee claims, i.e. from the fourth months’ salary, is payable in monthly instalments from the first day of the fourth month after the end of the employment relationship.

The severance obligations were measured on the basis of actuarial methods using the PUC method (projected unit credit method). The respective age of the employee, the remaining service period, the commencement date and the amount of the salary were taken into account as the basic parameters in the measurement.

Reinsurance policies were concluded for covering the severance obligations. The resulting claims are measured at the repurchase of value as of the closing date. If insurance policies are pledged in favour of the beneficiaries, the obligations are offset against the claims.

(d) Employee leave entitlements

Employee leave entitlements are recognised in the period they accrue to employees. A leave provision is recognised for the estimated liability for leave accrued but not taken by employees up to the end of the financial year.

(e) Share-based remuneration

Share-based remuneration includes remuneration plans paid out in cash as well as remuneration plans paid out with equity instruments. The fair value for both types of remuneration plans is determined on the day the remuneration is granted using a Monte Carlo simulation. A revaluation of the fair value for remuneration plans paid out with equity instruments does not take place in the subsequent periods. The value of the share-based remuneration paid out with equity instruments on issue is recognised with a corresponding increase in the capital reserve through profit and loss as a personnel expense over the period in which the entitlement of the employee to the rights vests. The amount recognised as an expense is adjusted to reflect the actual number of equity instruments that can ultimately be exercised by the employees.

We create provisions for share-based remuneration serviced by cash payments and not shares. The amount of the provision reflects the accrued portion of the fair value of the respective rights as of the reporting date. We recognise personnel expenses over the period in which the employees performed the relevant services (vesting period). The provision is adjusted accordingly. Share-based remuneration paid out in cash is measured at the current fair value until its servicing as of the respective balance sheet date. We recognise each change to the fair value of the provision in personnel expenses through profit or loss. The amount of personnel expenses for unvested purchase rights from remuneration paid out in cash not yet recognised through profit or loss is in line with the intrinsic value of the purchase rights as of the date of exercise. As the amount depends on future changes in the share price, it cannot be reliably forecast.

Please see **Note (29)** for further details on our share-based remuneration.

Dividends

Dividends are recognised as a liability when they are approved by the shareholders and announced at the Annual General Meeting.

5. SIGNIFICANT DISCRETIONARY JUDGEMENTS AND ESTIMATES

The preparation of the Group’s financial reporting requires the Managing Directors to make judgements, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and the disclosure of contingent liabilities at the end of the reporting period. However, the inherent uncertainty about these assumptions and estimates could result in outcomes that may require a material future adjustment to the carrying amounts of the assets and liabilities affected.

Discretionary judgements

In the process of applying the Group’s accounting policies, the Managing Directors made the following discretionary judgements which, besides the determination of estimates, had a significant effect on the amounts recognised:

Capitalised development costs

The Managing Directors use their judgement when deciding whether the capitalisation requirements for development costs have been satisfied. This is necessary as the future economic success of any product development is uncertain and it is not possible to preclude the occurrence of technical problems in the future at the time of capitalisation. Judgement is exercised based on the best information available at the time of preparing the consolidated financial statements. In addition, all internal activities related to the research and development of new products are continuously monitored by the Managing Directors.

Estimation uncertainties

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the coming financial years are discussed below:

(a) Accounting of business combinations

The acquisition valuation of assets and debt recognized as part of initial consolidations and their measurement after recognition is essentially based on estimates derived from assumptions about uncertain future developments.

Discretionary decisions must be made in particular for the valuation of intangible assets such as customer relationships, acquired technologies, or reacquired rights that are identified and initially recognized during the accounting of the group's acquisitions. The fair value values of these assets are regularly determined by application of income-based valuation procedures. During the valuation, future payment streams must be forecast and discounted with appropriate interest rates at the valuation effective date. If the actual future development deviates from the expectations and assumptions on which the valuation is based, depreciations could create a debit in the profit and loss statement.

For successive business mergers, i.e. in cases in which the Group obtains control over an acquired business in which it had already held an equity share, the previously held share must be revalued at the fair value applicable at the time of acquisition. Differences between the book value of the previously held shares and their fair value are recognized as profit / loss. The fair value values are regularly determined by application of income-based valuation procedures and thus are linked to the discretionary decisions and estimate uncertainties described in the previous paragraph.

In this consolidated financial report, the above comments on successive business mergers are particularly significant for the accounting of the of the YTWO Group's company acquisitions. The shares in the former joint venture at the time of the company acquisition had a book value of € 26,546 thousand. The fair value of the shares was determined based on our business planning using the discounted cash flow procedure and was € 38,880 thousand at the time of acquisition. On this basis, the revaluation of the shares results in an income of € 12,334 thousand. It was offset with expenditures of € 3,792 thousand from the reclassification through profit or loss of expenditures previously recorded in the other Group earnings into the profit and loss statement. Overall, the accounting of the successive company acquisition results in a revenue recognized in financial earnings of € 8,542 thousand. The accounting of the company acquisition thus had a significant impact on the Group's annual earnings. At the same time, intangible assets and goodwill were recognized, the valuations of which required forecasts of future payment streams and fair value valuation parameters (as described above) and was thus greatly influenced by discretionary decisions and estimates. If the actual future development deviates from the expectations and assumptions on which the valuation is based, depreciations could create a debit in the profit and loss statement. Please refer to **Note (7.F.)** for further information on the accounting treatment of the acquisition.

(b) Impairment of non-financial assets
The Group tests goodwill and internally created software that is not yet ready for use for impairment once a year. Other non-financial assets are tested for impairment if events or changes in circumstances indicate that the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of fair value less costs to sell and value in use. The calculation of these amounts is based on discretionary judgements and estimates. We refer to **Note (17)** for details of key assumptions and estimates used in testing goodwill for impairment.

The Managing Directors must exercise judgements with regard to the impairment of assets particularly in assessing: (i) whether an event has occurred that may indicate that the related asset values may no longer be recoverable; (ii) whether the carrying amount of an asset can be supported by the recoverable amount, being the higher of fair value less costs to sell and the value in use which is estimated based upon the continued use of the asset in the business; and (iii) whether the appropriate key assumptions were applied in preparing cash flow projections including whether these cash flow projections are discounted using an appropriate rate.

Changing the assumptions selected by the Managing Directors in assessing impairment, including the discount rates or the growth rate assumptions in the cash flow projections, could materially affect the net present value used in the impairment test and, as a result, affect the Group’s financial position and results of operations. If there is a significant adverse change in the projected performance and resulting future cash flow projections, it may be necessary to make an impairment charge to the income statement.

(c) Impairment of receivables
Impairment losses are charged on receivables based on an assessment of their recoverability. The assessment of impairment of receivables involves the use of estimates and judgements. An estimate for doubtful receivables is made when the collection of the full amount invoiced is no longer probable, as supported by objective evidence using available contemporary and historical information to evaluate the exposure. Uncollectable receivables are written off through profit or loss. Where the actual outcome or expectation in the future is different from the original estimates, such differences may affect the carrying amount of receivables and thus the impairment loss in the financial year in which such estimates are changed.

(d) Measurement of derivative financial liabilities from company acquisitions
As the amount of the consideration depends on what will happen in the future, the valuation of the fair value of derivative financial liabilities is inextricably linked to discretionary judgements and estimation uncertainties. Please refer to the explanations in **Notes (38)** and **(43)** regarding measurement.

(e) Income tax
The Group is subject to income taxes in various jurisdictions. Determining the income tax expense arising during the reporting period requires taking into account international tax regulations and includes significant discretionary judgements. There are many transactions and calculations for which the final tax determination is uncertain. The Group recognises liabilities on the basis of an estimation whether tax payments are expected after evaluating the respective tax administrations and finance courts. If the prospective final tax expense di-

verges from the calculated amounts that were initially recorded, such differences will impact the tax expense and tax provisions or tax refunds in the periods concerned.

Deferred tax assets relating to certain temporary differences and tax losses are recognised when the Managing Directors considers it to be probable that future taxable profits will be available against which the temporary differences or tax losses can be utilised. If the actual results are different from the original estimates, such differences will impact the recognition of deferred tax assets and tax expense in the period in which such estimates have been changed.

(f) Sales and Income Recognition

When recognising revenue from contracts with customers and, in individual cases, other income from Group services, it is necessary to determine the respective transaction price and allocate it to the individual performance obligations. Discretionary decisions have to be made both when determining the transaction price and when allocating it. This applies in particular to cases in which the transaction price has to be estimated because variable consideration has been agreed. Such situations arise in the sale of software licenses in individual cases in which the Group has a contractual obligation to supply a certain number of licenses, but also, under certain conditions, grants the customer the right to purchase additional licenses or services free of charge or at a reduced price. In such cases, the transaction price is estimated using the expected value method or the most likely amount method. In making this decision, we select the approach that most reliably estimates the consideration to which the Group is entitled.

For the allocation of the transaction price, we determine the individual sales prices that underlie the service obligations. The determination of individual sales prices requires discretionary decisions. For this, we use corresponding prices in the past, if we are dealing with service obligations that do not differ significantly between customers and are sufficiently comparable. This generally concerns service obligations connected to the provision of maintenance services and software consulting and other support services. For service obligations whose prices differ significantly between the customers and are not sufficiently comparable, we generally assign the transaction price according to the residual value method. This method generally applies to service obligations connected with the sale of software licenses.

In addition, we also have to use discretion in determining whether sales incomes should be recognized at a particular point in time or over a particular time period. This is necessary, for example, in software consulting and support services and in large implementation projects. For service obligations that are performed over a certain period of time, we use our discretion in determining the service progress. When applying the percentage-of-completion method, the total costs for fulfilling the service obligation, among other things, must be estimated.

The estimate of the outstanding service obligations of the Group is also subject to some discretion, since future contract changes must be considered. In particular the term and date of contract extensions must be taken into account based on past experience. In addition, the amount of the outstanding service obligations is influenced by exchange rate fluctuations.

In an agreement concluded in fiscal year 2016 concerning the sale of software licenses to the former joint venture YTWO Ltd., the Group had undertaken, under certain conditions, to supply additional licenses free of charge in addition to the contractually agreed number of software licenses. When the transaction was first recognized, the number of licenses to be delivered in total was estimated using the expected value method, allowing the transaction price per license to be determined on this basis. This transaction price was used as a basis for the earnings realization of the delivered licenses. If the collected income comes from licenses still to be delivered, the total income accounting has not yet recorded the earnings. It was instead listed under the liabilities as deferred income (listed in the Group balance sheet under current debt). The estimate of the total of licenses to be delivered was updated during the measurement after recognition on the following balance sheet effective dates, using the same methodology. All newly acquired knowledge relevant to valuation was considered in this process. In the reporting period, the measurement after recognition results in an amount recognized under other operating income of € 2,032 thousand, see **Note (42)**. As part of the accounting of the YTWO Ltd. company acquisition performed in the reporting period, the remaining liability-side deferred income was recorded as a reduction of the transferred remuneration and thus derecognized, see **Note (7.F.)**.

(g) Recognition and Measurement of Other Provisions

Provisions are liabilities whose maturity or amount is uncertain. Because they relate to the future, both the decision on whether to recognise a provision and how to measure that provision are associated with discretionary decisions and estimation uncertainties.

6. CHANGES TO THE CONSOLIDATED GROUP

The scope of consolidation as of 31 December 2018 has changed as follows compared to the scope of consolidation as of 31 December 2017:

	Domestic	Foreign
Full consolidation of companies as part of business combinations	6	24
Full consolidation of companies that were previously not consolidated due to their lack of materiality	0	2
Companies fully consolidated for the first time in the reporting period	**6**	**26**
Companies deconsolidated in the reporting period	0	1
Deconsolidated companies in the reporting period	**0**	**1**

For additional comments on the significant business mergers and the resulting effects on the consolidated financial statements, we refer to **Note (7)**.

Note (48) provides an overview of all companies included in the consolidated financial statements and their asset share pursuant to § 313 Para. 2 HGB.

7. BUSINESS COMBINATIONS

A. Acquisition of Datengut

a) Transferred Remuneration

The company acquired 51 % of the shares in the Datengut GmbH, Zwenkau (hereafter Datengut) with the purchase and transfer agreement dated 23.02.2018. The company was entered into the commercial register on 08.03.2018. The remuneration for the acquisition of the shares was approx. € 4,750 thousand. This amount contains a fixed purchase price portion of € 2,500 thousand, which was fulfilled by transferring liquid funds (hereafter cash purchase price). In addition, RIB Software SE was obliged to transfer a fixed number of its treasury shares (94,442) to the sellers at short notice once the purchase and assignment agreement became effective. At the time of the transfer on 23.03.2018, the market value of the shares totaled approx. € 2,250 thousand. The acquisition date was 23.03.2018. For reasons of simplification, the purchase price allocation was based on the value conditions as of 31.03.2018. The transactions between 24.03.2018 and 31.03.2018 were of minor importance. Furthermore, the value situation did not change significantly in this time.

b) Identifiable acquired assets and assumed debt

The fair value values of the identifiable assets and liabilities of Datengut at the acquisition date and the related carrying amounts immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 31 March 2018	Fair value 31 March 2018
Intangible assets	7	4.431
Property, plant and equipment	155	155
Other financial assets	62	62
Other non-financial assets	94	94
Trade receivables	600	600
Cash and cash equivalents	50	50
	968	**5.392**
Deferred income	248	248
Other debts and other liabilities	449	449
Deferred tax liabilities	3	3
	700	**700**
Net assets	**268**	**4.692**

The intangible assets of € 4,431 thousand come mainly from acquired technology (€ 1,709 thousand) and from existing customer contracts and the associated customer relationships (€ 2,715 thousand).

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

c) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred	4,750
Value of non-controlling interests	2,299
Fair value of the identifiable net assets	-4,692
Goodwill	**2,357**

The components of the non-controlling shares were evaluated at the corresponding share of the current ownership instruments in the amounts estimated for the identifiable net assets of the acquired companies.

The Goodwill of € 474 thousand is deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition as well as the know-how of the acquired employee base.

d) Description of the company and main reasons for the business combination

Datengut is one of the leading German providers of mobile solutions for the construction industry. Datengut develops and markets software for medium-sized and large construction companies, which transfers data from any already existing data sources and collates it in its own web application.

The existing Datengut software will complement the iTWO 4.0 platform in the form of so-called ‘app developments’. Furthermore, it is our intention to use the investment to establish the ‘Mobility’ competence center for the DACH region within the RIB Group.

As a result of the acquisition of Datengut, revenues in the reporting period increased by € 4,028 thousand and the consolidated comprehensive income by € 1,216 thousand.

If the transaction had already been executed on 01.01.2018, revenues in the reporting period would have increased by about € 4,325 thousand and the consolidated comprehensive income by about € 1,289 thousand.

B. Acquisition of IMS

a) Transferred Remuneration

The company acquired 80 % of the shares in the IMS Group (hereafter IMS), with the parent company IMS Gesellschaft für Informations- und Managementsysteme mbH, Dinslaken with the purchase and transfer agreement dated 27.07.2018. The remuneration for the acquisition of the shares was approx. € 8,000 thousand and was fulfilled via the transfer of liquid funds. The acquisition date was 27.07.2018. For reasons of simplification, the purchase price allocation was based on the value ratios as of 31.07.2018. The transactions between 28.07.2018 and 31.07.2018 were of minor importance. Furthermore, the value situation did not change significantly in this time.

In addition, the share purchase contract contains additional agreements concerning the acquisition of the outstanding shares of 20 %. Accordingly, the company has a call option for the remaining shares. The seller was granted a sales option. The striking price for both options is determined by a contractually specified formula as multiple of the average EBITDA of IMS in the fiscal years 2020 and 2021. In addition, an agreement was made for a price minimum and maximum. The company can choose to pay the striking price for this option in cash, in its treasury shares, or a combination thereof.

The shares continue to carry economic opportunities and risks, since the amount of the option price depends on the economic development of IMS until the time the option is exercised and cannot be determined in advance. The company currently has no claim to the yield associated with the ownership shares from the remaining 20 % of the shares, so that the share in the profit and loss is limited to the existing ownership shares and potential voting rights are not considered. We therefore do not anticipate the acquisition of the shares, which is why there is a balancing item for non-controlling shares. The valuation occurred at fair value, which corresponded to the fair value of the financial liability from the written put option in the amount of € 2,333 thousand at the acquisition date. The recognition of the liability led to a corresponding reduction of the capital reserve. The measurement after recognition at the balance sheet effective date results in an expenditure of € 359 thousand from the adjustment of this financial liability. With regard to the valuation technique and the significant input factors, we refer to the explanations on other financial liabilities in **Note (38)**.

b) Identifiable acquired assets and assumed debt

The fair value values of the identifiable assets and liabilities of IMS at the acquisition date and the related carrying amounts immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 31 July 2018	Fair value 31 July 2018
Intangible assets	42	3,860
Property, plant and equipment	192	192
Financial assets	25	25
Other financial assets	66	66
Other non-financial assets	1,103	1,103
Trade receivables	920	920
Cash and cash equivalents	2,465	2,465
	4,813	**8,631**
Deferred income	994	994
Other debts and other liabilities	3,239	2,512
Deferred tax liabilities	-	1,511
	4,233	**5,017**
Net assets	**580**	**3,614**

The intangible assets of € 3,860 thousand come mainly from acquired technology (€ 1,021 thousand) and from existing customer contracts and the associated customer relationships (€ 2,797 thousand).

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

c) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred	8,000
Value of non-controlling interests	2,333
Fair value of the identifiable net assets	-3,614
Goodwill	**6,719**

The non-controlling shares components were evaluated at fair value.

The Goodwill is generally not deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition as well as the know-how of the acquired employee base.

d) Description of the company and main reasons for the business combination
IMS is one the leading software and consulting companies in the real estate management sector in the German-speaking region. The core product, IMSWARE, supports customers in the varied, complex tasks in the area of facilities management. The software can be used as a licensed and as SaaS solution.

The existing software of IMS is supposed to create the possibility to expand the consistency of the iTWO 4.0 platform by "Total Cost of Ownership" so that maintenance costs can already be taken into account during planning.

As a result of the acquisition of IMS, revenues in the reporting period increased by € 3,882 thousand and the consolidated comprehensive income by € 556 thousand.

If the transaction has already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 7,357 thousand and the consolidated comprehensive income by about € 1,091 thousand.

C. Acquisition of ICS

a) Transferred remuneration
The Group acquired 40 % of the shares in the Integrated Computer Systems Support, Inc., Redmond/USA (hereafter ICS) by the contract dated 22.08.2018. The Group is also contractually obligated to acquire the remaining 60 % of the shares within a period of 36 months from the time of acquisition. The acquisition of the outstanding shares can occur at any time the Group chooses within this period. The unconditional purchase obligation results in substantial potential voting rights, so that the Group has already acquired control ICS before the acquisition of the remaining shares.

The acquisition date was 30.08.2018. For reasons of simplification, the purchase price allocation was based on the value conditions as of 31.08.2018. The transactions on 31.08.2018 were of minor significance. Furthermore, the value situation did not change significantly in this time.

The compensation for the acquisition of the shares was approx. € 2,217 thousand. A part of this, € 858 thousand, is due to the acquisition of 40 % of the shares, which was settled by transfer of liquid funds. The residual amount of € 1,359 thousand is due to the remaining 60 % of the shares and was recognized in liabilities as a financial liability. The purchase price for the remaining 60 % (hereafter "purchase price II") is based on a contractually specified formula as multiplier to the EBITDA of the ICS for the past 12 months to the end of the month preceding the share purchase. In addition, an agreement was made for a price minimum and maximum. Of purchase price II, a part of up to approx. € 1,747 thousand (USD 2,000 thousand) will be settled by transfer of liquid funds. The Group can choose to pay any additional residual amount in cash, in its treasury shares, or a combination thereof.

The shares continue to carry economic opportunities and risks, since the amount of purchase price II depends on the economic development of ICS until the time the option is exercised and cannot be determined in advance. For this reason, there is a balancing item for the non-controlling shares. The valuation occurred at fair value, which corresponds to the fair value of the financial liability from the purchase obligation in the amount of € 1,359 thousand. The recognition of the liability led to a corresponding reduction of the capital reserve. For the valuation method and the significant input factors, we refer to the comments for the other financial liabilities in **Note (38)**.

b) Identifiable acquired assets and assumed debt

The fair value values of the identifiable assets and liabilities of ICS at the acquisition date and the related carrying amounts immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 31 August 2018	Fair value 31 August 2018
Intangible assets	18	1,214
Property, plant and equipment	50	50
Other non-financial assets	24	24
Trade receivables	239	239
Cash and cash equivalents	747	747
	1,078	**2,274**
Deferred income	63	63
Other debts and other liabilities	317	317
Deferred tax liabilities	-	239
	380	**619**
Net assets	**698**	**1,655**

The intangible assets of € 1,214 thousand are mainly due to existing customer contracts and the associated customer relationships (€ 1,196 thousand).

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

c) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred for 40% of the shares	858
Value of non-controlling interests	1,359
Fair value of the identifiable net assets	-1,656
Goodwill	**561**

The non-controlling shares components were evaluated at fair value.

The Goodwill is generally not deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition and the know-how of the acquired employee base.

d) Description of the company and main reasons for the business combination

ICS is an established managed services provider on the west coast of the USA with a business concept in the area of digital transformation based on technology trends that has proven itself over decades. As the first MTWO partner, ICS will drive the spread of the MTWO technology on the US west coast with the aim of rapidly attracting MTWO users

As a result of the acquisition of ICS, revenues in the reporting period increased by € 1,125 thousand and the consolidated comprehensive income reduced by € 15 thousand.

If the transaction has already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 3,175 thousand and the consolidated comprehensive income by about € 144 thousand.

D. Acquisition of SaaSplaza Group

a) Transferred remuneration

The Group acquired 100 % of the shares in the SaaSplaza Group (hereafter SaaSplaza), with the parent company SaaSplaza International B.V., Amsterdam/Netherlands through the contract dated 01.11.2018. The remuneration for the acquisition of the shares was approx. € 10,029 thousand and was completed via the transfer of liquid funds. The acquisition date was 16.11.2018. For reasons of simplification, the purchase price allocation was based on the value conditions as of 31.10.2018. The transactions between 01.11.2018 and 16.11.2018 were of minor significance. Furthermore, the value situation did not change significantly in this time.

b) Identifiable acquired assets and assumed debt

The fair values of the identifiable assets and liabilities of SaaSplaza at the acquisition date and the related book values immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 31 October 2018	Fair value 31 October 2018
Intangible assets	103	11,299
Property, plant and equipment	516	516
Other financial assets	37	37
Deferred tax assets	2,339	2,339
Other non-financial assets	168	168
Trade receivables	3,380	3,380
Cash and cash equivalents	862	862
	7,405	**18,601**
Deferred income	677	677
Other debts and other liabilities	7,378	7,378
Deferred tax liabilities	-	2,486
	8,055	**10,541**
Net assets	**-650**	**8,060**

The intangible assets of € 11,299 thousand are due to existing customer contracts and the associated customer relationships.

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

c) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred	10,029
Fair value of the identifiable net assets	-8,060
Goodwill	**1,969**

The Goodwill is generally not deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition and the know-how of the acquired employee base.

d) Description of the company and main reasons for the business combination
SaaSplaza is a leading cloud provider of Microsoft Azure and Dynamics Services. The company's experts consult, design, transform, and manage business-wide cloud solutions for business-critical applications in the Microsoft Cloud. The portfolio focuses on Azure Services, Dynamics Cloud Solutions, and CSP services.

The Group will use the global presence of SaaSplaza to develop a comprehensive team to focus on the sale of MTWO to its existing and new customers. This investment represents an efficient approach for the Group to accelerating the introduction of MTWO, as SaaSplaza has a high level of expertise as managed service provider for Microsoft Azure and Dynamics 365.

As a result of the acquisition of SaaSplaza, revenues in the reporting period increased by € 3,265 thousand and the consolidated comprehensive income reduced by € 233 thousand.

If the transaction had already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 20,424 thousand and the consolidated comprehensive income by about € 510 thousand.

E. Acquisition of A2K Group

The Group acquired 40 % of the shares in the A2K Group (hereafter A2K), with the parent companies A2K Holdings Pty Ltd., Gatton/Australia, A2K Technologies Limited, Newton/New Zealand, and Phoenix PLM Pty Ltd., Gatton/Australia with contracts dated 18.09.2018. The Group acquired another 20 % of the shares in A2K with contracts dated 07.11.2018, so that the Group now has control over A2K. Until the acquisition date of the business combination, A2K was included in the consolidated financial report using the equity method and since the fully consolidated. Acquisition date for the other 20 % of the shares and thus the business merger was 14.12.2018. For reasons of simplification, the purchase price allocation was based on the value conditions as at 30.11.2018. The transactions between 01.12.2018 and 14.12.2018 were of minor significance. Furthermore, the value situation did not change significantly in this time.

a) Transferred remuneration
The transferred remuneration refers to the acquisition of the other 20 % of the shares. For the acquisition of the shares, a total of 297,200 RIB Software SE shares had to be transferred to the seller. The valuation of the shares was based on the share price at the time of acquisition, i.e. € 9.55, with their fair value thus amounting to approx. € 2,838 thousand.

b) Previously held shares
Due to the increase of the holding already existing before the acquisition date, the Group took over control during a business combination in stages. At the time of acquisition, the fair value of the shares already held amounted to € 8,649 thousand. The revaluation of the shares at the time of acquisition resulted in a loss of € 21 thousand. Expenses of € 43 thousand recognised in other comprehensive income up to the acquisition date were reclassified to the income statement through profit or loss. As a result of the fair value adjustment, € 64 thousand were recognized under financial expenses.

c) Identifiable acquired assets and assumed debt

The fair value values of the identifiable assets and liabilities of A2K at the acquisition date and the related book values immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 30 November 2018	Fair value 30 November 2018
Intangible assets	42	16,862
Property, plant and equipment	121	121
Other financial assets	147	147
Other non-financial assets	84	84
Trade receivables	4,442	4,442
Cash and cash equivalents	2,853	2,853
	7,689	**24,509**
Deferred income	145	145
Other debts and other liabilities	5,860	5,860
Deferred tax liabilities	-	5,030
	6,005	**11,035**
Net assets	**1,684**	**13,473**

The intangible assets of € 16,862 thousand are mainly due to existing customer contracts and the associated customer relationships (€ 16,820 thousand).

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

d) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred	2,838
Fair value of previously held shares	8,649
Value of non-controlling interests	5,389
Fair value of the identifiable net assets	-13,473
Goodwill	**3,402**

The components of the non-controlling shares were evaluated at the corresponding share of the current ownership instruments in the amounts estimated for the identifiable net assets of the acquired companies.

The Goodwill is generally not deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition and the know-how of the acquired employee base.

e) Description of the company and main reasons for the business combination

A2K has a high level of competence in the construction business and supports innovation by providing software and hardware solutions, consulting, training, development, and managed services. By covering the entire ANZ region and the depth and width of the service program, its technical expertise, and high level of customer service and understanding, A2K has developed into a reliable technology consultant for its customers. In addition, it is a leading solution provider for the manufacturing sector in Australia and New Zealand.

A2K has offices in Brisbane, Sydney, Melbourne, Adelaide, and Perth, supported by a team of highly qualified and experienced technical experts.

A2K already has great competence in the construction business and will expand the resources for Microsoft Azure in its current portfolio. This approach is will accelerate the market roll-out of MTWO significantly. In most cases, the target customers of MTWO are already existing customers of A2K.

As a result of the acquisition of the A2K Group, revenues in the reporting period increased by € 1,377 thousand and the consolidated comprehensive income by € 438 thousand.

If the transaction had already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 12,656 thousand and the consolidated comprehensive income by about € 1,126 thousand.

F. Acquisition of YTWO Group

The Group acquired another 50% of the shares in the YTWO Group (hereafter YTWO), with the parent company YTWO Limited, Cayman Islands by a contract dated 07.12.2018 and now holds 100% of the shares as of the financial report effective date. The acquisition date was 14.12.2018.

a) Transferred remuneration
The remuneration for the acquisition of the shares was approx. € 37,245 thousand. It includes the following components:

(1) Cash
For the acquisition of the shares, a cash purchase price of € 42,781 thousand was agreed, which was paid in full in the reporting period by transfer of liquid funds.

(2) Conditional purchase price
In addition, the purchase contract agrees a conditional purchase price of up to approx. € 5,301 thousand (USD 6.0 million), which is dependent on achieving certain performance targets. Due to the current plans, the Group does not expect that this conditional purchase price will be disbursed and has valued this component of the transferred remuneration with a fair value of zero.

(3) Previously existing relationships
At the acquisition date, the following contractual relationships existed between the Group and YTWO, which from the Group perspective were fulfilled by the business merger and thus affected the value of the transferred remuneration:

In fiscal year 2016, the Group sold software licenses to the former joint venture YTWO Ltd. In doing so, the Group undertook to deliver additional licenses free of charge in addition to the contractually agreed licenses, under certain conditions. The number of deliverable licenses was estimated using the expected value method during the initial recognition of the process and the resulting valuated service obligation was recognized under current debt as accrued income. The estimate was accrued in the reporting period using the same methodology based on new knowledge relevant to the valuation. At the time of the company acquisition, the fair value of the service obligation was only € 6,630 thousand. From the Group's perspective, this service obligation lapses due to the business merger. The lapse of the service obligation was thus recorded as reduction of the transferred compensation. With consideration of the deferred taxes of € 1,094 thousand due to the deferred income we get a reduction of the transferred compensation of € 5,536 thousand.

b) Previously held shares

Due to the increase of the holding already existing before the acquisition date, the Group took over control during a business combination in stages. At the time of acquisition, the fair value of the shares already held amounted to € 38,880 thousand. The revaluation of the shares at the time of acquisition resulted in income of € 12,334 thousand. Income recorded in the other Group income until the acquisition date of € 3,792 thousand were reallocated through profit or loss. The adjustment to fair value was therefore recognised in financial income in the amount of € 8,542 thousand.

c) Identifiable acquired assets and assumed debt

The fair value values of the identifiable assets and liabilities of YTWO at the acquisition date and the related book values immediately prior to the acquisition date are as follows:

Figures in € thousand	Carrying amount 14 December 2018	Fair value 14 December 2018
Intangible assets	25,500	25,500
Property, plant and equipment	162	162
Other financial assets	152	152
Other non-financial assets	301	301
Cash and cash equivalents	48,051	48,051
	74,166	**74,166**
Other debts and other liabilities	310	310
	310	**310**
Net assets	**73,856**	**73,856**

The intangible assets are software licenses, which the former joint venture has acquired from the Group in fiscal year 2016. As part of the accounting of the company acquisitions, the software rights must be recognized as reacquired rights as defined in IFRS 3.29.

At the time of acquisition, there was no difference between the gross amount of the contractual trade account receivables and their fair value.

d) Goodwill

The Goodwill was recognized as follows based on the acquisition:

Figures in € thousand	
Consideration transferred	37,245
Fair value of previously held shares	38,880
Fair value of the identifiable net assets	-73,856
Goodwill	**2,269**

The Goodwill is generally not deductible for tax purposes. It reflects, in particular, expected synergy effects arising from the acquisition and the know-how of the acquired employee base.

e) Description of the company and main reasons for the business combination
As 100% subsidiary of the Group, YTWO will look for possibilities for strengthening its supplier base and expand its portfolios with additional brands and high-quality construction materials. The Group expects that the new structure will help improve the brand positioning of YTWO and bring more users with a greater product variety to the platform.

As a result of the acquisition of YTWO, revenues in the reporting period increased by € 93 thousand and the consolidated comprehensive income decreased by € 575 thousand.

If the transaction had already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 99 thousand and the consolidated comprehensive income reduced by about € 8,073 thousand.

G. Acquisition of Levtech Group

In February 2019, the Group acquired 60% of the shares in the Levtech Group (hereafter Levtech), with parent company Levtech Consulting DMCC, Dubai/UAE.

The compensation for the acquisition of the shares was approx. € 1,200 thousand. This is a cash purchase price to be paid by transfer of liquid funds. In addition, the Group undertook to grant Levtech a loan of € 1,577 thousand (USD 1,800 thousand) at standard market conditions, to be used by the borrower to repay existing liabilities.

A part of the cash purchase price of € 807 thousand will be paid by transfer to the seller as soon as the seller has met all contractual conditions. The remaining amount of approx. € 393 thousand is only due if contractually agreed conditions apply and/or after the expiration of agreed guarantee periods.

We have not yet been able to compile a chart of the company acquisitions based on the acquisition method. For this reason, we are in particular unable to make statements on the allocation of the remuneration to the acquired assets and debt or the amount of the fair value values for these assets and debt. Based on an estimate, we currently do not expect that the accounting of the company acquisitions will lead to the recognition of Goodwill or intangible assets with significant book values.

The holding in Levtech is the fourth acquisition of the Group in the MTWO area. Levtech manages and supports the implementation of Microsoft Dynamics business software solutions and supplements them with its own industry solutions, in particular for the real estate and construction business. In addition to the development and sale of software, Levtech has consultants who implement international projects in digital transformation.

If the transaction had already been completed on 01.01.2018, revenues in the reporting period would have increased by about € 8,000 thousand and the consolidated comprehensive income by about € 200 thousand.

8. SEGMENT REPORTING

For internal corporate management purposes, the Group is organized into business segments according to its products and services.

The Group reports the three segments iTWO, YTWO and MTWO:

1. The reporting segment iTWO comprises the following business segments:

   - License / Software, which is focused on the sale of software solutions for installation on the customer‘s hardware and on maintenance and support services for customers who have purchased software solutions of the Group (“license model”);

   - Software as a Service (SaaS) / Cloud, which includes our range of solutions in the areas of online tendering and awarding services, project collaboration, new web services as well as iTWO Success; and

   - Consulting, which includes consulting and support services to assist clients with the implementation of software as well as consulting services related to the planning and management of construction and infrastructure projects.

2. The reporting segment YTWO stands for digital platforms and includes the following business segments:

   - YTWO (SCM), whose business model consists in providing customers with access to the YTWO platform based on the iTWO 4.0 technology for the model-based sourcing of construction products for a fee. This is based on two different income models. For customers with a large purchase volume, transaction fees are charged for the use of the YTWO platform (“transaction model”), which is calculated on the basis of the acquisition turnover of the customers with the construction products purchased via the YTWO platform, and monthly user fees for the provision of the platform as part of a SaaS contract which is offset with the transaction fees.

   - xTWO (E-commerce), through which the sourcing and delivery of construction items is organized online, mainly for the consumer segment (B2C).

3. In the reporting period, a third reporting segment MTWO was created:

   - MTWO is designed as a cloud based BIM 5D software platform, based on a Software as a Service (SaaS) offering on the basis of the iTWO 4.0 technology. In connection with the cooperation contract between RIB and Microsoft concluded in the reporting period, the RIB solution range on the MTWO platform is being enhanced with Microsoft products and IT services. The business model consists in RIB and Microsoft charging fees for subscription to their software and services provided on the MTWO Cloud (“subscription model”).

The License / Software, Software as a Service (SaaS) / Cloud and Consulting business segments are grouped together as the iTWO reporting segment because the Group's commercial performance largely depends on the marketing of the Group's software solutions, with equal effect on the three aforementioned business segments.

The business segments YTWO (SCM) and xTWO (E-commerce) are grouped together as the reporting segment YTWO because the commercial performance of both business segments depends on the marketing of the Group's digital platforms for the construction industry.

The Managing Directors monitor the incomes from the operative segments of the Group both to make decisions about resource allocations and to evaluate performance. The performance of a segment is assessed on the basis of its revenues and results.

The revenues shown are mainly sales to external customers. The licensing / software sales revenue iTWO includes an amount of € 3,650 thousand (previous year: € 3,993 thousand) for maintenance services to the former joint venture YTWO Ltd., which refer to the period until the acquisition date on 14.12.2018. The other operating income in the reporting segment iTWO includes income of € 2,032 thousand from the dissolution of deferred income connected with software sales to the former joint venture YTWO Ltd. In the previous year, the reporting segment iTWO contained other operating income from the sale of software licenses to the joint venture YTWO Ltd. of € 7,755 thousand. There were no other reportable transactions between the segments.

The accounting and valuation methods of the reportable segments correspond to the Group accounting principles described under **Note (4)**.

The following table shows the revenues and results of the Group's reporting and business segments:

2018

Figures in € thousand	iTWO	YTWO	MTWO	Total
Revenue, external	**121,544**	**9,311**	**6,019**	**136,874**
Licence / software	76,754	-	525	77,279
SaaS / Cloud	13,363	-	3,967	17,330
Consulting	31,427	-	1,509	32,936
xTWO (E-commerce)	-	9,311	18	9,329
Production costs	**-46,643**	**-7,974**	**-3,511**	**-58,128**
Licence / software	-20,151	-123	-	-20,274
SaaS / Cloud	-3,326	-	-2,608	-5,934
Consulting	-23,166	-167	-903	-24,236
xTWO (E-commerce)	-	-7,684	-	-7,684
Research and development expenses	**-15,909**	**-1**	**-749**	**-16,659**
Licence / software	-11,962	-	-	-11,962
SaaS / Cloud	-3,947	-	-749	-4,696
Consulting	-	-	-	-
xTWO (E-commerce)	-	-1	-	-1
Distribution and marketing costs	**-22,495**	**-1,636**	**-2,115**	**-26,246**
General administrative expenses	**-12,380**	**-585**	**-2,250**	**-15,215**
Other operating income and expenses	**3,238**	**269**	**195**	**3,702**
EBIT segment	**27,354**	**-616**	**-2,411**	**24,328**
Financial result				5,280
thereof profit shares from investments accounted for using the equity method	-	-3,559	-54	-3,613
Income taxes				-7,757
Consolidated net profit for the year				**21,851**
EBITDA segment	**40,459**	**-292**	**-2,307**	**37,860**
EBITDA-margin	33.3%	-3.1%	-38.3%	27.7%
Other segment information:				
Segment amortisation and adjustments	**-13,105**	**-324**	**-104**	**-13,533**
Carrying amount of participation in the joint venture YTWO accounted for using the equity method	**-**	**-**	**-**	**0**

2017

Figures in € thousand	iTWO	YTWO	Total
Revenue, external	**100,833**	**7,453**	**108,286**
Licence / software	67,949	-	67,949
SaaS / Cloud	13,004	-	13,004
Consulting	19,880	-	19,880
xTWO (E-commerce)	-	7,453	7,453
Production costs	**-36,371**	**-6,606**	**-42,977**
Licence / software	-17,795	-	-17,795
SaaS / Cloud	-2,699	-	-2,699
Consulting	-15,877	-	-15,877
xTWO (E-commerce)	-	-6,606	-6,606
Research and development expenses	**-13,680**	**-9**	**-13,689**
Licence / software	-9,713	-	-9,713
SaaS / Cloud	-3,967	-	-3,967
Consulting	-	-	-
xTWO (E-commerce)	-	-9	-9
Distribution and marketing costs	**-20,561**	**-1,179**	**-21,740**
General administrative expenses	**-9,843**	**-822**	**-10,665**
Other operating income and expenses	**10,373**	**27**	**10,400**
EBIT segment	**30,751**	**-1,136**	**29,615**
Financial result			-42
thereof profit shares from investments accounted for using the equity method	194	-3,663	-3,469
Income taxes			-11,125
Consolidated net profit for the year			**18,448**
EBITDA segment	**41,288**	**-996**	**40,292**
EBITDA-margin	40.9%	-13.4%	37.2%
Other segment information:			
Segment amortisation and adjustments	**-10,537**	**-140**	**-10,677**
Carrying amount of participation in the joint venture YTWO accounted for using the equity method	**-**	**31,225**	**31,225**

The Managing Directors as the chief operating decision-maker do not request submission of any regular details of segment assets and segment liabilities.

Geographic information

The Company is domiciled in Germany. The Group's revenue from external customers according to regions (based on the customer locations) for the respective financial year and the total non-current assets at the end of the respective financial year are analyzed in the following:

Figures in € thousand	2018	2017
Germany	67,643	52,312
Remaining region EMEA (Europe, Middle East and Africa)	34,910	33,127
Region EMEA	**102,553**	**85,439**
Asia Pacific (Asia and Pacific region)	15,483	9,350
North America	18,838	13,497
Total revenue	**136,874**	**108,286**

The non-current assets divided according to regions are as follows:

Figures in € thousand	31 December 2018	31 December 2017
Germany	72,053	57,509
Remaining region EMEA (Europe, Middle East and Africa)	48,451	37,527
Region EMEA	**120,504**	**95,036**
PR of China (including Hong Kong)	54,721	62,635
Remaining region APAC (Asia and Pacific region)	38,780	20,171
Region APAC	**93,501**	**82,806**
North America	31,993	20,754
Total	**245,998**	**198,596**

Information on important customers

No individual customer accounts for more than 10% of the Group's total revenue during the reporting period.

9. REVENUE

Revenue breaks down as follows:

Figures in € thousand	2018	2017
Software licences*	37,180	33,607
Software as a service / cloud	17,330	13,004
Total software licences and software as a service / cloud	**54,510**	**46,611**
Maintenance	40,099	34,342
Consulting	32,936	19,880
E-commerce	9,329	7,453
Total revenue	**136,874**	**108,286**

*The software licences include revenues from the sale of hardware components in connection with the sale of the products iTWO PPS and iTWO MES.

In the reporting period, an amount of € 1,259 thousand was reclassified from software licenses to maintenance within revenues. To ensure comparability, the prior-year amounts were adjusted and a corresponding reclassification in the amount of € 1,116 thousand was carried out.

The total software revenue (licence revenue incl. software as a service / cloud) is subdivided as follows:

Figures in € thousand	2018	2017
iTWO key account	8,459	13,385
iTWO mass market	13,312	12,692
SaaS / Cloud	17,330	13,004
Software Applications	15,409	7,530
Total software licences and software as a service / cloud	**54,510**	**46,611**

10. THE PRODUCTION COSTS OF SERVICES FOR REVENUE GENERATION

Production costs of services for revenue generation mainly includes cost of purchased goods, personnel expenses and non-personnel expenses of the support and consulting business units as well as depreciation of self-created software and purchased technology. The write-downs on internally generated software amount to € 6,212 thousand (previous year: € 5,595 thousand) in the reporting year. The write-downs on purchased technology amount to € 2,614 thousand (previous year: € 2,170 thousand) in the reporting year.

11. OTHER OPERATING INCOME

Other operating income breaks down as follows:

Figures in € thousand	2018	2017
Income from purchase price liabilities measurement after recognition	-	537
Income from the release of provisions and deferred liabilities	1,188	88
Grant income in respect of research and development work	186	530
Income from currency translation	1,917	1,663
Income from the reversal of deferred revenues	2,032	-
Income from the software delivery to YTWO Ltd.	-	7,755
Income from the deconsolidation of fully consolidated companies to date	72	71
Income from rental income from investment properties	1,010	779
Other	1,589	1,390
Total	**7,994**	**12,813**

12. OTHER OPERATING EXPENSES

The other operating expenses break down as follows:

Figures in € thousand	2018	2017
Expenses from currency translation	1,602	1,796
Expenses from purchase price liabilities measurement after recognition	1,215	-
Other	1,475	617
Total	**4,292**	**2,413**

13. OTHER FINANCIAL INFORMATION

Figures in € thousand	2018	2017
Personnel expenses:		
Wages and salaries	56,525	43,532
Social security and pension costs	9,010	7,387
Total	**65,535**	**50,919**
Minimum lease payments under operating leases:		
Office buildings	2,299	2,024
Equipment	721	702
Total	**3,020**	**2,726**
Scheduled amortisation and depreciation:		
of intangible assets	11,933	9,387
of property, plant and equipment	1,449	1,150
of investment property	151	140
Total	**13,533**	**10,677**
Disclosure of the scheduled amortisation of intangible assets in the income statement		
The production costs of services for revenue generation	8,968	7,777
General administrative expenses	66	69
Marketing and distribution costs	2,881	1,528
Research and development expenses	18	13
Total	**11,933**	**9,387**
Product warranty provision:		
Additional provision	290	261
Total research and development expenses		
Research and development expenses	25,952	21,354

Explanations of the cash flow statement

The following is a reconciliation of the cash-effective and non-cash changes in financial liabilities included in net cash flow from financing activities:

Figures in € thousand	31 Dec 2017	cash-effective	non cash-effective			31 Dec 2018
			Acquisition	Repayment	Changes in fair values	
Long-term bank liabilities	5,200	-400	0	0	0	4,800
Long-term other financial liabilities	1,934	-3,030	5,493	0	984	5,381
Short-term bank liabilities	400	0	0	0	0	400
Short-term other financial liabilities	8,669	-1,514	6,498	-7,155	74	6,572
Total debt from financing activities	**16,203**	**-4,944**	**11,991**	**-7,155**	**1,058**	**17,153**

14. FINANCIAL INCOME AND FINANCE COSTS

Finance income and costs break down as follows:

Figures in € thousand	2018	2017
Financial income:		
Adjustments to the fair value of existing shares in companies now required to be consolidated	8,566	3,497
Bank interest income	519	97
Income from interest compounding of receivables measured using the effective interest method	319	22
Other	23	52
Total	**9,427**	**3,668**
Finance costs:		
Adjustments to the fair value of existing shares in companies now required to be consolidated	-64	0
Payments made to non-controlling shareholders	-150	0
Accumulated interest on financial liabilities	-43	-33
Other	-277	-208
Total	**-534**	**-241**

15. INCOME TAXES

The parent company RIB Software SE is subject to German corporate income tax including solidarity surcharge and trade tax. The applicable tax rates for the Company were unchanged compared to the previous year at 30.53%.

The provision for income tax for the Group's subsidiaries is based on the respective tax rates applicable to them as determined in accordance with the relevant income tax rules and regulations for the countries in which they are domiciled during the periods presented.

The major components of the income tax expense break down as follows:

Figures in € thousand	2018	2017
Actual income tax	8,116	11,739
Deferred income tax	-359	-614
Total tax expense	**7,757**	**11,125**

A reconciliation of the expected tax expense arising from the profit before tax multiplied by the income tax rate of the parent company of 30.53% (previous year: 30.53%) and the income tax expense according to the income statement is provided in the following:

Figures in € thousand	2018	2017
Profit before tax	**29,608**	**29,573**
Expected tax expense	9,039	9,029
Non-deductible expenses and tax-exempt income	355	403
Tax profits/losses for which no deferred taxes were/are recognised	310	519
Change in the ability to realise deferred tax assets	-	568
Changes in tax rates and tax laws	-	-158
Differences in tax rate for foreign subsidiaries	-419	-1,190
Tax effect from at equity-valuation	-632	1,388
Taxes relating to other reporting periods	-654	236
Other	-242	330
Tax expense according to income statement	**7,757**	**11,125**

The movements in deferred income tax assets and liabilities of the Group during the periods presented are as follows:

Deferred tax assets

Figures in € thousand	Tax loss carryforwards	Pension provisions	Deferred income	Other	Total
As of 01 January 2017	**1,158**	**638**	**1,162**	**583**	**3,541**
Deferred tax recognised in the consolidated income statement as income/ (expense) during the year	-811	-152	736	54	**-173**
Deferred tax (debited)/ credited in other comprehensive income during the year	-92	49	239	-30	**166**
As of 31 December 2017 and 01 January 2018	**255**	**535**	**2,137**	**607**	**3,534**
Addition from initial consolidation (with no effect on profit or loss)	2,338	-	-	199	**2,537**
Deferred tax recognised in the consolidated income statement as income/ (expense) during the year	-120	-35	-713	102	**-766**
Deferred tax (debited)/ credited in other comprehensive income during the year	9	1	-20	9	**-1**
Other changes	-	-	-1,094	-	**-1,094**
As of 31 December 2018	**2,482**	**501**	**310**	**917**	**4,210**

The deferred taxes from tax loss carry-forwards concern subsidiaries in the US, the Netherlands, and Great Britain. It is likely that income to be taxed in the future will be available against which the not yet used tax losses can be applied. In fiscal year 2018, tax losses from previous years were partly offset with taxable income. The tax loss carry-forwards in the US expire in the years after 2027.

In the reporting year, deferred taxes were applied to tax loss carry-forwards of € 2,338 thousand through initial consolidation of SaaSplaza.

The other changes include the disposal of deferred tax assets due to the acquisition of YTWO; please refer to **Note (7.F.)**.

As of the financial report effective date, there were unused tax loss carry-forwards of € 6,952 thousand (previous year: € 4,652 thousand). No deferred taxes were applied to these amounts since it appears unlikely that there will be sufficient taxable income available in the future against which these loss carry-forwards can be applied. The loss carry-forwards can be carried forward indefinitely.

Deferred tax liabilities

Figures in € thousand	Other intangible assets	Pro-perty	Investment property	Consolidation adjustments	Other	**Total**
As of 01 January 2017	**8,663**	**489**	**420**	**4,123**	**421**	**14,116**
Addition from initial consolidation (with no effect on profit or loss)	-	-	-	1,590	-	**1,590**
Adjustments	-	-	-	-	-	**-**
Deferred tax recognised in the consolidated income statement during the year as an expense/ (income)	310	-44	-37	-966	-50	**-787**
Deferred tax debited/ (credited) in other comprehensive income during the year	-	-	-	-468	-10	**-478**
As of 31 December 2017 and 01 January 2018	**8,973**	**445**	**383**	**4,279**	**361**	**14,441**
Addition from initial consolidation (with no effect on profit or loss)	-	-	-	8,583	292	**8,875**
Adjustments	-	-	-	-	-	**-**
Deferred tax recognised in the consolidated income statement during the year as an expense/ (income)	471	41	-73	-1,412	-152	**-1,125**
Deferred tax debited/ (credited) in other comprehensive income during the year	-	-	-	170	1	**171**
As of 31 December 2018	**9,444**	**486**	**310**	**11,620**	**502**	**22,362**

As of the balance sheet date, the subsidiaries of the Group had accumulated profits of around € 59,385 thousand (previous year: € 55,008 thousand) for which no deferred taxes have been recognised, since we are able to control the timing of the reversal of the temporary differences, and it is likely that no temporary differences will be reversed in the foreseeable future.

The Group's consolidated statement of comprehensive income includes € 1 thousand for deferred tax income (previous year: € 49 thousand) from the revaluation of pension provisions.

The following amounts are disclosed in the consolidated statement of financial position after the country-specific netting of deferred tax balances:

Figures in € thousand	31 December 2018	31 December 2017
Deferred tax assets	620	2,019
Deferred tax liabilities	18,772	12,926

Deferred tax liabilities of € 15,301 thousand (previous year: € 10,829 thousand) are not expected to be realised before twelve months have passed.

16. EARNINGS PER SHARE – DILUTED AND BASIC

Earnings per share are calculated on the basis of the profit share of the shareholders in RIB Software SE as shown in the following table:

Figures in € thousand	2018	2017
Profit share of the shareholders of RIB Software SE – diluted and basic	21,328	18,448

Figures in thousand shares	2018	2017
Weighted average of shares in circulation - basic	49,559	45,033
Dilution effect	806	709
Weighted average of shares in circulation - diluted	50,365	45,742

Results per share in €	2018	2017
basic	0.43	0.41
diluted	0.42	0.40

The average market value of the Company's shares used to calculate the dilution effect of existing share options is based on the listed market prices for the period in which the options were in circulation.

17. GOODWILL

For the purposes of impairment testing, we allocate goodwill acquired in the event of a business combination to cash-generating units or groups of cash-generating units from the takeover date. The following overview shows how the carrying amount of the goodwill was allocated to the business segments, or, in the case of allocation to lower levels, to the cash-generating units or groups of cash generating units:

Figures in € thousand	31 December 2018	31 December 2017
Licence / software business segment	*64,337*	*58,465*
SaaS / Cloud business segment	*14,601*	*15,308*
Consulting business segment	*11,578*	*6,572*
iTWO reporting segment	**90,516**	**80,345**
YTWO (SCM) business segment	*2,256*	*-*
xTWO (E-commerce) business segment	*689*	*689*
YTWO reporting segment	**2,945**	**689**
MTWO reporting segment	**5,873**	**-**
GZ TWO development entity	**3,038**	**3,065**
Arriba Finance	**894**	**894**
Total	**103,266**	**84,993**

The allocation of the Goodwill was based on the respective business activities of the acquired businesses, the associated strategic goals of the Group, and the consideration of the expected resulting benefits for the segments of the Group. The development of the Goodwill in the reporting year can be seen in **Note (18)**. In the fiscal year 2018, Goodwill of € 17,277 thousand was gained in the initial full consolidation of Datengut, IMS, ICS, SaaSplaza, A2K, and YTWO. We refer to **Note (7)** for more information. The other changes in the book value result from exchange rate adjustments of the Goodwill kept in local currency.

Impairment testing of Goodwill

The recoverable amounts of the cash-generating units were determined as their values in use. For the business segments Licence / Software, SaaS / Cloud, and Consulting and for the reporting segment MTWO, cash flow plans for a five-year detailed planning period were used based on the financial planning. A growth rate of 1 % is assumed in perpetual annuity. In the business segments xTWO (E-commerce) and YTWO (SCM), the determination of the recoverable income in the cash flow plans was also based on a five-year detailed planning period. The perpetual annuities of these segments do not include any growth rates.

For the development unit GZ TWO, cash flow plans for a four-year detailed planning period were used based on the financial planning. No sustained growth was assumed in the perpetual annuity.

In the fiscal year 2014, the product iTWO finance was placed on the market, which will replace Arriba Finanzen in the medium term. This was considered in the determination of the recoverable amounts and cash flow plans for the remaining limited marketing period were used. No perpetual annuity was taken into account here.

The discount rates applied to the cash flow projections are as follows:

Figures in %	2018	2017
Licence / software business segment	8.59	7.92
SaaS / Cloud business segment	9.27	8.46
Consulting business segment	9.00	8.13
xTWO (E-commerce) business segment	8.46	7.29
YTWO (SCM) business segment	7.03	-
Reporting segment MTWO	9.12	-
GZ TWO development entity	8.84	8.68
Arriba Finance	21.71	20.27

Below is a description of each key assumption on which the Managing Directors have based its cash flow projections to undertake impairment testing of goodwill:

Revenues and expenses

The revenue forecast for the License / Software business segment includes the revenues generated from the license sale and the maintenance of the products. Based on detailed revenue and expense planning for the financial year 2019, it is estimated that the Licensing / Software business segment will generate annual revenue growth in the range of approx. 6 % to approx. 8 % over the detailed planning period. For the fiscal year 2019, we expect a growth of only approx. 6 % for license sales incl. maintenance, since the income from maintenance services for YTWO must be eliminated in the future due to the full consolidation in December 2018 in the Group.

The revenue forecast for the SaaS / Cloud business segment includes revenue from the supply of software under SaaS agreements. This mainly includes planned revenues generated by the iTWO 4.0, iTWO tx, iTWO cx and Presto (cloud) product lines as well as revenue from Exactal, Datengut, and IMS. The planned segment revenue includes revenue generated from the use and maintenance of the Cloud solutions. Based on detailed revenue and expense planning for the financial year 2019, it is estimated that the SaaS / Cloud business segment will generate annual revenue growth in the range of approx. 5 % to approx. 14 %.

The revenue forecast for the Consulting business segment includes revenues from the provision of training and consulting services. Based on detailed planning for the financial year 2019, which acknowledges the currently high demand for consulting services, it is estimated that the consulting business will report annual revenue growth in the range of approx. 4 % to approx. 11 % over the planning period.

The revenue forecast in the xTWO (E-commerce) business segment contains the earnings generated via the online platform xTWOstore from the sale of construction materials. Based on detailed revenue and expense planning for the financial year 2019, it is estimated that the xTWO (E-commerce) business segment will generate annual revenue growth in the range of approx. 4 % to approx. 6 % over the planning period.

The revenue forecast in the YTWO (SCM) business segment contains sales from the use of the YTWO platform. In addition to earnings from transactions fees, earnings from consulting services and fees for listing on the platform are included. Based on detailed revenue and expense planning, it is estimated that the YTWO (SCM) business segment will achieve an annual income growth in the range of approx. 60 % to approx. 90 % within a detailed planning period of 5 years.

The revenue forecast in the reporting segment MTWO contains income from the MSP partner companies ICS, A2K, and SaaSplaza, acquired in the reporting period, for fees for the software and data services provided on the cloud and income from software. Based on detailed revenue and expense planning for the financial year 2019, it is estimated that the MTWO reporting segment will generate annual revenue growth in the range of approx. 7 % to approx. 27 % over the planning period.

In respect of the development unit GZ TWO, the revenues from the development man-days have been planned by multiplying the planned manpower capacity by the daily rate which is expected in the future.

Due to the replacement of Arriba Finance by iTWO finance, cash flows have been planned for a limited period of 8 years. The estimate for this period is based on our experience from the replacement of other Arriba segment products by iTWO. The revenue forecast for Arriba Finance includes revenue from the sale of licenses and the maintenance as well as the provision of training and consulting services. Based on detailed planning for the financial year 2019, an annual decline in the revenues from the sales of licenses and from consulting is planned until the product expires, followed by decreasing revenues from maintenance.

In all areas, the planning of the cost of materials and third-party services has been adjusted to revenue growth. Personnel and material costs have also been adjusted to revenue growth on the basis of personnel planning. Investments, development costs, and other operating expenditures were forecast based on past values and experience and corrected for effects from the acquisitions of the companies in the reporting period. The segment-specific characteristics in the cost structure have been taken into account.

The plans for the segments were created in agreement with the Group strategy (target: above average growth, new innovative products, and development of new market segments and the associated customers). The assumptions for the income growth of the segments discussed above reflect past experiences and a planned increase of the addressable sales market.

In our opinion, no realistic change of the significant assumptions and estimates made above would lead to the book values of the segments exceeding their respective recoverable amounts.

Discount rates

The employed interest rates are interest rates before taxes and take into account the specific risks of the significant units.

18. DEVELOPMENT OF INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY IN THE 2018 FINANCIAL YEAR

	Acquisition or manufacturing costs						
Figures in € thousand	As of 01 January 2018	Additions from business combinations	Additions	Disposals	Reclassifi-cations	Currency adjustments	As of 31 December 2018
1. Goodwill	**93,290**	**17,277**	**0**	**0**	**0**	**996**	**111,563**
2. Other intangible assets							
a) Internally generated software	71,125	0	9,293	0	0	42	80,460
b) Customer relationships	15,334	34,827	0	0	0	-468	49,693
c) Purchased technology	15,262	2,730	0	0	0	93	18,085
d) Purchased software	1,375	106	556	353	0	-10	1,674
e) Software rights reacquired	0	25,500	0	0	0	0	25,500
f) Other	18	0	0	0	0	0	18
	103,114	**63,163**	**9,849**	**353**	**0**	**-343**	**175,430**
3. Property, plant and equipment							
a) Land and buildings	16,001	0	158	0	1,338	97	17,594
b) Furniture and fixtures	6,269	1,196	955	730	0	-46	7,644
c) Advance payments and assets under construction	0	0	20	0	0	0	20
	22,270	**1,196**	**1,133**	**730**	**1,338**	**51**	**25,258**
4. Investment properties	**7,625**	**0**	**0**	**0**	**-1,338**	**-2**	**6,285**

18. DEVELOPMENT OF INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY IN THE 2017 FINANCIAL YEAR

	Acquisition or manufacturing costs						
Figures in € thousand	As of 01 January 2017	Additions from business combinations	Additions	Disposals	Reclassifi-cations	Currency adjustments	As of 31 December 2017
1. Goodwill	**75,463**	**20,460**	**0**	**0**	**0**	**-2,633**	**93,290**
2. Other intangible assets							
a) Internally generated software	63,460	0	7,665	0	0	0	71,125
b) Customer relationships	11,926	3,764	0	0	0	-356	15,334
c) Purchased technology	12,430	2,864	0	0	0	-32	15,262
d) Purchased software	1,203	21	145	0	8	-2	1,375
e) Other	26	0	0	0	-8	0	18
	89,045	**6,649**	**7,810**	**0**	**0**	**-390**	**103,114**
3. Property, plant and equipment							
a) Land and buildings	14,605	0	1,766	0	0	-370	16,001
b) Furniture and fixtures	5,676	192	696	140	0	-155	6,269
	20,281	**192**	**2,462**	**140**	**0**	**-525**	**22,270**
4. Investment properties	**5,721**	**0**	**2,219**	**0**	**0**	**-315**	**7,625**

Amortisation and depreciation (cumulative)							Carrying amounts	
As of 01 January 2018	Additions	Impairment losses	Disposals	Reclassifi-cations	Currency adjustments	As of 31 December 2018	As of 31 December 2018	As of 31 December 2017
8,297	**0**	**0**	**0**	**0**	**0**	**8,297**	**103,266**	**84,993**
32,238	6,212	0	0	0	42	38,492	41,968	38,887
6,117	2,746	0	0	0	10	8,873	40,820	9,217
9,011	2,614	0	0	0	0	11,625	6,460	6,251
1,018	229	0	353	0	-7	887	787	357
0	132	0	0	0	-48	84	25,416	0
18	0	0	0	0	0	18	0	0
48,402	**11,933**	**0**	**353**	**0**	**-3**	**59,979**	**115,451**	**54,712**
864	405	0	0	3	13	1,285	16,309	15,137
4,140	1,044	0	631	0	-15	4,538	3,106	2,129
0	0	0	0	0	0	0	20	0
5,004	**1,449**	**0**	**631**	**3**	**-2**	**5,823**	**19,435**	**17,266**
589	**151**	**0**	**0**	**-3**	**0**	**737**	**5,548**	**7,036**

Amortisation and depreciation (cumulative)							Carrying amounts	
As of 01 January 2017	Additions	Impairment losses	Disposals	Reclassifi-cations	Currency adjustments	As of 31 December 2017	As of 31 December 2017	As of 31 December 2016
8,297	**0**	**0**	**0**	**0**	**0**	**8,297**	**84,993**	**67,166**
26,643	5,595	0	0	0	0	32,238	38,887	36,817
4,680	1,462	0	0	0	-25	6,117	9,217	7,246
6,841	2,170	0	0	0	0	9,011	6,251	5,589
858	160	0	0	0	0	1,018	357	345
18	0	0	0	0	0	18	0	8
39,040	**9,387**	**0**	**0**	**0**	**-25**	**48,402**	**54,712**	**50,005**
524	359	0	0	0	-19	864	15,137	14,081
3,572	791	0	132	0	-91	4,140	2,129	2,104
4,096	**1,150**	**0**	**132**	**0**	**-110**	**5,004**	**17,266**	**16,185**
449	**140**	**0**	**0**	**0**	**0**	**589**	**7,036**	**5,272**

19. OTHER INTANGIBLE ASSETS

A. Internally generated software

The internally generated software iTWO 5D and iTWO 4.0 is essential for the group. iTWO 5D is a fully integrated software solution for digital planning and building (ERP 5D). The web-based platform solution iTWO 4.0, which was developed from scratch, represents the digitalization of the entire value chain of a construction project through the networking of virtual and real construction according to the “Industry 4.0” model. Please also refer to **Section A.5.** of the group management report.

Of the carrying amount for the internally generated software of € 41,968 thousand (previous year: € 38,887 thousand), the following amounts are attributable to iTWO 5D / iTWO 4.0:

Figures in € thousand unless otherwise indicated	31 Dec 2018	iTWO 5D	iTWO 4.0	Others	31 Dec 2017	iTWO 5D	iTWO 4.0	Others
Carrying amount	41,968	16,829	14,015	11,124	38,887	18,019	11,414	9,454
of which uncompleted portion at the reporting date	1,402	91	0	1,311	1,903	675	0	1,228
Remaining amortisation period of the modules completed by the reporting date	3 to 10 years				4 to 10 years			

The uncompleted portion involves newly developed additional modules, which will not be completed, marketed and amortised until subsequent years.

B. Reacquired software rights

The reacquired software rights result wholly from the company acquisition of YTWO Group completed in the reporting year. We refer to **Note (7.F.)** for more information.

The reacquired software rights were acquired on 14.12.2018. Since then they have been subject to scheduled depreciation pursuant to IFRS 3.55 over the estimated residual technological useful life of 8 years and 6 months.

20. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Figures in € thousand	Notes	31 Dec 2018	31 Dec 2017
Shares in joint ventures	(A)	-	31,226
Shares in associated companies	(B)	-	-
Total		**0**	**31,226**

A. Joint venture

In the reporting period, the Group acquired an additional 50 % of the shares in the joint venture YTWO Ltd., the parent company of the YTWO Group (hereafter YTWO) and holds a total of 100 % of the shares as of the financial report effective date. On the date of the transitional consolidation on 14.12.2018, the book value of the share in the joint venture was € 26,546 thousand (previous year: € 31,226 thousand). The change of the consolidation method to full consolidation resulted in financial earnings of € 8,541 thousand. For more information, we refer to our comments in **Note (7.F.)**.

The summarized financial information is reconciliated from YTWO to the book value of the share of the Group. The information for the fiscal year 2017 depicted in the table contains the earnings of YTWO for the period from 01.01.2017 to 31.12.2017. The information for 2018 contains the earnings of YTWO for the period from 01.01.2018 to 14.12.2018.

Figures in € thousand	31 Dec 2018	31 Dec 2017
Assets and liabilities of the joint venture		
Short-term assets*	-	55,717
Long-term assets	-	35,821
Short-term liabilities**	-	-286
Long-term liabilities	-	-
Equity (100%)	**0**	**91,252**
Thereof attributable to the group (50%)	-	45,626
Elimination of inter-company profits from “downstream sales”	-	-14,400
Carrying amount of the invesmtment in the joint venture	**0**	**31,226**

* Includes cash and cash equivalents of € 55,638 thousand in the previous year.

** Includes short-term financial liabilities (with the exception of trade payables as well as other liabilities and provisions) of € 44 thousand in the previous year.

Figures in € thousand	2018	2017
Revenues	6	3
Comprehensive income (100 %)* **	**-19,226**	**-9,324**
Thereof attributable to the group (50 %)	-9,613	-4,662
Elimination of inter-company profits from “downstream sales”	6,054	999
Profit share recognized in the consolidated income statement	**-3,559**	**-3,663**

*** This includes unscheduled depreciation of € 8,448 thousand and scheduled depreciation of € 3,806 thousand (previous year: scheduled depreciation of € 2,027 thousand).

In addition, the Group holds shares in the joint venture “5D Institut”. The effects of these shares on the asset, financial, and income situation as well as the cash flows of the Group were of minor significance in the reporting period. The shares in the joint venture were evaluated using the equity method. There is no list price in an active market for the company, so there is no statement of the fair value.

B. Associated companies

In the reporting period, the Group acquired another 75.1 % of the shares in the iTWO Baufabrik 4.0 F&E GmbH, Stuttgart, included in the in the consolidated financial report as an associate in the previous year. On the balance sheet effective date, the Group holds 100 % of the shares in the iTWO Baufabrik 4.0 F&E GmbH. It was therefore initially included in the consolidated financial report using full consolidation.

The effects of these shares on the asset, financial, and income situation as well as the cash flows of the Group were of minor significance in the reporting period, both in relation to the individual holdings and in total.

21. INVESTMENT PROPERTIES

The Group's investment property consists of two office properties in the US and China.

Investment property USA

The property, which is located in the USA, was acquired in December 2017. Since December 2018, the property, which had previously mainly been leased, has largely been used by the company itself, so that the share of buildings leased to third parties has been reduced. The leased portion of the building is reported under "Investment property" in the reporting period. The property is valued according to the historical cost model and has been subject to scheduled depreciation. It is depreciated using the component approach. For this purpose, the building was split into the components building shell and technical equipment. The useful lives were 50 years for the building shell and 20 years for the technical equipment. This results in an average useful life of approx. 36 years. The monthly depreciation was approx. € 2 thousand. In the reporting period, there was rental income from the property of € 195 thousand and other operating income were recognized. The operating expenses that are directly attributable to the investment property during the reporting period amount to approx. € 53 thousand.

The pro rata recoverable amount of the property for the rented part of the building was about € 962 thousand on the balance sheet effective date. This value was derived from the observed market prices of other properties that were sufficiently similar to the compared property in location, use, soil properties, size, and other characteristics. The recoverable amount was not determined by a certificate of an external real estate assessor.

Investment property China

The property in China is valued according to the historical cost model. The building was completed in September 2013 and has been subject to planned depreciation since. Its depreciation is based on the component approach, whereby the building has been divided into two components: the building envelope and the technical equipment. The useful lives are 50 years for the building envelope and 25 years for the technical equipment. This results in an average useful life of approx. 37 years. The monthly depreciation amounts to approx. € 11 thousand. In the reporting period, the property generated rental income of € 815 thousand, which has been recognised in "Other operating income". The operating expenses directly attributable to the investment property amount to € 51 thousand during the reporting period.

The recoverable amount of the building at the balance sheet date is € 7,875 thousand. The fair value is generally determined at Level 2 (of fair value hierarchy). The recoverable amount of the building has been determined on the basis of an opinion of the real estate expert Jones Lang LaSalle, Hong Kong, taking into account the respective market conditions. The valuation has been carried out using the capitalised earnings method, taking into account rental income to be realised on the market, and a market-specific capitalisation interest rate.

The development of the carrying amounts as of the balance sheet dates is composed as follows:

Figures in € thousand	2018	2017
Opening balance	7,036	5,272
Acquisition or manufacturing costs		
Reclassification of property previously held as investment property	-1,338	-
Reclassification of previously owner occupied property	-	-
Additions (acquisition)	-	2,219
Amortisation and depreciation	-151	-140
Amortisation and depreciation (cumulative)		
Reclassification of previously property held as a financial investment	3	-
Reclassification of previously owner occupied property	-	-
Change resulting from foreign currency conversion	-2	-315
Closing balance	**5,548**	**7,036**

22. PREPAID LAND USE LEASE PAYMENTS

The land usage right was recorded at the amortised carrying amount of € 899 thousand.

The leasehold land is held under a 50-year lease and the prepaid rents are accordingly reversed over this period on a straight-line basis at € 21 thousand p.a. and recognised in the income statement. A total of € 60 thousand are attributed to foreign currency differences from the translation recognised as of the balance sheet date with no effect on profit and loss.

23. OTHER FINANCIAL ASSETS

Other financial assets of the Group break down as follows:

Figures in € thousand	31 Dec 2018		31 Dec 2017	
	long-term	short-term	long-term	short-term
Other receivables	495	1,020	295	770
Time deposits	-	32,907	-	34,283
Available-for-sale securities	-	87	-	92
Other financial assets	284	-	123	-
Total	**779**	**34,014**	**418**	**35,145**

Securities held as available for sale include corporate bonds issued by foreign companies denominated in US dollars as well as shares in money market and investment funds denominated in euro. The fair values of the securities are based on quoted prices in an active market.

The non-current other financial investments include a 10% holding in EMC European Modular Constructions GmbH, Cologne. The holding is of minor significance to the revenue, financial, and asset situation of the Group and is thus valued in simplified form at the amortized acquisition costs of € 47 thousand.

The available-for-sale securities developed as follows:

Figures in € thousand	2018	2017
Opening balance	92	98
Disposals	-5	-6
Closing balance	**87**	**92**

24. OTHER NON-FINANCIAL ASSETS

The short-term other non-financial assets of the Group break down as follows:

Figures in € thousand	31 Dec 2018	31 Dec 2017
Deferred income	2,394	1,825
Other receivables	420	992
Other tax assets	233	131
Contractual assets	1,156	159
Total	**4,203**	**3,107**

Deducting the received down payments of € 4,400 thousand, contractual assets of € 1,156 thousand are recorded on the balance sheet effective date. The income from orders in the reporting period totaled € 7.628 thousand. Of this, € 542 thousand are due to a change in the determination of the service progress.

On the balance sheet effective date, the total expenditures and profits recorded for the contractual assets minus the recorded losses was € 5,216 thousand.

In the reporting period, contractual assets of € 1,355 thousand were applied for business acquisitions.

25. INVENTORIES

Inventories break down as follows:

Figures in € thousand	31 Dec 2018	31 Dec 2017
Merchandise	1,801	2,040
Unfinished goods	962	405
Finished goods	47	-
Advance payments	-	25
Total inventories, gross	**2,810**	**2,470**
Allowance for impairments	14	167
Total inventories, net	**2,796**	**2,303**

The cost of goods for inventories recorded as an expense in the reporting period amounts to € 9,886 thousand, including € 189 thousand of expenses for services purchased. The allowance for impairments of € 14 thousand relate exclusively to merchandise.

26. TRADE RECEIVABLES

Trade receivables developed as follows:

Figures in € thousand			**Due in more than one year**	
	31 Dec 2018	31 Dec 2017	31 Dec 2018	31 Dec 2017
Trade receivables (gross)	40,629	26,374	2,854	7,447
Allowance for impairments	2,856	2,303	-	-
Trade receivables (net)	**37,773**	**24,071**	**2,854**	**7,447**

The carrying amount of the Group's trade receivables approximates their fair value.

The analysis of the age structure of overdue trade receivables not impaired as of 31 December 2017 is as follows (in accordance with IAS 39):

Figures in € thousand	**Total**	< 30 days	30-60 days	60-90 days	90-120 days	> 120 days
31 December 2017	**3,212**	1,528	409	471	316	488

Based on the information available up to the preparation of the consolidated financial statements as of 31 December 2017, there were no indications that the overdue but not impaired receivables would not be settled.

The allowance of trade receivables developed as follows in the previous year (in accordance with IAS 39):

Figures in € thousand	**2017**
Opening balance	410
Additions	2,041
Utilised	-65
Unused amounts reversed	-67
Change resulting from foreign currency conversion	-16
Closing balance	**2,303**

As of 31 December 2018, our credit risk position in relation to trade receivables was as follows (in accordance with IFRS 9):

Figures in € thousand	Gross carrying amount	not overdue	< 30 days	30-60 days	60-90 days	90-120 days	> 120 days
31 December 2018	40,629	26,638	6,316	1,755	911	1,170	3,839
of which not credit impaired (Level 2)	35,620	26,638	6,316	1,755	911	-	-
of which credit impaired (Level 3)	5,009	-	-	-	-	1,170	3,839

The allowance of trade receivables on the basis of expected credit losses over the entire term developed as follows (in accordance with IFRS 9):

Figures in € thousand	**2018**
Balance at the beginning of the year in accordance with IAS 39	**2,303**
Effect of initial application of IFRS 9	-
Balance at the beginning of the year in accordance with IFRS 9	**2,303**
Additions	487
Utilizations	-97
Additions from initial consolidation	167
Exchange rate effects and other changes	-4
Closing balance according to IFRS 9	**2,856**

The measurement of trade receivables resulted in expenses of € 487 thousand (previous year: € 2,041 thousand), which were recognized in profit or loss under sales and marketing expenses in the income statement.

The allowances of trade receivables relate to customers who were in financial difficulties or in arrears. The Group has not taken out collateral or credit insurance for these balances. If there are indications that a debtor is experiencing significant payment difficulties, the receivable is immediately written down by 100 % if we consider realization to be improbable. Before concluding contracts with new customers that exceed certain internal restrictions, the Group checks the creditworthiness of the customer in order to minimize the credit default risk. If there are no indications that a customer is experiencing payment difficulties, the allowance is measured individually on a case-by-case basis based on both the length of the overdue period and other relevant and reliable information. In doing so, we also take into account forward-looking information, such as on economic conditions or changes in country risk classifications.

27. CASH AND CASH EQUIVALENTS

Figures in € thousand	31 December 2018	31 December 2017
Cash balances	43	11
Bank balances	200,205	95,451
Cash equivalents	4,997	4,997
Liquid funds	**205,245**	**100,459**
Of which unrestricted	202,627	97,360
Of which restricted	2,618	3,099

Cash equivalents are defined as short-term highly liquid financial resources, which can be converted to cash at any time and which are subject to only low volatility. In this report, German Government Day-Bonds are reported under cash equivalents.

The bank balances are deposited with creditworthy banks with no recent history of default.

The carrying amount of the Group's cash and cash equivalents approximates their fair value.

Liquid funds available on a restricted basis

Some of the Group‘s subsidiaries have their headquarters in countries in which foreign exchange controls or other legal restrictions apply. In particular, this involves the Group companies domiciled in the People‘s Republic of China. As of the balance sheet date, the companies held cash amounting to € 2,618 thousand (previous year: € 3,099 thousand). The Managing Directors believe that this will not cause any disadvantages for the Group, as the cash is used for financing operations in the respective countries or cash transfers are approved if this should become commercially viable.

28. EQUITY

Subscribed capital / Own shares

Number	2018	2017
Issued shares in circulation:		
As of 01 January	**45,287,075**	**44,973,371**
Cash capital increase	4,684,565	-
Disposal of treasury shares	733,283	313,704
Exercised subscription rights of the stock option program	211,188	-
Acquisition of treasury shares	-1,686,000	-
As of 31 December	**49,230,111**	**45,287,075**

All issued shares are fully paid. The nominal amount of the shares is € 1.00 each. In the reporting period, the capital stock increased by 4,684,565 ordinary shares due to a cash capital increase at the RIB Software SE. In addition, 733,283 treasury shares were sold in the reporting year. Of these, 51,641 treasury shares were transferred to the sellers of the Exactal Group Limited, Hong Kong, which were initially retained to secure seller guarantees. The remaining 681,642 treasury shares were used for the company acquisitions in year 2018. In the reporting year, 211,188 options from the stock option program were exercised for the first time by entitled employees.

By 31.12.2018, 1,686,000 treasury shares had been purchased.

The number of circulating shares on the balance sheet effective date 31.12.2018 thus increased to 49,230,111.

Treasury shares

By resolution dated 30.05.2017, the Annual General Meeting authorized RIB Software SE to acquire treasury shares amounting to no more than 10% of the RIB Software SE's capital stock at the time of the resolution by 29.05.2022. This corresponded to 4,684,565 shares. The above resolution was suspended in the Annual General Meeting on 15.05.2018 and replaced by a new authorization.

Based on the resolution of the Annual General Meeting on 15.05.2018, RIB Software SE is authorized to acquire treasury shares amounting to no more than 10% of the RIB Software SE's capital stock at the time of the resolution by 14.05.2023. This corresponds to 5,153,022 shares. RIB Software SE may not use the authorization for the purpose of trading in its treasury shares. RIB Software SE may exercise the authorization in whole or in parts, once or several times; the authorization may also be exercised by its Group companies or by third parties on the account of RIB or that of the Group companies. The acquired shares, together with the treasury shares already held by RIB Software SE or attributable to it in accordance with Sections 71d and 71e AktG [Stock Corporation Act] may at no time account for more than 10% of the respective capital stock of RIB Software SE.

In addition to sale on the exchange or by means of an offer made to all shareholders, the Administrative Board is authorized to proceed with the acquired treasury shares as follows, in particular: (i) to use the shares as part of a company merger or the acquisition of companies, parts of companies, holdings in companies, or other benefits in kind, (ii) to sell the treasury shares to third parties in consideration of certain conditions, (iii) to use the treasury shares to meet the subscription rights granted in 2015 by the stock option program, and (iv) to collect the treasury shares without further resolution by the Annual General Meeting. The subscription right of the shareholders is excluded in each case. In addition, if treasury shares are sold by an offer made to all shareholders, the Administrative Board can block the subscription right of the shareholders for top values.

The Administrative Board has exercised its authorization by resolutions dated 17.10.2018 and 17.12.2018. As part of the stock buyback program 2018, a total of up to 3 million treasury shares were bought back at a total purchase price without ancillary costs of at most € 45 million in the period from 01.11.2018 to 05.03.2019. On this basis, the company bought back 1,686,000 treasury shares in the reporting year. By the time the annual and consolidated financial statements for the year under review were prepared, the number of treasury shares had already reached 3 million and the share buyback program had thus been terminated. The shares were bought back within the price range specified by the Administrative Board from € 8.88 to € 15.00 per share.

In January of the financial year 2018, 290,000 treasury shares with a nominal value of € 1.00 per share were used by RIB Limited, Hong Kong, in the context of the acquisition of further shares of Exactal Group Limited, Hong Kong. The transferred shares are thus again in circulation.

Another 94,442 treasury shares with a nominal value of € 1.00 per share were used in March 2018 for the acquisition of 51% of the shares in the Datengut GmbH, Zwenkau, as part of the purchase price and are thus again in circulation.

A total of 297,200 treasury shares were used in December 2018 for the acquisition of 20% of the shares in A2K. The transferred shares are thus again in circulation.

This results in the following development in the stock of treasury shares:

	Number of shares	Date of use	Pro rata amount of share capital	Proportion of share capital	Acquisition costs
	Units		€ thousand	%	€ thousand
Balance as of 01 Jan 2017	**1,765,143**		**1,765**	**3.77**	**10,597**
Disposals in 2017	-258,202	Nov.-Dec. 2017	258	0.55	-1,545
Value adjustments					-37
Balance as of 31 Dec 2017	**1,506,941**		**1,507**	**3.22**	**9,015**
Disposals in 2018	-384,442	Jan.-Mar. 2018	-384	0.82	-2,299
Additions in 2018	633,000	Nov.-13 Dec. 2018	633	1.22	6,761
Disposals in 2018	-297,200	14 Dec. 2018	-297	0.57	-2,282
Additions in 2018	1,053,000	14 Dec.-31 Dec. 2018	1,053	2.04	11,183
Balance as of 31 Dec 2018	**2,511,299**		**2,511**	**4.85***	**22,378**

* Due to the changes in the share capital during the year, the sum of the percentage changes does not equal the percentage share as of 31 December 2018.

Authorized capital

Authorized capital 2015

The Administrative Board was authorized to increase the capital stock of the company by 9.6.2020, once or several times by a total of up to € 18,355 thousand, by issuing up to 18,354,784 new registered shares with a nominal value of € 1.00 per share against cash deposits or investment in kind ("Authorized Capital 2015"). The new shares must generally be offered to the shareholders for subscription. However, the Administrative Board was authorized to exclude the shareholders' subscription rights under certain conditions set out in the Company's Articles of Association. For more details about the Authorized Capital we refer to our comments in **Section E.1.** of the Management Report.

In the fiscal year, the Administrative Board has partially used the above authorization and decided on 22/23.03.2018 to increase the capital stock of the company from € 46,846 thousand by € 4,684 thousand to € 51,530 thousand by issuing 4,684,565 new registered capital shares. The new shares will be fully entitled to dividends starting on 01.01.2018. The subscription right of the shareholders was blocked pursuant to § 4 Para. 4 Clause 3 lit. c) of the Articles of Incorporation together with §§ 203 Para. 1 and 2, 186 Para. 3 Clause 4 AktG. The capital increase was entered into the commercial registry on 23.03.2018.

The Annual General Meeting of the company decided on 15.05.2018 to suspend the granted authorization to increase the capital stock in "Authorized Capital 2015" if it was not used and create a new Authorized Capital.

Authorized capital 2018

The Administrative Board is authorized to increase the capital stock of the company by 14.5.2023, once or several times by a total of up to € 13,670 thousand, by issuing up to 13,670,219 new registered shares with a nominal value of € 1.00 per share against cash deposits or investment in kind ("Authorized Capital 2018"). The new shares must generally be offered to the shareholders for subscription. However, the Administrative Boardare authorized to exclude the shareholders' subscription rights under certain conditions set out in § 4 Para. 4 of the Company's Articles of Association. The authorization was given to the Administrative Board by the Annual General Meeting of the company on 15.05.2018. This authorization was not used in the reporting year. For more details about the Authorized Capital we refer to our comments in **Section E.1.** of the Management Report.

Conditional capital

Share program 2015 ("Conditional Capital 2015/1")

The share capital of the Company may conditionally be increased by up to € 1,337,428.00 (previous year: € 1,548,616.00) by issuing up to 1,337,428 new registered shares (previous year: 1,548,616) with a nominal value of € 1.00 per share ("Conditional Capital 2015/1").

The conditional capital increase is only executed if, according to the stock option program 2011 based on the resolution of the shareholder meeting on 20.05.2011 (version of resolution of shareholder meeting on 04.06.2013) or the stock option program 2015 based on the resolution of the shareholder meeting on 10.06.2015, subscription rights were issued, the owners of the subscription rights exercise them, and the company does not issue treasury shares to fulfil the subscription rights. The Administrative Board is exclusively responsible for granting and implementing subscription rights to members of the Executive Board of the former RIB Software AG and to the Managing Directors. The new shares will participate in profit from the beginning of the financial year in which the issue occurs.

The term of the subscription rights is 7 years. The subscription rights can only be exercised after the expiration of 4 years if the beneficiary is employed at this time and the market price of the share exceeds a certain value with a period of 12 months after they are granted for a total of 60 stock exchange trading days.

211,188 subscription rights were exercised in the reporting year. Therefore, the capital stock was increased by € 211,188 in the reporting year by issuing 211,188 new registered shares for a nominal value of € 1.00 per share.

At the end of the reporting period, a total of 847,718 exercisable subscription rights existed (see **Note 29**).

Issue of bonds (“Conditional Capital 2018”)

The Annual General Meeting on 15.05.2018 authorized the Administrative Board by 14.05.2020, to issue once or several times registered convertible, warrant, or profit participation bonds and/or profit participation rights (or combinations of these instruments) (jointly “bonds”) with or without term limitation for a total nominal value of up to € 200,000,000.00 and grant the owner / creditors of bonds conversion / option rights for the acquisition of up to 5,153,022 registered shares of the company with a total nominal value of up to € 5,153,022.00 based on the conditions of the bonds and/or give rise to duties to convert the respective bonds in such shares under the conditions of the bonds.

The capital stock was increased by up to € 5,153,022.00 by issuing up to 5,153,022 new registered shares with a nominal value of € 1.00 per share (“Conditional Capital 2018”). The conditional capital increase is for the purpose of granting registered shares to the owners / creditors of bonds that were issued based on the authorization passed by the Annual General Meeting on 15.05.2018 under agenda point 11 by the company or its direct or indirect domestic or foreign majority holding companies and give rise to a conversion / option right or grant / give rise to a conversion duty into new registered shares of the company. The conditional capital increase shall only be executed when option / conversion rights are exercised, when the owners / creditors obligated to convert fulfil their duty to convert, or when deliveries of shares due to substitution rights of the company are made and no treasury or new shares under an authorized capital are used for this purpose. The new registered shares participate in the profits from the start of the fiscal year in which they are created by exercising option / conversion rights, by fulfilling conversion duties, or by exercising substitution rights. The Administrative Board is authorized to determine the further details of the implementation of the conditional capital increase. In the reporting year, the authorization to issue bonds as described above was not exercised.

Capital reserves

The movement in capital reserves during the reporting period breaks down as follows:

Figures in € thousand	2018
As of 01 January 2018	**187,168**
Disposal of own shares	8,192
Allocation of premium from cash capital increase	126,483
Transaction costs	-2,998
Share-based remuneration	1,581
Additions to financial liabilities from company acquisitions	-3,692
As of 31 December 2018	**316,734**

The transaction costs of the cash capital increase in the amount of € 4,316 thousand, after deduction of the related tax benefits in the amount of € 1,318 thousand, were recognised as a deduction from the capital reserve.

Retained earnings

In the reporting year, in accordance with the applicable statutory provisions, no adjustment was made to the legal reserves included in retained earnings.

29. STOCK OPTION PROGRAMS

By resolutions of 20 May 2011 and 04 June 2013, the Annual General Meeting adopted the 2011/2013 share option plan and authorised the Executive Board to grant 1,548,616 subscription rights until 19 May 2016. The term of the subscription rights is seven years. The subscription rights can only be exercised after the expiry of a waiting period of four years if the beneficiary is employed at this time and the listed price of the share exceeds a certain amount within a period of 12 months after granting on a total of 60 trading days.

The strike price of a subscription right amounts to € 1.00. If the performance target is not reached in a particular year, it may be compensated for in the following year by reaching the performance target applicable to this period. Subscription rights for which the performance target is not reached and cannot be compensated for in the following year lapse.

From the 2011/2013 share option plan, 260,688 share options settled in equity instruments and 15,500 phantom shares settled in cash were granted in prior years.

By resolution of 10 June 2015, the Annual General Meeting adopted the 2015 share option plan and authorised the Executive Board to grant 1,548,616 subscription rights until 09 June 2020. At the same time, the cancellation of the 2011/2013 share option plan was decided. The term of the subscription rights is seven years. The subscription rights can only be exercised after the expiry of a waiting period of four years if the beneficiary is employed at this time and the listed price of the share exceeds a certain amount within a period of 12 months after granting on a total of 60 trading days, as follows

- in the period from 01 July 2017 to 30 June 2018, an amount of € 15.88;
- in the period from 01 July 2018 to 30 June 2019, an amount of € 17.88;
- in the period from 01 July 2019 to 30 June 2020, an amount of € 19.88;
- in the period from 01 July 2020 to 30 June 2021, an amount of € 21.88;

- in the period from 01 July 2021 to 30 June 2022, an amount of € 23.88;
- in the period from 01 July 2022 to 30 June 2023, an amount of € 25.88;
- in the period from 01 July 2023 to 30 June 2024, an amount of € 27.88.

The strike price of a subscription right amounts to € 1.00. If the performance target is not reached in a particular year, it may be compensated for in the following year by reaching the performance target applicable to this period. Subscription rights for which the performance target is not reached and cannot be compensated for in the following year lapse.

In the reporting period, a total of 255,619 stock options were granted on 02 July 2018. In previous years, a total of 695,755 stock options were granted under the 2015 Stock Option Plan.

Movement of subscription rights	**Stock options**		**Phantom shares**	
	2018	**2017**	**2018**	**2017**
Balance at the beginning of the reporting period	866,417	612,852	9,500	12,500
Granted in the reporting period	255,619	278,841	0	0
Forfeited in the reporting period	63,130	25,276	0	3,000
Exercised in the reporting period	211,188	0	0	0
Lapsed in the reporting period	0	0	0	0
Balance at the end of the reporting period	847,718	866,417	9,500	9,500
To be exercised at the end of the reporting period	12,500	69,300	9,500	9,500

The weighted average remaining period of the outstanding share options is 4.6 years as of the balance sheet date.

The subscription rights were valued by means of a Monte Carlo simulation taking into account the absolute performance target. The following parameters were included in the valuation of the subscription rights:

	Stock options	**Phantom shares**
Valuation date	02 July 2018	28 December 2018
Strike price	€ 1.00	€ 1.00
Share price	€ 19.040	€ 11.830
Risk-free interest rate	-0.09%	-0.66%
Dividend yield	1.06%	1.91%
Expected volatility	42.52%	57.99%
Term	6.4 years	1.9 years
Fair value	**€ 14.760**	**€ 10.620**

The estimates for the expected volatility were derived from the historical share price movements of RIB Software SE. The remaining term of the option rights was used as the time window.

The personnel expenses recorded in fiscal year 2018 from granting stock options was € 1.6 million. The issue of phantom shares resulted in earnings of € 124 thousand which was offset against the personnel expenses. The book value of the liabilities from the Phantom shares is € 101 thousand, the intrinsic value of vested services was € 135 thousand.

On the effective date, there are liabilities to the tax authority from payable payroll tax due to the stock options of € 289 thousand exercised in the reporting period.

The weighted average share price for options exercised during the reporting period was € 15.03.

30. OTHER EQUITY COMPONENTS

Other equity components are composed as follows:

Figures in € thousand	31 December 2018	31 December 2017
Foreign currency translation reserve	2,995	-3,093
Revaluation on reserve	-360	-363
Total	**2,635**	**-3,456**

The exchange rate conversion reserve includes differences that were due to the conversion of annual financial report of foreign subsidiaries. The increase is mainly due to the development of the US-Dollar and the Hong Kong-Dollar against the Euro in the reporting period and to the reclassification recognized in income of exchange rate conversion differences as part of the accounting of successive business acquisitions. The revaluation reserve includes actuarial profits and losses from pension reserves and similar liabilities.

31. NON-CONTROLLING INTERESTS

The following table shows information on the net assets of each subsidiary of the Group with significant non-controlling interests (before consolidation entries) as of 31 December 2018. The information on total comprehensive income and cash flow from operating activities relates to the period since initial consolidation using the full consolidation method.

Figures in € thousand	Datengut	IMS	ICS	A2K
Percentage of non-controlling interests	**49%**	**20%**	**60%**	**40%**
Non-current assets	4,189	3,935	1,200	16,932
Current assets	2,767	4,642	1,100	9,959
Non-current liabilities	-	-1,318	-218	-5,111
Current liabilities	-1,554	-3,178	-455	-8,216
Net assets	**5,402**	**4,081**	**1,627**	**13,564**
Net assets of non-controlling interests	2,647	816	976	5,426
Revenues	4,028	3,882	1,125	1,377
Profit	705	399	-55	315
Other comprehensive income	-	-	35	-385
Comprehensive income	**705**	**399**	**-20**	**-70**
Profit allocated to non-controlling interests	345	80	-33	126
Other comprehensive income attributable to non-controlling interests	-	-	21	-154
Cash flows from operating activities	**1,245**	**54**	**91**	**1,068**

32. DIVIDENDS

The net profit of RIB Software SE as at 31.12.2018 amount to € 10,032 thousand. Of this amount, a partial amount of € 199 thousand is subject to a payout block. The total net profit available for distribution to the shareholders is effectively € 9,833 thousand as of 31.12.2018.

For the past financial year, the Managing Directors are proposing that the Administrative Board submit a proposal to the Annual General Meeting for a dividend of € 0.18 in the financial year 2019, totalling € 8,625 thousand to be paid out to the shareholders. This dividend is yet to be approved by the Annual General Meeting and has therefore not been accounted for as a liability in these Financial Statements. At the time of the submission of the proposed resolution by the Managing Directors, the Company held 3,825,299 treasury shares with no dividend rights for the Company.

Should the number of dividend-bearing shares change by the time the resolution on the appropriation of the net profit is adopted, the Administrative Board will submit a revised resolution proposal for the appropriation of the net profit to the Annual General Meeting, allowing for the changes. However, the proposal will still provide for a payout of € 0.18 per dividend-bearing share.

A dividend of € 0.18 per share was paid in the 2018 financial year.

33. PENSIONS AND SIMILAR OBLIGATIONS

The provisions for pensions and similar obligations covers the pension fund scheme of the Group. These schemes are only valid for employees who joined the Group prior to May 1995.

The occupational pension plans define pension plans which cover age, disability and survivors‘ dependants‘ rights for employees. The amount of the pension depends on the length of service and the amount of the worker‘s allowance. The pension obligations are not covered and are covered by assets of the group. All risks have been adequately taken into account in the context of the actuarial report.

In addition to the company pension plans, the Group made contributions to statutory pension insurance funds which fall under the definition of defined contribution plans. The Group’s contributions to these defined contribution plans came to € 1,248 thousand in the 2018 financial year and € 1,201 thousand in the 2017 financial year.

The following actuarial methods and assumptions were used to calculate the pension provisions:

- Calculation basis: actuarial 2018 G mortality tables
- Notional interest rate: 2.03 % p.a. (2017: 1.75 % p.a.)
- Pension growth trend: 1.50 % p.a. (2017: 1.50 % p.a.)
- Employee turnover: 2.50 % p.a. (2017: 2.50 % p.a.)

(a) Present value of the defined benefit pension plans and fair value of the plan asset:

Figures in € thousand	2018	2017
Present value of the defined benefit pension plan	3,456	3,569
Net debt from the defined benefit pension plans	**3,456**	**3,569**

(b) The development of the net debt from defined benefit pension plans is composed as follows:

Figures in € thousand	2018	2017
Pension obligations as of 01 January	3,569	3,840
Current service cost	12	13
Net interest expense	61	62
Revaluation - actuarial loss/profit	-2	-160
Therefore: from changes in financial assumptions	-115	-44
Therefore: from changes in demographic assumptions	53	-
Therefore: experience adjustments	60	-116
Pension payments	-184	-186
Pension obligations as of 31 December	**3,456**	**3,569**

Actuarial gains and losses are recognised immediately in accumulated other comprehensive income.

(c) The amounts recognised in the income statement are as follows:

Figures in € thousand	2018	2017
Service cost	12	13
Net interest expense	61	62
Total cost	**73**	**75**

In addition, the Group has incurred costs for defined contribution plans operated by public authorities that are also recognised in the income statement.

(d) The provisions for pensions and similar obligations break down as follows:

Figures in € thousand	2018	2017
Long-term pension provisions	3,272	3,383
Short-term pension provisions	184	186
Total pension provisions	**3,456**	**3,569**

The contributions payable in relation to pension obligations in the 2019 financial year are expected to amount to € 201 thousand.

Material valuation parameters were subjected to a sensitivity analysis for measuring the pension provisions. The calculations carried out for this purpose by the actuaries were undertaken separately for the valuation parameters classified as material. An increase or decrease in the material actuarial assumptions would have had the following effects on the present value of the pensions as well as the defined benefit obligations.

		Figures in € thousand
Valuation parameter	Sensitivity in % points	Pension provisions
Notional interest rate	+ 0.75	3,177
Notional interest rate	- 0.75	3,780
Pension growth trend	+ 0.5	3,635
Pension growth trend	- 0.5	3,291
Fluctuation rate	+ 0.5	3,456
Fluctuation rate	- 0.5	3,456

The weighted average term of the performance-based obligations as of 31 December 2018 is 12 years (previous year: 13 years).

34. TRADE PAYABLES

The carrying amounts of trade payables closely approximate their fair value. The trade payables are non-interest-bearing and fall due for payment within one year.

35. OTHER PROVISIONS

The movements of other provisions are as follows:

Figures in € thousand	Warranty provisions	Post-employment benefits	non-current employee benefits	Legal disputes	Other	**Total**
As of 01 January 2017	**356**	**367**	**286**	**350**	**80**	**1,439**
Utilised	262	-	-	-	-	262
Unused amounts reversed	-	-	-	-	15	15
Arising during the year	261	24	13	550	108	956
Change arising from currency translation	-	-44	-	-	-	-44
As of 31 December 2017 and 01 January 2018	**355**	**347**	**299**	**900**	**173**	**2,074**
Additions from initial consolidation	113	-	-	-	8	121
Utilised	246	-	-	315	-	561
Unused amounts reversed	-	-	76	585	103	764
Arising during the year	290	36	-	25	6	357
Change arising from currency translation	-2	16	-	-	-	14
As of 31 December 2018	**510**	**399**	**223**	**25**	**84**	**1,241**

The Group grants its customers guarantees for the functionality of its products. The amount of the warranty provisions is estimated on the basis of the sales volume and on the empirical data regarding the actual proportion of the warranty claims made. The basis of this estimation is constantly reviewed and adjusted if necessary.

Provisions for other long-term benefits result from severance pay obligations in the context of employee redundancies and departures. Provisions have been measured in accordance with actuarial principles using the projected unit credit (PUC) method. In the financial year 2018, this was based on a discount rate of 2.03% p.a. (2017: 1.75% p.a.) and a salary trend of 1.75% p.a. (2017: 3.0% p.a.).

The reserves for legal disputes on 31.12.2017 concerned three legal disputes in which the Group was involved. The main asserted claims were in connection with a company acquisition that was considered but not ultimately realized. The reserve formed for this was completely dissolved in the reporting year, since it was no longer expected that there would be a claim. The two other legal disputes necessitated expenditures totaling € 315 thousand. The dissolutions of the reserves for legal disputes in the reporting period resulted in total income of € 585 thousand.

36. DEFERRED LIABILITIES

The accruals break down as follows:

Figures in € thousand	31 December 2018	31 December 2017
Accrued payroll and social security expenses	6,415	4,304
Licence obligations	300	41
Commission	566	194
Accrual for outstanding invoices	2,460	217
Other	1,117	945
Total	**10,858**	**5,701**

37. DEFERRED INCOME

The amounts include sales earnings and – in some cases – other income from services of the Group that were already invoiced to the customers or paid by the customers, but that cannot yet be recognized through profit and loss since the services had not yet been provided at the end of the reporting periods.

The deferred income increased in the reporting year due to additions from business acquisitions of € 2,127 thousand. For more about the company acquisitions we refer to **Note (7)**.

Increases of the deferred income resulted in € 10,082 thousand from invoicing and due invoices of customers. Decreases of the deferred income resulted in € 9,149 thousand from the fulfilment of service obligations. This amount was recognized in sales earning in the reporting year.

In the previous year, the deferred income included income from software sales to the former joint venture YTWO Ltd. of € 10,209 thousand. This deferred income increased by € 486 thousand in the reporting year due to exchange rate conversions. Due to the revaluation, deferred revenues decreased by € 4,065 thousand (we refer to **Note (42)**). The reduction reflects the value of benefit obligations already fulfilled in previous years. The remaining partial amount of € 6,630 thousand reduced the consideration for the acquisition of the shares in YTWO Ltd. and is no longer included in deferred revenues. Please also refer to **Note (7.F.)**.

Outstanding service obligations of the Group concern transaction prices from customer contracts connected to not yet realized sales incomes. These include both the recognized deferred income as well as contractual service obligations from existing customer contracts that had not yet affected the balance sheet as of the balance sheet effective date. These are in particular existing maintenance contracts and obligations from the sale of cloud software. The contracts have a term of one or several years. On 31.12.2018, there are outstanding service obligations with a transaction price of approx. € 92,324 thousand. The main portion of this transaction price is likely to be realized as revenue within 12 months after the balance sheet effective date.

38. OTHER FINANCIAL LIABILITIES

The majority of these relate to derivative financial liabilities from company acquisitions, which were classified as at fair value through profit or loss. In addition, there is a liability from the repurchase of treasury shares as of the balance sheet date 31 December 2018. In the reporting period, the fair value of the financial liability from the acquisition of the shares in RIB SAA in 2015 was reviewed and a revaluation was performed. In addition, financial liabilities were recognised in the reporting period due to the acquisitions of the IMS Group and ICS, for which a revaluation was also required as of the balance sheet date 31 December 2018. The changes in other financial liabilities are explained in detail below.

Other financial liabilities are as follows:

Figures in € thousand	31 December 2018		31 December 2017	
	Non-current	Current	Non-current	Current
Liability from the acquisition of Exactal	-	-	-	8,619
Liability from the acquisition of RIB SAA	2,549	-	1,926	-
Liability from the acquisition of IMS Group	2,702	-	-	-
Liability from the acquisition of A2K Group	-	1,423	-	-
Liability from the acquisition of ICS	-	1,362	-	-
Liability from the acquisition of xTWO	-	-	-	50
Liability from the repurchase of treasury shares	-	3,694	-	-
Other	130	93	8	-
Total	**5,381**	**6,572**	**1,934**	**8,669**

By agreement dated 13 November 2017, the Group acquired a further 50% of the shares in **Exactal**. The acquisition date was November 20, 2017. At the same time, the parties to the contract had granted each other mutual call and put options for the remaining 25 % of the shares by agreement dated November 13, 2017. Thereafter, the options could be exercised in a period that began on January 1, 2019 and/or January 1, 2020 and ended 30 days after completion of the audit of the subgroup financial statements for the respective previous year of the exercise period. Contrary to this option agreement, the parties agreed in a contract dated 04 January 2018 to acquire the outstanding 25% of the shares early, so that the call and put options are not actually exercised. The obligation to acquire the outstanding shares resulted in a financial liability that was measured at fair value of € 7,155 thousand as of 31 December 2017.

In an agreement dated 04 January 2018, the parties agreed that the Group would acquire the outstanding shares in exchange for 290,000 treasury shares. The financial liability therefore had to be derecognized in January 2018. The subsequent measurement of the financial liability up to the date of derecognition resulted in an expense of € 487 thousand, caused by the change in the share price of the RIB share from the reporting date of 31 December 2017 until derecognition.

In addition, the current financial liability as of 31 December 2017 included the unpaid portion of the cash purchase price in the amount of € 1,464 thousand. After all sales guarantees had been fulfilled in the year under review, € 732 thousand of this financial liability was paid in May and November 2018 respectively.

In the fiscal year 2015, the Group acquired 75% of the shares in **RIB SAA**. At the same time, mutual call and put options were signed with the sellers regarding the transfer of the outstanding 25% of the shares. The short option in the put option agreement results in a financial liability for the Group with a fair value of € 2,632 thousand calculated at the time of acquisition. Part of this, € 1,582 thousand, was allocated to the company acquisition and another € 1,050 thousand to a separate transaction in the form of a remuneration agreement.

The financial liability allocated to the company acquisition was fully recognized as part of the accounting of the company acquisitions. The financial liability allocated to the separate transaction is accrued over a 66-month period and charged to personnel expenses. It is included in financial liabilities and, as of the balance sheet date, it amounts to € 754 thousand. The personnel expenses attributable to the reporting period amount to € 217 thousand. The compounding of financial liabilities resulted in an interest expense of € 37 thousand.

The options can generally be exercised by either party during the period from 01 January 2021 to 31 March 2021. The option prices are based on the proportionate goodwill of RIB SAA as calculated using a contractually agreed valuation method. The valuation uses a multiplier procedure based on the operating income of the RIB SAA in the two fiscal years before the option is exercised, where contractual minimum and maximum values limit the respective option price on the top and bottom. The minimum price for the outstanding 25 % totals € 1,750 thousand, the maximum € 4,000 thousand.

The planning period relevant to the valuation covers the fiscal years 2019 and 2020. Starting from the high level of the base year 2018, the earnings planning assumes revenue growth of between approx. 5 % p.a. and 6 % p.a., coupled with corresponding improvements in earnings.

Based on our updated calculations in the year under review, we assume that RIB SAA's operating profit after tax at the time of the option will be in the range of between approx. € 0.7 million and approx. € 1.0 million. Taking into account the estimated probabilities of the occurrence of alternative future scenarios and the contractual upper and lower price limit, we assume that, at the date of the option, a purchase price of € 3,068 thousand will have to be paid for the currently still outstanding 25% of the shares. A part of this, € 1,797 thousand, is to be allocated to the company acquisition. The resulting financial liability was evaluated by discounting this partial amount to the balance sheet effective date using a term-adequate, risk-conform interest rate of 1.25 % and recognized at its fair value of € 1,795 thousand. The measurement after recognition of the financial liability in the reporting period resulted in an expenditure of € 369 thousand.

As it refers to the future, the valuation of the financial liability is inherently associated with discretionary decisions and estimation uncertainties. In the period up to the maturity of the financial liability, this may result in additional expenses of no more than € 1,451 thousand.

In the 2014 fiscal year, the RIB Group acquired 75% of the shares in **xTWO**. At the same time a put option agreement for the transfer of the outstanding shares of 25 % was concluded, leading to recognition of a derivative financial liability. An early takeover of the outstanding shares of 25% was agreed with a notarial agreement dated 08.06.2016. The fixed purchase price was € 344 thousand, of which € 294 thousand were paid in the previous years. In the reporting year, the remaining € 50 thousand were paid.

The company acquired 80% of the shares in the **IMS** Gesellschaft für Informations- und Managementsysteme mbH with the purchase and transfer agreement dated 27.07.2018. The acquisition date was 27.07.2018.

In addition, the share purchase contract contains additional agreements concerning the acquisition of the outstanding shares of 20%. Accordingly, the company has a call option for the remaining shares. The seller was granted a put option. The striking price for both options is determined by a contractually specified formula as multiplier of the average EBITDA of IMS Group in the fiscal years 2020 and 2021. In addition, an agreement was made for a price minimum and maximum value, so that the striking price of the option will range between € 1,600 thousand and € 3,200 thousand. The company can opt to pay the striking price for this option in cash, in its treasury shares, or a combination thereof.

For the written put option, a financial liability of € 2,333 thousand was set. The recognition of the liability led to a corresponding reduction of the capital reserve. The valuation of the financial liability was carried out through discounting the expected striking price of € 2,408 thousand, using a term-adequate, risk-conform interest rate of 0.85%. The compounding of financial liabilities resulted in an interest expense of € 10 thousand. Due to the positive development of IMS in the reporting period, a revaluation of the financial liability was carried out for the balance sheet effective date. The planning period relevant to the valuation covers the fiscal years 2020 and 2021. Starting from the base year 2018, the earnings planning assumes revenue growth of between approx. 3 % p.a. and 5 % p.a., coupled with corresponding improvements in earnings.

Based on our updated calculations, we assume that the consolidated EBITDA of the IMS at the time the option is exercised will range between approx. € 1.5 million and approx. € 1.7 million. Taking into account the estimated probabilities of the occurrence of alternative future scenarios and the contractual upper and lower price limit, we assume that, on the date of the option, a purchase price of € 2,779 thousand will have to be paid for the 20 % of the shares currently still outstanding. This financial liability is evaluated with the fair value of € 2,702 thousand by discounting this partial amount for the balance sheet effective date using a term-adequate, risk-conform interest rate of 0.85 %. The measurement after recognition of the financial liability in the reporting period resulted in an expenditure of € 359 thousand.

The expected value of the purchase price obligation was determined under consideration of the estimated probabilities of alternative future scenarios and the contractual price maximum and minimum. In the period up to the maturity of the financial liability, this may result in additional expenses of no more than € 498 thousand. We refer to our comments in **Note (7. B.)**.

Per contract dated 22.08.2018, the Group acquired 40% of the shares in the **I**ntegrated **C**omputer **S**ystems Support, Inc., Redmond/USA (hereafter **ICS**). In addition, the Group is contractually obligated to acquire the outstanding 60% of the shares within a period of 36 months. The acquisition of the outstanding shares can occur at any time during this period the Group choses. The acquisition date was 30.08.2018.

Based on our calculations we expect that the purchase price for the acquisition of the outstanding shares will be approx. € 1,376 thousand. The purchase price is based on a contractually specified formula as multiplier to the EBITDA of the ICS for the past 12 months to the end of the month preceding the share purchase. In addition, an agreement was made for a price minimum and maximum value, so that the striking price of the option will range between approx. € 1,310 thousand (USD 1,500 thousand) at standard market conditions, and approx. € 2,620 thousand (USD 3,000 thousand) at standard market conditions. Of the purchase price, a part up to approx. € 1,747 thousand (USD 2,000 thousand) at standard market conditions, is to be settled per transfer of liquid funds. The company can opt to pay any amount above this in cash, in its treasury shares, or a combination thereof.

The financial liability was evaluated on the balance sheet effective date with € 1,362 thousand by discounting of the expected purchase price on the balance sheet effective date, using a term-adequate, risk-conform interest rate of 0.85 %. The compounding of financial liabilities resulted in an interest expense of € 3 thousand. The expected value of the purchase price obligation was determined under consideration of the estimated probabilities of alternative future scenarios and the contractual price maximum and minimum. In the period up to the maturity of the financial liability, this may result in additional expenses of no more than € 1,244 thousand. We refer to our comments in **Note (7.C.)**.

The Group acquired 40 % of the shares in the A2K Holdings Pty Ltd., Gatton/Australia, A2K Technologies Limited, Newton/New Zealand, and Phoenix PLM Pty Ltd., Gatton/Australia (hereafter **A2K**) with contracts dated 18.09.2018. The Group acquired another 20% of the shares in A2K with contracts dated 07.11.2018, so that the Group gained control over A2K at the time of the acquisition on 14.12.2018. The total amount of the compensation for 40% of the shares in the A2K of € 8,767 thousand was settled by transfer of liquid funds. Of the total amount, € 7,344 thousand were settled immediately on 26.09.2018 and € 1,423 thousand were retained as security for contractual seller guarantees. This amount is listed as a current financial liability on the balance sheet effective date. The total amount of the compensation for the additional acquired 20% of the shares was paid in full by transfer of treasury shares of the RIB SE to the sellers. We refer to our comments in **Note (7. E.)**.

In subsequent periods, the acquisition of **YTWO** may result in expenses of approximately € 5,301 thousand (USD 6,000 thousand) due to an earn-out arrangement agreed in the contract. We refer to our comments in **Note (7.F.)**.

39. OTHER LIABILITIES

Other liabilities break down as follows:

Figures in € thousand	31 December 2018	31 December 2017
Advance payments received on orders (contract liabilities)	3,318	2,157
Tax liabilities	4,403	1,849
Social security liabilities	498	150
Liabilities due to employees	727	353
Other	2,077	1,044
Total	**11,023**	**5,553**

The other liabilities of the Group do not incur interest. The carrying amounts of the other liabilities correspond almost exactly to their fair values.

The received down payments for orders increased in the reporting year due to additions from business acquisitions of € 720 thousand. For more about the company acquisitions we refer to **Note (7)**.

Increases of the received down payments of € 2,371 thousand resulted from the collection of payments for service obligations that were not yet fulfilled as of the balance sheet effective date. Reductions of € 1,930 thousand from the fulfilment of service obligations. Of this, € 1,674 thousand were recorded in the sales income in the reporting year.

40. FINANCIAL COMMITMENTS

(a) Operating lease agreements

The Group leases certain office buildings and technical equipment in the scope of operating lease agreements. Contracts with terms of one to five years were concluded for this purpose.

At the end of each of the financial years presented, the Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

Figures in € thousand	31 December 2018	31 December 2017
Due within one year	4,680	2,740
Due in between one and five years	6,394	5,383
Due in more than 5 years	550	-
Total	**11,624**	**8,123**

(b) Other

The company acquisition RIB SAA in 2015 results in a financial liability of € 1,195 thousand, which was subject to scheduled accrual until the date of fulfilment and recognized in profit and loss. On the balance sheet effective date 31.12.2018, a partial amount of € 272 thousand was not yet recognized. In this respect, we refer to our comments in **Note (38)**.

The company acquisition of the YTWO Group results in an assumed payment obligation to the holding EMC European Modular Constructions GmbH of € 950 thousand for the payment of a business loan.

41. CONTINGENT LIABILITIES

There were no material contingent liabilities as of 31 December 2018 and 31 December 2017.

42. RELATED PARTY TRANSACTIONS

a) The transactions with related parties are shown in the following table:

Figures in € thousand	Notes	2018	2017
Former joint venture YTWO Ltd.			
Sale of software	(1)	-	7,755
Reversal of deferred revenues	(2)	2,032	-
Invoiced maintenance	(3)	3,809	3,993
Invoiced management fee	(4)	250	222
Other related companies and persons:			
Rental expense	(6)	63	64
Total		**6,154**	**12,034**

b) Outstanding balances in connection with related parties are shown in the following table:

Figures in € thousand	Notes	31 Dec 2018	31 Dec 2017
Receivables from non-consolidated subsidiaries:			
Loan to 3D Prodigy	(6)	123	107

Remarks:

1) In fiscal year 2016, the Group sold software licenses for a total of € 42.7 million to YTWO Ltd. From this, other operating income of € 7,755 thousand was still realized in the previous year.

(2) During the sale of the software licenses as described in the previous note (1), the Group undertook to deliver additional licenses free of charge in addition to the contractually agreed licenses under certain conditions. The number of the deliverable licenses was estimated using the expected value method during the initial recognition of the process and the resulting valuated service obligation was recognized under current debt as accrued income.

The service obligation was measured after recognition in the reporting period using the same basic methodology based on new valuation-relevant insights. This led to a reduction of the accrued income of about € 4,065 thousand since we had to assume a lower volume of licenses to be delivered free of charge. A part of the dissolution value of € 2,032 thousand as part of an interim earning elimination of "downstream sales" reduced the carrying amount of the share in the former joint venture YTWO Ltd. The residual amount of € 2,032 thousand was recognized as income and is included in the other operating income (see also **Note (11)**). For additional comments on uncertainties in the estimates we refer to **Note 5 (f)**.

(3) In the reporting period, the Group charged YTWO Ltd. maintenance services in the amount of € 3,809 thousand (previous year: € 3,993 thousand). The resulting incoming payments were also recognized in the reporting period. This relates to income from services rendered up to the acquisition date of 14 December 2018. The amounts attributable to the period of full consolidation were eliminated in the consolidated financial statements. We refer to our comments in **Note (7.F.)**.

(4) In the reporting period, the Group received a management fee for expenses from the YTWO Ltd. as part of the activities of Thomas Wolf in his function as Chairman of the Board and Interim CEO of the YTWO Ltd. We refer to our comments in **Note (7.F.)**.

(5) In connection with the company acquisition of the YTWO Group by the Group, the YTWO Ltd. paid capital repayments of respectively € 1,325 thousand to the two former companies. The amount belonging to the Group was recognized as reduction of the carrying amount shares in the former joint venture without affecting the profit and loss statement.

(6) In the reporting period, the Group paid rent for provided office space of € 52 thousand (previous year: € 52 thousand) to the Mühl24 GmbH, Hungen, and to Thomas & Yvonne Wolf Grundbesitz Kranichfeld GbR, Hungen of € 11 thousand (previous year: € 12 thousand). The payments were made in the respective reporting period. The Chairman of the Administrative Board of the Group, Thomas Wolf, has an indirect majority holding in the Mühl 24 GmbH, Hungen, and the Thomas & Yvonne Wolf Grundbesitz Kranichfeld GbR, Hungen.

(7) On the balance sheet effective date, the Group had still open receivables from a loan agreement with the non-consolidated subsidiary 3D Prodigy of € 123 thousand (previous year: € 107 thousand)

All business transactions described above are based on standard market conditions.

c) Remuneration of persons in key positions of the Group:

The remuneration of persons in key positions concerns the salaries of the Managing Directors and the remuneration to the Administrative Board of the parent company. We refer to **Note (45)** in this regard.

43. FINANCIAL INSTRUMENTS - FAIR VALUE AND RISK MANAGEMENT

A. Classifications and fair values

The following table shows the book values and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not contain any information on the fair value of financial assets and financial debts that are not assessed at fair value if the book value is an appropriate approximation of the fair value.

Presentation of financial instruments in accordance with IFRS 9:

I. Financial assets

Figures in € thousand			Fair value			
Business model	**Hold**	**Hold and Sell**	**Level 1**	**Level 2**	**Level 3**	**Total**
As of 31 December 2018						
Measured at fair value through profit or loss						
Cash market and investment funds	-	86	86	-	-	86
Corporate Bonds	-	1	1	-	-	1
Total	**-**	**87**	**87**	**-**	**-**	**87**
Measured at amortized cost						
Trade receivables	37,773	-	-	-	-	-
Other receivables	1,515	-	-	-	-	-
Time deposit	32,907	-	-	-	-	-
Other financial assets	284	-	-	-	-	-
Cash and cash equivalents	205,245	-	-	-	-	-
Total	**277,724**	**-**	**-**	**-**	**-**	**-**

II. Financial liabilities

Figures in € thousand	Carrying amount	Fair value			
		Level 1	**Level 2**	**Level 3**	**Total**
As of 31 December 2018					
Measured at fair value through profit or loss					
Derivatives	6,613	-	-	6,613	6,613
Measured at amortized cost					
Trade payables	10,137	-	-	-	-
Other financial liabilities	5,340	-	-	-	-
Bank loans*	5,200	-	-	-	-
Other liabilities**	108	-	-	-	-
Total	**27,398**	**-**	**-**	**6,613**	**6,613**

* The bank loans have a remaining term of 13 years and are repayable in equal quarterly installments.

** Not included are other liabilities in the amount of € 10,915 thousand that do not represent financial liabilities.

Presentation of financial instruments in accordance with IAS 39:

Figures in € thousand	Carrying amount			Fair value			
	Held to maturity	**Available-for-sale**	**Loans and receivables**	**Level 1**	**Level 2**	**Level 3**	**Total**
As of 31 December 2017							
Financial assets at fair value							
Cash market and investment funds	-	86	-	86	-	-	86
Corporate Bonds	-	6	-	6	-	-	6
Total	**-**	**92**	**-**	**92**	**-**	**-**	**92**
Financial assets not measured at fair value							
Trade receivables	-	-	24,071	-	-	-	-
Other receivables	-	-	1,065	-	-	-	-
Time deposit	34,283	-	-	-	-	-	-
Other financial assets	-	-	123	-	-	-	-
Cash and cash equivalents	-	-	100,459	-	-	-	-
Total	**34,283**	**-**	**125,718**	**-**	**-**	**-**	**-**

		Held for trading	**Other financial liabilities**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial liabilities at fair value							
Derivatives*	-	9,081	-	-	7,155	1,926	9,081
Financial liabilities not measured at fair value							
Trade payables	-	-	2,273	-	-	-	-
Other financial liabilities*	-	-	1,522	-	-	-	-
Bank loans**	-	-	5,600	-	-	-	-
Other liabilities***	-	-	984	-	-	-	-
Total	**-**	**9,081**	**10,379**	**-**	**7,155**	**1,926**	**9,081**

* With regard to the remaining terms of derivatives and other financial liabilities, please refer to **Note (38)**. All other liabilities are current.

** Bank loans have a remaining term of 14 years and are repayable in equal quarterly installments.

*** Not included are other liabilities in the amount of € 4,569 thousand that do not represent financial liabilities.

B. Determination of the fair values

The Group uses the following hierarchy to determine and report the fair values of financial instruments:

- **Level1:**
  fair values determined on the basis of quoted unadjusted prices in active markets for identical assets or liabilities.

- **Level2:**
  fair values determined on the basis of valuation techniques that directly or indirectly monitor all inputs that have a significant impact on the fair value of the asset.

- **Level3:**
  fair values determined on the basis of valuation techniques that do not directly or indirectly monitor all inputs that have a significant impact on the fair value accounted for.

Our determination of the point in time at which the regroupings between the different levels can be considered as having occurred is based on the date of the event or the change in circumstances which has triggered the regrouping.

Financial liabilities measured at fair value as of December 31, 2018 are derivative financial liabilities from business combinations. For details of this and the changes in the fair values of financial liabilities, please refer to **Note (38)**.

The derivatives allocated to level 3 are the liabilities from option agreements as part of the company acquisitions RIB SAA, IMS and ICS. For a description of the techniques used to evaluate these liabilities and the input factors used for measuring the fair value, we refer to our comments in **Note (38)**.

There were no reclassifications between levels 1 and 2 or reclassifications into or out of level 3 in the reporting period.

The financial liabilities assessed at fair value developed as follows during the reporting year:

Figures in € thousand	2018	2017
As of 01 January	**9,081**	**2,239**
Changes without effect on profits		
Acquisition of company shares	3,692	7,165
Derecognition	-7,685	-
	-3,993	**7,165**
Changes with effect on profits		
Income from the measurement after recognition of purchase price liabilities (other operating income)	-	-158
Income from the disposal of purchase price liabilities (other operating income)	-	-379
Expenses from the revaluation of purchase price liabilities (other operating expenses)	1,215	-
Personnel expenses from accumulation of purchase price liabilities (production costs)	217	181
Expenses from the interest accrued on purchase price liabilities (finance expenses)	93	33
	1,525	**-323**
As of 31 December	**6,613**	**9,081**
Gains/losses(-) from the valuation of financial liabilities	-1,525	323

The changes affecting earnings concern unrealized expenditures from the valuation of financial liabilities of € 1,215 thousand existing at the end of the reporting period, recorded in the other operating expenditures, and expenditures of € 217 thousand, listed under production costs. In the previous year, € 181 thousand were listed under production costs.

Material valuation parameters were subjected to a sensitivity analysis for measuring the purchase price liabilities on level three. The calculations carried out for this purpose by the Group were undertaken separately for the valuation parameters classified as material. An increase or decrease in the material assumptions would have had the following effects on the carrying amounts of the purchase price liabilities on level three of € 6,613 thousand:

Figures in € thousand

Valuation parameter	Sensitivity	Carrying amount
Discounting interest rate used for the discounting period	+ 1%-point	6,470
Discounting interest rate used for the discounting period	- 1%-point	6,760
Growth rate in the budgeted revenues in the budget period	+ 10.0%	6,870
Growth rate in the budgeted revenues in the budget period	- 10.0%	6,335

C. Financial risk management and policy

The Group continues to operate primarily in Europe but is increasing its activities in North America, Australia, New Zealand and Asia. Through its ordinary operating activities, the Group is exposed to a variety of financial risks. The Group‘s overarching risk management system seeks to mitigate potential adverse effects on the Group‘s financial performance. The Group does not use derivative financial instruments to hedge its risk exposures. No economic hedging relationships were recognised in the consolidated financial statements as balance sheet hedging relationships.

The group is exposed to the following risks from the use of financial instruments:

(i) Market risk

Market risk can be broken down into foreign currency risk, interest rate fluctuation risk and other price risks.

(a) Foreign currency risk
Recognised assets and liabilities may be exposed to exchange rate risk arising from future commercial transactions both on the procurement side, from the purchase of services, as well as on the sales side, from the sale of software licenses and the provision of services.

The majority of the Group's subsidiaries conduct the majority of their transactions in their respective local currencies. The focus of the Group's operations is located in the euro zone, North America and Asia and the majority of the sales and purchase transactions are denominated in euro.

The Group conducts its transactions in the regions outside the euro zone in the following currencies:

- Pound sterling (GBP)
- US dollar (USD)
- Hong Kong dollar (HKD)
- Singapore dollar (SGD)
- Czech koruna (CZK)
- Australian dollar (AUD)
- Indian rupee (INR)
- Chinese yuan (CNY)
- United Arab Emirates dirham (AED)
- Swiss francs (CHF)
- Danish krone (DKK)
- Philippine peso (PHP)
- Cayman Islands dollar (KYD)
- New Zealand dollar (NZD)

The assets and liabilities are recognised in the above currencies and converted into the presentation currency (euro) for the consolidated financial statements.

The Group does not use any forward exchange contracts to hedge against currency risks from procurement and sales transactions.

If the euro had been 10% stronger against the currencies listed above as of 31 December 2018, the consolidated net profit for the year would have included an additional expense of € 2,937 thousand and € 9,433 thousand in consolidated comprehensive income for the year. If the euro had been 10% weaker against the currencies listed above as of 31 December 2018, the consolidated net profit for the year would have included additional income of € 2,937 thousand and € 9,433 thousand in consolidated comprehensive income for the year.

(b) Interest rate fluctuation risk
The Group's interest rate fluctuation risk is the risk that the fair values of available-for-sale securities fall (rise) as a result of interest rate changes. The corporate bonds still held in foreign companies in US dollars as of 31 December 2017 are not expected to have any significant effects on the consolidated financial statements if there are any realistic changes in the market rate.

(c) Other price risks
Price risks due to hypothetical changes in prices with an effect on financial instruments did exist as of 31 December 2018 and did not exist as of 31 December 2017.

(ii) Liquidity risk
Liquidity risk is monitored on the basis of cash flow planning and projections. The Group monitors its liquidity requirements arising from operating activities, investing activities and financing activities. Prudent liquidity management entails maintaining sufficient cash and ensuring the availability of funding through an adequate level of credit facilities.

As at the end of the reporting period, there were interest-bearing bank liabilities in the Group of € 5,200 thousand with an interest rate of 0.70% p.a. interest over a fixed term of 10 years.

The contractual maturity of financial liabilities in the form of trade payables is disclosed in **Note (34)**. Other financial liabilities, which are included under deferred liabilities and other current liabilities, are generally not subject to contractually fixed terms. They are paid on a regular basis or in line with the general terms and conditions of the contractual party.

Please see **Note (38)** with respect to the due dates of the financial liabilities from company acquisitions.

(iii) Credit risk
The Group's maximum exposure to credit risk in relation to financial assets concerns the possibility that counterparties may be unable to meet their contractual obligations and corresponds to the carrying amount of those assets as stated in the consolidated statement of financial position.

a) Trade receivables

As of 31 December 2018, the carrying amount of trade receivables amounted to € 37,773 thousand (previous year: € 24,071 thousand), thus representing the maximum default risk relating to these assets.

Credit risk is managed by reviewing the creditworthiness of customers before entering into transactions. The Group makes references to credit ratings from external credit agencies, if available.

Payment terms and conditions are modified appropriately in response to any deterioration of the credit ratings of the customers.

The Group has established different credit terms for different customers. The average credit period granted is 14 to 30 days. In individual cases, certain customers enjoy a longer credit period. The Group reviews the recoverable amount of each individual receivable at the end of each reporting period. The customer's financial position, past experience and other factors are taken into account to ensure that adequate impairment losses are recognised for uncollectable amounts.

The Group does not have significant exposure to any individual debtors or contractual counterparties.

Occasionally, customers will settle payment only after the credit period given. In such cases, management considers various ways to handle the situation, including suspension of supplies and services until settlement is made, taking legal action or requesting collateral.

b) Other financial assets

As of 31 December 2018, the Group has other financial assets of € 34,793 thousand (previous year: € 35,563 thousand). This sum thus represents the maximum default risk with respect to these assets.

This includes short-term time deposits of € 32,907 thousand (previous year: € 34,283 thousand) with a remaining term of more than three months at the time of acquisition.

The time deposits are mainly deposited with reputable banks.

c) Cash and cash equivalents

As of 31 December 2018, the Group holds cash and cash equivalents in the amount of € 205,245 thousand (previous year: € 100,459 thousand). This sum represents the maximum default risk with regard to these assets.

The Group's cash and cash equivalents are mainly deposited with reputable banks.

(iv) Capital risk management

The Group's objectives for managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders.

The Group is currently funding its capital expenditures through internally generated funds from its operations and from available liquid funds. The only exception to this is the investment in the building in Stuttgart, which is partly financed by a bank loan. The Group manages capital based on the gearing ratio, defined as net debt divided by capital plus net debt. The Group's policy is to keep the gearing ratio below 50%. Net debt is defined as interest-bearing liabilities, net of liquid funds, and excludes liabilities incurred for the financing of working capital purposes. Capital includes equity attributable to the shareholders of the Company.

The Group's gearing ratio was zero throughout the periods presented.

Fair values

The carrying amounts of the Group's financial instruments approximate their fair values, due to the short term to maturity at the end of each of the periods presented.

D. Adoption of IFRS 9

The Group applies IFRS 9 “Financial Instruments” for the first time for the fiscal year beginning 01 January 2018. First-time application is retrospective. In accordance with the transitional provisions, the option was exercised to continue to present comparative information in accordance with IAS 39.

In line with our expectations, the first-time application of IFRS 9 did not have a material impact on the Group's results of operations, financial position and net assets. The following table shows the reconciliation of the relevant measurement categories from IAS 39 to IFRS 9 for all financial assets and financial liabilities. The initial classification of financial instruments in accordance with IFRS 9 did not result in any material revaluations, so that an adjustment to the carrying amounts as of 01 January 2018 was not necessary. The implementation of the model, which is based on expected credit losses from trade receivables and contract assets as well as investments in time deposits and other debt instruments, did not lead to significant revaluations of impairments, so that an adjustment of the carrying amounts as of 01 January 2018 was not necessary.

Figures in € thousand

	Measurement categories		Carrying amounts according to IAS 39 as of	Carrying amounts according to IFRS 9 as of
	IAS 39	IFRS 9	31.12.2017	01.01.2018
Financial assets				
Cash market and investment funds	Available for sale	Measured at fair value through profit or loss	86	86
Corporate bonds	Available for sale	Measured at fair value through profit or loss	6	6
Trade receivables	Loans and receivables	Measured at amortized cost	24,071	24,071
Other receivables	Loans and receivables	Measured at amortized cost	1,065	1,065
Time deposits	Held to maturity	Measured at amortized cost	34,283	34,283
Other financial assets	Loans and receivables	Measured at amortized cost	123	123
Cash and cash equivalents	Loans and receivables	Measured at amortized cost	100,459	100,459
			160,093	**160,093**
Financial liabilities				
Derivates	Measured at fair value (held for trading)	Measured at fair value through profit or loss	9,081	9,081
Trade payables	Measured at amortized cost (other financial liabilities)	Measured at amortized cost	2,273	2,273
Other financial liabilities	Measured at amortized cost (other financial liabilities)	Measured at amortized cost	1,522	1,522
Bank loans	Measured at amortized cost (other financial liabilities)	Measured at amortized cost	5,600	5,600
Other liabilities	Measured at amortized cost (other financial liabilities)	Measured at amortized cost	984	984
			19,460	**19,460**

44. AUDITOR'S FEES

The auditor's fees for the auditor BW PARTNER Bauer Schätz Hasenclever Partnerschaft mbB Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Stuttgart, in accordance with § 314 (1) No. 9 HGB, break down as follows:

Figures in € thousand	2018
Audit of the financial statements	225
Other assurance services	-
Tax advice	27
Other services	128
Total	**380**

Other services mainly relate to services in connection with financial due diligence investigations in connection with corporate transactions.

45. REMUNERATION OF THE COMPANY'S ADMINISTRATIVE BOARD AND THE MANAGING DIRECTORS

The comprehensive remuneration granted to the Managing Directors in the reporting year amount to € 3,410 thousand in the fiscal year 2018 (previous year: € 2,883 thousand). For their activities, the Managing Directors earned a success-independent base remuneration ("Remuneration 1") of € 943 thousand in fiscal year 2018 (previous year: € 1,014 thousand). The remuneration also contains a performance-related component ("Remuneration 2") for fiscal year 2018 of € 660 thousand (previous year: € 870 thousand). In fiscal year 2018, share-based remuneration ("Remuneration 3") of € 1,808 thousand (previous year: € 999 thousand) was granted.

It contains share-based remuneration in fiscal year 2018, which was agreed with a retiring Managing Director on occasion of his retirement. In detail it was agreed that 20,000 stock options he was granted during his activities and which would have lapsed without further regulation should continue to be valid as remuneration for a non-competition clause. At the time of the agreement, the fair value per option was € 23.33. The share-based remuneration granted in the reporting year was thus € 467 thousand.

As of 31 December 2018, there are outstanding balances from the compensation of the Managing Directors in the amount of € 940 thousand (previous year: € 870 thousand) for the portion of "Remuneration 2" reported as deferred liabilities relating to the 2017 and 2018 fiscal years.

In fiscal year 2018, former members of the Executive Board received pensions of € 25 thousand (previous year: € 25 thousand).

Pension reserves of € 316 thousand (previous year: € 312 thousand) were due to former members of the Executive Board of the former RIB Software AG.

The total remuneration of the Administrative Board for fiscal year 2018 came to a total of € 105 thousand (previous year: € 105 thousand). This remuneration is listed as current debt as of December 31, 2018.

There are no other obligations to members of the Administrative Board and the Managing Directors.

For additional information we refer to the remuneration report included in the Group's Management Report under **Section H**.

46. AVERAGE HEADCOUNT FOR THE YEAR

Employees within the meaning of § 314 (1) No. 4 HGB

Number	2018	2017
General administration	138	104
Research and development	395	336
Marketing/sales	185	148
Support/consulting	320	244
Total	**1,038**	**832**

47. INFORMATION ON THE CORPORATE GOVERNANCE CODE

The Administrative Board has issued the declaration of compliance pursuant to Section 161 of the German Stock Corporation Act for the 2018 financial year. The declaration can be accessed via the homepage of RIB Software SE in the Investor Relations section.

48. DISCLOSURE ON SHAREHOLDINGS PURSUANT TO § 313 (2) HGB

	Abbreviations	Share in capital in %*
Fully consolidated entities:		
Germany:		
RIB Deutschland GmbH, Stuttgart	RIB Deutschland	100.00
RIB Engineering GmbH, Stuttgart	RIB Engineering	100.00
RIB Information Technologies AG, Stuttgart	RIB IT	100.00
RIB COE Europe GmbH, Stuttgart	RIB COE	100.00
MTWO AG, Stuttgart (formerly: RIB iTWOcity AG, Stuttgart)	MTWO	100.00
RIB Cosinus GmbH, Freiburg	RIB Cosinus	100.00
xTWO GmbH, Hungen	xTWO	100.00
xTWOmarket GmbH, Hungen	xTWOmarket	100.00
iTWO Baufabrik 4.0 F&E GmbH, Stuttgart	iTWO Baufabrik	100.00
Datengut GmbH, Zwenkau	Datengut	51.00
IMS Gesellschaft für Informations- und Managementsysteme mbH, Dinslaken	IMS	80.00
IMS systems GmbH, Dinslaken	IMS Systems	100.00
KIRUS GmbH, Dinslaken	Kirus	100.00
YTWO Europe GmbH, Stuttgart	YTWO Europe	100.00
SaaSplaza GmbH, Unterföhring	SaaSplaza DE	100.00
Other countries:		
Guangzhou RIB Software Company Limited, Guangzhou/People's Republic of China	RIB China	100.00
Guangzhou TWO Information Technology Company Limited, Guangzhou/People's Republic of China	GZ TWO	100.00
RIB A/S, Copenhagen/Denmark	RIB A/S	100.00
Docia Ltd, London/United Kingdom	Docia	100.00
RIB Asia Ltd, Hong Kong/People's Republic of China	RIB Asia	100.00
RIB Cosinus AG, Lucerne/Switzerland	RIB CCH	100.00

*) Participation in accordance with Sec. 16 German Stock Corporation Act

	Abbreviations	Share in capital in %*
RIB iTWO Software Private Limited, Mumbai/India	RIB India	100.00
RIB Limited, Hong Kong/People's Republic of China	RIB Ltd.	100.00
Exactal Group Limited, Hong Kong/People's Republic of China	Exactal Group Ltd.	100.00
Exactal Technologies Pty Ltd, Brisbane/Australia	Exactal Tech.	100.00
Exactal (Singapore) Pte Ltd, Singapore	Exactal Singapore	100.00
Exactal Europe Limited, London/United Kingdom	Exactal Europe	100.00
Exactal Limited, Hong Kong/People's Republic of China	Exactal Ltd. HK	100.00
Exactal Pacific Limited, Auckland/New Zealand	Exactal New Zealand	100.00
Exactal Holdings Pty Ltd, Brisbane/Australia	Exactal Holding	100.00
Exactal Malaysia Sdn, Bhd, Kuala Lumpur/Malaysia	Exactal Malaysia	100.00
Exactal Corporation, Austin/USA	Exactal Corporation	100.00
Exactal Creative Limited, Hong Kong/People's Republic of China	Exactal Creative HK	100.00
Dimtronix Systems Limited, Hong Kong/People's Republic of China	Dimtronix	100.00
Exactal Creative Australia Pty Ltd, Brisbane/Australia	Exactal Creative AU	100.00
eMeasure Limited, Hong Kong/People's Republic of China	eMeasure	100.00
RIB Management Computer Controls, Inc., Memphis/USA	RIB MC²	100.00
TWO Americas LLC, Atlanta/USA	TWO Americas	100.00
RIB PTE. Limited, Singapore	RIB Singapur	100.00
RIB stavebni Software s.r.o., Prague/Czech Republic	RIB Prag	100.00
RIB SAA Software Engineering GmbH, Vienna/Austria	RIB SAA	75.00
RIB Software (UK) Limited, London/United Kingdom	RIB UK	100.00
RIB Software PTY Ltd, Sydney/Australia	RIB PTY	100.00
RIB Software NZ Limited, Auckland/New Zealand	RIB NZ	100.00
RIB Spain SA, Madrid/Spain	RIB Spain	100.00
RIB U.S. Cost Incorporated, Atlanta/USA	RIB US Cost	100.00
TWO Hong Kong Limited, Hong Kong/People's Republic of China	TWO HK Ltd.	100.00
RIB Software DMCC, Dubai/United Arab Emirates	RIB DMCC	100.00
RIB iTWO Software, Inc., Bonifacio Global City/Philippines	RIB PHP	100.00
IMS Schweiz AG, Zurich/Switzerland	IMS CH	100.00
Integrated Computer Systems Support, Inc., Redmond/USA	ICS	40.00
A2K Holdings Pty Ltd., Gatton/Australia	A2K Holdings	60.00
A2K Technologies Pty Ltd., Gatton/Australia	A2K Tech PTY	100.00
A2K Recruitment Pty Ltd., Gatton/Australia	A2K Recruitment PTY	100.00
A2K Technologies Limited, Newton/New Zealand	A2K Tech Ltd.	60.00
A2K Recruitment Limited, Newton/New Zealand	A2K Recruitment Ltd.	100.00
Phoenx PLM Pty Ltd., Gatton/Australia	Phoenx	60.00
EBS Business Solutions Pty Ltd, Gatton/Australia	EBS	100.00
Consult AEC Pty Ltd, Gatton/Australia	Consult AEC PTY	100.00
Consult AEC Limited, Newton/New Zealand	Consult AEC Ltd.	100.00
SaaSplaza International B.V., Amsterdam/Netherlands	SaaSplaza Int.	100.00
SaaSplaza B.V., Amsterdam/Netherlands	SaaSplaza BV	100.00
SaaSplaza Nederland B.V., Amsterdam/Netherlands	SaaSplaza NL	100.00
SaaSplaza Inc., Encinitas, San Diego/USA	SaaSplaza US	100.00
SaaSplaza Pte. Ltd., Singapore/Singapore	SaaSplaza SG	100.00
SaaSplaza Pty. Ltd., Sydney/Australia	SaaSplaza AU	100.00
SaaSplaza Cloud Services Co. Ltd., Shanghai/People's Republic of China	SaaSplaza Cloud	100.00

*) Participation in accordance with Sec. 16 German Stock Corporation Act

	Abbreviations	Share in capital in %*
SaaSplaza Inc., Toronto/Canada	SaaSplaza CA	100.00
MTWO Holdings Limited, Cayman Islands (formerly: MTWO Limited, Cayman Islands)	MTWO Holdings Ltd.	100.00
MTWO Limited, Hong Kong/People's Republic of China (formerly: CTWO Limited, Hong Kong/People's Republic of China)	MTWO Ltd.	100.00
YTWO Limited, Cayman Islands	YTWO Ltd.	100.00
YTWO International Company Limited, Hong Kong/People's Republic of China	YTWO Int. Ltd.	100.00
YTWO Formative, Inc., Delaware/USA	YTWO Inc.	100.00
YTWO Asia Limited, Hong Kong/People's Republic of China	YTWO Asia	100.00
Guangzhou YTWO Information Technology Co. Ltd., Guangzhou/People's Republic of China	YTWO IT GZ	100.00
Joint Venture:		
5D Institut GmbH, Friedberg (formerly: iTWO 5D - Institut für Integrales Planen und Bauen GmbH, Friedberg)	5D Institut	50.00
Companies that are not consolidated due to their inessentiality:		
3D Prodigy PTE Limited, Singapore	3D Prodigy	51.00
5D BIM Prodigy Technology, Inc. Mandaluyong/Philippines	5D BIM Prodigy	63.00
Guangzhou Prodigy 5D Company Ltd, Guangzhou/People's Republic of China	GZ Prodigy 5D	100.00
GZ cTWO Ltd, Guangzhou/People's Republic of China	GZ cTWO Ltd.	100.00
TWO Dragon Limited, Cayman Islands	TWO Dragon Ltd.	100.00
TWO.ex Limited, Hong Kong/People's Republic of China	TWO.ex Ltd.	100.00
deltus 32. AG, Frankfurt	deltus 32	100.00
DAEDALUS GmbH – CAFM – Consulting und Dataservices, Gütersloh	DAEDALUS	33.00

*) Participation in accordance with Sec. 16 German Stock Corporation Act

Stuttgart, 15 March 2019

RIB Software SE
Stuttgart

The Managing Directors

Thomas Wolf Michael Sauer Mads Bording Rasmussen

DECLARATION OF THE LEGAL REPRESENTATIVES

We hereby confirm that to the best of our knowledge, the interim consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group and the interim Group management report gives a true and fair view of the business performance, including the results of operations and the situation of the Group, and describes the main opportunities and risks and anticipated development of the Group in the remaining financial year, in accordance with the applicable framework for interim financial reporting.

Stuttgart, 15 March 2019

RIB Software SE
Stuttgart

The Managing Directors

Thomas Wolf Michael Sauer Mads Bording Rasmussen

INDEPENDENT AUDITOR‘S REPORT

To RIB Software SE, Stuttgart

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

OPINIONS

We audited the consolidated financial report of the RIB Software SE, Stuttgart, (hereafter “RIB SE” or “parent company”) and its subsidiaries (hereafter jointly “RIB” or “Group”) – consisting of the consolidated balance sheet as of 31 December 2018, the consolidated statement of comprehensive income, consolidated statement of changes in equity, and the consolidated cash flow statement for the fiscal year from 1 January 2018 to 31 December 2018, as well as the consolidated notes, including a summary of significant accounting methods. In addition, we audited the consolidated management report of RIB SE, which is included with the management report of the parent company, for the fiscal year from 1 January 2018 to 31 December 2018. In accordance with the German legal regulations, we did not audit the content of the components of the consolidated management report listed in the Annex.

In our opinion, on the basis of the knowledge obtained in the audit

- the enclosed consolidated financial report complies with the IFRS, as they apply in the EU, in all material matters, and the German legal regulations as they apply pursuant to section 315e (1) HGB and, in adherence to these regulations, conveys a picture of the net assets and financial position reflecting the actual situation of the Group on 31 December 2018 and the results of operations for the fiscal year from 1 January 2018 to 31 December 2018 and

- the enclosed consolidated management report conveys overall an accurate representation of the situation of the Group. The consolidated management report agrees with the consolidated annual financial report in all material matters, complies with German statutory regulations, and depicts the opportunities and risks to future development correctly. Our audit findings for the consolidated management report do not extend to the content of the components of the consolidated management report listed in the Annex.

Pursuant to section 322 (3) Clause 1 HGB we declare that our audit did not result in any objections concerning the propriety of the consolidated annual financial report and the consolidated management report.

BASIS FOR THE OPINIONS

We conducted our audit of the consolidated annual financial report and consolidated management report in accordance with section 317 HGB and the EU Auditor Directive (No. 537/2014; hereafter “EU-AD”) in adherence with the generally accepted auditing principles specified by the Institute of Public Auditors in Germany (IDW). Our responsibilities according to these regulations and principles are described in the section “Responsibility of the auditor in auditing the consolidated annual financial report and consolidated management report” in our audit certificate. We are independent of the Group companies in accordance with European and German commercial and professional regulations and have met all other German professional duties in accordance with these requirements. In addition, we declare pursuant to Article 10 (2) f) EU-AD that we have not provided any prohibited non-audit services pursuant to Article 5 (1) EU-AD. We believe that the audit evidence we acquired is sufficient and appropriate to serve as a basis for our audit findings on the consolidated annual financial report and consolidated management report.

KEY AUDIT MATTERS IN THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Key audit matters are matters that, according to our professional judgement, were the most important in our audit of the consolidated financial report for the fiscal year from 01 January 2018 to 31 December 2018. These matters were taken into account in connection with our audit of the consolidated financial report as a whole and in the formation of our audit findings; we do not offer a separate audit finding for these matters.

We assessed the following audit matters to be particularly important:

• Realization of sales income from software sales

• Impairment of goodwill

• Initial consolidation of YTWO Limited

In the following we will describe the particularly important audit matters, addressing in particular why we consider the matter to be particularly important and how the matter was treated in the audit of the financial report, including a summary of our reaction to this matter and any applicable important findings.

Realization of sales income from software sales

With regards to the expected impact of the new IFRS 15 accounting standard, we refer to Note (3) of the notes to the Consolidated Financial Statements. For information on revenue recognition, please refer to Note (4) of the notes to the Consolidated Financial Statements. For disclosures on significant discretionary decisions and sources of uncertainty in the area of sales and revenue recognition, please refer to the information in Note (5) of the notes to the Consolidated Financial Statements. For information on the amount and composition of revenue, please refer to Note (9) of the notes to the Consolidated Financial Statements.

<u>The risk for the financial statements</u>

In the 2018 fiscal year, RIB achieved sales revenue of € 136.9 million, of which € 127.5 million came from the sale of software and associated products and services. The accounting of sales revenue from software contracts pursuant to IFRS 15 is complex and thus bears the risk that errors can occur in the accounting of the sales contract. RIB has defined detailed guidelines, procedures, and processes for sales realization. Depending on the respective transaction volumes, RIB differentiates in particular between the areas mass market and key accounts. In the key account area, a number of extensive contracts are concluded with customers. The accounting representation of these contracts and the transactions based on them requires discretionary decisions and estimates. This concerns in particular an assessment whether multi-component contracts exist, the identification of the different service obligations, the distribution of the transaction price over the individual service obligations, and an assessment whether and when the material opportunities and risks were transferred to the buyer.

<u>Approach taken in the audit</u>

In the mass market area, we audited the suitability and effectiveness of the internal controls implemented by RIB in order to ensure an accrual-based and complete sales realization. In addition, for a sample of the sales revenues posted we audited the accrual-based and complete representation of sales revenue by viewing customer contracts and verifying the actual time of performance.

In the key accounts area, for all software contracts that we individually rated as material and for a sample from the remaining software contracts, we

- obtained an understanding of the transaction by verifying the underlying contracts and associated documents and using explanations of RIB employees in the Development, Sales, and Accounting departments;

- assessed whether the agreed service obligations were completely identified and independent service obligations were delineated correctly and whether the distribution of the transaction income over the individual service obligations was proper;

- assessed whether for every independent service obligation the sales revenue was recorded accrual-based at the time / period in which the service was provided.

<u>Our conclusions</u>
RIB has implemented suitable regulations for the procedure for the realization of sales income from software sales. In the mass market area, our audit did not result in any significant objections concerning the suitability and effectiveness of the internal controls implemented. In the key account area, the sales realization followed the RIB guidelines. If there was room for discretion in decisions and if estimates had to be made, they were balanced and appropriate.

Impairment of goodwill
For the accounting principles applied we refer to No. (4) of the consolidated notes, for information about material discretionary decisions and sources of estimate uncertainties in the accounting of the goodwill we refer to the information in No. (5) of the consolidated notes, for the amount and composition of the item, the procedure of RIB for implementing impairment audits, and their results we refer to the information in No. (17) of the notes to the consolidated financial statements.

<u>The risk for the financial statements</u>
The consolidated balance sheet for 31 December 2018 discloses goodwill of € 103.3 million (19.4% of the consolidated balance sheet total). RIB allocates goodwill to cash-generating units of groups of cash-generating units and performs annual impairment tests or tests as required on this level. The recoverable amount of the cash-generating units is compared with its carrying amount. The recoverable amount is the higher of the two amounts of value in use and fair value minus disposal costs. RIB determines the value in use using a valuation model according to the discounted cash flow method. Because as of 31 December 2018, the value in use was higher than the carrying amount for all (groups of) cash-generating units, it was not necessary to also determine the fair value minus disposal costs.

The value in use is an estimate determined in consideration of both past and future expected developments. The basis of the assessment is the cash flow forecasts for the coming five years approved by the legal representatives. The discounting is performed using the average weighted capital costs of the respective cash-generating unit. The determination of the discounting interest rates is based on country-specific assumptions about future market developments. The results of this analysis depend greatly on how the legal representatives estimate the future cash inflows and the respective discounting rates used. For this reason, the analysis is subject to significant uncertainties. With this in mind and due to the complexity of the analysis, we rated this matter as particularly important.

Approach taken in the audit

We checked the valuation models used by RIB for plausibility both in terms of calculations and methodology. We evaluated the assumptions for the budget planning in terms of their plausibility, consistency and lack of contradictions. In order to assess adherence to the budget, we made sample target-actual comparisons of historical budget data with the actual developments. We compared the valuation parameters used in the valuation models, such as growth rates and discounting rates, with our own assumptions and publicly available market data. In order to be able to estimate a possible impairment risk for a possible change of individual material assumptions, we performed our own sensitivity analysis. In order to assess the correctness of the calculations we double checked selected calculations under risk-oriented aspects.

Our conclusion

RIB applied proper valuation procedures for verifying the impairment of goodwill. According to our assessment, the underlying assumptions and valuation parameters are appropriate and plausible. Our audit activities did not result in any objections concerning the assessment of the impairment of goodwill.

Initial consolidation of YTWO Limited

For the accounting of the acquisition of shares in YTWO Limited (hereafter “YTWO” or, including all subsidiaries, “YTWO Group”) we refer to the information in No. (7.F.) of the consolidated notes and Sections A.3.3. and B.3. of the consolidated management report. For the accounting of the shares in YTWO until the initial consolidation we refer to the information in No. (20) of the consolidated notes. For the business transactions between RIB and YTWO in the time up to the initial consolidation we refer to the information in No. (42) of the notes to the consolidated financial statements.

The risk for the financial statements

In the 2018 fiscal year, RIB acquired 50 % of the shares in YTWO previously held by the Flex Ltd., Singapore (hereafter “Flex”), at a purchase price of € 42.8 million. Before this, RIB had already held 50 % of the shares in YTWO and managed YTWO together with Flex as a joint venture, which was included in the consolidated financial report of RIB using the equity method. After all contractual conditions had been met, the companies of the YTWO Group were initially consolidated on 14 December 2018. In connection with the initial consolidation, the previously held 50 % share in YTWO was revaluated pursuant to IFRS 3, resulting in a profit of € 12.3 million. Furthermore, expenditures from currency translations previously recorded in other consolidated income of € 3.8 million were reallocated in the income statement due to the company acquisition. After offsetting, this yields a profit of € 8.5 million, which was recognized as financial income in the consolidated income statement. The accounting of the company acquisition recognized intangible assets of € 25.5 million and cash of € 48.1 million. The purchase price allocation results in goodwill of € 2.3 million. The intangible assets acquired are software licenses that YTWO acquired from RIB in the 2016 fiscal year. At the time of the initial consolidation, there was a business relationship between RIB and YTWO, which from the perspective of the Group was fulfilled through the merger of the companies.

This matter was of particular importance for our audit since it exhibits a high degree of complexity and a number of discretionary decisions have to be taken and estimates made for its representation in the accounting. This concerns in particular the revaluation of the shares previously held in YTWO, the valuation of the intangible assets acquired, and the valuation of the previously existing business relationship that was fulfilled in the merger of the companies. These values are estimates determined in consideration of both past and future expected developments. Estimates include discretionary decisions and uncertainties in the valuation of past events or likely future events. Estimated values thus create a higher risk of incorrect disclosures in the accounting.

Approach taken in the audit
In order to understand the acquisition process and the business relationship between RIB and YTWO, we first interviewed the legal representatives of RIB about the underlying strategic considerations and objectives. Concerning the acquisition process, we studied the purchase contract between RIB and Flex. We compared the purchase price with the purchase agreement and the payment records. Concerning the business relationship between RIB and YTWO, we perused the underlying contracts and associated documents and studied the business transactions between RIB and YTWO in the period since the creation of the joint venture in 2016 until 14 December 2018.

For the valuation of the shares previously held in YTWO and the implementation of the purchase price allocation, RIB consulted an external expert. For the assessment of the proper accounting of the acquisition of the shares, we evaluated the underlying opening balance sheet of YTWO on 14 December 2018. Furthermore, we studied the usability of the revaluation of the shares previously held in YTWO performed by the external expert and the assets and debts of YTWO set during the purchase price allocation. In this connection, we studied the initial data and assumptions underlying the expert opinion and inspected the valuation procedure utilized for agreement with valuation principles. In particular, we discussed the expected sales and income planning for YTWO with the managers responsible and compared them with the budget plans of the Group. We compared the valuation parameters used in the valuation models, in particular the risk-free interest rate, the market risk premium, and the Beta factor, with our own assumptions and publicly available market data. In order to assess the correctness of the calculations we double checked selected calculations under risk-oriented aspects. Finally, we assessed whether the disclosures in the notes for the acquisition of YTWO are correct.

Our conclusion
The procedure underlying the identification and evaluation of the assets acquired and debt accepted is correct and complies with the applicable accounting and valuation principles. The material assumptions and parameters are appropriate. The representation in the notes of the consolidated financial statements is appropriate.

OTHER INFORMATION
The legal representatives are responsible for any other information. The other information includes the parts of the consolidated management report that we acquired before the date of this audit certificate and that is listed in the annex to this audit certificate and whose content has not been audited, and other information (other than the consolidated financial report, consolidated management report, and the associated audit certificate) contained in the business report of the Group for the 2018 fiscal year, which we will likely receive after this date.

Our audit findings for the consolidated financial report and consolidated management report do not extend to the other information and correspondingly we have not provided an audit assessment nor any other kind of audit result for this information.

In connection with our audit, we have the responsibility to read the other information and to assess whether the other information

- contains material deviations from the consolidated financial report, consolidated management report, or our findings made during the audit or

- otherwise appears to be represented essentially incorrectly.

If we, based on our work, draw the conclusion that this other information is represented materially incorrectly, we are obligated to report this fact. We have nothing to report in this respect.

RESPONSIBILITIES OF THE LEGAL REPRESENTATIVES AND THE ADMINISTRATIVE BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The Managing Directors as legal representatives are responsible for the compilation of the consolidated financial report, which is compliant with the IFRS, as applicable in the EU, and the supplementary applicable German legal regulations as required by section 315e Para. 1 HGB in all material matters, and for ensuring that the consolidated financial report, in adherence to these regulations, conveys a picture of the net assets, financial position, and results of operations reflecting the actual situation of the Group. Furthermore, the legal representatives are responsible for the internal controls that they have deemed necessary to ensure the compilation of a consolidated annual financial report that is free of materially incorrect representations, be they intentional or unintentional.

When compiling the consolidated annual financial report, the legal representatives are responsible for assessing whether the Group is a going concern. Furthermore, they are responsible for disclosing any facts applicable to whether the Group is a going concern. In addition, they are responsible for performing the accounting based on the going-concern accounting principle, unless the intention is to liquidate the Group or cease business operations or there is no realistic alternative to this.

In addition, the legal representatives are responsible for compiling a consolidated management report that conveys overall a correct picture of the situation of the Group and agrees with the consolidated annual financial report in all material matters, meets German legal regulations, and correctly represents the opportunities and risks of future development. Furthermore, the legal representatives are responsible for taking precautions and measures (systems) which they consider necessary for ensuring the compilation of a consolidated management report in compliance with the applicable German legal regulations and providing sufficient suitable evidence for the statements made in the consolidated management report.

The Administrative Board is responsible for monitoring the accounting process of the Group for the compilation of the consolidated financial report and of the consolidated management report. Three members of the Administrative Board as Managing Directors were involved in the compilation of the consolidated financial report and the consolidated management report. The majority of the members of the Administrative Board was not involved in the compilation of the consolidated financial report and the consolidated management report.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

Our objective is to gain a sufficient level of certainty as to whether the consolidated annual financial report as a whole is free of materially – intentional or unintentional – incorrect representations and whether the consolidated management report overall conveys a correct picture of the situation of the Group and agrees with the consolidated annual financial report and the findings made in the audit in all material matters, complies with German legal regulations, and correctly depicts the opportunities and risks of future development, as well as to issue an audit certificate that contains our audit findings on the consolidated financial statements and the group management report.

Sufficient certainty is a high level of certainty but no guarantee that an audit performed in compliance with section 317 HGB and the EU-AD, in compliance with the German principles of proper auditing issued by the Institute of Auditors ("Institut der Wirtschaftsprüfer" - IDW) will always uncover materially incorrect representations. Incorrect representations may result from violations or incorrect information and are considered material if they (individually or cumulatively) can be reasonably expected to influence the business decisions of its recipients based on this consolidated annual financial report and consolidated management report.

We exercised our dutiful discretion during the audit and retained a critical basic attitude. In addition

- we identify and assess the risks of materially – intentional or unintentional – incorrect representations in the consolidated annual financial report and consolidated management report, plan and perform audit activities in reaction to these risks, and acquire audit evidence that is sufficient and appropriate to serve as a basis for our audit findings. The risk that materially incorrect representations are not uncovered is greater in case of violations than in the case of incorrect information, since violations may include fraudulent collusion, falsification, intentionally incomplete information, misleading representations and/or the suspension of internal controls.

- we acquire an understanding of the internal controls relevant to the audit of the consolidated annual financial report and the precautions and measures relevant to the audit of the consolidated management report in order to plan audit activities appropriate to the applicable situation, however, not with the goal of issuing an audit finding concerning the effectiveness of these systems of the company.

- we assess the suitability of the accounting methods used by the legal representatives as well as the plausibility of the estimated values provided by the legal representatives and any connected disclosures.

- we draw conclusions concerning the suitability of the going-concern accounting principles employed by the legal representatives and, based on the audit evidence acquired, whether there is material uncertainty in connection with events or circumstances which would justify significant doubt about the capacity of the Group as a going concern. If we reach the conclusion that there is material uncertainty, we are obligated to point out the pertinent disclosures in the consolidated annual financial report and consolidated management report in our audit certificate or, if these disclosures are inappropriate, to modify our respective audit finding. We base our conclusions on the audit evidence acquired by the date of our audit certificate. Future events or circumstances can result in the inability of the Group to continue its business activities.

- we assess the overall representation, the structure, and content of the consolidated annual financial report including notes and whether the consolidated annual financial represents the underlying business transactions and events in a manner so that the consolidated annual financial report conveys a picture of the net assets, financial position, and results of operations of the Group that reflects the actual situation, in keeping with the IFRS, as these are applicable in the EU, and the supplementary applicable German legal regulations pursuant to section 315e Para. 1 HGB.

- we obtain sufficient suitable audit evidence for the accounting information of the companies or business activities within the Group to submit audit findings on the consolidated financial report and consolidated management report. We are responsible for the management, monitoring, and implementation of the audit of the consolidated financial report. We alone are responsible for our audit findings.

- we assess the agreement of the consolidated management report with the consolidated annual financial report, its compliance with law, and the picture it conveys of the situation of the Group.

- we perform audit activities on the forward-looking statements made by the legal representatives in the consolidated management report. Based on sufficient suitable audit evidence we check the plausibility in particular of the assumptions on which the forward-looking statements made by the legal representatives are based and assess the proper derivation of the forward-looking statements from these assumptions. We do not provide an independent audit finding on the forward-looking statements and the underlying assumptions. There is a significant, unavoidable risk that future events will deviate significantly from the forward-looking statements.

Among other things, we discuss the planned audit scope and schedule as well as significant audit findings with the persons responsible for monitoring, including any deficiencies in the internal control system that we detect during our audit.

We submit a declaration to the supervisory instances that we have adhered to the relevant impartiality requirements and will discuss any relationships and other matters which could reasonably be assumed to impact our impartiality and the measures taken to prevent this.

Based on the matters that we have discussed with the supervisory instances, we determine those matters that were the most significant in the audit of the consolidated financial report for the current reporting period and which are therefore the particularly important audit matters. We describe these matters in the audit certificate, unless laws or other legal regulations preclude the public disclosure of the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

FURTHER INFORMATION PURSUANT TO ARTICLE 10 OF THE EU AUDIT REGULATION

We were appointed as auditors of the consolidated financial statements by the Annual General Meeting on 15 May 2018. The Administrative Board assigned the audit to us on 12 December 2018. We have been continuously responsible for auditing the consolidated financial statements of RIB Software SE, Stuttgart since the 2011 fiscal year.

We declare that the audit findings contained in the audit certificate agree with the additional report to the audit committee pursuant to Article 11 EU-AD (Audit Report).

RESPONSIBLE AUDITOR

The responsible auditor for conducting the audit is Olaf Brank.

Stuttgart, 15 March 2019

BW PARTNER
Bauer Schätz Hasenclever Partnerschaft mbB
Auditors Tax Advisors

Philipp Macke	Olaf Brank
Auditor	Auditor

APPENDIX TO THE AUDITOR'S REPORT: PARTS OF THE GROUP MANAGEMENT REPORT WHOSE CONTENT IS UNAUDITED

We have not audited the content of the following parts of the Group Management Report:

- the non-financial consolidated statement contained in Section F. of the Group Management Report and

- the consolidated statement on business management contained in Section die G. of the Group Management Report.

FINANCIAL STATEMENTS OF RIB SOFTWARE SE

FOR THE FINANCIAL YEAR 2018 (HGB) (EXCERPT)

BALANCE SHEET AS OF 31 DECEMBER 2018

RIB Software SE, Stuttgart

ASSETS

	Figures in €	31 December 2018	31 December 2017
A.	**Non-current assets**		
	I. Intangible assets		
	commercial and industrial property rights and similar rights and values as well as licenses to such acquired for a consideration	131,051.51	28,924.24
	II. Property, plant and equipment		
	1. Land and buildings	8,204,214.49	8,325,501.75
	2. Furniture and fixtures	434,835.40	474,823.76
		8,639,049.89	8,800,325.51
	III. Financial assets		
	1. Investments in affiliated companies	193,606,328.90	163,178,780.60
	2. Interests in companies	12,500.00	24,950.00
		193,618,828.90	163,203,730.60
		202,388,930.30	**172,032,980.35**
B.	**Current assets**		
	I. Inventories		
	Unfinished goods	135,200.00	0.00
	II. Receivables and other assets		
	1. Trade receivables	11,321,085.00	9,395,658.63
	2. Receivables from affiliated companies	48,302,002.08	1,795,010.97
	3. Other assets	3,099,550.99	1,645,497.23
		62,722,638.07	12,836,166.83
	III. Securities		
	Other securities	4,997,027.80	4,997,027.80
	IV. Cash on hand and bank balances	129,032,040.58	71,799,170.33
		196,886,906.45	**89,632,364.96**
C.	**Prepaid expenses**	**938,693.95**	**584,022.82**
		400,214,530.70	262,249,368.13

EQUITY AND LIABILITIES

	Figures in €	31 December 2018	31 December 2017
A.	**Equity**		
	I. Issued capital		
	1. Subscribed capital - conditional capital: € 6,490,450.00	51,741,410.00	46,845,657.00
	2. less nominal amount of treasury shares	-2,511,299.00	-1,506,941.00
		49,230,111.00	45,338,716.00
	II. Capital reserves	323,540,066.82	188,433,326.80
	III. Retained earnings		
	Legal reserves	47,588.47	47,588.47
	IV. Retained earnings	10,031,944.57	15,303,233.35
		382,849,710.86	**249,122,864.62**
B.	**Provisions**		
	1. Pension provisions	2,314,995.00	2,224,949.00
	2. Provisions for taxation	311,543.00	401,950.00
	3. Other provisions	1,461,598.75	2,157,410.00
		4,088,136.75	**4,784,309.00**
C.	**Liabilities**		
	1. Liabilities to financial institutions	5,200,000.00	5,600,000.00
	2. Trade payables	698,885.87	260,155.43
	3. Liabilities to affiliated companies	1,404,376.96	869,184.38
	4. Other liabilities	4,326,455.26	253,394.70
	- of taxes: € 401,144.90 (prior year: € 36,399.42)		
	- of which social security liabilities: € 5,018.17 (prior year: € 1,401.24)		
		11,629,718.09	**6,982,734.51**
D.	**Prepaid expenses**	**1,646,965.00**	**1,359,460.00**
		400,214,530.70	**262,249,368.13**

INCOME STATEMENT FOR THE FINANCIAL YEAR 2018

RIB Software SE, Stuttgart

	Figures in €		2018	2017
1.	Revenues		55,304,304.11	54,272,431.52
2.	Increase in inventories of work in progress		135,200.00	0.00
3.	Other operating income		5,191,618.76	2,433,228.83
	- of which from currency translation:	€ 1,859,909.59		
	(prior year:	€ 4,581.80)		
4.	Material costs			
	a) Expenses for goods		-2,580,934.60	-1,535,003.45
	b) Expenses for services purchased		-16,094,405.66	-14,255,064.50
			-18,675,340.26	-15,790,067.95
5.	Personnel expenses			
	a) Wages and salaries		-2,368,571.78	-2,917,639.07
	b) Social security and pension costs		-411,633.28	-270,387.58
	- Of which for pension schemes:	€ -183,417.75		
	(prior year:	€ -10,847.65)		
			-2,780,205.06	-3,188,026.65
6.	Amortisation of intangible non-current assets and depreciation on property, plant and equipment		-315,125.36	-1,677,919.78
7.	Other operating expenses		-25,884,566.10	-21,897,056.73
	- of which from currency translation:	€ -14,994.36		
	(prior year:	€ -1,462,118.22)		
8.	Income from investments		7,128,737.00	5,039,329.34
	- of which from affiliated companies	€ 7,128,737.00		
	(prior year:	€ 5,039,329.34)		
9.	Other interest and similar income		528,629.82	102,750.32
	- from affiliated companies	€ 46,683.33		
	(prior year:	€ 6,260.00)		
10.	Depreciation of financial assets		0.00	-1,100,000.00
11.	Interest and similar expenses		-120,426.00	-210,953.56
	- of which write-ups	€ -79,451.00		
	(prior year:	€ -91,617.89)		
12.	Income tax expense		-4,310,218.32	-5,063,421.59
13.	**Earnings after taxes**		**16,202,608.59**	**12,920,293.75**
14.	Other taxes		-51,403.00	-77,921.42
15.	**Net profit for the year**		**16,151,205.59**	**12,842,372.33**
16.	Profit carried forward from the prior year		6,239,138.59	1,175,015.06
17.	Income from the sale of treasury shares		3,899,817.16	1,285,845.96
18.	Expenses from the acquisition of treasury shares		-16,258,216.77	0.00
19.	**Retained earnings**		**10,031,944.57**	**15,303,233.35**

FURTHER INFORMATION

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March 2019

Translation of the original German version:
The English version of the Annual Report is a translation of the original German version; in the event of variances, the German version shall take precedence over the English translation.

FINANCIAL CALENDAR 2019

30 April 2019	15 May 2019
Interim Report (January - March 2019) Analyst Conference Call	Annual General Meeting

31 July 2019	31 October 2019
Interim Report (January - June 2019) Analyst Conference Call	Interim Report (January - September 2019) Analyst Conference Call

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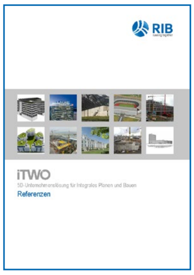
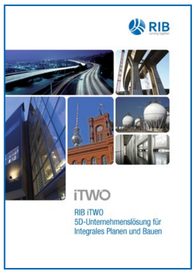
Product informationen and References





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