

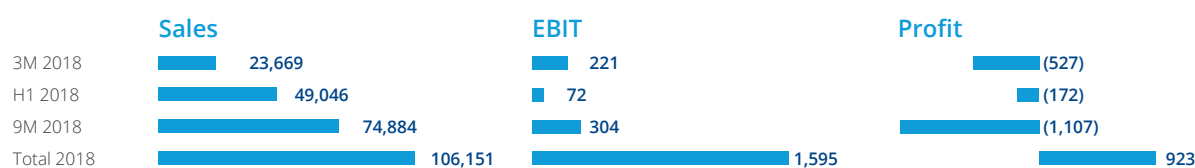


# Annual Report 2018

## Summary of Consolidated Results

		31.12.2018	31.12.2017	31.12.2016	Change (2017/2018)
<b>Sales</b>	EUR K	<b>106,151</b>	90,452	77,333	17.4 %
<b>Operating performance</b>	EUR K	<b>106,151</b>	90,452	77,714	17.4 %
<b>Total operating revenue</b>	EUR K	<b>109,768</b>	95,649	79,483	14.8 %
<b>EBIT</b>	EUR K	<b>1,595</b>	4,993	3,943	(68.0) %
<b>EBIT margin (on sales)</b>	%	<b>1.5</b>	5.5	5.1	—
<b>EBIT margin (on total operating revenue)</b>	%	<b>1.5</b>	5.2	5.0	—
<b>EBITDA</b>	EUR K	<b>6,833</b>	8,773	7,804	(22.1) %
<b>EBT</b>	EUR K	<b>171</b>	4,340	3,452	
<b>Net profit for the year</b>	EUR K	<b>923</b>	3,884	2,826	(76.2) %
<b>Earnings per share (weighted)</b>	EUR	<b>0.48</b>	2.05	1.50	—
<b>Earnings per share (diluted)</b>	EUR	<b>0.48</b>	2.00	1.44	—
<b>Equity ratio</b>	%	<b>36.2</b>	36.3	44.2	—
<b>Net debt</b>	EUR K	<b>9,611</b>	(11,305)	8,746	—
<b>Employees</b>		<b>1,205</b>	1,011	911	19.2 %

## Development by quarter (EUR K)



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A

To the  
Shareholders





Rainer Gläß  
Chief Executive Officer

## Letter from the Management Board

Dear shareholders,

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We would like to take this opportunity of presenting you with the annual report for GK Software<sup>1</sup> for 2018. GK Software passed another important milestone in its history by generating turnover of more than EUR 100 million and was therefore able to continue its growth course without any restraints during the past financial year. Turnover overall reached a figure of EUR 106.2 million and therefore exceeded the previous year's figure by more than 17 percent. Turnover in the GK/Retail business even increased by more than 27 percent and we also achieved a market breakthrough by attracting four new US customers in the world's largest retail market. Growth in the GK/Retail segment was supported by all types of turnover and the product licence turnover for the GK/Retail suite alone at EUR 10.8 million significantly exceeded the

1 - The expression GK Software always refers to the corporate Group in the following text. "The Company" is also used as a synonym. When GK Software SE is used, this exclusively refers to the individual company.

figures generated during the last few years. This was accompanied by further licence turnover amounting to approx. EUR 6 million for the Group's other software solutions (valuephone, prudsys, TAPS). It was also extremely gratifying to note that relevant market analysis rated our range of solutions as the international leader. Our solutions made their way to new customers in Australia, the Middle East and Europe and even America in a wide variety of retail formats and this demonstrates this claim to leadership, which is also supported by the reactions in the market place.

In the light of this growth, we were able to make large investments to continue expanding our market position by pressing ahead with the integration of the expertise acquired during the last few years in terms of artificial intelligence and mobile solutions into our product portfolio and expanding its cloud capabilities. Overall, we spent EUR 14.1 million on further developments to our products and maintaining them; despite this, the Group was able to generate positive earnings before interest, taxes, depreciation and amortisation (EBITDA) of EUR 6.83 million. However, we need to state that this result was lower than the figure in the previous year and the earnings target set for 2018 was significantly missed. The reasons for this were not only the expenditure of products, but declining turnover in the IT Services segment of EUR 5 million and sales opportunities, which were expected in 2018, but were not realised. Earnings before interest and taxes (EBIT) therefore amounted to EUR 1.60 million (2017: EUR 5.0 million). Due to this, the Group's annual net profits amounted to EUR 0.92 million (2017: EUR 4.99 million).

The strength of our product, our position in the market place and our internal KPI system, however, continue to make us confident that we will actually be able to achieve an EBIT margin of 15 percent, which we are seeking in our medium-term forecast up to 2020, in our core business segment.

In terms of selling products to new customers, 2018 was another successful year. Eleven new customers selected GK Retail solutions and another one opted for our euroSUITE medium-sized enterprise solution, for example. Then another three existing customers switched to the new OmniPOS system. What was particularly important for our future growth was the fact that we were able to attract four new customers in the USA alone, including two that are in the TOP20 of food retailers in the country. We have therefore achieved a breakthrough in the USA, because we can strengthen our visibility in the country through these projects and create references for future sales work. We will also have the first reference in the petrol station segment through one of these projects in 2019 and therefore be able to put OmniPOS into productive use in a new product environment for the first time. The other new customers demonstrate the successful continuation of our joint internationalisation strategy with SAP too. We were able to attract customers in Australia and Egypt for the first time, for example. Overall, we will be equipping more than 4,000 stores in all the new OmniPOS projects.

The competitiveness of our solutions was viewed as very high in several independent studies during 2018. Forrester Research rated OmniPOS as the world's leading solution, for example. The "Forrester Wave: Point of Service, Q3 2018" sector study<sup>1</sup> particularly emphasised the product quality, the architecture and the cloud-capability as well as the convincing product strategy and vision of the solution. This assess-

1 – The Forrester Wave™: Point Of Service, Q3 2018, <https://reprints.forrester.com/#/assets/2/781/RES140771/reports>



ment further strengthens our outstanding position in this internationally competitive market and is also reflected in our growing market shares. GK Software was rated as the fourth-strongest company around the globe in this sector in terms of turnover in the Retail POS/MPOS Market IHL study (November 2018)<sup>1</sup> and its range of software as the market leader. The report emphasised that our market share is continuing to grow. This rating also matches this year's edition of the RBR Study on the global POS market<sup>2</sup>. It reveals a market share of about 13 percent for GK Software in the field of POS systems at major retailers in the traditional core markets of Western and Eastern Europe and a market share of 10 percent in the MEA region (Middle East & Africa). Measured in terms of the total number of systems that have been installed, the Company has now moved up to position 2 in Europe and is the leader when it comes to new installations. We assume that we will be able to continue improving our market shares with the rollout of further major projects in future.

We drew attention to two new topics at our leading exhibitions in New York and Düsseldorf at the beginning of 2018 for the first time. The Frictionless Checkout Scenario is based on our mobile consumer solution (MCA) and OmniPOS. The till solution works invisibly in the background when customers check in with their mobile phone in a store, scans the items themselves and then pay with their mobile phone at the end too. A component from our AIR platform is being used to cover the prevention of fraud topic. AIR stands for Artificial Intelligence for Retail and is based on our expertise in the field of artificial intelligence, which we acquired by taking over a majority shareholding in prudsys AG at the end of 2017. The platform forms the basis for smart AI solutions, which are being developed for special fields of application in the retail sector. A self-learning algorithm, which is based on reinforcement learning, is available for fraud detection during self-scanning and it decides in real time which baskets need to be checked. The results of each decision are immediately included in the next decision-making process. Other topics, which are made available on the basis of the AIR platform, are, for example, personalisation modules or solutions for automated pricing.

We completely took over our long-standing partner, valuephone, in June 2018 and therefore gained full access to an important building block in our comprehensive range of services for the retail sector. valuephone has developed our mobile consumer solution, which SAP already included in its own portfolio using the "hybris Mobile Customer Assistant by GK" name in 2017. The solution is geared towards consumers and their mobile devices and enables the complete range of mobile customer contacts - ranging from infotainment and mobile couponing to self-scanning and even mobile payments. This solution is already in use at major customers and is being prepared for the rollout phase in several ongoing projects. The integration of valuephone employees and the valuephone solution in our product portfolio was already well-advanced at the end of 2018.

Our long-standing partnership has now proved its worth in almost 70 joint projects around the globe and is not only characterised by close cooperation in the sale of solutions, but also through intense cooperation in the fields of research and technol-

1 – IHL: Retail POS/mPOS Software Market 2018, <https://www.ihlservices.com/product/retail-pos-software-restaurant/>

2 – rbr: Global POS Software 2018, <https://www.rbrlondon.com/research/retail-software/>

ogy. We will continue our close and very successful cooperation with SAP and work on continuing to expand the joint portfolio for the retail sector.

Our research and development work continued to be dominated by the ongoing development of range of cloud services during the 2018 financial year. This included investments in our new petrol and hospitality sector services as well as the general ongoing development of our range of solutions. The petrol solution will go into operational service for the first time in mid-2019. Other focal points included our mobile consumer solution (MCA) and the development of our AIR platform for handling specific processes in the retail sector based on artificial intelligence. The latest premium qualification of OmniPOS and our Mobile Customer Assistant during the first quarter of 2019 guaranteed that the latest versions of our solutions have been approved for sale by SAP. Other solutions are currently in the premium qualification phase.

We were able to expand our installation base by about another 35,000 units during the reporting period, so that 297,000 systems (tills, mobile devices, servers) are now in productive use in 58 countries. Our solutions were put to use for the first time in several new countries, including Australia, Japan, Singapore and Hong Kong. Several huge mass roll-outs at existing customers and the huge increase in the number of mobile installations (without consumer apps) were important here in 2018 too. The installations at the former DBS company in the USA or those at prudsys AG are not included in the figures, as both products are not comparable. Our mobile customer app (previously valuephone) attracted 4.8 million downloads for all the different platforms. Downloads from southern Africa were important for the first time; the app has been available there since 2018. As in previous years, almost all our existing projects continued to generate further turnover. This occurs with great regularity, as our customers are permanently adapting their solutions to new requirements in their business by expanding into new countries, developing new sales concepts or introducing omni-channel requirements.


We continue to be confident that we will continue our growth course in 2019 and beyond too. We are observing constantly increasing demand for our internationally market-leading, new solutions and continue to have a well-filled sales pipeline. We assume that we will continue to be successful in our sales work, primarily with SAP, and that our intensive discussions with potential customers from Germany and abroad will bear fruit, as in previous years. We believe that we are in an excellent position in several ongoing tender procedures with a view to the current financial year and we are also expecting further growth from our business with existing customers and will therefore be able to improve our profitability in this field too.

We are continuing to stand by our medium-term forecast published in the 2017 annual accounts for the 2020 financial year; according to this, turnover should achieve fifty percent growth by 2020 (compared to 2017) and the earnings rate in our core segments should reach 15 percent again (EBIT margin on operating performance). If we follow the estimates outlined at the beginning about the development of the economy in general and the retail sector, it is probable that GK/Retail's turnover will continue to grow considerably again in 2019. On our way to the profitability goal that we are seeking by the year 2020, we are assuming that we will be able to take an intermediate step and exceed the figures for 2018.

We are delighted that you are supporting GK Software SE and its pathway of growth and we would like to thank you for placing your ongoing trust in the Company.

Schöneck, 26 April 2019

The Management Board



Rainer Gläß  
Chief Executive Officer



André Hergert  
Chief Financial Officer



Uwe Ludwig  
Chairman of the Supervisory  
Board

## Report by the Supervisory Board

Dear  
shareholders,

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The report by the Supervisory Board for the 2018 financial year at GK Software SE, which I am able to present to you here, once again relates to a successful year despite everything, even if we had to record a significant decline in earnings, despite gratifying developments in turnover once again. The reason for this was primarily that planned licence income and the expected breakthrough in generating turnover in the USA failed to materialise, while it was impossible to absorb the loss of turnover in the technical customer services from the AWEK subsidiary. The issues affecting the earnings situation were compounded by the fact that the plans for turnover were higher than achieved and the necessary adjustments on the costs side did not take place consistently enough.

However, we can still state that we have laid the foundations for returning to the good results that we were able to record in the highly successful years following our

listing on the stock exchange. However, we are fully aware that the interim difficult phase has not yet been completely overcome. We have had to learn that success is not automatic and therefore huge efforts continue to be necessary to fully return to the pathway of success. After our attention was directed to a significant improvement in earnings during the past year and we specifically appointed a costs officer for this, who has already started work, we are absolutely convinced that we have completed the turning point that we are seeking and hope that our expectations in terms of earnings linked to this will soon be achieved.

### Composition of the Supervisory Board

In accordance with the articles of association, the Supervisory Board consists of three members. During the 2018 financial year, they were:

- Uwe Ludwig (Chairman)
- Thomas Bleier (Deputy Chairman) and
- Herbert Zinn.

It was necessary to re-elect two members of the Supervisory Board during the 2018 annual shareholders' meeting caused by the change in the form of the Company to a Societas Europaea (SE). Following their re-election, the composition of the Supervisory Board remained as it was previously.

### Meetings

The Supervisory Board held its ordinary meetings on 26 February, 24 April, 27 August and 26 November 2018. Three meetings of the Supervisory Board were held as telephone conferences during 2018 too, when major decisions were about to be taken. They took place on 26 April, 28 November and 10 December 2018. The supervisory body also held separate preliminary meetings before each meeting of the Supervisory Board for the purposes of coordinating matters internally.

All the members of the committee were present for all the ordinary meetings and conferences, with the exception of the meeting on 27 August. It is customary practice at GK Software that the representatives of the Management Board are always involved in the meetings. Beyond these meetings, the members of the Supervisory Board were also regularly in contact with each other - and the Chairman of the Supervisory Board was particularly in contact with the Management Board and the members of the Group Management Board too. Decisions were made during meetings or by a circulation procedure. During its meetings, the Supervisory Board was briefed in detail about the company's economic and financial situation and the fundamental corporate policy by means of verbal and written reports from the Management Board. When the first deviations from the plan emerged, the Management Board also provided the Supervisory Board with interim reports on the latest course of business and earnings at regular intervals and forwarded the minutes of the Group Management Board meetings promptly on each occasion.

### Functions of the Supervisory Board

During the 2018 financial year, the Supervisory Board at GK Software SE fulfilled the tasks incumbent upon it according to the law, the articles of association, the recommendations of the government's "German Corporate Governance Code" commission and the Supervisory Board's latest rules of procedure and it continually and carefully monitored the company's managers.

Following the personnel changes on the Management Board and the further management level during the two previous years, it was primarily necessary to continue to closely support the restructuring process that had been completed and the changes and improvements that it introduced. After consolidating the new procedural conditions on the Group Management Board, it was necessary to deliberately optimise the interaction and cooperation processes in order to gradually achieve the associated goals for the Company too. It was necessary in the middle of 2018 to ensure that Mr Jaszczyk was relieved of his CTO duties from 1 September 2018 after his successor within the Company had been prepared to take up this post; Mr Jaszczyk could then devote even greater energy and intensity to establishing the North American business; he had previously worked on developing our products as CTO for the corporate group for several years. Since that time, business in the tough North American market has turned the corner, which shows that the decision by the Management Board to relieve him of his other tasks was completely correct. We are extremely grateful to Mr Jaszczyk for holding his two positions for several years, which was a particular challenge and involved coping with an enormous amount of work.

The Supervisory Board has been urgently following the ongoing development and adaptation of the risk management systems for years. As a result, the Supervisory Board called for reports on the progress of the implementation of the security concept, which is being continually expanded, and on the ongoing establishment of formalised administrative processes, revised procedures in the controlling department and the work of the data protection officer. The Supervisory Board welcomed the progress achieved in these fields and the implementation of the initial steps to establish a compliance management system within the GK Group, which is set to become a firm element in the Company's procedures as it makes further progress and is finally established.

The Supervisory Board also fully focused on the appropriateness of the remuneration for members of the Management Board as part of the necessary changes to the existing contracts of employment and pensions agreements. As in previous years, we focused our attention on the relationship between the remuneration payments and the Company's economic situation and on the conditions prevalent at comparable companies, the soundness of the overall structure of remuneration within GK Software and the composition of fixed and variable salary elements. After it had been established that there were significant deviations from the economic targets set for the 2018 financial year, the Supervisory Board in part significantly reduced the share options offered as a reward for all the Management Board and Group Management Board members. The variable salary components for the Management Board and Group Management Board members in three cases were significantly reduced, but the Supervisory Board otherwise recognised the originally agreed amounts in terms of providing additional motivation.

In order to monitor the management team, the Supervisory Board was guided by the annual budget passed for 2018 and called for reports from the Management Board because of the significant discrepancies, which were already visible after the first half of the year, particularly regarding the ongoing development of costs, profitability, special elements in the business policy, the background to corporate planning in all the business divisions, the ongoing course of business and important individual measures adopted by the Company. The Supervisory Board also called for and received a number of additional reports on the development of business throughout the whole financial year and particularly during the second half of the year. This was particularly the case towards the end of the third quarter when the expected and sought business results did not materialise as announced, despite the positive developments in turnover. The Management Board supplied the Supervisory Board with information throughout the year, both during and outside meetings, and the Supervisory Board discussed these reports and checked them with a critical eye.

### Corporate governance

The Supervisory Board and Management Board act in the full knowledge that good corporate governance forms an important basis for the company's success and is therefore in the best interests of shareholders and equity markets. The Management Board and Supervisory Board issued their annual declaration of compliance according to Section 161 of the German Companies Act in April 2019. The wording of this is printed in this business report as part of the Corporate Governance Report. The Management Board and the Supervisory Board have pledged to follow the recommendations of the German Corporate Governance Code as far as possible. A decision was made on the legal stipulation to have equal representation of women and men in management positions on 31 August 2015 and this continues to apply. No conflicts arose in terms of conflicts of interest for the members of the Supervisory Board in 2018.

### Sustainability reporting

In line with the statutory provisions, an independent sustainability report is being published by GK Software SE for the second time together with this report. The Supervisory Board received explanations about the principles of reporting and the content of the sustainability report from the Management Board at the same time as the annual accounts and consolidated accounts in line with the stipulation.

### 2018 audit of annual accounts

The GK Software SE annual accounts compiled by the Management Board in line with the guidelines set by the German Commercial Code and the IFRS consolidated accounts and the respective management report were audited by the auditing company, PriceWaterhouseCoopers GmbH, Erfurt and were given an unqualified audit certificate. Taking into account these audit reports, the Supervisory Board examined the annual accounts compiled by the Management Board, the consolidated accounts, the dependency report, the management report for GK Software SE and for the Group and the suggestion for using the profits from the Management Board for 2018. During its meeting on 24 April 2019, the Supervisory Board asked the Man-

agement Board to explain the 2018 annual and consolidated accounts with their unsatisfactory signs and had reports prepared about profitability, the Company's equity, the interim course of business and the Company's ongoing situation. All the Supervisory Board members received the necessary paperwork and documents prior to this meeting.

During the meeting, the auditors commented on the Management Board's presentation, explained the audit findings using the audit reports and answered all the questions on these reports. The auditors were able to satisfactorily answer all the issues that were raised during the meeting. There are no doubts about the auditors' independence. The Supervisory Board therefore approved the annual accounts for GK Software SE at its meeting on 24 April 2019 and endorsed the consolidated accounts for GK Software. The annual accounts have therefore been approved.

The Management Board also prepared a report on relations with associated firms in line with Section 312 of the German Companies Act. The auditors checked this and provided a verbal report on the results of their audit during the meeting on 24

April 2019. The review by the Supervisory Board did not give rise to any reasons for objections to be raised. Accordingly, it did not have any objections to the final declaration by the Management Board in its report according to Section 312 of the German Companies Act either and confirmed this by voting in favour during its meeting on 24 April 2019.

The Supervisory Board would like to thank the Management Board, the complete management team and all the employees for the work that they performed in 2018. It primarily regrets that, despite all the efforts made during the last few years, the promised return to a successful pathway has still not been achieved and it has not yet been able to fulfil the opportunity of achieving improved results. Its wish for all those involved is that it will be possible to very quickly implement the necessary cost savings through the costs officer who has been appointed so that the improvements in results being sought will lead to confirmation of their special involvement and their successful work.

Schöneck, 24 April 2019



Uwe Ludwig  
Chairman of the Supervisory Board



# Corporate Governance Report

according to Section 289a of the German Commercial Code

GK Software views responsible and transparent behaviour as absolutely essential for its long-term economic value creation. Both the Management and Supervisory Boards have therefore issued the statutory declaration of compliance according to Section 161 of the German Companies Act. Monitoring compliance with the declaration is therefore viewed as an important task for the Management Board and the Supervisory Board. The declaration is issued every year and is available to the public on the internet at <https://investor.gk-software.com> in the "Corporate Governance" section.

## Cooperation between the Management Board and the Supervisory Board

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The Management Board and the Supervisory Board have been working together based on a relationship of trust for many years. The Management Board provides regular reports to the Supervisory Board about profitability and Group strategies and their implementation, but also about existing or possible risks. This is done during the scheduled Supervisory Board meetings, three of which were held during the past financial year, and also directly through regular monthly meetings with the Chairman of the Supervisory Board. Further information on this can be found in the Report by the Supervisory Board. Because it has just three members, the Supervisory Board did not form any committees. All the issues are discussed and decided upon by the full body. The Chairman of the Supervisory Board is solely authorised to conduct negotiations for human resources decisions related to the Management Board, but these negotiations must be approved by the whole body. There were no conflicts of interest among members of the Management and Supervisory Boards.

## Transparency

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GK Software chose to have its company flotation listed on the most stringently controlled segment of the German Stock Exchange, the Prime Standard section, in the summer of 2008. The highest possible degree of transparency towards its investors and all the other participants in the capital markets has been one of the most important Company principles from the outset.

The Company will also appoint a voting proxy at the 2019 annual shareholders' meeting and this will allow shareholders to exercise their voting rights, even if they cannot attend the annual shareholders' meeting in person. All the public information such as compulsory notifications and press releases, the financial statements or the reports on the annual shareholders' meeting will be made available on the Company's website at any time.

## Risk management

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The risk management system established by the Company is geared towards the needs of its business. It is designed to help identify risks at an early stage and appropriately prevent or restrict any risks that occur. Please refer to the Group management report for further details.

## Declaration of compliance

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Section 161 of the German Companies Act obliges the Management Board and the Supervisory Board at GK Software SE to make an annual declaration that compliance has been or is being achieved with regard to the recommendations of the "Government Commission on German Corporate Governance Code" published by the German Minister of Justice in the official section of the electronic German Federal Gazette, or state which recommendations have not been or are not being used.

This declaration must be made available to shareholders at all times.

The last annual declaration was made in April 2018 and relates to the version of the Code dated 7 February 2017. The future corporate governance practices at GK Software SE in the following declaration also relate to the recommendations in the Code in its current version dated 7 February 2017.

On 24 April 2019, the Management and Supervisory Boards at GK Software SE declared that, since issuing the last annual declaration of compliance in April 2018, the recommendations of the "Government Commission on German Corporate Governance Code" had been met, apart from the exceptions noted in the declaration published in April 2018, and continue to be met with the following exceptions.

**Code number 2.3.3** The Company will not provide any Internet broadcast of the annual shareholders' meeting, as the Management Board and Supervisory Board believe that this would not create a higher participation level at the annual shareholders' meeting.

**Code number 4.1.5** The candidates for management positions will mainly be selected by the Management Board on the basis of their personal skills and abilities in the interests of the Company. Only after this will other objective background issues in the candidates like their age, place of origin or gender be taken into account in order to not generally restrict the interests of the Company. In setting the target rate for the share of women at the top management level below the Management Board, the Management Board will take into account the fact that this only involves four persons.

**Code number 4.2.3** Variable elements of remuneration do not exclusively have an assessment basis lasting several years, because it should also be possible to set short-term goals.

**Code number 4.2.4** The Company does not reveal the earnings of the members of the Management Board in the annual accounts by name. The total earnings of the members of the Management Board are disclosed. This departure from normal practice not to reveal the individual salaries in the annual and consolidated accounts for 2015 - 2019

was adopted, based on the qualified majority of three quarters of the equity capital represented at the annual shareholders' meeting at the annual shareholders' meeting on 29 June 2015 in line with Section 286 Paragraph 5 of the German Commercial Code and Section 314 Paragraph 2 Sentence 2 of the German Commercial Code.

**Code number 4.2.5** Please refer to Code Number 4.2.4 regarding Code number 4.2.5.

**Code number 5.1.2** The Supervisory Board will mainly take into account personal suitability, which results from the individual skills and specialist expertise in the candidates, when filling vacant positions on the Management Board so as to not generally restrict the interests of the company. Other criteria will only be taken into consideration after this. There is no age limit for members of the Management Board; GK Software SE feels that the professional qualifications of the members of the Management Board play a more important role. The Supervisory Board will particularly take into account the fact that the Management Board only consists of two members when setting the target size for the share of women on the Management Board.

**Code number 5.3** In a departure from number 5.3 of the Code, the Supervisory Board at GK Software SE does not form any committees due to the size of the committee (the Supervisory Board only consists of three members), as the provision of consistent and extensive information for all members of the Supervisory Board can be guaranteed most efficiently in meetings where all the members of the Supervisory Board are present. Any issues can be handled and answered appropriately by the whole body. An auditing committee (number 5.3.2) has therefore not been set up either. The same applies to a nomination committee (number 5.3.3) and the other specialist committees (number 5.3.4). The issues normally incumbent on the specially appointed committees are handled by the complete committee, as the board members have the necessary qualifications for this.

**Code number 5.4.1** The composition of the Supervisory Board at GK Software SE is not decided by the Supervisory Board, but by the Company's annual shareholders' meeting. The Supervisory Board seeks to engage in successful coopera-

tion between its members and constructive cooperation with the Management Board. The nominations for candidates submitted by the Supervisory Board to the annual shareholders' meeting will take into account the geographical distribution and the degree of complexity of the business activities at GK Software. Criteria such as the age, background or gender of the candidates will not be taken into consideration. There is no provision for an obligatory age limit for the members of the Supervisory Board, as the older members of the Supervisory Board particularly enrich the board as a result of their wide experience and their specialist qualifications are of greater importance. For the same reason, there is no set limit for membership of the Supervisory Board either. The Supervisory Board will particularly take into account the fact that the Supervisory Board only consists of three members when setting the target size for the share of women on the Supervisory Board.

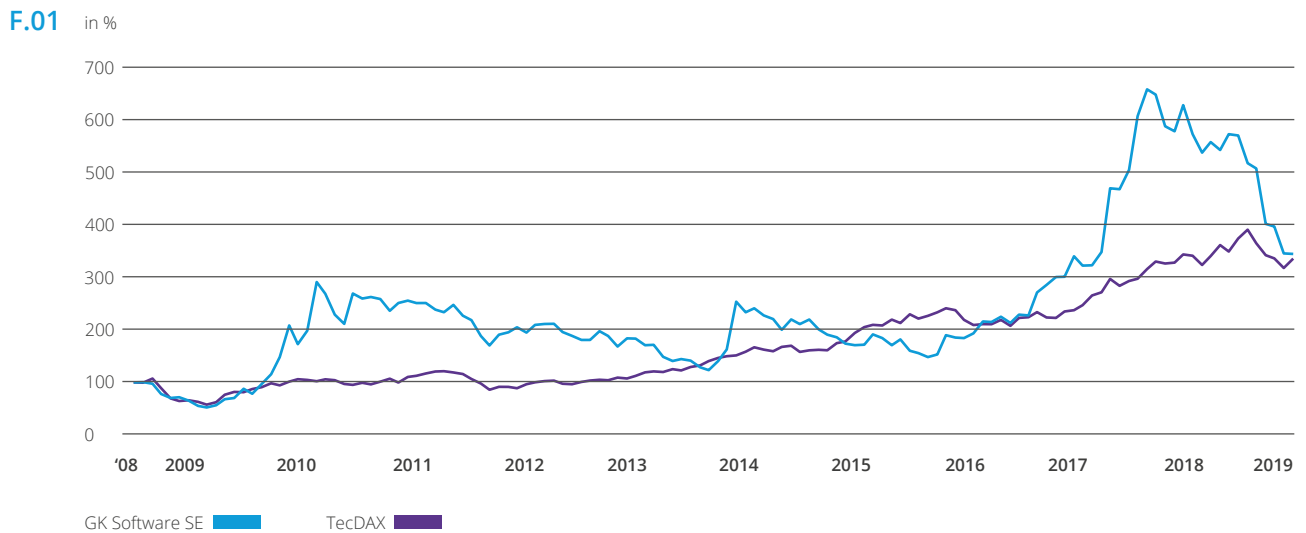
**Code 5.4.6** The remuneration for the members of the Supervisory Board exclusively takes place with fixed elements. No remuneration, which depends on the Company's success, is granted to the members of the Supervisory Board, as the members of the Supervisory Board must be able to pursue their tasks as a supervisory body for the Company without any possible conflict of interests.

**Code 7.1.2** The consolidated accounts are not published within 90 days after the end of the financial year, but after four months in line with the current guidelines published by Deutsche Börse AG. The interim reports are not made available after 45 days, but after two months according to the current guidelines published by Deutsche Börse AG. GK Software SE believes that the periods of time set by Deutsche Börse AG are sufficient to provide shareholders with detailed information.

# GK Software SE Shares

## Basic data

### Share price development (indexed)



### Basic data

**T.01**

Securities Identification Number (WKN)	757142
ISIN	DE0007571424
Trading symbol	GKS
GK Software AG IPO	19 June 2008
Type of shares	Ordinary stock in the name of the holder without any nominal value (individual share certificates)
Trading markets	Frankfurt and XETRA
Market segment	Regulated Market (Prime Standard)
Designated sponsor	ICF Bank AG
Number of shares	1,926,475
Share capital	EUR 1,926,475
Free float	46.35 %
Highest price in 2018	EUR 133.00 (22 January 2018)
Lowest price in 2018	EUR 63.40 (27 December 2018)

## Summary/share performance

The GK Software SE shares listed on the Prime Standard section of the Frankfurt Stock Exchange registered a downward trend during the last financial year too. The shares were worth EUR 120.50 at the start of the year, but had reached EUR 71.40 at the end of the reporting period. This corre-

sponded to market capitalisation of EUR 138 million at the end of 2017.

## Number of shares issued

The Company reported on 31 December 2018 that the total number of voting rights amounted to 1,926,475 shares.

The Company reported on 31 March 2019 that the total number of voting rights amounted to 1,929,050 shares.

### Shareholder structure on 31 December 2018

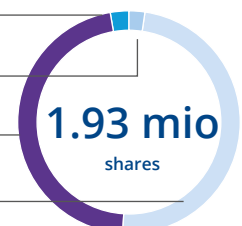
**F.02**

Rainer Gläß – 2.74%

Stephan Kronmüller – 2.28%

Freefloat – 46.35%

GK Software Holding GmbH – 48.62%



## Shareholder structure

GK Software SE has an extremely stable shareholder base, which is enabling the Company to achieve long-term and sustained development. The shareholder structure was as follows on the reporting date of 31 December 2018: Rainer Gläss, the founder and CEO, directly held 2,74 percent of the shares. Stephan Kronmüller, also a Company founder and the former Head of Technology and Development, directly held 2,28 percent of the shares. 48,62 percent of the shares were owned by GK Software Holding GmbH, which are indirectly and equally apportioned to the shareholders Rainer Gläss and Stephan Kronmüller. This created a free float of 46,35 percent on 31 December 2017.

The Company was informed about the following holdings in GK Software SE, which exceeded the 3 percent threshold:

### Amounts exceeding the threshold value

#### T.02

Correct on	Shareholder	Proportion
		in %
17.3.2016 <sup>1</sup>	Scherzer & Co. AG, Cologne	6.36
22.9.2016	Wilhelm K. T. Zours (of which Deutsche Balaton Aktiengesellschaft, Heidelberg with 3.18%)	6.55
27.12.2013	SAP SE, Walldorf	5.29

<sup>1</sup> -Initial notification of 5.23 percent on 6 March 2012. Information on the current portfolio by the shareholder on 17 March 2016.

## Directors dealings in 2018

### Directors Dealings

#### T.03

Date	Person acting	Position	Activity	Volume	Market price
				EUR	EUR
5.9.2018	Herbert Zinn	Supervisory Board	Purchase	101,855.00	102.06
11.6.2018	André Hergert	Management Board	Sale	238,539.00	111.00
30.5.2018	André Hergert	Management Board	Purchase	125,100.00	25.02
12.3.2018	Rainer Gläss	Management Board	Purchase	125,100.00	25.02
29.1.2018	Rainer Gläss	Management Board	Sale	1,770,000.00	118.00

## Investor relations

GK Software deliberately chose to have its shares listed in the most stringently regulated sector at Deutsche Börse, the Prime Standard, for its flotation in the summer of 2008. The highest possible degree of transparency towards its investors and all the other participants in the capital markets has been one of the most important Company principles from the outset.

André Hergert, the CFO, is responsible for investor relations, which has been assigned its own department. This guarantees that any enquiries from investors and potential investors are answered immediately.

GK Software SE also attaches particular importance to providing an ongoing flow of information for the future. Among other things, this involves the completion of quarterly reports and extensive half-yearly and annual reports in German and English, a finance calendar, as well as compulsory announcements, which have to be published immediately, and corporate news. The accounting system has been adapted to the international IFRS accounting standards and also meets investors' requirements for information. As in previous years, GK Software will hold its analysts' conference during the Frankfurt Equity Capital Forum in 2019 too. Investor and press roadshows also take place at regular intervals so that the Company remains in permanent contact with the capital markets.

The Management Board also prepared a report on relations with associated firms in line with Section 312 of the German Companies Act. The auditor checked this and verbally communicated the

results of his audit to the meeting on 26 April 2019. The review by the Supervisory Board did not give rise to any reasons for objections to be raised. It did not raise any objections to the Management Board's final declaration in its report in line with Section 312 of the German Companies Act.

The Supervisory Board wishes to thank the Management Board and all staff members for their commitment and the work they have performed and also wishes them all continued success.

B

Group  
management report







André Hergert  
Chief Financial Officer

## Group Management Report

### Business and general conditions at GK Software

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- Corporate structure and holdings
- Twelve business sites in Europe as well as branches in the USA and South Africa
- Both company founders are actively involved in the Company

GK Software SE<sup>1</sup> is one of the world's leading technology companies for retail sector software with a

special focus on solutions for large and very large retail companies with many local stores. GK Software SE and its predecessor company, G&K Datensysteme GmbH, which was founded by Rainer Gläss and Stephan Kronmüller and changed its name to GK Software AG in 2001, have been successfully operating in the market place for 29 years. The Company's flotation took place in the Prime Standard segment of the Frankfurt Stock Exchange in 2008. GK Software AG was transformed into GK Software SE on 19 January 2018.

<sup>1</sup> - The expression GK Software always refers to the corporate Group in the following text. "The Company" is also used as

a synonym. When GK Software SE is used, this exclusively refers to the individual company.

## Group structure of GK Software

## F.03



100%	GK SOFTWARE	GK Software USA Inc.
100%	GK SOFTWARE	OOO GK Software RUS
100%	GK SOFTWARE	GK Software Africa PTY Ltd.
100%	EURO SOFTWARE <small>A Member of the GK Software Group</small>	EUROSOFTWARE s.r.o.
100%	EURO SOFTWARE <small>A Member of the GK Software Group</small>	TOV Eurosoftware-UA
100%	StoreWeaver® <small>A Member of the GK Software Group</small>	Storeweaver GmbH
100%	awek	AWEK Microdata GmbH
100%	awek	AWEK GmbH
80,12%	prudsys <small>Member of the GK Software Group</small>	prudsys AG
100%	valuephone®	valuephone GmbH
100%		Economically inactive legal units

The Company's headquarters have been located in Schöneck/Vogtl. since it was founded. Alongside its administration department, the product development department, project management and third-level support facilities are all based at this site. 1. Waldstraße GmbH, which was founded to prepare for the takeover of new business activities, is another wholly owned subsidiary of GK Software SE. This company was transformed into Deutsche Fiskal GmbH in March 2019 and has had its headquarters in Berlin since that time. GK Software SE has a branch next to Checkpoint Charlie in Berlin, which is primarily responsible for managing the marketing, sales and partner activities; parts of the software development work are also based there.

The Group's second largest business site has been situated in Plzen in the Czech Republic since 2002. Software production and research & development are the main activities pursued by the wholly-owned subsidiary, Eurosoftware s.r.o. Major work on programming and further technological developments for the solutions provided by

GK Software take place at the Plzen site. TOV Eurosoftware UA in Lviv has been an additional wholly-owned subsidiary of GK Software SE and a site for customised software development since the beginning of 2016.

GK Software SE has another wholly owned subsidiary in Dübendorf in Switzerland called StoreWeaver GmbH. StoreWeaver GmbH has a German branch in St. Ingbert in the German state of Saarland. The teams in St. Ingbert are primarily responsible for the implementation of customer projects and they also look after the customers of our SQRS solution, which is no longer being sold (Solquest Retail Solutions).

The Group acquired two more business sites when it took over AWEK GmbH and its subsidiaries, AWEK C-POS GmbH and AWEK microdata GmbH, on 10 December 2012. The administration, hotline, dispatching, quality assurance, repairs and stores departments are located in Hamburg - the companies moved there from their own business site in

Barsbüttel near Hamburg in the summer of 2018 - while the software development department is based in Bielefeld. The service organization at AWEK also consists of mobile technicians who are spread across the different parts of Germany.

GK Software SE has its own sales organisation in Russia in the form of OOO GK Software RUS. GK Software USA Inc. was founded in the USA in December 2013 in order to support the expected expansion of our North American business locally through our own organisation. The retail segment of DBS Data Business Systems Inc., which was taken over in March 2015, has been incorporated into GK Software USA Inc. A wholly-owned subsidiary trading under the name of GK Software Africa (Pty) Ltd was also set up in South Africa at the beginning of 2015 to deal with business in this region and it operates under the GK Software Africa (Pty) Ltd name.

GK Software took over the majority of shares in prudsys AG in Chemnitz on 1 November 2017. prudsys AG specialises in personalisation and dynamic pricing, among other things. It has developed its own solution on the basis of artificial intelligence processes.

valuephone GmbH was completely taken over on 7 June 2018. valuephone has developed a mobile consumer solution, which SAP also sells using the "Mobile Consumer Assistant by GK" name. The solution is another outstanding addition to the Company's product portfolio.

The partnership with SAP SE, Walldorf (SAP) was once again extremely important for GK Software's business during the reporting period, just as it has been in previous years. SAP will remain by far the most important partner for GK Software in the future. Sales situations and projects, for example, are processed together in numerous countries. At present, SAP operates as a reselling partner for GK Software around the globe. The "SAP Omnichannel Point-of-Sale by GK" software developed by the Company is the official migration path for existing customers for the discontinued SAP (SAP POS) solution. SAP acquired a 5.29 percent share in GK Software SE at the end of 2013 and has a pre-emptive right to purchase the founders' shares.

The Management Board of GK Software SE consists of Company founder Rainer Gläss (CEO, Strategy, Marketing & Sales) and André Hergert (Finances). The Management Board is supported by a Group Management Board, which consisted of the following members in 2018: Stephan Kronmüller, Michael Jaszczyk (CEO USA), Harald Göbel (Customer Solutions & Services), Stefan Krueger (Sales) and Dobromir Karamelski (CTO). The latter joined the Group Management Board during the course of the financial year.

The three-man Supervisory Board at GK Software SE is led by the Chairman Uwe Ludwig. He has been a member of the Supervisory Board since 2001 and was re-elected to the committee until 2021 at the annual shareholders' meeting in 2016. Thomas Bleier was elected to the Supervisory Board in 2003. His period in office was confirmed until 2022 at the annual shareholders' meeting in 2018. Herbert Zinn was first elected to the Supervisory Board at the annual shareholders' meeting in 2011. This current period in office ends with the annual shareholders' meeting in 2023.

The management of the Company is largely determined by two key management factors - turnover and earnings - although, for the latter, earnings before interest and taxes (EBIT) and earnings before interest, tax, depreciation and amortisation (EBITDA) are mainly used as well as the relationship between these earnings factors and turnover (operating performance). Another major factor is the margin of gross profits on turnover. We understand gross profits to be the excess of turnover over and above services purchased from third parties, semi-finished products and goods that were directly used to achieve this turnover revenue in order to be able to observe the influence and extent of outside services in the turnover that is generated. These key performance indicators are supplemented by a deeper economic assessment of the individual segments and the customer orders (projects) that are handled. The major factor here is the personnel ratio (quotient of personnel expenditure attributed to an object under consideration and turnover revenues) and variants of this factor.

This is accompanied by a key performance indicator system of KPIs geared towards earning capacity, which concern the Group's funding. The issue

here is the ability of the Group to be able to service its financial obligations at any time, both in the long and short term. The key performance indicators used here concern the equity ratio and the capitalisation ratio in different variants as a measure of matching the maturities of assets and the capital used to fund them. Another important aspect concerns the Group's ability to be able to use any investment opportunities, which arise, at very short notice. A key performance indicator here is the excess in cash and cash equivalents over interest-bearing liabilities. There are different variants of this key performance indicator too, depending on the goal that is being observed.

This system, which is geared towards financial key performance indicators, is complemented by those geared towards non-financial indicators. The main focus of attention here is on factors like customer satisfaction and the number of customer contacts. They are not observed in a formal manner, but they are recorded and analysed as part of regular reporting to the responsible members of the Group Management Board and the Management Board.

### The GK Software portfolio of solutions

- GK Software — Simply Retail
- An extensive portfolio of omni-channel solutions

#### The OmniPOS platform

GK Software is convinced that only innovative, marketing-driven retail companies with optimised logistics will be able to survive in the omni-channel world that is currently developing. Retail companies will therefore increasingly become technology-oriented companies, which have to be capable of mapping all their consumers' needs on one modern technological **platform**. At the same time, it will be necessary to ensure that the increasing degree of complexity is not handled by more and more solutions that are running in parallel alongside each other. The main task therefore involves reducing the complexity through a suitable platform solution again and creating solutions that remain operable and manageable for the users despite growing demands, particularly from con-

sumers. The Company's current slogan "Simply Retail" takes this into account.

In line with this this aspiration, GK Software is following the idea of creating a unified and end-to-end technological platform, which pursues the goal of enabling a consistent and personalised consumer experience through all the so-called **customer touch points**. It must also be possible within this standard platform to create special expansion opportunities for each of the Company's customers in order to map the individual excellence and the creativity of each retail firm. After all, the latter forms the basis for the specific competitive benefits and unique characteristics of any retailer and ensures that it is perceived as a separate brand within the large number of providers in the retail sector.

The retail sector faces a number of major challenges for the future and this process is being driven by e-commerce. In order to cope with this digital transformation process, the retail sector has to find the correct answers to five main fields of digitalisation, in GK Software's view. They are: **customer-centredness, smart retail technologies, expansion, process automation** and the **consumer supply chains**. A customer-centred approach has a very high priority and means that all the processes and functions always have to be considered from the point of view of customers. The rapid speed of technological developments permanently enables new technologies and devices to be used and checks need to be made to see whether they improve the shopping experience for customers and open up new opportunities. In contrast to the cut-throat competition created by online retailers, the classic retailers will have to seek to expand into new markets, enable franchise concepts or verticalise their business even more strongly than in the past. The optimisation of business processes on the basis of new technologies - artificial intelligence and machine learning should particularly be mentioned here - will also significantly strengthen efficiency in many fields of activities. Not least, the retail trade will have to extend and improve supply chains to customers by using omni-channel concepts in order to offer them the same experience as e-commerce traders. All these processes, which are relevant to competition issues, demand a far greater use of modern technologies, end-to-end concepts and innovative approaches - and they

are exactly what have been included in the architecture of OmniPOS.

This is why the Company has made such significant investments during the last few years in order to enable the process of digital transformation with specific solutions. This has meant that significant parts of the range of solutions have been newly developed in order to safeguard the [future viability](#) of the GK range of solutions for years to come and not just rely on the status quo. The results of this fundamental management decision are not as clearly evident at first glance as the switch from DOS to Java was, for example. However, if we view the effect resulting from this, the expenditure associated with it and the dimension of this change in general terms, this step taken in the field of software development is at least as great as the former one.

The new solution platform known as [OmniPOS](#) (POS = Point of Sale), which emerged from these investments, was initially brought on to the market at selected customers in a ramp-up phase, starting in 2015. This solution platform is far more than the preceding solution, GK/Retail POS (version 12), which is in use at most customers. The fundamental architecture idea of OmniPOS is being able to use nearly all the functions in a modular and allotted manner as well as with or without user interfaces. Each function must be usable as a central service, but also as a local instance and be secure across network boundaries. At the same time, the central [services](#) must be able to handle the simultaneous operation of very many clients at a data centre or in a [\(private\) cloud](#). This is the only way to make it possible to guarantee operations at thousands of checkouts, calculate prices at a web shop or safeguard communications with a huge number of customer devices, all at the same time.

The various GK Software products are brought together in the [OmniPOS platform](#) with their specific features. The Mobile Customer Assistant solution is part of the OmniPOS platform that is used in the projects in a modular way, depending on what the customer wants. All the solution components are fully based on the same infrastructure, the same programming paradigms, Java and other modern programming languages as well as open standards. This means that they do not depend on any particular hardware or operating system.

OmniPOS was officially launched at the beginning of 2016. The company is continuing to maintain version 12 of the GK/Retail Business Suite, which was sold previously, and adapt it to special customer wishes. However, OmniPOS has been exclusively used in new projects since 2016.

Almost the complete portfolio related to the OmniPOS platform is being sold by SAP with identical features using the [SAP Omnichannel Point-of-Sale by GK](#) and [SAP hybris Mobile Customer Assistant by GK](#) product names.

#### **cloud4retail**

GK Software has managed to make available the first professional enterprise POS solution that operates fully in a cloud in the form of cloud4retail. GK Software can handle the full operations through this, including maintenance and offering complete services. One special feature is that OmniPOS can be used in the cloud either in the standard version or with customised adaptations. Retailers can therefore lower their long-term costs and gain greater flexibility and speed when introducing new business processes.

#### **AIR - Artificial Intelligence for Retail**

One unique feature of the OmniPOS platform of solutions is the use of artificial intelligence to optimise decision processes involving large amounts of data. As part of this, [machine learning-supported personalisation](#) allows customers to be addressed at all the touch points in a precise and targeted manner - whether in a store, on a mobile device or at a web store. Using AIR (Artificial Intelligence for Retail), GK Software has developed the first specifically retail-oriented platform based on artificial intelligence in order to optimise retail processes. Retailers can automatically make automate many processes by using AIR - ranging from dynamic pricing to personalisation and even fraud detection - on the basis of machine learning and other AI methods. AIR is an AI platform that focuses on precisely tailored processes covering special challenges in the retail sector in its specific forms.

#### **Suitable for any sector**

The OmniPOS platform is not geared to any individual retail segment, but is equally suitable for [all the formats and segments](#) in the retail sector - ranging from small shops to department stores,

from food retailers to fashion and even specialist retailers.

### Suitable for any device

The architecture of the OmniPOS platform has been designed so that it is not just possible to use it with a particular type of device or class of device. The underlying [open client concept](#) ensures that nearly all standard devices can be used on the basis of the same cloud-enabled services. They include mobile and stationary checkouts consisting of a wide variety of types of hardware, scales, self-checkouts, self-scanning devices, mobile data logging devices for employees, tablets or, not least, the wide variety of consumer smartphones.

### For all store processes

OmniPOS not only takes over the classic checkout functions within a store, but is geared towards handling all the store-related [business processes associated with goods, money and customers](#). As a result, the services on the platform handle all the functions necessary to operate stores, ranging from promotion management to in-store merchandising or price labelling and even cash management.

### Secure operations

The daily operations involving thousands of devices and the central services associated with these are a huge challenge for any retailer. The issues of [configuration](#) and [monitoring](#) are therefore a central element in the OmniPOS platform. Operations can either be guaranteed by the retailer itself or by GK Software or a partner in the form of a cloud service.

### Integrating the peripherals

The stores at retailers, particularly those in the food retail sector, are equipped with a wide range of different types of technology. The OmniPOS platform includes all these different peripheral items and handles the [data supply and data removal in real time](#). This prevents any parallel flows of data and isolated solutions in stores, it simplifies operations for systems and it reduces costs in the long term.

### Central services for all the channels

One of the basic concepts of OmniPOS is that information for different channels and types of devices is made available centrally and can be

requested by various data users. Price calculations (Central Pricing Engine), managing promotions (Central Promotions Engine) or storing and making available points or virtual credit (Stored Value Server) are crucially important in an omni-channel world. These solution components are [core services](#) of OmniPOS and are available for all the retailer's channels with the same quality.

### Ongoing product development

Investments were made in the ongoing development of the OmniPOS cloud solution and the Mobile Customer Assistant consumer platform and AI-based solutions during the whole of 2018. The first two solutions successfully passed SAP's [premium qualification process](#) during the year under review. New products and functions are checked by SAP as part of this kind of product test and in each case the current version was approved for sale. The AI solution for dynamic pricing is currently undergoing this kind of acceptance process and will expand the portfolio of solutions sold by SAP by providing an essential new component.

### Other solutions in the portfolio

#### Payment services

In the field of payment services, GK Software offers a market-leading solution for handling payments in the USA in the form of TransAction+; it is able to integrate a large number of point of sale systems and a large range of payment authorisation providers. It meets high data protection standards and supports credit and debit cards and gift vouchers, "electronic benefits" as well as handling cheque authorisation and accounting for more than 40 payment providers in the USA. The software manages customer-oriented payment devices at the highest level and is certified for the latest EMV transactions (chip and PIN).

#### The SQRS software package

When acquiring the assets of the former company known as Solquest GmbH, its range of solutions known as Solquest Retail Solutions (SQRS) was also taken over and they are still in use at three customers with approx. 1,500 installations. The particular high-performance features of the software were in the areas of SAP integration and mobile solutions. The SQRS solutions were no longer marketed after the takeover of Solquest in order to

keep the Group's portfolio of products slim. However, minor adjustments are still being made as part of existing customer relations and they are handled by StoreWeaver GmbH. Alongside this, a migration path has been developed in order to provide a long-term perspective for the customers of the former Solquest GmbH company.

#### **The euroSUITE solution from AWEK**

AWEK develops and markets software for medium-sized companies known as euroSUITE and it complements the GK Software range; it is primarily geared towards the medium-sized retail sector and the company provides support for an earlier version of this software used by several customers in German-speaking countries.

#### **Developing and adapting software**

In addition to its products, GK Software also provides comprehensive software services. The most important component in this context involves customising and adapting software developments during the initial projects and subsequently introducing change requests, which are a permanent feature of most projects. They include, for example, adapting software that is already in productive use to broader customer requirements, such as integrating new bonus systems in the checkout environment. Classic issues like consulting, project management or training courses come under the heading of developing and adapting software too.

#### **Maintenance and services**

In addition to software maintenance that is subject to charges, where the aim is to eliminate errors and faults, GK Software is able to offer full services to the retail trade too. This means that GK Software can now provide maintenance for third-party software and hardware made by a wide variety of manufacturers. About 40 mobile service technicians are available for this work and they can reach any store in Germany within set times. In addition to providing classic services, the company can handle other options like rollout services or staging (i.e. the initial installation of systems). A customer care management department has been established as part of the further expansion of the Company's service portfolio; it supports existing customers in a wide variety of tasks related to operating and adapting the solutions that they use. A special services department has also been established to help customers continually optimise

their productive applications and the way that they interact.

#### **Partner training**

The GK Academy is responsible for providing qualifications for the implementation partners, customers' employees and training GK Software workers. The Group continued to train implementation partners in 2018, which can then handle the introduction of GK/Retail themselves.

#### **Research and development**

- Research and development as a strategic factor in the face of competition
- Constant expansion of investments in R&D safeguards the Company's role as a leading innovator
- Using new technologies as part of the partnership relationship with SAP

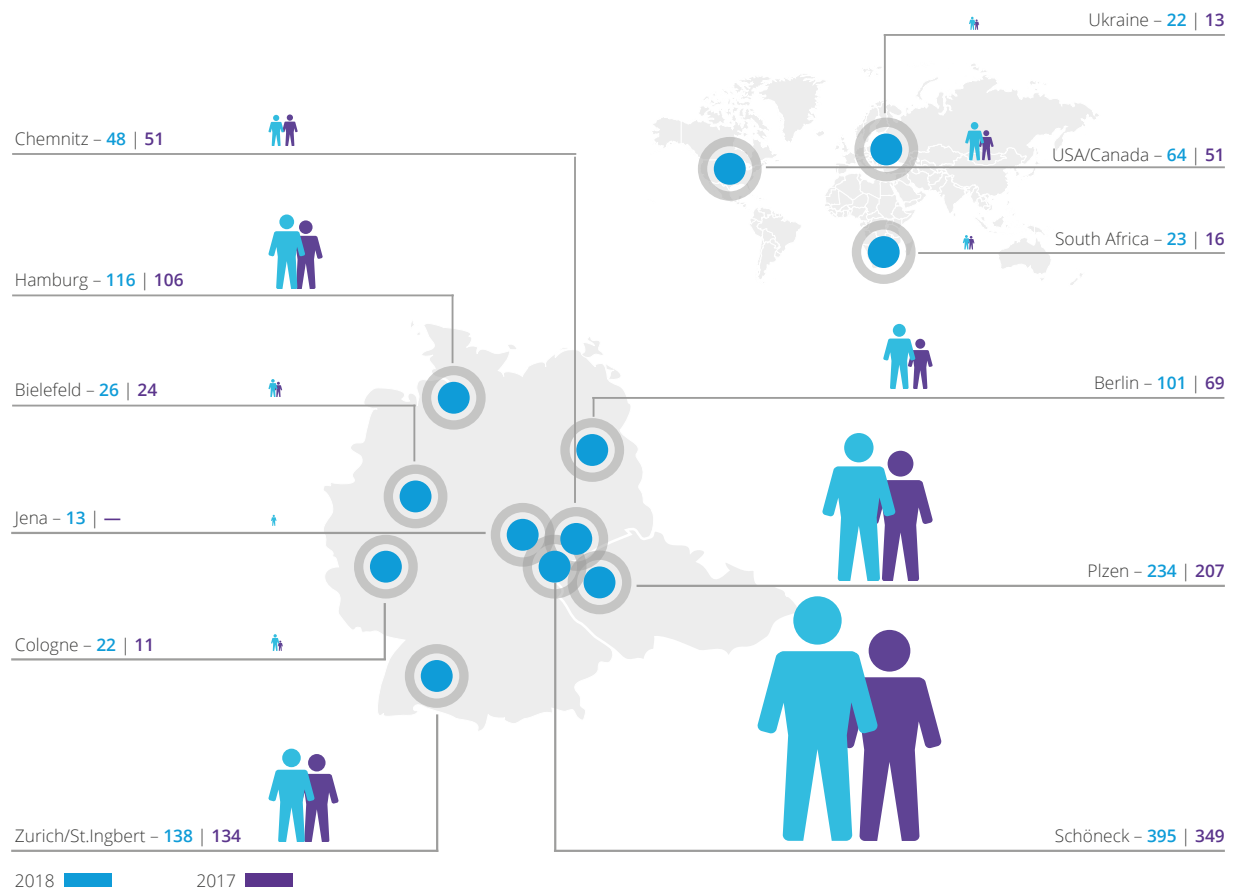
The ongoing development of existing products and the development of new software solutions have always been the major focus at GK Software during the past few financial years and they will continue to be strategic competitive factors in future too. This is also reflected in the continuing growth in the number of employees in this department.

GK Software is continually making investments in research and development in order to maintain its market-leading position in the long term too. A distinction must be made between applied research, which is operated by the Futurelab and corporate innovation and research teams, and application-oriented product development. Expenditure in the research division amounted to EUR 0.85 million in 2018. The research teams are based at several of the Group's business sites. The application-related "product development" work is primarily performed in Germany and in the Czech Republic. Expenditure in this department amounted to a total figure of EUR 14.10 million during the past year.

Overall, GK Software spent approximately EUR 15 million on research & development work dur-

## Distribution of employees at group business locations (from 5 employees) on 31 December 2018

## F.04



ing the 2018 financial year; this corresponded to approx. 14 percent of turnover.

### Personnel

- Further expansion of capacity
- Taking over valuephone employees

A total of 1,205 people were employed by the Group on the reporting date of 31 December 2018 (excluding members of the Management Board and trainees). As a result, there were 194 more employees than on the previous year's reporting date (1,011). 27 of this growth in employees was due to the takeover of valuephone GmbH in June 2018. With 395 staff members (previous year: 349), a large proportion of the Group's employees are employed at the Schöneck business site. The Ber-

lin branch of GK Software SE now has 100 employees working in the sales & marketing, project & partner management and development departments, following a figure of 69 in the previous year. The number of employees increased to 234 (previous year: 207) at the Czech subsidiary Eurosoftware s.r.o. in Plzen. There were 101 employees within the corporate Group in Hamburg (previous year: 106) at the end of the year. They included a large number of mobile service technicians who are deployed at various sites throughout Germany. 26 employees were employed at AWEK's second business site in Bielefeld (previous year: 24); most of them work on software development. 133 people were working at the St. Ingbert business site at the end of the year (previous year: 129). Five people were working in Dübendorf (Switzerland) at this time (previous year: 5).



The branch in Cologne had 22 members of staff at the end of the reporting period, in comparison with 11 at the end of the 2017 financial year. 64 people were working for GK Software in the USA (2017: 51). The South African subsidiary employed 23 people on the reporting date (2017: 16). The number of people employed at the business site of the Ukrainian subsidiary in Lviv has increased from 13 to 22 since the end of 2017.

49 people were employed in Chemnitz, the headquarters of prudsys AG, on the reporting date. The Group is pooling its expertise for the range of topics covered by artificial intelligence at this business site.

The Management Board expects the growth in employee numbers to continue in future, even if at a more moderate pace. The major focus will be on adding to the numbers of more experience or more qualified employees. The Company has introduced and continually expanded an extensive "Active Balance" programme during the last few years, with a view to retaining and gaining employees, and its varied facilities for sport and leisure pursuits as well as simplifying the organisation of daily life have been very well received. The construction and design of the new Innovation Centre and the GK Campus in Schönebeck, which includes an in-house fitness centre, a free cafeteria and a modern employee restaurant, are also covered by this programme.

Huge investments have been made in training and developing employees for years in order to be able to provide a foundation for and boost sales growth at GK Software SE in terms of human resources too. 1,735 employees (some of them on several occasions) attended training courses at the GK Academy during 2018, for example. New employees undergo extensive and standardised introductory courses, while a permanently adapted training programme is available for all employees too. The Company is also actively involved in training new or future employees. They include trainees on apprenticeship courses, students from universities of cooperative education or students on sandwich courses. 17 trainees and 14 students (from the university of cooperative education or on sandwich courses) are currently employed at GK Software SE. 21 student trainees are also working at the firm and it is also supervising the degree dissertations

of a further 12 students, who normally complete work experience programmes at the firm. Not least, 45 school pupils from the region were given the opportunity of intensively getting to know the firm in the form of pupil placements or holiday jobs during the whole of 2018. These different measures are already providing the first success stories in attracting new employees and the aim is to further intensify them in future.

## Customers and projects

### – Further international sales success stories

### – Omni-channel solution portfolio very competitive

GK Software's customers come from almost all areas of the retail sector and are distributed around the globe. The important market sectors, where the Company is active, are primarily the food retail sector, drugstores & household goods, fashion & lifestyle. DIY & furniture markets or technology & cars. The products and services are mainly geared towards large and medium-sized enterprises and are particularly suitable for customers with many stores in several countries. GK Software currently has more than 260 customers of varying sizes. This figure includes about 100 customers at prudsys AG, which was taken over in 2017, 39 customers from the retail segment of DBS Data Business Inc., which was taken over in 2015, and 23 customers of the AWEK Group, which was taken over in 2012. The customers of valuephone GmbH, which was taken over in June 2018, all make use of GK Software's checkout software. The GK/Retail POS solution, which was sold until 2016, is currently being used by 30 customers. 50 customers have either directly purchased OmniPOS or obtained it via SAP since the start of sales, including eight existing customers that used GK/Retail POS prior to this. 13 customers also use the mobile merchandise management solution, either alongside the POS solution or on its own.

The Company maintains business relationships with 10 customers that are numbered among the 50 largest retailers in the world (GlobalTOP50).<sup>1</sup> Overall, the Company has 297,000 productive

1 – Kantar Consulting's 2018 Top 50 Global Retailers

installations in productive operation in 58 countries.

#### **New customer projects in 2018:**

The Group gained 11 new customers for GK/Retail and one for the AWEK euroSUITE solution during the reporting period. In most cases, the customer's name is subject to secrecy until the rollout has taken place.

- A leading pharmacy chain in Australia (approx. 470 outlets in Australia)
- An electronics retailer in Scandinavia (about 400 stores)
- Hy-Vee/supermarket operator (approx. 250 hypermarkets in the USA)
- A leading luxury fashion retailer (approx. 300 outlets around the globe)
- A fashion retailer (more than 100 outlets in the USA)
- A supermarket operator (more than 320 outlets in the USA)
- A household goods retailer (approx. 30 outlets in Saudi Arabia)
- A pharmacy chain (approx. 20 outlets in Egypt)
- A supermarket operator (more than 180 outlets in the USA)
- A perfume and cosmetics group (more than 500 outlets around the globe)
- An AWEK migration project for a DIY retailer (90 stores in Germany and Luxembourg)

In terms of existing projects, 2018 too was dominated by extensive new orders, starts to pilot operations and rollouts in several projects as well as intensive change request business. OmniPOS was successfully rolled out at numerous customers in a wide variety of retail segments and was successfully put into service for the first time in countries like Japan, Romania and Bulgaria. Several existing customers are currently considering whether to switch to OmniPOS. Eight customers, which have

been using GK/Retail for a long time, have already decided to introduce it and some of them have already put the solution into productive use in several countries. We handed over and rolled out more country-specific versions in several ongoing projects. The customer loyalty app, Mobile Consumer Assistant (MCA), went live in twelve countries in southern Africa; two customers opted for our self-scanning solution and another one for our scales solution known as OmniScale. We have also been able to sign further contracts with existing customers and they cover, for example, extensions to licencing agreements or developing and adapting software or other services.

One piece of evidence for the vibrant partnership with SAP is that there are now 66 joint customer projects where GK solutions have been sold by SAP. The strategic relationship between both companies in the store sector was also reflected in their joint activities at the NRF in New York, the EuroCIS in Düsseldorf or the Mobile World Congress in Barcelona, as well as numerous other coordinated activities.

#### **Market and competitive environment**

- **The German retail sector once again set new records in 2018 - turnover rose to EUR 525.0 billion**
- **E-commerce continues to grow - its share is now more than ten percent**
- **Investment needs for retail IT remain high**

Business developments at GK Software are determined by several factors and their effects in different economic regions. The most important determining factors are the general economic conditions, the current situation and the expected business prospects for the retail sector.

With GK Software's business expansion into more and more economic areas, it goes without saying that the number of factors affecting its business have increased, as the situation in some individual markets may move in different directions in spite of global economic trends. However, this provides some detachment in the Company's general operations from the developments in its original core

markets – primarily in Central Europe – without these markets losing their significance for GK Software in the foreseeable future. The year 2018 also demonstrated in an impressive manner that GK Software can now very easily move into different geographical markets if no major orders or only a few are placed for projects in its traditional home markets.

The global economy grew overall, despite slowing down in the second half of the year, by 3.7% overall in 2018. According to the IMF, developing nations were the engines powering growth and they increased their economic performance by 4.6% during the past year. Growth in industrial nations was also significant at 2.3%. The US economy grew by 2.9% in 2018, while the economy in the eurozone expanded by 1.8%. Economic growth was 1.5% in Germany.

Alongside the basic economic trends in the markets processed directly or through partners, the general trends in the retail sector are also an enormously important factor for the Company's business. The issue of omni-channel retailing continues to be a major area of focus, as it is exerting a huge influence on retailers' strategic decisions in all markets. Beyond this, the introduction of genuine cloud services based on enterprise POS solutions is becoming increasingly important for all sizes of retailers. Long-term issues like demographic developments, new ways of establishing customer loyalty or internationalisation also remain important driving forces and are becoming more and more connected to the mega-trend of omni-channel retailing. GK Software responded to these priorities in the retail sector at an early stage and has made significant preparations for the future with its main product known as GK/Retail OmniPOS. The new cloud4retail service and the Mobile Customer Assistant customer loyalty solution are further strengthening the competitive position of OmniPOS. We are also expecting the same effect from integrating solutions on the basis of artificial intelligence.

Even if the licensing business with customers was again powered by customers from outside the German-speaking world, the developments in Germany, Austria and Switzerland continue to remain highly significant for the direct business of GK Software, as this is an internationally leading

market in the sector and many existing customers have their headquarters here. The German retail sector, Europe's largest retail market, had a very successful year again in 2018. After recent years were characterised by continuous growth, turnover actually rose by a nominal 2.8 percent, which is 1.2 percent in real terms, having been adjusted for inflation. Overall, turnover in the retail sector (excluding vehicles, petrol stations, fuels and chemists) amounted to approx. EUR 525.0 billion in 2018<sup>1</sup>. The increase in turnover in the retail sector therefore grew somewhat less strongly than gross domestic product (GDP), which was able to grow in real terms by 1.5 percent<sup>2</sup>. The retail trade therefore contributed 16.2 percent to GDP overall in 2018 and remains a leading sector in the general economy in Germany<sup>3</sup>.

The overall prospects for the European retail sector indicate an ongoing upward trend.<sup>4</sup> Turnover adjusted for inflation rose, for example, by between 1.4 and 2.7 percent on average in the months from January until November, when compared to the figures for the previous year.<sup>5</sup> Turnover also rose in Great Britain, despite the weakness of sterling in connection with the preparations for Brexit, after it had tended to stagnate until 2015. Turnover in the retail sector reached a figure of GBP 380 billion, which signified an increase of 3.8 percent over the previous year.<sup>6</sup> There has also been a continual upward trend in retail sales in the USA during the last few years and this has ensured greater activity in the world's largest retail market.<sup>7</sup> At USD 6 trillion, turnover in the retail sector there exceeded the high-

1 - [https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2019/01/PD19\\_035\\_45212.html](https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2019/01/PD19_035_45212.html)

2 - [https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2019/01/PD19\\_018\\_811.html](https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2019/01/PD19_018_811.html)

3 - [https://www.destatis.de/DE/PresseService/Presse/Pressekonferenzen/2019/BIP2018/Pressebrochure\\_BIP2018.pdf?\\_\\_blob=publicationFile](https://www.destatis.de/DE/PresseService/Presse/Pressekonferenzen/2019/BIP2018/Pressebrochure_BIP2018.pdf?__blob=publicationFile), p. 11

4 - [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sts\\_trtu\\_a&lang=de](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sts_trtu_a&lang=de)

5 - Eurostatistics Data for Short-Term Economic Analysis, Issue Number 01/2019, p. 24 (Retail trade deflated turnover)  
<https://ec.europa.eu/eurostat/documents/3217494/9502946/KS-BJ-19-001-EN-N.pdf>

6 - <https://www.ons.gov.uk/businessindustryandtrade/retailindustry/datasets/poundsdatatotalretailsales>

7 - [http://ycharts.com/indicators/retail\\_sales](http://ycharts.com/indicators/retail_sales)

est figure prior to the recession, which amounted to 4.4 trillion in 2007.<sup>1</sup>

Developments in interactive retailing, i.e. mainly e-commerce and the mail order business without any services, continue to be dynamic. This business was able to increase its turnover once again by 11.4 percent to a figure of approx. EUR 65.1 billion.<sup>2</sup> This growth was mainly attributable to the e-commerce sector, which increased by more than 9 percent to a figure of EUR 53.6 billion<sup>3</sup> and therefore accounted for more than 10 percent of total turnover in the retail business<sup>4</sup>. This trend is expected to continue in 2019 too. According to initial estimates, online turnover in the current year is expected to be approx. EUR 58.5 billion<sup>5</sup>. This trend is even clearer in other important, leading retail markets like Great Britain (18.0 percent of total turnover<sup>6</sup>). However, it is not yet observable to the same degree everywhere. While the share of the online retail trade amounts to 8.9 percent of the total retail sector in the USA<sup>7</sup>, the figure was only 3.4 percent in Italy or 4.8 percent in Spain, for example<sup>8</sup>. It should be generally assumed, however, that online retail sales will continue to grow in all developed retail markets.<sup>9</sup>

Omni-channel retailers continued to grow disproportionately in 2018 and increased their turnover by 12.9 percent to a figure of approx. EUR 22.7 billion; while the classic, purely online market places only grew by about 9.7 percent to a figure of EUR 30.6 billion. This means that in-store retailers, which also successfully operate an online business, have been increasingly in a position to make use of their advantages arising from the combination

of stores and web shops.<sup>10</sup> GK Software has been preparing its solutions for this development by moving in the direction of successful omni-channel retailing for years and therefore believes that it is in an excellent position to meet the relevant demands. These unabated developments are triggering huge challenges for the in-store retail sector and the challenges are also being driven by other innovations.

The German Retail Federation (HDE: Handelsverband Deutschland) is expecting nominal growth of 2.0 percent to EUR 535.5 billion for the entire retail sector in 2019. However, the experience of the past few years has shown that the forecasts published by the HDE have tended to be conservative and were usually exceeded by the actual turnover achieved by the retail sector. The HDE views the ongoing positive economic conditions and the dynamic growth in online retailing as the basis for continued, moderate growth<sup>11</sup>.

The analyses performed by the marketing research company GfK also support the HDE forecasts with regard to developments in the retail sector. According to these, consumer confidence is likely to remain stable. It fell slightly in January 2019, but is still positive. Overall, the GfK is expecting an increase in consumer expenditure in Germany of about 1.5 percent<sup>12</sup>. An increase in private consumption of 1.9 percent is also expected for the whole of the European Union.<sup>13</sup> "The basic prerequisite for this is efficient and extensive digital infrastructure," said HDE President Josef Sanktjohanser, commenting on the fact at the beginning of 2018 that half the growth in retail sales is now generated online<sup>14</sup>. The deputy managing director of the HDE, Stephan Tromp, confirmed this at the start of the year, "...We need measures that consider all economic areas in order to fully make use

1 – <https://www.thebalance.com/u-s-retail-sales-statistics-and-trends-3305717>

2 – <https://www.bevh.org/presse/pressemitteilungen/details/auch-in-2018-zweistelliges-e-commerce-wachstum.html>

3 – [https://einzelhandel.de/images/presse/Pressekonferenz/2019/Jahres-PK/Charts\\_Konjunktur\\_Jahres-PK.pdf](https://einzelhandel.de/images/presse/Pressekonferenz/2019/Jahres-PK/Charts_Konjunktur_Jahres-PK.pdf), p.8

4 – Own calculations

5 – [https://einzelhandel.de/images/presse/Pressekonferenz/2019/Jahres-PK/Charts\\_Konjunktur\\_Jahres-PK.pdf](https://einzelhandel.de/images/presse/Pressekonferenz/2019/Jahres-PK/Charts_Konjunktur_Jahres-PK.pdf), p.8

6 – <https://www.invespcro.com/blog/global-online-retail-spending-statistics-and-trends/>

7 – Ibid.

8 – <https://www.statista.com/statistics/281241/online-share-of-retail-trade-in-european-countries/> (estimated in 2017; details on Germany fluctuate depending on the source)

9 – <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/>

10 – <https://www.bevh.org/presse/pressemitteilungen/details/auch-in-2018-zweistelliges-e-commerce-wachstum.html>

11 – <https://einzelhandel.de/presse/aktuellemeldungen/11902-jahresprognose-einzelhandel-hde-erwartet-2019-zwei-prozent-umsatzwachstum>

12 – <https://www.gfk.com/de/insights/press-release/konsumklima-im-aufwind/>

13 – [http://europa.eu/rapid/press-release\\_IP-19-850\\_en.htm](http://europa.eu/rapid/press-release_IP-19-850_en.htm)

14 – <https://einzelhandel.de/presse/aktuellemeldungen/10965-online-handel-bleibt-wachstumstreiber-hde-prognose-fuer-2018-umsatzplus-von-zwei-prozenthttp>

of the potential of digitalisation.”<sup>1</sup>This statement is supported by the EHI Study entitled “Till Systems 2018” from the EHI Retail Institute that the fundamental digital structure in the retail sector needs to be expanded. In the surveys, 66 percent of those questioned indicated that they wished to renew their POS systems by 2020.<sup>2</sup>

The need for investments by the retail trade remains high, as the study published by the EHI Retail Institute entitled “IT Trends in the Retail Sector in 2019” indicates. 94 percent of those companies questioned by the EHI at least expected their IT budget to remain constant, if not increase. 64 percent of those questioned believe that the renewal of their infrastructure (cloud and networks) and 39 percent believe that introducing omni-channel projects will be the most important IT projects during the next two years.<sup>3</sup>The “Smart Stores” white paper published by the EHI and Microsoft also shows that artificial intelligence (AI) is already being used at 68 percent of retailers or there are plans to introduce it.<sup>4</sup>The RIS News “Store Experience Study 2019” shows that the retailers questioned want to increase their IT expenditure by 5.2 percent annually on average in order to, for example, personalise the customer experience, strengthen store employees, improve loyalty programmes or be able to use a standard customer database along all their channels in order to improve customers’ experiences in the stores.<sup>5</sup>There is much ground to be made up in Germany in fields like home delivery, for example. The market share of online retailing in the whole food market is only 3.8 percent in Germany<sup>6</sup>. Different concepts are increasingly being tested in Germany at the moment like store-based deliveries, click-and-collect or central warehouse-based deliveries. About 70 percent of German omni-channel retailers already offer two services like in-

store returns or click and collect.<sup>7</sup>These positive market trends are also clearly reflected in the discussions that GK Software is holding with existing customers and potential interested parties. The IT departments at retailers are also focusing on other issues related to technologies and processes, for which GK Software is in an ideal position with its new GK/Retail OmniPOS solution.

Overall, the conditions for the course of business at GK Software during the current financial year and beyond are very positive. This is all the more so because, following the recent project successes in North and Central America or the Middle East, the Company assumes that it will be able to continue expanding its potential customer base internationally.

These trends are subject to the proviso that the global economy is not severely disrupted by political or economic factors, which could have a negative effect on the economic situation.

GK Software continues to assume that the investments in new systems, which are required in the short or medium term, and the use of new technology fields by the retail sector will continue to provide sales potential in all the markets that are being actively processed in future too. The Company also expects the partnership with SAP in particular to lead to successes internationally and reinforce the Company’s potential in the long term.

GK Software is currently in an excellent position in many ongoing tender procedures in different regions of the world and has important advantages over its competitors with its innovative, broad portfolio of products, the internationality of its solutions and its proven ability to introduce projects quickly.

1 – <https://einzelhandel.de/presse/aktuellmeldungen/11962-digitalisierungsstrategie-der-bundesregierung-zu-kurzgesprungen>

2 – EHI Retail Institute, Kassensysteme 2018, Fakten, Hintergründe und Perspektiven, p. 30

3 – <https://www.ehi.org/de/pressemitteilungen/handel-investiert-in-infrastruktur/>

4 – <https://www.ehi.org/de/pressemitteilungen/ki-wichtiger-zukunftstrend-im-handel/>

5 – RIS News, Study: Store Experience Study 2019, p. 8

6 – HDE: Handelsreport Lebensmittel Online 2017, p. 8

7 – EHI study: Omni-Channel Commerce 2018, p. 47

## Explanations on the target/ performance comparison

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The Management Board had issued the following forecast for the financial performance indicators for the corporate Group combined under the umbrella of GK Software SE for the 2018 financial year.

*The goal of our previous medium-term strategy until 2018 remains unchanged. That is to say, we wish to return to the familiar profit margins of more than 15 percent (EBIT margin on operating performance) for our core business in the coming financial year and then maintain this level during the next few years. However, the expenditure from tapping into new geographical markets could continue to impair developments, as already mentioned above. Even short-term delays in existing customer projects can have a considerable impact on the Company's earnings situation. It is precisely the uncertainty about achieving individual sales prospects, which, in conjunction with the size of the Company, creates a forecast for the EBIT that is fraught with considerable uncertainties, as individual large-scale sales opportunities can involve a significant share of turnover revenues with particularly high profit margins.*

*If we follow the estimates outlined at the beginning about the development of the economy in general and the retail sector in particular, it is probable that the GK/Retail's turnover will continue to grow considerably again in 2018. However, as we achieved a significant part of our medium-term forecast, which originally extended as far as 2018, during the past financial year, we are issuing a new medium-term forecast up until 2020 to coincide with this financial report.*

*We are confident that we will be able to continue our growth in turnover during the next three years and have again set the goal of increasing our turnover compared to the figure in 2017 (EUR 90 million) by about fifty percent by 2020. We wish to increase our earnings in our core business to about 15 percent in 2018 and achieve this figure in the next few years too.*

The course of the 2018 financial year completely confirmed the expectations of the Management

Board in terms of turnover: The Group was able to increase its turnover from EUR 90.45 million in 2017 to EUR 106.15 million or by 17.4 percent and the increase in our GK/Retail core segment was even higher, exceeding 27.5 percent from EUR 75.59 million to EUR 96.37 million. The development of the operational earnings before interest and taxes (EBIT) has been affected by the risks that we described in our forecast in terms of "postponements [...] of significant customer projects", among other things. The postponement of decisions by customers regarding projects involving the issue of licences amounting to about EUR 4 million, probably to 2019, had a negative effect on the results of our core business just as much as the development of our operational efforts in the USA. While the Group took an important step in what is the largest retail market in the world by gaining four new customers, we only managed to achieve the progress in the efficiency of our project services, which we had already been seeking during previous years, at the end of 2018. This gave rise to expenditure totalling EUR 3.76 million during the past financial year, which was not covered by turnover revenues and affected the development of our earnings as risks associated with "tapping into new geographical markets." Even if this development fell short of our expectations, given the steps that were envisaged (we had sought to overcome the inefficiencies in North America by the end of the 3rd quarter in 2018), it was already possible to overcome these problems in Africa at the end of 2017 - a development that was confirmed during the whole of 2018. The first few months of 2019 for our US organisation also reveal that things have significantly improved compared to previous years. However, it is still too early to definitely talk about a breakthrough in efficiency.

Other factors, which initially weighed on the earnings from our core business, involved the integration of the solutions from prudsys AG, which was acquired in the autumn of 2017, and those of valuephone GmbH, which was purchased in the summer of 2018, into the GK/Retail range of solutions. These negative effects were found in the general, administrative integration work and particularly the technological integration of the product worlds into the GK/Retail product suite and the management capacities required for this.

## Explanation of the business results and an analysis of the assets, financial and earnings situation

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If we look back at 2018 in terms of GK Software's market presence, it can be viewed as a very successful year, if not the most successful in the firm's history.

Turnover rose by almost 17 percent to a figure of EUR 106.15 million, for example - and the Group even managed to expand its turnover in its GK/Retail core business segment by more than one quarter from EUR 75.59 million to EUR 96.37 million. This success is also reinforced by ratings published by independent analysts. The analysts at Forrester Wave, for example, state that the solutions provided by GK/Retail are stable, trend-setting and provide the widest range of services and have the most convincing product vision; this, in turn, is reflected in the decisions by four US food retailers to make use of our GK/Retail solutions. Seven other customers from Europe, Arabia and even Australia illustrate the global attractiveness of what we can offer.

On the earnings side, however, 2018 marked a step backwards in comparison with the developments in previous years. Earnings before interest, tax, depreciation and amortisation (EBITDA) at EUR 6.83 million and earnings before interest and tax (EBIT) at EUR 1.59 million both fell below the figures for the previous year (EUR 8.77 and EUR 4.99 million respectively). In order to summarise matters, the following factors played an important role in developments:

1. Various customers postponed decisions about important customer projects to 2019. In our view, it was therefore no longer possible to generate turnover revenues of up to EUR 4 million during the year under review.
2. It was already possible to achieve the improvement in efficiency that was being sought in our African sales region at the end of 2017 and this was confirmed by developments in 2018. However, the measures adopted in the USA and North America did not take effect until the end of 2018. Even if the development during the first few months of 2019 is promising, it is

necessary to put on record that expenditure amounting to EUR 3.76 million in 2018, which was not covered by turnover revenues, now has to be made good.

3. On top of this, we invested in our GK/Retail solution suite to a significant degree in 2018 - beyond what was done in the past. The main areas of investments focused on integrating our acquisitions in the field of artificial intelligence (prudsys AG, October 2017) and mobile applications (valuephone GmbH, June 2018). Investments were also made in the cloud capabilities of our solutions. Overall, we made additional investments in our range of products to the tune of approx. EUR 4.81 million in comparison with the previous year, in order to be able to use the opportunities that result from the growing technological possibilities in general and our customers' requirements.
4. In our hardware services business segment, losses amounting to about EUR 1.7 million at the level of full-cost accounting in one area mainly accrued as a result of the decision by one anchor customer to no longer extend existing hardware maintenance contracts.

As a result, the Group earnings amounted to EUR 0.92 million in the 2018 financial year. If we take into account the general positive developments in our sales market and the effects that had a negative effect on the development of our earnings in 2018, we believe that we have good reason to be able to meet the expectation formulated for the year 2020 in the form of a medium-term forecast in the 2017 Group annual accounts of being able to achieve an EBIT margin of more than 15 percent in our core business (in terms of operating performance). To ensure that we are able to reach this goal, we are seeking an intermediate stage in 2019 between what we actually achieved in 2018 and the goal envisaged for 2020.

## Total operating revenue

T.04

	31.12.2018		31.12.2017		Change	
	EUR K	in %	EUR K	in %	EUR K	in %
Sales	106,151	96.7	90,452	94.6	15,699	17.4
<b>Operating revenues</b>	<b>106,151</b>	<b>96.7</b>	<b>90,452</b>	<b>94.6</b>	<b>15,699</b>	<b>17.4</b>
Other operating revenues	3,617	3.3	5,197	5.4	(1,580)	(30.4)
<b>Total operating revenues</b>	<b>109,768</b>	<b>100.0</b>	<b>95,649</b>	<b>100.0</b>	<b>14,119</b>	<b>14.8</b>

## Earnings situation

– Turnover: EUR 106.15 million

– EBITDA: EUR 6.83 million

The Group's total turnover rose by more than 17 percent from EUR 90.45 million to EUR 106.15 million. Our core business segment registered turnover amounting to EUR 75.59 million in 2017 and the figure rose to EUR 96.37 million in 2018, an increase of more than one quarter. In comparison with previous years, these figures also include the turnover achieved with the former SQRS business segment, which is no longer being registered separately because of its minor importance with turnover of just EUR 0.52 million (following EUR 0.81 million in the previous year). This development underlines very clearly the market interest in our solutions. In contrast, our IT Services business unit developed very poorly with a decline in turnover of 34.2 percent from EUR 14.86 million to EUR 9.78 million.

The development in the GK/Retail segment was based on gaining 11 new customers and further intensifying business with existing customers, including companies switching to our OmniPOS solution. This turnover was supplemented by that associated with our credit card payment settlement solution known as TransAction+, designed for the USA, and the solution for using artificial intelligence methods in the retail sector - the Real-Time-Decisioning" engine (RDE) from prudsys AG, in which we acquired a majority holding in October 2017.

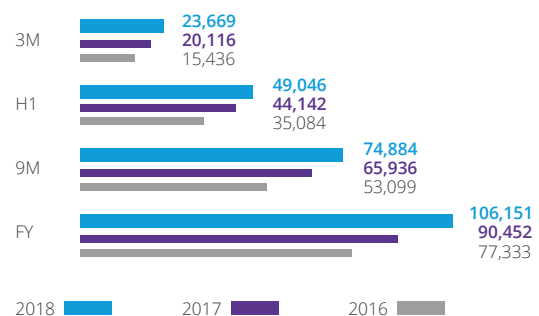
The reason for the decline in the IT Services segment was primarily in the considerable reduction in the scope of business with one significant cus-

tomers. This affected the work involving local store and hardware services, i.e. in the stores. However, the turnover generated by the consolidated solution for small and medium-sized enterprises, "EuroSUITE" remained stable compared to the previous year.

On the basis of the increase in the GK/Retail segments and the decline in turnover in the other segment, the share of turnover from the core segment reached a level of 90.8 percent (following 83.6 percent in the previous year), while the share of turnover generated by IT Services declined from 16.4 to 9.2 percent.

## Quarterly sales development compared to previous years in EUR K

F.05





## Turnover by segments

## T.05

EUR K	GK/Retail		IT Services		Eliminations		Group	
	FY 2018	FY 2017	FY 2018	FY 2017	FY 2018	FY 2017	FY 2018	FY 2017
<b>Turnover with third parties</b>	<b>96,373</b>	<b>75,595</b>	<b>9,778</b>	<b>14,857</b>	<b>—</b>	<b>—</b>	<b>106,151</b>	<b>90,453</b>
Product licences	16,621	8,964	738	867	—	—	17,359	9,831
Customer individual development (Services incl. Maintenance)	6,224	6,348	—	—	—	—	6,224	6,348
<b>Sum of licences</b>	<b>22,845</b>	<b>15,312</b>	<b>738</b>	<b>867</b>	<b>—</b>	<b>—</b>	<b>23,583</b>	<b>16,179</b>
Maintenance	22,019	20,209	6,195	8,987	—	—	28,214	29,196
Services	51,415	39,568	1,595	1,451	—	—	53,010	41,019
GK Academy	238	390	—	62	—	—	238	452
Other business	(115)	141	1,288	3,550	—	—	1,173	3,691
Revenue reductions	(29)	(26)	(38)	(60)	—	—	(67)	(86)
<b>Turnover with other segments</b>	<b>—</b>	<b>68</b>	<b>879</b>	<b>608</b>	<b>(879)</b>	<b>(676)</b>	<b>—</b>	<b>—</b>
<b>Depreciation</b>	<b>(5,035)</b>	<b>(3,463)</b>	<b>(202)</b>	<b>(317)</b>	<b>—</b>	<b>—</b>	<b>(5,237)</b>	<b>(3,780)</b>
<b>EBIT segment</b>	<b>1,140</b>	<b>1,974</b>	<b>754</b>	<b>3,204</b>	<b>(299)</b>	<b>(308)</b>	<b>1,595</b>	<b>4,871</b>
<b>Assets</b>	<b>119,624</b>	<b>110,556</b>	<b>5,657</b>	<b>11,037</b>	<b>(14,100)</b>	<b>(15,116)</b>	<b>111,181</b>	<b>106,477</b>
<b>Debts</b>	<b>82,323</b>	<b>74,241</b>	<b>620</b>	<b>6,589</b>	<b>(12,017)</b>	<b>(12,901)</b>	<b>70,926</b>	<b>67,929</b>
<b>Cash and cash equivalents</b>	<b>11,765</b>	<b>26,691</b>	<b>24</b>	<b>3,788</b>	<b>—</b>	<b>—</b>	<b>11,789</b>	<b>30,479</b>

When observing the development of turnover according to types of services, it is clear that the licence revenues increased most strongly in relative terms (+67.4 percent), followed by the project services, which exceeded the previous year's figure by 12.0 percent.

The licence revenues amounted to EUR 23.58 million, EUR 7.4 million higher than in the previous year. This increase was achieved in the GK/Retail segment. EUR 17.36 million of this figure was accounted for by licences for standard products (the figure in the previous year was EUR 9.83 million) and EUR 16.62 million by those from the GK/Retail segment (EUR 8.96 million in the previous year). This development is, firstly, due to the positive development in terms of new customers - 11 opted for GK/Retail during the financial year - but also by selling other products to customers that are already using solutions from the GK/Retail suite. In this field, it was also possible to earn licence revenues for programming software to meet customers' individual needs. This amounted to EUR 6.22 million in 2018, following a figure of EUR 6.35 million in 2017, and increased the stocks of licenced software that needs to be maintained. Our solutions for smaller and medium-sized retailers, which are made available under the "euro-SUITE" brand, enjoyed the same level of demand, but turnover was just EUR 0.74 million, because

the number of new customers was somewhat lower than in the previous year (EUR 0.87 million).

In our view, it seems worth mentioning that it was possible to attract earnings in the form of subscription revenues amounting to EUR 3.52 million in 2018; all of this figure was achieved by the GK/Retail segments and especially for solutions based on artificial intelligence applications from prudsys AG.

Turnover for maintenance services fell slightly by 3.4 percent from EUR 29.20 million to EUR 28.21 million. The reason for this was the decline in hardware-related maintenance in the IT Services segment by EUR 2.79 million, which has already been mentioned several times. The good development in the GK/Retail segment, however, was able to make up for this development to a significant degree: Turnover here rose by EUR 1.81 million from EUR 20.21 million to EUR 22.02 million. Overall, the share of this recurring turnover amounted to 26.7 percent.

If we take into account the subscription turnover that was achieved, the share of recurring turnover amounted to almost 31.0 percent overall.

Turnover for software development work, which is the result of introductory and adaptation services

in customer projects, increased from EUR 41.02 million to EUR 53.01 million. The main driving forces here were project services for the GK/Retail products; turnover here increased from EUR 39.57 million to EUR 51.42 million.

Other turnover primarily involved services associated with hardware used at retailers' stores in the IT Services business segment. This also included purchasing new hardware on behalf of customers and preparing this hardware for productive use (so-called "staging"). Turnover revenues from the sale of hardware are entered here; this occurs if the Group purchases hardware on behalf of its customers according to their specifications. The decline in other turnover revenues by EUR 3.61 million to EUR 1.17 million was due to the development in the IT Services segment, which has already been mentioned. This figure was particularly affected by the decline in turnover for the purchase of hardware as part of hardware maintenance and staging for hardware systems.

As is the previous year, the software solutions from GK Software were developed to such a degree that the expenditure used for further development work could no longer be adequately separated from general improvements or took place in a new technological environment so that the success of measures could not be reliably forecast. This kind of in-house work was not therefore capitalised.

As a result, the Group's operating performance was no different to the turnover figures entered, as in the previous year. Other operating revenues, which amounted to EUR 3.62 million, reached a lower figure than in the previous year, when the result was EUR 5.20 million. The difference is the result of the revenues entered on a single occasion in the previous year arising from adjusting the liabilities associated with the acquisition of the Retail Division of DBS Data Business Systems Inc. during 2015; this amounted to EUR 1.48 million. Overall, total operating revenue amounted to EUR 109.77 million in 2018; as a result, this exceeded the figure for the previous year by 14.7 percent.

Expenditure on semi-finished products, goods and purchased services amounted to EUR 7.73 million, EUR 0.80 million lower than in the previous year. Expenditure on goods used and semi-finished

products declined by EUR 1.20 million to EUR 1.45 million in accordance with the declines in other turnover revenues, while expenditure for project-related work rose by EUR 0.40 million to a total figure of EUR 6.29 million. The increase in purchased services was a reaction to short-term capacity bottlenecks.

In order to be able to realise the capacity requirements because of incoming orders and handle the opportunities that arise from using technological innovations in good time, the Group continued to increase its capacities for product development and project completion during the year. As a result, the average number of employees rose from 961 to a figure of 1,129 during the year. In arithmetical terms, 48 people were due to the takeovers of prudsys AG (in October 2017) and valuephone GmbH (in June 2018) and this gave rise to personnel expenditure amounting to EUR 2.7 million. The expansion in personnel arising from organic growth therefore amounted to 120 persons (or 12.5 percent) as an annual average figure. Based on average familiarisation periods of 3 - 6 months, this organic growth in personnel numbers triggered human resources expenditure for familiarising employees of EUR 2.40 million.<sup>1</sup> Overall, the expansion in personnel resulted in an increase in personnel costs from EUR 57.81 million to EUR 68.78 million in the year under review. The increase in costs because of the ongoing development of the organisation therefore amounted to EUR 8.20 million and therefore amounted to almost 14 percent of the figure for the previous year; overall, personnel costs increased by EUR 10.97 million or 19.0 percent. The personnel ratio (measured in terms of turnover) therefore declined by 0.9 percentage points to 64.8 percent. We are now expecting significant, lasting improvements in our project efficiency in the USA in 2019, which should lead to improved figures for this important indicator.

Other operating expenditure rose by EUR 5.87 million to a figure of EUR 26.41 million. This development reflects the increase in advertisement and travel costs, which were EUR 0.95 million higher

1 - It is not possible to provide specific figures, as new employees have different background experiences and make individual progress; the mathematical expenditure just for employees who are being trained is between EUR 1.66 and EUR 3.32 million.

than in the previous year in response to the significantly broader geographical operating radius of the Group - despite the expansion of local workforces. Vehicle costs, which exceeded the previous year's figure by EUR 1.42 million, also experienced a significant increase, although EUR 0.68 million of this figure was accounted for by one-off expenditure. Legal and consultancy costs rose by EUR 0.72 million because of the efforts made to obtain a better basis for the Group's compliance system through measures like assessing the existing documents and transactions performed during the last few years. EUR 0.30 million of this expenditure can be viewed as one-off costs. The investments in the firm's campus in Schöneck, including a hotel particularly for guests of GK Software, and the expansion or adaptation of business premises in Hamburg, Berlin and Jena also generated higher operating costs and an increase in one-off expenditure of EUR 1.75 million.

Overall, this development led to EBITDA of EUR 6.83 million, following a figure of EUR 8.77 million in the previous year.

Depreciation and amortisation rose to EUR 5.24 million during the reporting period, following a figure of EUR 3.78 million in the previous year. The increase in depreciation and amortisation was largely due to commissioning the finished buildings at the Group's headquarters in Schöneck and the amortisation of the assets identified as part of the corporate acquisitions in October 2017 and June 2018.

Overall, costs increased by 19.3 percent so that GK Software achieved an EBIT figure of EUR 1.60 million, following a figure of EUR 4.99 million in the previous year.

The financial results were negative again at EUR (1.42) million (EUR (0.65) million in the previous year). Interest revenues amounting to EUR 0.14 million (EUR 0.13 million in the previous year) were countered by interest-bearing liabilities of EUR 1.56 million (EUR 0.79 million in the previous year).

#### Earnings figures

T.06	31.12.2018		31.12.2017		Change	
	EUR K	in % <sup>1</sup>	EUR K	in % <sup>1</sup>	EUR K	in %
EBITDA	6,833	6.4	8,773	9.7	(1,941)	(22.1)
EBIT	1,595	1.5	4,993	5.5	(3,397)	(68.0)
EBT	171	0.2	4,340	4.8	(4,169)	(96.1)
Group result	923	0.9	3,884	4.3	(2,961)	(76.2)

1 - margin on turnover

The capitalisation of tax claims from the losses carried forward led to consolidated net earnings of EUR 0.92 million, following a figure of EUR 3.88 million in the previous year, together with the developments that have already been described. This amounted to undiluted earnings per share of EUR 0.48 (EUR 2.05 in the previous year) and diluted earnings per share of EUR 0.48 in 2018 (EUR 2.00 in the previous year).

#### Assets situation

The consolidated balance sheet total amounted to EUR 111.18 million on the reporting date and was therefore EUR 4.58 million higher than the figure of EUR 106.60 million on the last reporting date.

Non-current assets rose by EUR 12.11 million to a figure of EUR 56.83 million. Current assets without cash and cash equivalents rose by EUR 11.16 million to a figure of EUR 42.56 million, while cash and cash equivalents fell by EUR 18.67 million to a figure of EUR 11.79 million.

The equity ratio was almost unchanged on 31 December 2018 at 36.2 percent; the figure on the reporting date in the previous year had been 36.3 percent. Equity amounted to EUR 40.26 million (EUR 38.67 million at the end of the previous year).

Debts at GK Software rose by EUR 3.00 million to a figure of EUR 70.93 million compared to EUR 67.93 million at the end of the previous year.

## Assets situation

T.07

	31.12.2018		31.12.2017		Change	
	EUR K	in %	EUR K	in %	EUR K	in %
Non-current assets	56,832	51.1	44,724	42.0	12,109	27.1
Current assets without cash and cash equivalents	42,559	38.3	31,396	29.4	11,163	35.6
Cash and cash equivalents	11,790	10.6	30,479	28.6	(18,689)	(61.3)
<b>Assets</b>	<b>111,182</b>	<b>100.0</b>	<b>106,598</b>	<b>100.0</b>	<b>4,583</b>	<b>4.3</b>
Equity	40,256	36.2	38,669	36.3	1,588	4.1
Non-current liabilities	28,348	25.5	29,657	27.8	(1,309)	(4.4)
Current liabilities	42,577	38.3	38,272	35.9	4,305	11.2
<b>Liabilities</b>	<b>111,182</b>	<b>100.0</b>	<b>106,598</b>	<b>100.0</b>	<b>4,583</b>	<b>4.3</b>

The increase in non-current assets by EUR 12.11 million was the result of the investments at the business site in Schöneck, which largely contributed to the increase in carrying amounts for property, plant and equipment by EUR 8.56 million, and the result of the acquisition of valuephone GmbH, which caused the intangible assets to increase by EUR 4.66 million compared to the figure on the reporting date in the previous year.

The investments at the business site in Schöneck stem from the increasing degree of completion of the firm's campus, including the overnight accommodation capacity, after the Group's innovation centre was completed in 2017. EUR 5.91 was spent on construction and completing buildings in 2018 and advance payments amounting to EUR 0.83 million were made on facilities that are still under construction. A further EUR 1.83 million was spent on equipping these new facilities and the workplaces for new employees and making necessary replacement investments. This was countered by scheduled depreciation amounting to EUR 2.73 million in all (depreciation amounting to EUR 1.90 million was registered in the previous year).

Non-tangible assets were increased, primarily through the acquisition of all the shares in valuephone GmbH. As a result, the value of the core product at valuephone GmbH in the field of mobile consumer applications, the Mobile Consumer Assistant (MCA), was set at EUR 1.62 million as part of allocating the purchase price. Customer relations were also identified as an asset as part of acquiring the company and their value was esti-

mated at a figure of EUR 1.56 million. Allocating the purchase price also created goodwill of EUR 2.62 million. EUR 0.69 million was spent on industrial property rights (largely for software tools) as part of the general investment activities. Scheduled amortisation of intangible assets amounting to EUR 2.30 and changes in the intangible assets caused by currency rates and amounting to EUR 0.66 million countered these accruals.

Deferred tax assets amounted to EUR 4.03 million on the reporting date and were therefore EUR 1.11 million lower than the figure in the previous year. This figure involves sums that were included on account of losses carried forward and amounted to EUR 4.96 million. We assume that these will be fully liquidated because of the expected development of the corporate Group during the next few years.

The change in current assets without cash and cash equivalents by EUR 11.16 million was mainly due to a strong growth in trade accounts receivable by EUR 8.32 million compared to the previous year and in contractual assets, which were EUR 5.16 million higher than the figure in the previous year. This increase was due to the very high turnover in the month of December 2018.

Other accounts receivable and assets fell by EUR 2.39 million compared to the previous year. The figures for stocks of semi-finished and finished goods also declined. They were EUR 0.52 million lower than in the previous year. The decline in other accounts receivable was due to the fall in loans given to third parties (by EUR 2.08 million), largely due to the elimination of one loan caused by the takeover and in the decline in accounts receivable arising from value-added tax claims (EUR 0.26 million). These movements were compensated for by the increase in accounts receivable from income tax (EUR 0.59 million) and advance payments made in conjunction with the acquisition of valuephone GmbH (EUR 1.53 million). The decline in stocks is an expression of the lower turnover in conjunction with hardware maintenance and the associated stock levels that were lower than in the past.

Cash and cash equivalents amounted to EUR 11.79 million and were therefore EUR 18.69 million below the figure of EUR 30.48 million on the

reporting date in the previous year. We would refer you to the explanations on the development of the financial situation below to explain this development.

Non-current debts declined by EUR 1.31 million compared to the balance sheet reporting date in the previous year. While the non-current loans, which existed at the beginning of the year, were reduced by scheduled repayments (or by the reclassification of the share due for repayment during the year into current liabilities) (by EUR 2.60 million), another long-term loan amounting to EUR 3.00 million was taken out to finance the building activity at the site during the course of 2018. As a result, the non-current bank liabilities rose slightly by EUR 0.27 million on balance in comparison with the previous year. In contrast, pension provisions fell by EUR 0.32 million - i.e. they were largely constant, while the movements in the remaining items were only of secondary importance and largely balanced each other out.

Current debts rose in comparison with the previous year by EUR 4.30 million to EUR 42.58 million; this was primarily caused by the increase in current bank liabilities by EUR 1.95 million, in other current liabilities by EUR 1.49 million, in contractual liabilities by EUR 0.65 million and in trade accounts payable by EUR 0.53 million.

### Financial situation

Stocks of liquid funds amounted to EUR 30.48 million on the reporting date in the previous year and amounted to EUR 11.79 million at the end of the year under review. Taking account of the fact that use was made of current account credit lines or credit cards amounting to EUR 5.64 million (EUR 2.54 million in the previous year), the cash and cash equivalents amounted to EUR 6.15 million.

The cash flow from operating activities in the narrower sense – i.e. without any change to net current assets – declined from EUR 8.69 million to EUR 7.00 million. This decline by EUR 3.21 million compared to the same period in the previous year was almost exclusively due to the decline in annual earnings by EUR 2.96 million. Non-cash depreciation and amortisation increased from EUR 3.78 million to EUR 5.24 million.

The changes to net current assets related to the reporting date weighed on cash flow to the tune of EUR 11.26 million, compared to a positive figure of EUR 6.28 million in the previous year. The increases in trade accounts receivable and contractual assets, which rose by EUR 13.74 million because of the strong turnover in December 2018, weighed on the results, while the increase in trade accounts payable and other payables eased the cash flow by just EUR 1.77 million. In the previous year, a positive figure of EUR 7.76 million was recorded here. The increase in contractual liabilities (relieving the cash flow by EUR 0.65 million) and the reduction in provisions by EUR 0.46 million led on balance to an easing of pressure on the cash flow because of the change in these items amounting to EUR 0.19 million.

The payments for interest and income taxes had eased the net flow of cash and cash equivalents from operational activities by EUR 0.25 million in the previous year, while these items weighed on the results to the tune of EUR 1.41 million in the year under review. Overall, this created a net outflow of funds from operating activities amounting to EUR 5.67 million in the year under review, following an inflow of EUR 15.22 million in the previous year.

The outflow of cash and cash equivalents from investment activities increased to EUR 15.73 million during the financial year because of the investments described in the assets situation, compared to a figure of EUR 9.28 million in the previous year. A further EUR 7.09 million was spent on investments for the firm's campus at the business premises in Schöneck.

In its funding activities, the Company gained EUR 3.36 million by using loans; EUR 4.26 million was paid out because of the scheduled repayment of loans. The Group also gained access to EUR 0.61 million in equity by exercising granted share options from the share option programmes at GK Software. Overall, the outflow of cash and cash equivalents due to financial activities amounted to EUR 0.29 million.

In total, stocks of cash and cash equivalents therefore fell by EUR 18.69 million to a figure of EUR 11.79 million during the financial year and the company made use of current account credit

lines and credit cards to the tune of EUR 5.64 million. The Company had access to unused current account or credit facilities amounting to EUR 5.09 million on the balance sheet reporting date.

Because the Group's financial managers are seeking to meet the goal of guaranteeing that the company will be able to service its loans and debts at all times and have adequate liquidity to secure investment projects, it places the highest priority on maintaining capital.

Liabilities amounting to EUR 42.58 million will have to be serviced during 2019. Cash and cash equivalents amounting to EUR 11.79 and current liquid assets amounting to EUR 42.56 million countered these liabilities.

Beyond the balance sheet, there were also obligations arising from operating leasing contracts totalling EUR 3.85 million on the balance sheet reporting date, of which EUR 1.87 million is due for repayment during the course of 2019 and the remaining EUR 1.98 million is due between 2020 and 2021.

The Management Board believes that an adequate funding framework and funding opportunities have been established for the Group's current potential. The general conditions for funding need to be constantly compared with investment opportunities and adjustments have to be made, if necessary.

The development of the Group's turnover is particularly gratifying and shows that GK Software's market products are meeting customers' needs. We have already explained in detail the development of the earnings situation, with which we are not at all satisfied, in the form of explanations on the target/performance comparison. While the measures adopted since 2015 to improve the earnings situation in our project services business in the regions of Europe and Africa have demonstrated extremely gratifying results since 2016 and 2017, an improvement in the key performance indicators in the USA was only possible at the end of 2018 and therefore much later than hoped. The key performance indicators at the beginning of 2019, however, point to a significant improvement compared to the figures recorded during the year under review. Consolidating this development is now the major focus of the management team

responsible for this area. The Group is responding to the development in the IT Services segment by introducing capacity adaptation measures so that this negative item should significantly decline during the course of 2019. These special factors may have weighed on the key performance indicators for the assets and financial situation overall compared to the previous year, but management is confident that it will achieve its medium-term forecast published in the 2017 annual accounts for the year 2020, both in terms of turnover and earnings, via an intermediate stage in 2019 as a result of the measures that have been adopted. We would refer here to the explanations on the target/performance comparison.

### Financial and non-financial performance indicators

**Financial performance indicators.** It should be noted that the key indicators, on which the financial data is based, are very much connected to each other. As a result, the development of these figures largely depends on the development of two key indicators. These are turnover and earnings. In order to normalise tax effects, GK Software uses earnings before income taxes and the financial results (EBIT) and the margin on operating performance derived from this to determine earnings. In this sense, we would refer to the forecast report for the development of these key figures.

#### Financial performance indicators

T.08	31.12.2018	31.12.2017	
Gross earnings margin on turnover	%	96.1	96.3
Personnel ratio	%	64.8	63.9
EBITDA margin on operating performance	%	6.4	9.7
EBIT margin on operating performance	%	1.5	5.5
Equity ratio	%	36.2	36.3
Investment ratio I	%	51.1	42.0
Excess in cash and cash equivalents over interest-bearing liabilities	EUR K	(9,611)	11,305

We would refer to our comments on the Group's management system as regards the calculation system for these key performance indicators.

The key performance indicators listed above help to analyse developments and discrepancies from plans. For example, the personnel ratio is an important figure for analysing the development of the earnings situation. On the other hand, this largely depends on the "turnover" key performance indicator and any deterioration in its value may express both wrongly established production apparatus and missing the target figure for the "turnover" key performance indicator. However, this can be directly deduced. In this sense, these key indicators are important aids in analysing developments, but are not control parameters in themselves.

If we assume that the forecast for the key performance indicators will be met, we can expect that the key performance indicators cited here for analysing the earnings, financial and assets situation will develop positively and will again move towards the figures quoted in the medium-term forecast for 2018 - 2020.

**Non-financial performance indicators.** Management largely observes key figures in sales activities when it comes to non-financial performance indicators. There are two key values here: customer satisfaction and the number of customer contacts. They are not observed in a formalised manner, but are documented and assessed through regular reports about existing projects and sales activities with possible new customers and are presented to the responsible members of the Group Management Board and the Management Board and then assessed. Decisions about ongoing actions and procedures are made at an individual case level. Overall, we expect customer satisfaction will generally continue to improve.

# Report on the Risks, Opportunities and Outlook for the GK Software Group

The Management Board did not determine any notable changes to statements made in previous years as part of its risk and opportunity management system during the recent checks on existing opportunities and risks.

## Risks

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### Risk management system

The risk management system focuses on recognising risks. It attempts to pick up any possible risks that might pose a threat to the company's existence and those that might not. The risk management scheme does not register any positive opportunities.

Due to the nature of the risk management system, the focus is on early recognition and reporting of any emerging risks. For this purpose, deliberately informal discussions between the members of the Group Management Board and employees, who are responsible for the risk classes described below, are encouraged in order to eliminate any avoidance strategies in communications as far as possible. This is because the management team is aware that the early recognition of risks requires open communications between top managers and those responsible, but at the same time, people tend to avoid communicating unpleasant news and managing risks by monitoring key figures alone is not possible. Nevertheless, the risk management system is being further developed with a view to the expansion of economic key figures in particular, in order to facilitate the verification of informal information.

The most serious risk among the following ones is the risk of damage to the company's reputation if an individual project should go wrong. The risks that influence customer behaviour, such as the effects on demand because of a perception that the company has performed inadequately

or delays in investments because of new market conditions or regulatory measures, follow this in terms of their significance. There may well be connections between the two types of risks mentioned: changes in market conditions or regulatory requirements may increase the complexity of projects, making it more likely that problems will arise during them.

GK Software is trying to quantify the risks and their effect on the current financial year as far as possible according to the amount of damage and the probability level of whether they might occur. The risk classification scheme can be basically derived as part of the risk sequence described above. However, particularly regarding the risks that could lead to damage in terms of reputation, direct damage that is normally comparatively insignificant (damage of a few thousand euros) can cause indirect damage, which is difficult to quantify and manage (e.g. negative market sentiment towards GK Software) and this cannot be attributed to an individual risk that has occurred. The Group therefore devotes a great deal of attention to any project courses that have been affected in order to keep the risks manageable. This analysis fundamentally applies to all the business segments at GK Software in the same way.

The risks presented in the following section can be summarised as follows:

Risks firstly need to be summarised, which result from changes in the requirements of potential customers for the Group's products and services. These lead to extended sales cycles and therefore to a reduction in the number of realisable sales opportunities. At the same time, new requirements increase the complexity of projects and increase the risk that project plans might fail. These risks increase the risk of damage to the Group's reputation because the lack of sales opportunities, above all caused by extended sales cycles, raises the significance of individual projects for the overall reputation of GK Software. Another risk group is related



to external risks, such as macroeconomic developments, the development of regulatory framework conditions and shifting focuses in the customer and competitive environments. These risks cannot be controlled by the Group and can in part have the effect of enhancing the risks in the first group. A third group of risks relates to the development, usage and management of project capacities. The solution to the employment risk lies in increasing the flexibility of capacities; increased risks for project quality may result from this flexibility because it may only be possible to access this flexible capacity indirectly. Further risks are individual risks that are the result of major individual measures such as company acquisitions and their integration. Alongside these aforementioned operational risks, there are financial risks, but their impact on forecasts is not believed to be very significant at the moment.

We are summarising the individual case risks, which result from the acquisition of other companies, for example, in our own risk category, which is not subject to any general assessment sequence.

There is also a separate risk category related to the issue of tying employees to the company and gaining new ones.

GK Software deliberately takes entrepreneurial risks in order to benefit from the opportunities presented by the market in the appropriate manner. A risk management system has been introduced during the past few years to recognise, manage and minimise risks at an early stage. Among other things, the Management Board meets once a month to discuss possible identified risks and introduce countermeasures. In order to give all the business units the opportunity to outline their concerns, a Group Management Board was formed where the business units can continually report on their development and any risks and opportunities that arise. The Supervisory Board is informed of the results of these discussions. The documentation for the risk management system is being continually updated.

## Risks and overall picture of the risk situation

**Customer and market-related risks** One major risk that cannot be influenced by the Group involves the business developments of GK Software's customers due to the development of the general economy and consumer sentiment. The actual developments in 2018 and previous years and also the prospects for 2019 and thereafter suggest generally steady and constant growth prospects in the economic and political situation in many parts of the world. The direct and indirect effects of the crises, which have already broken out or are smouldering, on the specific markets where GK Software is active, are still unclear. They include the upcoming Brexit, the situation in Italy, the unresolved Ukraine/Russia conflict and the effects of latent terrorism risks in Germany and Europe, the ongoing development of the situation in the civil war regions in the Middle East and North Africa and the refugee crisis - all of them with the potential for mutual effects to increase. Then there are the political uncertainties about the political course in the USA in almost every respect. The actual ongoing developments in this situation and the associated uncertainties could exert an influence on economic developments in Europe, but it is impossible to specify any details at the moment.

It is true that the forecasts presented by associations and analysts tend to suggest that the retail sector will enjoy relatively steady developments in a very calm overall economic environment again, but the psychological factors of any contradictory news situations on the investment behaviour of customers of GK Software can only be guessed in an environment that is hard to assess - as was the case last year.

In the light of this general uncertainty, the Management Board continues to make every effort to provide itself with room to manoeuvre by keeping costs as flexible as possible and only deliberately incurring them if they are necessary.

One major argument for the successful sales of GK Software solutions and the long-standing customer relationships in many cases is the consistently successful completion of customer projects in the past. However, any failures in the project business could do long-term damage to this posi-

tive reputation and even lead to a reversal of this positive sentiment towards GK Software. This kind of situation could pose a threat to the company's long-term existence. As a result, the relevant project managers inform the responsible members of the Group Management Board about any possible risks during the course of ongoing projects in order to enable an appropriate and timely response to these kinds of risks. The main tool for preventing objective errors and undesirable developments has been the increasing use of general project approaches during the past few years, which are designed to ensure that all the major general conditions are established in conjunction with each customer and are then taken into account accordingly in the project work. However, as objective factors are not the only criteria in assessing the quality of project work, GK Software also makes use of subjective factors. GK Software views the degree of customer satisfaction and the number of new customer contacts as an important indicator for assessing risks of this kind. These two factors are therefore subject to particular monitoring and are regularly checked as part of the sales controlling processes.

On the basis of its customer structure and the structure of its target market, the Group business is repeatedly dominated by individual major projects with a relatively small number of customers, with the result that these business relations provide significant contributions to turnover and results within any financial year. The Management Board anticipates that this will continue to be the case in future too. If one business partner breaks off a project or drifts into payment difficulties, this can have financial consequences for GK Software too. However, this risk is restricted by regular payment plans or agreements for payments according to so-called project milestones.

Another new risk arises from the development of omni-channel approaches in the retail sector. This fundamentally new way of thinking and the opportunity of introducing it can extend the sales cycles in comparison to current periods, as customers view these developments as strategic and have to introduce an appropriate process to achieve the full potential. This can extend the times required for making decisions with the corresponding effects on sales opportunities for GK Software.

The ongoing consolidation of the retail sector market may lead to a reduction in the number of store networks in the long term, which could lead to an increase in buying power in the retail sector. The retail sector in Germany is generally dominated by strong competition in terms of prices. Retail companies therefore seek to pass on the resulting pressure on prices to their suppliers and contractual partners. This process is also felt in the field of investments in IT equipment and may have an effect on manufacturers of software for the retail sector. However, as GK Software makes available strategically significant solutions to retail groups, these risks are not classified as a threat to the company's existence.

The process of consolidation taking place on the customer side is continuing, similar to that encountered at rival companies. This concentration is marked by the acquisition of direct competitors of GK Software by major global manufacturers of hardware, which are therefore becoming universal providers for the retail sector. This combination could persuade possible customers to purchase all their services from these rival firms. Although the Management Board assumes that the market development seen in the past will continue and hardware and software will be purchased separately, it is impossible to fully exclude a reversal in this trend and therefore the adverse effects on the sales opportunities at GK Software.

The planned expansion is also associated with certain financial risks. These mainly arise from preliminary payments for acquiring the customer for the Group. This risk is increased by the extensions in sales cycles already mentioned above. The increase in sales expenditure associated with longer sales cycles plays a role in part. However, the need to maintain the ability to deliver products when agreements are signed is of special importance. This can lead to idle capacity costs of a significant magnitude. In addition to these general risks emerging from market operations, internal organisational risks occur based on the internationalisation aspect and they concern protecting the parent company from possible risks arising from actions by the domestic and international subsidiaries or recognising those risks that pose a threat to the existence of the subsidiaries at an early stage and introducing suitable countermeas-

ures. The Group is continuing to develop its controlling operations for holdings for this purpose.

The project business also needs to be increasingly scaled as part of any further expansion and this takes place by involving partners. There are, however, other risks here, in particular quality risks, due to a lower level of control over partners. GK Software has therefore set up a partner programme to certify integration partners and so-called project coaches. This is designed to guarantee the quality of project operations and the firm will continue to develop this work.

Customer projects in Germany and abroad, which are increasingly becoming more complex, as described in the analysis of the market and competitive environment, also contain risks for the ongoing development of GK Software and could lead to higher provisions for warranties and fair dealing gestures, not only for individual projects, but for all of them. The Management Board is, however, confident that it has steered the development work for software in a direction that generally guarantees the quality standards achieved in the past. This quality risk in individual projects is managed by regular reporting by the responsible project managers to the responsible Group Management Board Members. A summary report of recognised risks is communicated to the Management Board at the standard monthly Board meetings.

GK Software cannot exclude the possibility that it will expand its product and sales base by the deliberate acquisition of companies with a view to expanding its business activities during the next few years. The Group will exercise the maximum possible degree of prudence when preparing for and checking acquisitions. However, it is impossible to fully exclude the risk that an acquisition may have negative effects on the results at GK Software.

To ensure further growth, the Company needs to attract additional, highly qualified employees. At the same time, it is impossible to rule out the possibility that members of staff in key positions will leave the Company. For this reason, it will be an ongoing challenge for the Company to retain current staff in the firm and attract new, motivated specialists at the same time. The Company is mak-

ing efforts to be an interesting employer for its existing employees and become one in the jobs market by providing a combination of interesting tasks, international fields of operation and innovative products. The flotation and the Company's reputation as an innovative IT corporation have made the Company considerably more attractive in the jobs market. The aim is to further increase the existing attractiveness by completing the introduction of share option schemes for managers and senior employees in the Company. In addition to competence management, which aims to further increase the skills and abilities of employees in line with their tasks, we have initiated other measures as part of our "Active Balance" programme. This covers a variety of joint activities by employees including minor services designed to make everyday life easier; this aims to increase the attractiveness of the Company as an employer. We wish to reinforce this development even more by planning and organising our corporate campus at the Company's headquarters in Schönebeck.

Overall, GK Software analyses these risks as those that could have considerable effects on the firm's financial and earnings situation in the long term. However, no indicators or only weak ones, which could point to these risks occurring, can be seen at the moment.

In the light of the fact that the Group manages its capital with the aim of guaranteeing that it will be able to service its loans and debts at all times and have adequate liquidity available to secure investment projects and therefore places the highest priority on maintaining capital, it is important to state the following risks to business developments within the Group too.

The **financial risks** not only involve credit default risks and liquidity risks, but also market risks. We understand a credit default risk to be the risk of a loss for the Group if one contractual party does not meet its contractual obligations. In principle, the Group only maintains business relations with those contractual parties where any deviation from the contractual obligations does not appear to be probable.

Trade receivables exist with the Group's customers. The maximum credit risk corresponds to the carrying amount of the trade accounts receivable.

All the Group's customers are companies with an outstanding position in their respective markets. The probability of any default on account of the impossibility of meeting the obligations agreed with the Group is therefore slight. This situation is monitored closely by observing the customer's payment behaviour, the market environment and drawing on external sources such as reports from the relevant specialist press. If this monitoring process gives rise to an assumption that the general economic situation for individual customers has changed, further measures are adopted in agreement with the management team in order to restrict any possible losses. Value adjustments may also occur if customers believe that work has not been completed or is inadequate. In these cases, the Group basically carries out individual value adjustments for precautionary reasons, if there is some expectation that settlements on a goodwill basis – without any recognition of legal grounds – might be made. Interest revenues have not been entered from these depreciated financial assets.

The default risk with regard to cash and cash equivalents is slight, as the banks holding the accounts are all members of the German deposit protection scheme or they have an outstanding reputation with a corresponding credit rating.

The Group is also exposed to credit risks that are the result of financial guarantees granted to banks. The maximum default risk for the Group in this regard corresponds to the maximum sum, which the Group would have to pay if a claim was made against a guarantee.

The Group controls the liquidity risks by having appropriate cash and cash equivalents, credit lines and similar credit facilities available and by monitoring the deviations between forecasts and actual cash flows. The maturity dates of financial obligations are monitored, as is the Group's fundamental ability to generate adequate finances from its operating business in order to be able to meet these obligations at any time. The Group typically accepts so-called "covenants" in addition to the general loan conditions when funding projects with loans that are provided by banks and they relate to general financial performance figures or other constraints. Failure to meet these additional conditions normally entitles the bank concerned to

make the loans in question due for payment in full immediately, regardless of whether the main loan contract obligations are being met and probably can continue to be met or not. The Group handles this risk by monitoring the covenants and communicating with the banks concerned in an appropriate manner.

Based on the current structure of liabilities and the actual liquidity situation, the Management Board has not identified any liquidity risks.

Overall, GK Software assesses these financial risks as operational risks, which may have a significant effect on the firm's financial and earnings situation. However, no indicators or only weak ones, which could point to these risks occurring, can be seen at the moment.

The situation in 2018 only changed gradually in comparison with the risk situation in 2017. In particular, the major operational risks have not increased to a great degree. It is true that the complexity of projects is increasing, but the Group is also learning how to better cope with these risks. In the view of the Management Board, there were no risks that could prove to be a threat to the existence of GK Software at the end of 2018.

### Risk reporting in relation to the use of financial instruments

**Financial market risks** The Group is exposed to risks associated with exchange rates and interest rates as a result of its business activities. The exchange rate risks result from the business sites maintained in different currency areas and increasingly from customer relations that go beyond the eurozone. The interest risks are the result of selected types of financing to enhance the Group's financial leeway.

In order to guard against these market risks, the Group is making increasing use of derivative financial tools like interest-capping arrangements or currency hedging tools to provide safeguards against rising interest on debit balances and a possible devaluation of the euro. This hedging business is always closely related to the Company's actual fundamental business and is exclusively

used to maintain, as far as possible, the fundamentals for calculations used for this business.

**Exchange rate risks** arise from the Group's exposure to Czech crowns, Swiss francs, Russian roubles, South African rand, US dollars as well as Canadian dollars and Ukrainian hryvnia. The Group therefore accepts payment obligations arising from work, renting and leasing contracts in all these currencies. GK Software with its companies therefore not only issued invoices for sales and services in euros on the balance sheet reporting date, but also in Swiss francs, US dollars, Canadian dollars and South African rand. In order to be able to handle the Group's currency risks in a standard manner, GK Software SE tries to combine the currency risks internally. The Group carried out a sensitivity analysis to determine its risk of exposure to foreign currencies.

We normally handle business transactions in the operational currency of the Group firm concerned. Operational business transactions are not handled in the operational currency in individual cases so that there is a currency risk for monetary financial instruments. There were accounts receivable amounting to CAD 1,140 K on 31 December 2018 (previous year: CAD 799 K). Currency rate fluctuations in conjunction with our original monetary financial instruments do not have any major effects on our profits. The Group's exchange rate risk sensitivity mainly increased due to the change in its exposure to US dollars in mathematical terms. However, the following description does not include the interest and currency swap taken out to safeguard the financial risks. After taking this effect into account, the currency risk did not increase significantly in comparison with the previous year.

In the view of the Management Board, the sensitivity analysis, however, only reflects one part of the exchange rate risk, as the risk at the end of the reporting period only reflects the risk during the year to a certain extent. Risks exist in possible changes to exchange rates for services, which the Group companies settle in local currencies every month. Services with a total value of EUR 10.50 million were provided by Group companies in 2018, which were either paid for in a currency other than the euro or not billed in the currency in which the services were provided for the third par-

ties. These service invoices were settled in Czech crowns, Russian roubles, Ukrainian hryvnia, Swiss francs or US dollars.

An interest and currency swap was taken out to safeguard the cash flow arising from the acquisition of the Retail & Programming division of DBS Inc. in the USA in order to repay the investment loan at IKB. The interest and currency swap started on 31 December 2015 and ends on 31 March 2021. Quarterly repayments amounting to USD 529 K and approx. USD 100 K in interest have had to be paid to IKB every quarter from the first half of 2016 onwards. Bank assessments were used to determine the fair value on the balance sheet reporting date. The market value of this interest and currency swap covering a nominal volume of EUR 5,000 K (USD 5,297 K) amounted to a total figure of EUR 393 K on the balance sheet reporting date - derived from the mid-market price. This amount was entered on the balance sheet under "Other liabilities". No valuation unit was formed.

The Group is exposed to **interest risks**, as it takes out financial resources with fixed and variable interest rates. The risk is managed by maintaining an appropriate ratio of fixed and variable interest rates on funds. This takes place by using interest rate caps. The interest risks are the result of interest payments agreed within the loan contracts. There is no link with the exchange rate risk here, because all the loans are nominated in euros. Interest payments amounting to EUR 1,562 K were made during the reporting year and affected the income statement. The interest rate on the loan with the DZ Bank is fixed for the complete term, so that no interest risks arise from this contract. A fixed interest rate also exists for the complete term of the loan taken out with IKB Industriebank AG to fund the acquisition of the Retail & Programming division of DBS Inc. The interest rate is set quarterly at a rate of 1.9 percentage points above the 3-month EURIBOR rate for the investment loan taken out with the Commerzbank of EUR 450 K (value on reporting date: EUR 191 K). The interest risk has been restricted by an interest rate cap of 1.0 percent p.a. The loan of EUR 2,975 K from the Commerzbank in Plauen (value on the reporting date: EUR 3,000 K), which was taken out in October 2018, has an interest rate set at a figure of 1.2 percentage points per annum. The loan has a term until 30 September 2028. There are no risks

related to interest on deposits because of the current low interest rates for deposits. Despite this, the company is keeping a close eye on the development of interest on deposits. The investment strategy can be quickly adapted because only short-term investments are used.

There are no other risk categories, because of the type of financial instruments used. There is a description of the exchange rate and interest risk in section 8.1 of the notes on the consolidated accounts.

In the view of the Management Board, there were no risks, which could prove to be a threat to the existence of GK Software and its Group at the end of 2018 or on the publication date of 26 April 2019.

## Opportunities

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There are growth opportunities for the Group both in Germany and abroad; this situation has not changed from previous years. The issues targeted by the products of GK Software are key strategic IT projects that are high on the list of priorities at many retail companies. In order to be successful in the international market, the Group is well placed with references, not only from the German retail sector, but from having a technically well-developed product. GK Software is already very well represented internationally with more than 297,000 installations in over 55,000 stores in almost 60 different countries. GK Software also has several major partners with excellent networks in the retail sector. The partnership with SAP in particular should make it easier to gain access to new customers in international markets like the USA and Africa. The Group can make use of the experience that it has gained with its German and international customers, as the solutions have already been successfully introduced in almost 60 countries and can therefore be quickly transferred to other foreign customers.

The growth prospects in Germany have not yet been exhausted by a long way either. The focus of the Group will primarily be on new areas in future. Fairly small and medium-sized chain stores, which have not been a prime target in the past, provide

further huge potential, particularly if standardised solutions are sold.

One of the major issues for retailers during the next few years will be to integrate their in-store business with other channels like web stores or mobile apps. Then there are the latest trends like home delivery, mobile payments or social networks, which need to be integrated on one platform. Other long-term issues like integrated and automated processes for optimising stocks, scheduling and efficient customer management systems will continue to play an important role in reducing costs and increasing customer loyalty. As a result, the retail trade will almost certainly invest in solutions that integrate all the business processes. Without standardisation and the simplification of processes, retail companies' margins will come under even greater pressure. Homogenised check-out systems and centralised data flows will therefore be very important for retailers in future. New methods and processes like using procedures with artificial intelligence will generally lead to new approaches and more intensive use of information technology. GK Software can benefit from this investment behaviour by the retail sector.

The consolidation process in the software industry with sector solutions for the retail trade has already started and is continuing. GK Software plans to play an active role in this process with its attractive range of products and solid financial basis.

### Internal monitoring and risk management systems with regard to the Group's accounting process

The instruments related to accounting for the internal checking system and risk management pursue the goals of completing accounting tasks according to the statutory provisions and recognising potential risks in the economic development of the Group in good time. The focus not only particularly relates to the internal checking system for accounting, but also on complying with the relevant stipulations in accounting law.

The internal checking system is being continually developed by the Management Board and monitored by the Supervisory Board. The Manage-

ment Board dictates the design and scope of the requirements placed on the internal checking system. It must be noted that any internal checking system related to accounting procedures - regardless of its scope and type - cannot provide any absolute certainty, but has to be designed in such a way that any major incorrect statements about the Company's or Group's earnings, asset and financial situation can be prevented.

This task is the responsibility of the finance department at GK Software, which is constantly developing the existing tools, stringently taking into account the development of the Company's business operations and the legal and accounting standards. The tools cover general instructions and individual rules, which are designed to guarantee that accounting processes are handled properly. The members of staff in the finance department are being continually trained on how to comply with internal rules and legal stipulations.

The constant increase in the speed of amendments to European international accounting laws and additions - which often contradict and compete with national law and standards - is proving to be an additional burden on any presentation of accounts and involves a number of risks with a view to conforming to standards; this goes far beyond what was normal in the past. In order to keep the expenditure on this level of conformity within a reasonable framework in proportion to the information benefits for those who will actually read the balance sheet, the Company is not only trying to train employees, as described, who are familiar with accounting practices, but also obtain the necessary information about adjustments to accounting law in good time by consulting external service providers and include them in the accounting processes in the appropriate manner.

Compliance with instructions and individual rules is supported by standard notification processes and IT-supported reporting procedures and the ongoing further integration of accounting processes within standardised IT systems. Defined, internal checks are embedded in the accounting process and they include measures like manual balancing, separating functions and the principle that four eyes are better than two.

The Group accounts and the accounts of the individual companies are organised and handled in-house, as are the accounts of GK Software and all the individual companies. GK Software SE completes the accounts for the German subsidiaries or branches of subsidiaries as a service, with the exception of prudsys AG, AWEK GmbH and AWEK Microdata GmbH. The independent accounting procedures for the German companies mentioned here are (or are being) closely integrated in the central accounting structures at GK Software SE. The accounting procedures for the foreign Group companies are handled locally. The increasing importance of the subsidiaries - particularly the companies overseas - made it necessary to set up a holding management department in the past and this is designed to guarantee, by means of information obligations placed on the holding companies, that the parent company receives all the necessary information about the earnings, asset and financial situation promptly, but also about the companies' major non-financial indicators. The holding management department is being continually developed.

The accounts for GK Software SE are handled with IT support and displayed on Microsoft Navision. The technical equipment and the provision of personnel for the department have been selected in such a way that all the tasks associated with a company of this size can be handled appropriately.

## Outlook

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In general terms, the following points need to be noted: [The Management Board at GK Software is continuing to stand by its medium-term forecast published in the 2017 annual accounts for the 2020 financial year; according to this, turnover should achieve fifty percent growth by 2020 \(compared to 2017\) and the earnings rate in the core segment should reach 15 percent again \(EBIT margin on operating performance\).](#)

This forecast is subject to the proviso that the use of [investment projects](#), which could continue to significantly improve the position of the Group in its target market, can be negatively affected by expenditure for tapping into [new markets](#), which continues to be a high priority, or the [postponement](#) of customer projects with fairly large volumes or a general [deterioration](#) of the overall economic situation.

Based on the information available so far, the Management Board is expecting the Group's financial and earnings situation to improve again as a result of the ongoing expansion of business in 2019 and it does not expect any developments in its financial situation, which could pose a threat to its existence. This estimate is naturally subject to the impact of developments, which the Company cannot influence and which might have a significant effect on this forecast, whether they are expected or come as a surprise.

We continue to believe that our strategy to increase the extent of our geographical range by tapping into and further developing other geographical markets represents the right course for our business. We are continuing to pursue an important goal of covering operational expenditure completely or almost through revenues from project services, software maintenance and retail services in order to uncouple the revenue situation from fluctuations experienced in the past.

If we follow the estimates outlined at the beginning about the development of the economy in general and the retail sector, it is probable that GK/Retail's turnover will continue to grow considerably again in 2019. On our way to the profitability goal that we are seeking for the year 2020, we are assuming

that we will be able to take an intermediate step and significantly exceed the figures for the past year. As in previous years, the expenditure for tapping into new geographical markets could impair this development. Even short-term delays in existing customer projects can have a considerable impact on the Company's earnings situation. It is precisely the uncertainty about achieving individual sales prospects, which, in conjunction with the size of the Company, creates a forecast for the EBIT that is fraught with considerable uncertainties, as individual, large-scale sales opportunities can involve a significant share of turnover revenues with particularly high profit margins.

As regards the non-financial performance indicators in the area of customer satisfaction compared to the reference year of our medium-term forecast, 2017, we are expecting a further steady improvement during the next few years; this will be based on the ongoing development of solutions and gaining local employees at the project-customer interfaces. However, our experience shows that expansion into new geographical markets may cause friction based on cultural differences, which could temporarily prevent us from reaching this target. The number of customer contacts will probably increase due to our deeper penetration of the new regions reached during the last two years and our entry into other markets. We are also expecting that the deeper knowledge of markets gained by our organisation will help us be better qualified for the opportunities that arise and enable us to serve them adequately.

We would explicitly repeat here once again that these estimates are only realistic if no external political or economic shock situations take place, particularly in the light of the growing number of political or economic uncertainty factors around the globe. These kinds of problems, which affect the whole economy, could lead to a curb on the readiness of the retail sector to make investments around the world or in individual geopolitical regions; and this could also have a negative effect on the turnover and earnings potential at GK Software.

The absolute priority at the Company will be further growth in future too. The Supervisory Board and the Management Board of GK Software therefore propose to only distribute the available funds



in the form of dividends if extraordinarily positive business developments with positive figures occur.

## Other Information

according to Section 315a of the German Commercial Code

### Principles of the remuneration system at GK Software SE

The members of the Management Board at GK Software SE not only receive a fixed salary, but also a component that is dependent on results and this is linked to qualitative targets and mainly relates to the development of the firm. These qualitative targets are set by the Supervisory Board for the members of the Management Board every year.

The Management Board is granted benefits in kind in addition to fixed remuneration. This includes the provision of company cars, which are also available for private use. In addition to this, the Management Board members are reimbursed for the costs of maintaining residences at the different corporate business locations. The members of the Management Board are also provided with pension packages according to their level of seniority.

Furthermore, pension commitments have been made to both members of the Management Board and to two former members of the Management Board. The members of the Management Board are entitled to participate in the Company's share option programme according to the general rules stipulated for these programmes. The allocation of share options to members of the Management Board is made by the Supervisory Board and depends on the degree to which the members of the Management Board have met their business targets.

8,000 share options in all were granted to the members of the Management Board during 2018. Overall, the members of the Management Board were able to hold more than 39,000 options on the balance sheet reporting date. The following applies to the whole Management Board if the targets that are set are fully met: their total earnings are divided up into a 65 percent share for the fixed part and a 35 percent share for variable earnings. Fixed earnings of 69 percent and 31 percent of

earnings determined in a variable manner were paid out or offered as bonuses during the course of 2018. It is possible to grant severance payments to members of the Management Board who leave the Company if they have performed any extraordinary work within the scope of the German Corporate Governance Code. The Supervisory Board determines whether any benefits are granted or not.

The members of the Supervisory Board receive a fixed annual payment according to the articles of association. There is no provision for any performance-related remuneration.

### Details according to Section 315a of the German Commercial Code

5. **Capital ratios.** The share capital at GK Software SE amounted to a nominal figure of EUR 1,926,475.00 on 31 December 2018 and was divided up into 1,926,475 no-par ordinary shares with a calculated share in the share capital of EUR 1.00 each. Each no-par value share grants one vote, in accordance with Section 4 of the articles of association. The number of shares in circulation during the course of 2018 increased by a total figure of 23,275 shares through the issue of employee shares from the contingent capital.
6. **Shareholders' rights and obligations.** The same rights and obligations are associated with each share. Shareholders are entitled to asset and administrative rights. The asset rights include the right to share in the profits and the buying option to purchase shares in any increase in share capital. The shareholders' participation in the Company's profits is also defined by their share in the equity capital. Their administrative rights include the right to take part in the company's annual shareholders' meeting, speak there and ask questions or make applications and exercise voting rights.

**7. Equity shareholdings.** The following direct or indirect shareholdings that exceed 10 percent were known on the balance sheet date:

- a. Mr Rainer Gläss directly or indirectly has 502,292 shares (26.1 percent), of which 449,500 shares are indirectly held by Gläß Vermögensverwaltung GmbH & Co KG.
- b. Mr Stephan Kronmüller directly or indirectly holds 531,200 shares (27.6 percent), of which 487,200 shares are indirectly held by GK Software Holding GmbH.
- c. SAP SE, Walldorf, Germany, informed us in accordance with Section 25a of the German Securities Act that its voting rights share as a result of (financial/other) instruments, which is subject to reporting requirements, amounted to 60.5 percent on 10 December 2013 (corresponding to 1,043,492 voting rights), based on the overall number of voting rights at GK Software SE, i.e. 1,890,000, at that time.

**8. Appointments to the Management Board and changes to the articles of association.**

Appointing and dismissing members of the Management Board are issues that are governed by Sections 84 and 85 of the German Companies Act. Members of the Management Board are appointed by the Supervisory Board for a maximum period of five years and an extension of their time in office is permissible for a maximum period of five years each time. According to the articles of association, the number of members on the Management Board is determined by the Supervisory Board, but the Management Board must comprise at least two persons. The Management Board at GK Software SE currently has two members. The articles of association can only be amended by the annual shareholders' meeting according to the rules of the German Companies Act. The Supervisory Board may decide on the wording of the articles of association – i.e. simply make linguistic amendments to the articles of association – according to Section 10 Para. 8 of the articles of association. Any decisions taken at the annual shareholders' meeting require the simple majority of votes cast according to Section 15 Paragraph 2

of the articles of association, if the law does not prescribe anything different.

**9. The Management Board's powers to issue and repurchase shares.**

Contingent capital I. According to Section 4a Paragraphs 1 and 2 of the articles of association, the Management Board was authorised by the annual shareholders' meeting on 15 May 2008, with the agreement of the Supervisory Board, to grant one or several subscription rights to as many as 37,000 individual shares to members of the Management Board, managers of companies, in which GK Software SE has a direct or indirect majority holding ("associated firms"), and managers of the Company and its associated firms as part of the share option scheme until 14 May 2013. As a result of the decision taken by the annual shareholders' meeting on 21 June 2018, the contingent capital I was cancelled, if it still existed.

According to Section 4a Paragraph 4 of the articles of association, the equity capital was conditionally increased by a further EUR 50,000 (contingent capital II), divided into 50,000 individual share certificates. The increase in equity capital is only carried out if holders of share options, which were issued in the period up to 27 June 2017 on the basis of the resolution passed at the annual shareholders' meeting on 28 June 2012, exercise their subscription rights to Company shares and the Company issues new shares to service them.

Members of the Management Board, managers of companies, in which GK Software has an indirect or direct majority holding ("associated firms"), and managers of the Company and its associated firms are entitled to participate in the share option scheme.

The issue of subscription rights is the responsibility of the Management Board, once approval has been obtained from the Supervisory Board. Each of the options gives the holder the right to exchange the option for a new, no-par value Company share made out to the holder. The shares would be fully entitled to attract profits in the financial year in which they are created. A share option scheme to make use of contingent capital II came into force during the course of the 2013 financial year. 50,000 options in all were offered to members of the

Company and firms associated with it.

Another 10,675 share options were offered to employees at the Company during the 2013 financial year. They could be exercised for the first time on 27 August 2017, as the exercise conditions had been met. 7,675 options of these options were exercised by the authorised persons by 31 January 2018.

Another 14,000 share options were offered to employees at the Company during the 2013 financial year. They could be exercised for the first time on 11 November 2017, as the exercise conditions had been met. 2,500 options of these options were exercised by the authorised persons by 31 January 2018. A further 11,500 options had been exercised by 30 May 2018.

3,500 share options were offered to employees at the Company on 28 August 2014. Of these, a total of 1,500 options were forfeited by the end of the 2016 financial year. The remaining 2,000 share options matured for the first time on 28 August 2018. 1,600 shares of these shares were issued on 31 October 2018.

A further 21,825 share options were offered to employees from this option scheme on 1 December 2014 during the 2014 financial year. They can be exercised for the first time on 1 December 2018, if the exercise conditions are met. 4,000 of these options were forfeited by the end of the 2016 financial year. No shares from these options were issued in 2018.

A further 8,500 options were issued on 20 June 2017. The full number is still outstanding and they may only be exercised for the first time on 19 June 2021, if the conditions for doing so have been met. The exercise price is EUR 92.10.

The decision taken at the annual shareholders' meeting on 29 June 2015 authorised the Management Board to issue up to 75,000 share options with subscription rights to GK Software SE shares with a term of up to five years until 27 June 2020, provided that each share option grants the right to subscribe to one GK Software SE share (contingent capital V); this may only take place with the agreement of the Supervisory Board. The share options are exclusively for subscription by members of the GK Software SE Management Board, selected managers and other senior employees at GK Software SE and for subscription by mem-

bers of the management team and selected managers and other leading employees in companies, which are independently associated firms in a relationship with GK Software SE in the sense of Sections 15 and 17 of the German Companies Act.

A share option scheme from [contingent capital III](#) was drawn up for the first time in 2015.

5,000 share options were issued to Company employees on 1 November 2015. The share options are subject to a four-year commitment period, so that they cannot be exercised for the first time until 1 November 2019. None of these options were granted to members of the Management Board. 2,500 of these options were forfeited on 31 December 2015.

25,625 options were also issued on 30 November 2015. They are also subject to a four-year commitment period and can therefore not be exercised until 30 November 2019, if the conditions for exercising them have been met. 5,000 of these share options were granted to members of the Management Board. 1,575 of these options were forfeited by the end of the 2016 financial year.

31,000 share options were issued again on 29 August 2016. They are also subject to a four-year commitment period and can therefore not be exercised until 29 August 2020, if the conditions for exercising them have been met.

10,000 of these share options were granted to members of the Management Board.

A further 16,000 share options were issued on 4 December 2017. They cannot be exercised for the first time until 3 December 2021. The exercise price is EUR 116.69. 10,000 of these options were issued to the members of the Management Board.

A decision taken at the annual shareholders' meeting on 16 June 2016 authorised the Management Board to issue on one or several occasions [option and/or convertible bonds, profit participation certificates or participating bonds](#) made out to the holder or name or a combination of these financial instruments and exclude the subscription rights to these instruments or their combination until 15 June 2021, provided that the Supervisory Board agrees. To underlie this ruling, a decision was also made to create further [contingent capital IV](#) of up to EUR 250,000.00, subdivided into 250,000 non-par shares made out to the holder for this pur-

pose. The Company issued a convertible bond with a term until October 2022 and a total nominal value of EUR 15 million on 19 October 2017, using part of this contingent capital. This convertible bond can be converted into 96,775 new or existing GK Software ordinary shares made out to the holder. They have a term of 5 years and were issued with 100% of the nominal amount and are subject to an interest coupon of 3.00% p.a. The initial bond price was EUR 155.00.

The decision taken at the annual shareholders' meeting on 21 June 2018 authorised the Management Board to issue up to 83,500 share options with subscription rights to GK Software SE shares with a term of up to five years until 20 June 2023, provided that each share option grants the right to subscribe to one GK Software SE share ([contingent capital V](#)); this may only take place with the agreement of the Supervisory Board. As many as 30,000 shares may be issued to members of the Management Board and as many as 53,500 share options to members of management teams in Group firms, selected managers and other leading employees at GK Software SE as well as selected managers and other leading employees at Group firms. The issue should not take place in less than three annual tranches provide that no tranche involves more than 50% of the complete volume. The waiting period is at least four years. 37,000 options were issued from contingent capital V on 26 November 2018. They will not become mature for subscription until the maturity conditions have been met - i.e. on 26 November 2022 for the first time.

**10. Authorised capital.** The Management Board is authorised to increase the Company's nominal capital on one or more occasions by up to EUR 945,000 by issuing up to 945,000 ordinary shares in accordance with Section 4b of the articles of association until 27 August 2019. In principle, the subscription right must be granted to the shareholders; however, the Management Board has the right to exclude the subscription right to one or several increases in capital in the form of authorised capital in order to balance out fractional amounts, or when increasing capital in return for assets in kind, particularly when acquir-

ing companies, if the increase in capital takes place in exchange for cash deposits and the issue price does not fall far below the stock exchange price for shares that have already been issued and the ratio of new shares issued does not exceed 10 percent of the share capital, excluding the subscription right, according to Section 186 Paragraph 3 Sentence 4 of the German Companies Act. These new shares may also be offered or transferred to people employed by the Company or by an associated firm in the sense of Section 15 of the German Companies Act.

**11. Sharebuy-backscheme.** The 2018 annual shareholders' meeting on 21 June 2018 authorised the Management Board to acquire the Company's own shares up to a total of 10 percent of the Company's equity capital of EUR 1,919,875.00 existing at the time that the decision was made by 20 June 2023, provided that the Supervisory Board agrees to this. Together with the other shares owned by the Company or attributed to it according to Sections 71a ff of the German Companies Act, the acquired shares may not exceed 10 percent of the nominal capital at any time. The authorisation may not be exercised for the purpose of trading with the Company's shares. The Management Board may use the shares acquired as part of the authorisation for any legal purposes, provided that the Supervisory Board approves.

**12. Change of control clauses.** The "Software LICENSE AND RESELLER AGREEMENT" between SAP SE and GK Software SE may be terminated by SAP SE for an important reason, if the majority of shares in GK Software are sold to somebody who is a close rival of SAP SE.

**13. Compensation agreements.** No compensation agreements have been agreed if a takeover offer is made.

**14. Shares with special rights.** Holders of shares with special rights, which grant control authorisation, do not exist, as this class of share does not exist at GK Software SE. There is no control of voting rights for shares held by employees either, where the employees do not directly exercise the control rights.

Declaration by company management according to Section 315d in conjunction with Section 289f of the German Commercial Code

#### Explanation according to Section 161 of the German Companies Act

The annual declaration on the German Corporate Governance Code according to Section 161 of the German Companies Act has been submitted by the Management Board and the Supervisory Board and has been published on the Company's home page at

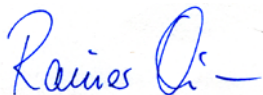
<https://investor.gk-software.com/de/corporate-governance/entsprechenserklaerung>

relevant.

#### specifications about management practices

The Company does not have any relevant corporate management practices, which go beyond the statutory requirements or the requirements complying with the German Corporate Governance Code.

The Management Board



Rainer Glaess  
Chief Executive Officer



André Hergert  
Chief Financial Officer

#### Description of the way that the Management Board and the Supervisory Board work

A regular meeting of the Supervisory Board takes place once a quarter. The members of the Supervisory Board, however, remain in close contact beyond these meetings and obtain information about the Company's development or events, which could affect the Company's development. Informal meetings between members of the Supervisory Board and members of the Management Board also take place alongside the official, mandatory information provided to the Supervisory Board. The Management Board completes the Company's business in a cooperative manner, but different business areas are assigned to the members of the Management Board. The members of the Management Board report on developments in their business areas at meetings of the Management Board, which normally take place every month. In addition to these meetings, the members of the Management Board remain in mutual contact at all times.

No committees have been formed on either body because of their size. The bodies speak with one mind on all issues.







C

Consolidated  
Financial Report



# Consolidated Balance Sheet

on 31 December 2018

## Assets

T.09	EUR K	Notes No.	31.12.2018	31.12.2017
	Property, plant and equipment	2.; 3.1.	22,746	14,183
	Intangible assets	2.; 3.2.	30,019	25,359
	Financial assets	2.	34	33
	Active deferred taxes	2.; 3.14.	4,034	5,149
	<b>Total non-current assets</b>		<b>56,833</b>	<b>44,724</b>
	Goods	2.; 3.3.	387	798
	Auxiliary materials and supplies	2.; 3.3.	99	192
	Initial payments made	3.3.	35	54
	Trade accounts receivable	2.; 3.4.	26,030	17,711
	Trade accounts receivable from ongoing work	2.; 3.5.	10,289	5,129
	Income tax claims	2.; 3.7.	1,045	450
	Other accounts receivable and assets	2.; 3.7.	4,674	7,062
	Cash and cash equivalents	2.; 3.8.	11,790	30,478
	<b>Total current assets</b>		<b>54,349</b>	<b>61,874</b>
	<b>Balance sheet total</b>		<b>111,182</b>	<b>106,598</b>

## Liabilities

T.10	EUR K	Notes No.	31.12.2018	31.12.2017
	Subscribed capital	3.9.	1,926	1,903
	Capital reserves	2.; 3.9.	21,429	20,488
	Retained earnings	3.9.	31	31
	Other reserves (OCI from introducing IAS 19 2011, IAS 21)	3.9.	(881)	(704)
	Profit brought forward		15,758	11,998
	Shortfall for period minorities interests		924	3,882
	Equity attributable to GK Software SE stockholders		39,187	37,598
	Equity attributable to noncontrolling interest		1,069	1,071
	<b>Total equity</b>		<b>40,256</b>	<b>38,669</b>
	Provisions for pensions	2.; 3.10.	1,558	1,880
	Non-current bank liabilities	2.; 3.11.	9,141	8,867
	Convertible bond	3.12.	13,418	13,149
	Deferred government grants	2.; 3.13.	861	910
	Deferred tax liabilities	2.; 3.14.	3,370	4,851
	<b>Total non-current liabilities</b>		<b>28,348</b>	<b>29,657</b>
	Current provisions	2.; 3.15.	1,231	1,346
	Current bank liabilities	2.; 3.11.	12,260	10,307
	Liabilities from trade payables	2.; 3.16.	2,365	1,835
	Initial payments received	2.; 3.17.	1,509	858
	Income tax liabilities	2.; 3.18.	283	488
	Other current liabilities	2.; 3.19.	24,930	23,438
	<b>Total current liabilities</b>		<b>42,578</b>	<b>38,272</b>
	<b>Balance sheet total</b>		<b>111,182</b>	<b>106,598</b>

# Statement of Comprehensive Income

for the financial year from 1 January to 31 December 2018

## Statement of Comprehensive Income

T.11	EUR K	Notes No.	FY 2018	FY 2017
<b>Ongoing business operations</b>				
	Turnover revenues	2.; 4.1.	106,151	90,452
	Other operating revenues	4.2.	3,617	5,197
	<b>Turnover and other revenues</b>		<b>109,768</b>	<b>95,649</b>
	Materials expenditure	4.3.	(7,733)	(8,530)
	Personnel expenditure	4.4.	(68,791)	(57,809)
	Depreciation and amortisation	3.1.; 3.2.; 4.5.	(5,237)	(3,780)
	Other operating expenditure	4.6.	(26,411)	(20,537)
	<b>Total operating expenses</b>		<b>(108,172)</b>	<b>(90,656)</b>
	<b>Operating results</b>		<b>1,596</b>	<b>4,993</b>
	Financial income	4.7.	138	133
	Financial expenditure	4.7.	(1,563)	(786)
	<b>Financial results</b>		<b>(1,425)</b>	<b>(653)</b>
	<b>Income tax results</b>		<b>171</b>	<b>4,340</b>
	Income taxes	2.; 4.8.	752	(456)
	<b>Consolidated surplus/ shortfall for the period</b>		<b>923</b>	<b>3,884</b>
	of which attributable to noncontrolling interest		(2)	2
	of which attributable to GK Software SE stockholders		925	3,882
<b>Other results after income taxes</b>				
<b>Items, which will be reclassified in the consolidated profit and loss statement in future under certain conditions</b>				
	Differences in exchange rates from recalculating foreign business operations	1.5.	(124)	87
<b>Items, which will not be reclassified in the consolidated profit and loss statement in future</b>				
	Actuarial gains/ losses from defined benefit pension plans	3.10.	(53)	61
	<b>Overall results</b>		<b>746</b>	<b>4,032</b>
	of which attributable to noncontrolling interest		(2)	2
	of which attributable to GK Software SE stockholders		748	4,030
	<b>Earnings per share (EUR/ share) from the consolidated surplus/ shortfall - undiluted</b>	4.9.	<b>0.48</b>	<b>2.05</b>
	<b>Earnings per share (EUR/ share) from the consolidated surplus/ shortfall - diluted</b>	4.9.	<b>0.48</b>	<b>2.00</b>

# Consolidated Statement of Changes in Equity

for the financial year from 1 January to 31 December 2018

## Consolidated statement of changes in equity

T.12

EUR K	Subscribed capital	Capital reserves	Retained earnings	Other reserves	Earnings attributable to GK Software SE stockholders	Equity attributable to GK Software SE stockholders	Equity attributable to non- controlling interest	Total
<b>Figures on 31 December 2016</b>	<b>1,890</b>	<b>18,588</b>	<b>31</b>	<b>(853)</b>	<b>11,998</b>	<b>31,654</b>	<b>0</b>	<b>31,654</b>
Share option scheme	13	617	0	0	0	630	0	630
Convertible bond	0	1,284	0	0	0	1,284	0	1,284
Corporate mergers	0	0	0	0	0	0	1,069	1,069
Allocation based on IAS 19	0	0	0	87	0	87	0	87
Allocation based on IAS 21	0	0	0	61	0	61	0	61
Consolidated profit/ loss for the period	0	0	0	0	3,882	3,882	2	3,884
<b>Figures on 31 December 2017</b>	<b>1,903</b>	<b>20,489</b>	<b>31</b>	<b>(705)</b>	<b>15,880</b>	<b>37,598</b>	<b>1,071</b>	<b>38,669</b>
Share option scheme	23	940	0	0	0	963	0	963
Corporate mergers	0	0	0	0	(122)	(122)	0	(122)
Allocation based on IAS 19	0	0	0	(53)	0	(53)	0	(53)
Allocation based on IAS 21	0	0	0	(123)	0	(123)	0	(123)
Consolidated surplus/ shortfall for the period	0	0	0	0	924	924	(2)	922
<b>Figures on 31 December 2018</b>	<b>1,926</b>	<b>21,429</b>	<b>31</b>	<b>(881)</b>	<b>16,682</b>	<b>39,187</b>	<b>1,069</b>	<b>40,256</b>

# Consolidated Cash Flow Statement

for the financial year from 1 January to 31 December 2018

## Cash flows from operating business

T.13	EUR K	Notes No.	FY 2018	FY 2017
<b>Cash flows from operating business</b>				
			923	3,884
			352	247
			(752)	456
			1,562	844
			(138)	(133)
			(89)	(13)
			(49)	(16)
			395	319
			(67)	—
			5,237	3,780
			53	(534)
			(891)	682
			463	(828)
			3	3
			<b>7,002</b>	<b>8,691</b>
<b>Changes in net current assets</b>				
			(13,739)	(2,223)
			523	183
			1,769	7,757
			651	588
			(464)	(23)
		5.	(932)	(423)
		5.	(480)	674
			<b>Net inflow of funds from operating activities</b>	<b>15,224</b>
			<b>(5,670)</b>	<b>15,224</b>

**Cash flows from investment and financing activities, loans  
and cash and cash equivalents**

T.14	EUR K	Notes No.	FY 2018	FY 2017
<b>Amount carried forward</b>				
<b>Net inflow of funds from operating activities</b>			<b>(5,670)</b>	<b>15,224</b>
<b>Cash flow from investment activities</b>				
			(11,978)	(8,159)
			89	7
			294	2,566
			(4,243)	(4,448)
		5.	106	65
			0	691
<b>Net cash outflow for investment activities</b>			<b>(15,732)</b>	<b>(9,278)</b>
<b>Cash flow from financing activities</b>				
			612	383
			3,358	7,920
			(4,264)	(3,510)
			—	14,328
<b>Net inflow (previous year: net outflow) in cash from financing activities</b>			<b>(294)</b>	<b>19,121</b>
<b>Net outflow of cash and cash equivalents</b>			<b>(21,696)</b>	<b>25,067</b>
			27,944	2,812
		3.8.	6,151	27,944
			(97)	65
		3.8.	—	928

**Summary of cash and cash equivalents**

T.15	EUR K	Notes No.	FY 2018	FY 2017
			11,790	30,479
		2.6.	(5,639)	(2,535)
<b>Cash and cash equivalents at the end of the financial year</b>			<b>6,151</b>	<b>27,944</b>

# Notes on the Consolidated Accounts

for the 2018 financial year

## 1. Principles of Reporting

### 1.1. General information

GK Software SE is a public limited company based in Germany. The address of the registered headquarters and head office for business operations is Waldstrasse 7, 08261 Schöneck.

GK SOFTWARE SE is entered in the Commercial Register at Chemnitz Local Court under reference number HRB 31501 (HRB 19157 until 31 December 2017).

The change in the legal form of GK Software that was announced from a public limited company (AG) to a European public limited company (Societas Europaea/SE) was formally completed with the entry into the Commercial Register on 19 January 2018. The annual shareholders' meeting on 22 June 2017 had opted for the change in line with the suggested ruling by the Management Board and the Supervisory Board.

The Group's business involves the development and production of software and hardware and sales and trade in this field.

The Group manages its capital – which not only includes equity, but all accounts receivable and accounts payable – with the aim of guaranteeing the Group's ability to service its loans and debts and provide sufficient liquidity to maintain collateral for investment projects at all times.

These goals are monitored by tracking financial indicators (e.g. the equity ratio, capitalisation ratio I, surplus of liquid funds over interest-bearing liabilities) for the target corridors. The aim of maintaining adequate capital is supported by investing cash and cash equivalents in a non-risk manner. Derivative financial instruments are only used to the extent that they are needed to hedge actual business deals.

### 1.2. Principles of presentation

The consolidated accounts for GK Software SE on 31 December 2018 were prepared in line with the accounting standards of the International Accounting Standards Board (IASB) - the International Financial Reporting Standards (IFRS) - if they have been adopted by the European Union, and the provisions needing to be applied in line with Section 315e Para. 1 of the German Commercial Code (HGB). The Company's consolidated accounts were also prepared, taking into account the Interpretations (IFRIC, SIC) of the International Financial Reporting Standards Interpretations Committee (IFRS IC).

The following accounting standards and interpretations were obligatory for the first time for the 2018 financial year:

#### Newly applied IFRS standards

#### T.16

IFRS	Amendment	Amendment for the financial year from
IFRS 2	Amendments to IFRS 2: Classification and Assessment of Share-Based Payments	1.1.2018
IFRS 9	Financial Instruments	1.1.2018
IFRS 15 <sup>1</sup>	Revenue from Contracts with Customers	1.1.2018
IFRIC 22	Foreign Currency Transactions and Advance Consideration	1.1.2018
Improvements	Improvements to IFRSs 2014-2016: Amendments to IFRS 1 and IAS 28	1.1.2018

1 – including clarification of IFRS 15

IFRS 9 "Financial Instruments" contains revised stipulations on classifying and assessing financial assets, fundamental changes to the provisions for adjusting the value of financial assets as well as revised rules for entering hedging relations on the balance sheet. The effect of this standard on the Company's financial accounts is currently expected to be minimal, as no complex financial instruments



are being used (apart from interest caps and interest and current swaps to safeguard operational business transactions).

No financial assets, which were recognised as ongoing purchasing costs according to IAS 39 and are now assessed as fair value according to IFRS 9, were entered on the balance sheet at 31 December 2018. The Company did not hold any financial instruments on the balance sheet reporting date, which are classified as fair value with a neutral entry on changes in value under other earnings.

The entries on impairment in value were based on the expected losses (expected loss model). The scope of risk provisions was determined using the three-stage model, where the 12-month expectations of losses according to the first approach and the total losses to be expected if the credit risk deteriorates significantly were entered. The new model for impairment in value did not have any significant effects in conjunction with assessing accounts receivable.

IFRS 15 "Revenue from Contracts with Customers", which has been published, replaces the previous IFRS provisions on revenue recognition - IAS 18 and IAS 11 "Construction Contracts" - with the goal of merging the large number of rules contained in various standards and interpretations in a unified model for revenue recognition. The basic principle of the standard is that the amount of revenue should be entered as expected for the payments of the counter-performance needing to be entered on the balance sheet. Turnover revenue is recognised when the customer obtains the authority to dispose of the goods or services. IFRS 15 also contains stipulations to present the performance surpluses or obligations existing at contract level, which are the result of the relationship between the work performed by the company and the customer's payment. The Company used the standard for the financial year starting on 1 January 2018 for the first time. There were no special conversion effects, which would have had to be entered in the relevant reserve fund (modified retrospective method). Any changes regarding the amount and the recognition time of the turnover revenue entered for customer contracts was only found to a very limited degree, as the individual component parts of the revenue models at GK Software SE (sale of licences, providing maintenance services,

providing implementation services, training, operating shops) have been generally assessed independently of each other in terms of the time and amount of the counter-performance according to IAS 18 and according to IFRS 15, even if they are marketed together. As GK Software SE regularly grants its customers licences for an unrestricted period, this is currently a sale and will be in future too, while maintenance services are provided during specific periods of time. GK Software SE provides services, which are accounted for in line with the hours involved, as part of its normal consulting projects. Fixed price projects, which are currently entered on the balance sheet according to the percentage of completion method, will continue to meet the conditions for the recognition of turnover revenue related to time even in line with IFRS 15, according to our current understanding. The use of IFRS 15 did not have any major effects on the EBIT or the balance sheet total. The previous items on the balance sheet known as "Accounts receivable from ongoing work" as well as "Advance payments received" have been replaced by "Contractual assets" and "Contractual liabilities". IFRS 15 creates additional quantitative and qualitative specifications in the notes on the accounts.

The other standards mentioned here did not have any major effects on the Company's consolidated accounts.

The International Accounting Standards Board (IASB) has also issued the following standards, interpretations and amendments to existing standards, but it is not compulsory to use them or their adoption into European law has not yet been fully completed by the European Union. These standards have not been used in advance and no premature usage is planned in future either:

## IFRS standards not used

## T.17

IFRS	Amendment	Amendment for the financial year from
IFRS 16	Leases	1.1.2019
IFRS 9	Amendments to IFRS 9: Prepayment Features with Negative Compensation	1.1.2019
IFRIC 23	Uncertainty over Income Tax Treatments	1.1.2019
IAS 28	Amendments to IAS 28: Investments in Associates and Joint Ventures	1.1.2019
Improvements	Improvements to IFRSs 2015-2017: Amendments to IFRS 3, IFRS 11, IAS 12, IAS 23	1.1.2019

IFRS 16 replaces the previous differentiation of operating and financial leases by a unified lessee balancing model, according to which lessees are obliged to report all leases on the balance sheet in the form of usage rights and a corresponding leasing liability. Assets and debts from leases are entered at their cash value on the first occasion when they are used. The only exceptions here involve current (12 months or less) or low-value leases. Leasing payments are subject to interest at the implicit interest rate that forms the basis for the lease, if this can be determined. Otherwise, discounting takes place using the lessee's incremental borrowing rate. This creates a situation where leases, which have not been entered on the balance sheet in the past - in a manner largely comparable to the current accounting of financial leases - must be entered on the balance sheet. GK Software SE will apply the standard in a binding manner from 1 January 2019 onwards, taking into consideration the modified, retrospective method (the cumulative effect of using this for the first time takes place as an adjustment to the opening balance sheet figure for retained earnings in the 2019 reporting period). In the past, the Company only had operating leases, which largely involved rented office premises and leased vehicles. GK Software SE has primarily identified an accounting procedure for the usage rights on rented office premises and leased vehicles as well as the corresponding liability. The Company intends to make use of the exceptional rule, where it is possible to forego a new assessment of the leasing contracts in the sense of IFRS 16, which already existed before 1 January 2019 onwards (modified retrospective method). That means that these contracts can continue to be maintained according to the clas-

sification in IAS 17/IFRIC 4. There is not expected to be any effect that needs to be reported in the retained earnings in the 2019 reporting period. In order to be able to determine the effects of using IFRS 16 for the first time, a project team has been formed at GK Software SE, which has checked all the Group's leasing arrangements during the last year with a view to the new accounting regulations for leases in line with IFRS 16. There is expected to be a balance sheet extension of between approx. EUR 10,200 – 10,800 K as part of using the simplified transition method. The equity ratio will decline accordingly by approx. 2.90 – 3.10 percent. The future allocation of the rental expenditure into amortisation and interest expenditure is expected to create a positive EBIT effect of approx. EUR 120 - 135 K.

The other amended standards mentioned here will not have any major effects on the Company's consolidated accounts.

The reporting procedures for the 2018 financial year have taken place in line with the standards and interpretations that must be applied and provide a picture of the Group's assets, financial and revenue situation, which matches the actual circumstances.

Assets and debts are also assessed at their amortised purchase and manufacturing costs.

The presentation of the consolidated accounts has taken place on the basis of the historical purchase or manufacturing costs. The consolidated accounts have been presented in euros. If not indicated otherwise, all the amounts are specified in EUR K. Normal commercial practices of rounding figures up or down have been used. As a result, there may be differences caused by rounding.

The financial year for GK Software SE and the subsidiaries included in the consolidated accounts matches the calendar year. The profit and loss statement has been prepared using the total cost method. The balance sheet structure follows the maturity of the assets and debts. Assets and debts are viewed as current, if they are due or are to be sold within one year.

### 1.3. Consolidated companies

The consolidated accounts include GK Software SE and all the companies where GK Software SE has majority voting rights, either directly or indirectly, or has the opportunity to gain control.

The consolidated companies not only include the parent company, but also 5 German companies and 6 foreign firms. A detailed list can be found in paragraph 8.3.

All the companies in the consolidated group are either directly or indirectly owned by GK Software SE.

GK Software SE also has a 50 percent holding in Unified Experience UG (limited liability), Lindlar. GK Software SE does not exercise any control here, which is why it has not been included in the consolidated companies. Fuel Retail GmbH was not included in the consolidation process because it has not started operating as a business. The firm's own nursery school, PIXEL gUG, has been left out too because of its negligible effect.

### 1.4. Principles of consolidation

The consolidated accounts are prepared on the basis of the standard balance sheet and assessment methods used within the Group.

Internal profits and losses within the Group, sales, expenditure and earnings or the accounts receivable and payable, which exist between the consolidated companies, have been eliminated. The effects of taxes on profits have been taken into account in the consolidation procedures that affect the results and deferred taxes have been included in the calculations.

### 1.5. Subsidiaries

The consolidated accounts include the accounts of the parent company and the companies that it controls, including structured companies (its subsidiaries). The Company obtains control if it:

- can exercise authority to dispose of the holding company,

- is exposed to fluctuating profits arising from its holding, and
- can affect the amount of profits because of its powers of disposal.

The Company conducts a reassessment, whether it controls a holding company or not, if facts and circumstances indicated that one or several of the aforementioned three criteria regarding control have changed.

If the Company does not own majority voting rights, it still controls the holding company if it has the practical possibility of unilaterally determining the substantial activities of the holding company through its voting rights. When assessing whether its voting rights are sufficient for its decision-making power, the Company takes into account all the facts and circumstances, including:

- the scope of the voting rights that the Company owns in relation to the scope and distribution of the voting rights or other holders of voting rights;
- potential voting rights for the Company, other holders of voting rights and other parties;
- rights arising from other contractual agreements; and
- other facts and circumstances, which indicate that the Company has or does not have a current opportunity to determine the substantial activities at the time when decisions have to be made, taking into consideration the voting behaviour at previous annual shareholders' meeting or other such meetings.

A subsidiary is included in the consolidated accounts from the time that the Company obtains control over the subsidiary until the time when control by the Company ends. The results of the subsidiaries acquired or sold during the course of the year are entered in the Group profit and loss statement and the other Group results in line with the actual time of acquisition or until the actual time of the disposal.

The profits or losses and each element of the other results must be assigned to the sharehold-

ers of the parent company and the non-controlling shareholders. This applies even if this creates a situation where the non-controlling shareholders have a negative balance.

If necessary, the annual accounts of the subsidiaries are adapted to adapt the balance sheet and assessment methods to the methods that are used within the Group.

All the assets, debts, equity, revenues, expenditure and cash flows internally related to the Group in conjunction with the business transactions between Group companies are completely eliminated as part of the consolidation process.

### 1.6. Corporate mergers

The acquisition of business operations is entered on the balance sheet according to the acquisition method. The initial consolidation takes effect from the day on which GK Software SE directly or indirectly gains control over the Group company. The inclusion ends at the time when the control of the Group company is transferred to a company outside the Group. The equivalent transferred during a corporate merger is assessed at the fair value, which consists of the total fair value of the transferred assets at the time of the acquisition, the liabilities taken over from the former owners of the acquired company and the equity instruments issued by the Group in exchange for full control of the acquired company (if relevant). Any costs associated with the corporate merger must in principle be entered to affect net income when they are incurred.

The acquired identifiable assets and liabilities that are taken over must be measured at their fair value. The following exceptions apply:

Deferred tax claims or deferred tax liabilities and assets or liabilities in conjunction with agreements for benefits to employees must be entered and assessed according to IAS 12 "Income Taxes" or IAS 19 "Employee Benefits".

The goodwill relates to the surplus arising from the total of the transferred equivalent, the amount of all the shares that have not been fully taken over in the acquired company, the fair value of the

equity share previously held by the acquirer in the acquired company (if relevant) and the balance of the existing fair values in the acquired identifiable assets at the time of the acquisition and of the liabilities and contingent liabilities that have been taken over. During the periods following the corporate merger, the disclosed hidden reserves and hidden liabilities are continued, amortised or cancelled in line with the way that the corresponding assets are treated.

If, after another assessment, the share to be apportioned to the Group of the fair value of the acquired, identifiable net assets is larger than the total from the transferred equivalent, the amount of the non-controlling shares in the acquired company and the fair value of the equity share previously held by the acquirer in the acquired company (if relevant), the excess amount is entered directly as profit to affect the net income (in the profit and loss statement). This kind of difference in liabilities did not occur during the financial year.

If the initial entering of a merger on the balance sheet at the end of the financial year, in which the merger takes place, is incomplete, the Group shall enter preliminary figures for the items where the balance sheet figures are incomplete. The amounts provisionally assessed must be corrected during the assessment period or additional assets or liabilities must be assessed in order to reflect the new information about facts and circumstances, which existed at the time of acquisition and which would have influenced the assessment of the amounts entered on the reporting date, had they had been known.

### 1.7. Currency conversions

When preparing the accounts of each individual consolidated company, any business transactions, which are made in other currencies than the Group's functional currency (foreign currencies), will be converted using the exchange rates valid on the day of the transaction. Monetary items in a foreign currency are converted using the valid exchange rate on the reporting date for the accounts. Non-monetary items in foreign currencies, which are assessed at their fair value, are converted using the exchange rates, which applied at the time when the fair value was determined.

Non-monetary items assessed at their procurement or production costs are converted using the exchange rate at the time when they are first entered on the balance sheet.

Any conversion differences arising from monetary items are entered in the period in which they are incurred. The following are excluded from this process:

- Conversion differences from the inclusion of outside funds in foreign currencies, which occur in the preparation process for assets that are envisaged for productive use. They are assigned to the production costs, if they represent adjustments to the interest expenditure arising from the inclusion of outside funds in foreign currencies.
- Conversion differences from business transactions in order to safeguard particular foreign currency risks (see the guidelines on entering hedging relations in subsection 3.18).
- Conversion differences from monetary items to be received or to be paid to/from a foreign business operation, the fulfilment of which is neither planned nor probable and is therefore part of the net investment in this foreign business operation, are initially entered under "Other earnings" and are reclassified from equity to the profit and loss statement when sold.

In order to prepare the consolidated accounts, the assets and debts from the foreign business operations within the Group are converted into euros (EUR) and the valid exchange rates on the reporting date for the accounts are used. Revenues and expenditure are converted at the average exchange rate during the period, unless the conversion rates were subject to major fluctuations during the period. In this case, the conversion rates are used at the time of the transaction. Conversion differences from the conversion of foreign business operations into the Group's currency are entered under "Other results" and accumulated under equity.

Any goodwill accruing from the acquisition of a foreign business operation and adjustments to the fair values of the identifiable assets and debts are

treated as assets or debts for the foreign business operations and converted on the exchange rate valid on the reporting date. Any resulting conversion differences are entered under "Equity".

## 2. Balance Sheet and Assessment Principles

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The consolidated accounts have been prepared on the basis of historical purchase and production costs: certain property and financial instruments are excluded from this, if they were assessed with the amount of their new value or with the fair value on the balance sheet reporting date. A relevant explanation is found as part of the particular balance sheet and assessment methods.

Historical purchasing or production costs are generally based on the fair value of the equivalent paid in exchange for the asset.

The fair value is the price, which would be acquired for the sale of an asset between the market participants or paid for the transfer of a debt in an orderly business transaction on the assessment date. This is valid, regardless of whether the price was directly observable or was estimated using an assessment method.

When determining the fair value of an asset or a debt, the Group takes into account particular features of the asset or the debt (for example, the condition and location of the asset or sales and usage restrictions), if market participants would also take into account these features when setting the price for the acquisition of the particular asset or when transferring the debt on the assessment date. The fair value for assessment purposes and/or the obligation to specify details is determined on this basis in these consolidated accounts as a matter of principle. The following are excluded from this process:

- Share-based payments covered by IFRS 2 Share-Based Payments,
- Leases, which come under the area covered by IAS 17 Leases,
- Assessment standards, which are similar to fair value, but do not correspond to it, e.g. the net sales value in IAS 2 Inventories or the value in use in IAS 36 Impairment of Assets.

The fair value is not always available as a market price. It often has to be determined on the basis

of different assessment parameters. Depending on the availability of observable parameters and the significance of these parameters for determining the fair value overall, the fair value is assigned to the stages 1, 2 or 3. The subdivision takes place according to the following proviso:

- The input parameters in stage 1 are listed prices (unadjusted) at active markets
- for identical assets or debts, which the Company can access on the assessment reporting date.
- The input parameters in stage 2 are different input parameters to the prices listed in stage 1,
  - which are either directly observable for the asset or the debt
  - or can be derived from other prices indirectly.
- The input parameters in stage 3 are parameters that are not observable for the asset or the debt.

The main balance sheet and assessment principles are explained below in relation to individual items in the financial statements.

### 2.1. Property, plant and equipment

The balance sheet values for property, plant and equipment are based on purchase costs or production costs plus additional purchase costs, reduced by scheduled depreciation. These assets are depreciated in a linear and pro rata temporis fashion in line with their economic serviceable life.

The depreciation on buildings is made in a linear fashion over a period of use of 15 – 40 years. Movable fixed assets are depreciated in a linear fashion as a matter of principle; the period of use varies between three and fourteen years.

The estimated periods of use, the carrying amounts and the depreciation methods are checked on each balance sheet date and, if necessary, the effect of possible changes to the means of assessment is entered prospectively.

Fully depreciated property, plant and equipment assets are shown with historical purchasing and production costs and accumulated depreciation until the assets in question are removed from operation. The purchase and production costs as well as the cumulated depreciation is removed from the accounts in the case of asset disposals and the results from the asset disposals (disposal revenues minus the remaining carrying amount) are entered on the profit and loss statement under "Other revenues" or "Other expenditure".

## 2.2. Leases

GK Software SE acts exclusively as a lessee.

The classification of the leases takes place according to the allocation of the opportunities and risks between the lessor and the lessee, according to IAS 17. Leases are classified as financial leases, if all the risks and opportunities associated with the ownership are transferred to the lessee through the lease conditions. All the other leases are classified as operating leases. In terms of financial leases, the rented units are entered on the balance sheet at their fair value at the time when they are acquired. Amortisation takes place on a scheduled basis over the period of usage. Leasing payments within the operating lease are entered as expenditure on a linear basis over the period of the lease. The Group only has operating leases.

The Group's leasing and rental circumstances cover different assets like buildings, rented premises, computer equipment and vehicles. The leasing agreements are normally concluded for a period of between three and five years. The circumstances for the individual agreements are concluded on an individual basis with different conditions. The agreements do not normally contain any individual contractual conditions governing particular financial performance indicators. The leasing agreements are not used as security in conjunction with taking out liquid funds. The costs incurred in conjunction with the ongoing leasing contracts are entered to affect earnings for the period of the relevant contractual term. The entry will take place as described in paragraph [1.2](#), IFRS 16, from 2019 onwards.

## 2.3. Intangible assets

### 2.3.1. Intangible assets acquired in return for payment

Intangible assets that have been acquired in return for payment are entered with their purchasing or production costs minus any accumulated amortisation and write-downs. The scheduled amortisation expenditure is entered as expenditure in a linear fashion to cover the expected useful serviceable life of between three and seven years. The expected useful serviceable life and the method of amortisation are checked at least at the end of each financial year and any changes to estimates are taken into account prospectively.

### 2.3.2. Intangible assets developed in-house

Costs for research activities are entered as expenditure during the period, in which they are incurred.

An intangible asset that has been developed in-house, which is the result of development work (or the development phase of an internal project), is capitalised if the following evidence can be provided accumulatively:

- The technical feasibility of the completion of the intangible asset exists in order to make it available for use or for sale
- The Company intends to complete the intangible asset and use it or sell it.
- There is a capability for using or selling the intangible asset if the intangible asset will provide probable future economic value
- Adequate technical, financial or other resources are available to complete the development and be able to use or sell the intangible asset and
- It is possible to reliably determine the expenditure that can be allocated within the framework of developing the intangible asset.

The amount used to capitalise this kind of intangible asset, which has been developed in-house, is the total amount of expenditure that was incurred from the day when the intangible asset cumulatively met the conditions outlined above for the

first time. The costs directly attributable to a software product cover the personnel costs for the employees involved in the development work and appropriate parts of the relevant overheads.

If the capitalisation conditions are not met, the development costs are entered to effect net income in the period, in which they are incurred. Any development costs already entered as expenditure are not capitalised during the following period.

Intangible assets developed in-house are valued in just the same way as purchased intangible assets by their purchase or production costs minus any accumulated amortisation and write-downs. Scheduled amortisation starts in the year of capitalisation with the pro rata temporis amount and it uses the linear method over a period of five years as a matter of principle.

### 2.3.3. Intangible assets acquired as part of a corporate merger

Intangible assets, which have been acquired as part of a company merger, are entered separately from the goodwill and are assessed with their fair value at the time of the acquisition.

During the following periods, intangible assets, which were acquired as part of a company merger, are assessed in the same way as individually acquired intangible assets using their procurement costs minus any accumulated amortisation and any accumulated write-downs.

#### Customer base

Customer bases were identified and entered in each case in association with the acquisition of AWEK GmbH, DBS, prudsys AG and valuephone GmbH.

The scheduled amortisation is normally entered in a linear fashion to affect expenditure for the expected period of use (see section 2.16). The expected period of use and the amortisation method are checked on each reporting date and all the changes to estimates are taken into account prospectively. As soon as there are some signs that the carrying amount of the customer base exceeds the expected influx of funds, the customer base is revalued with this lower figure. Any impairment charges are entered under the item

“Extraordinary amortisation”. The expected influx of funds is the lower of the two values from the fair value minus any sales expenditure and the value in use. The value in use is the cash flow reduced to its cash value minus any interest for the unit, which could generate cash and cash equivalents and to which the customer base is assigned.

We have normally estimated the period of use of existing customer relationships of between 7 and 10 years (see [2.16](#)). The estimate is derived from the average period of use of the solutions sold by the Group - i.e. 7 - 15 years, the introductory expenditure for these systems and their flexible extension, but considerable expertise is required to use them, however. The high reputation of the unit taken over also allows customer relations to be serviced for a longer period, particularly as the employees permanently work with the requests for expansion and changes from these existing customers.

#### Technology

The acquisition of prudsys AG and valuephone GmbH 1 also involved the purchase of technology, which primarily consists of the in-house developed software. Industrial property rights and similar rights and values are assigned to the stocks and are subject to impairment related to the period of use.

#### Goodwill

The goodwill resulting from corporate mergers is entered on the balance sheet at its procurement costs minus any necessary write-downs. The figures involved here can be inspected in table [T.18](#).

GK Software summarises assets, which cannot be checked individually as part of the intrinsic value tests, in the smallest group of assets, which generates an inflow of cash from ongoing use; this cash is largely independent of that of other assets or groups of assets. If assets do not generate any inflow of cash, which is largely independent of other assets or other groups of assets, GK Software does not check the intrinsic value on the level of the individual asset, but on the level of the unit generating the cash and cash equivalents, to which this asset belongs.

The goodwill amounts are checked for their intrinsic value at least once a year. If any events or cir-



cumstances indicate that the fair value may have been reduced, another check takes place. Any reduction would be determined by identifying the expected, achievable amount for the units that generate the cash and cash equivalents. If this amount falls below the carrying amount of the unit, including the assigned goodwill, impairment expenditure is directly entered in the profit and loss statement and may not be reversed in the following reporting periods. Regular checks are made on 31 December each year.

#### 2.3.4. Write-downs on property, plant and equipment and intangible assets apart from goodwill

On each reporting date, the Group checks the carrying amounts for property, plant and equipment and intangible assets in order to determine whether there are any indications of the need to write down these assets. If these indications can be recognised, the achievable value of the asset is assessed in order to determine the scope of any possible write-down expenditure. If the achievable amount for the individual asset cannot be estimated, an estimate is made of the achievable value of the unit that generates cash and cash equivalents, to which the asset belongs. If an appropriate and constant basis can be determined for allocation, the joint assets are allocated to the units that generate the individual cash and cash equivalents. Otherwise, an allocation to the smallest group of units generating cash and cash equivalents takes place, for which an appropriate and constant principle of allocation can be determined.

The achievable amount is the higher amount arising from the fair value minus any sales costs and the value in use. When determining the value in use, the estimated future flows of cash are discounted by a pre-tax interest rate. On the one hand, this pre-tax interest rate takes into account the current market assessment above the fair value of the money and, on the other hand, the risks inherent in the asset, if they have not been included in the estimate of the flows of funds.

If the estimated achievable amount of an asset (or a unit generating cash and cash equivalents) is less than the carrying amount, the carrying amount of the asset (or unit generating cash and cash equivalents) is reduced to the recoverable amount. The expenditure for the write-down is entered immediately in the accounts.

If the expenditure on write-downs should reverse subsequently, the carrying amount of the asset (or unit generating cash and cash equivalents) is increased to the latest estimate of the recoverable amount. The increase in the carrying amount is restricted to the value, which would have occurred if no write-down expenditure had been entered for the asset (unit generating cash and cash equivalents) in previous years. Any write-up is directly entered in the accounts to affect net income.

#### 2.3.5. Writing off intangible assets

An intangible asset must be written off if it is withdrawn or if no further economic use is expected from its use or its withdrawal. The profit or loss from the write-off of an intangible asset, assessed with the difference between the net sale price and the carrying amount of the asset, is entered in the profit and loss statement at the time when the asset is written off. The entry is made under "Other income" or "Other expenditure".

#### 2.4. Stocks

The following assets are entered as assets, if they are:

- set to be used as ancillary or working materials or purchased goods for consumption when producing something or providing a service,
- being produced for this kind of sale or
- kept for sale in normal business procedures.

The ancillary and working materials comprise installation items and other components for checkout systems.

The inventories are assessed based on their purchase or production costs or a lower net sales value. The purchase or production costs contain all the costs of purchase, processing and workmanship and any other costs that occur in order to transport the inventories to their current location in their current state (IAS 2.10). As a result, the inventories embrace both the individual costs and the attributable overheads (mainly depreciation).

## 2.5. Financial assets

For reasons of simplification, we would refer to the combined list of financial liabilities and assets in paragraph ↗2.10.

## 2.6. Trade accounts receivable, other receivables, assets and contractual assets

Accounts receivable and other assets (in the loans and accounts receivable category) are generally assessed according to the effective interest method for amortised purchase costs minus any value adjustments. As they do not normally contain any interest share, they must be recorded on the balance sheet at their nominal value minus any value adjustments for irrecoverable accounts receivable.

Financial assets, with the exception of financial assets assessed at their fair value and affecting the results, are checked to see whether they have any possible write-down indications on the balance sheet date. Financial assets are viewed as impaired if there is an objective indication that the expected future cash flows from the financial assets may have changed in a negative direction as a result of one or several events, which occurred after the initial setting of the value of the asset.

Any trade accounts receivable, where it is assumed that they cannot be collected, are written off according to the direct method. The other trade accounts receivable are checked periodically for objective signs of whether any need to write them down has already occurred. Typical signs of the potential to write down a particular trade account receivable are, e.g. well-known and significant financial troubles for the customer or overdue payments for receivables going beyond 30 days. Outstanding accounts receivable, for which a value adjustment was already performed in the past, are removed from the accounts, if necessary, taking into consideration the value adjustment already performed.

Any write-down leads to a direct reduction in the carrying amount of all the affected financial assets, with the exception of trade accounts receivable, where the carrying amount is reduced by an impairment account. If an impaired trade account

receivable is believed to be irrecoverable and its value is corrected, it is entered in the impairment account. Any subsequent receipts on sums already entered as value adjustments are also entered against the impairment account. Any changes to the carrying amount in the impairment account are entered through the profit and loss statement to affect net income.

If the outcome of a manufacturing order can be reliably assessed, the revenues and the order costs, which arise in connection with this manufacturing order, are entered according to the percentage of completion of work on the balance sheet date and are shown as a contractual asset. The contractual asset is determined on the basis of the work actually performed at the end of the reporting period in relation to the total contractual asset. This takes place on the basis of the actual working hours in relation to the total number of expected hours. Changes in the contracted work, claims and performance bonuses are included to the extent that their amount can be reliably determined and it is deemed that they will probably be received.

If the outcome of a manufacturing order cannot be reliably assessed, the revenues are only entered according to the amount of order costs that have already been incurred and can probably be recovered. Costs for orders are entered as expenditure during the period, in which they are incurred.

Estimates about the costs of the progress made in the order are corrected if the circumstances change. If it is likely that the total costs for orders will exceed the total revenues from orders, the expected loss is immediately entered as expenditure.

If the order costs related to an order and incurred by the reporting date plus published gains and minus published losses exceed the partial payments, the excess is entered as a manufacturing order with a credit balance due from the customer (contractual asset). For contracts in which the milestone invoices exceed the order costs incurred plus accrued gains and less recognised losses, the excess is entered as a manufacturing order with a debit balance due from the customer. Amounts received before the work has been performed are entered as debts in the contractual liabilities on the consolidated balance sheet. Invoiced amounts

for services, which have already been provided and which have not yet been paid for by the customer, are included in the consolidated balance sheet under "Trade accounts receivable".

## 2.7. Cash and cash equivalents

Cash and cash equivalents are entered at their nominal value. The cash equivalents include demand deposits and fixed deposits with an original due date of no more than three months.

## 2.8. Equity

### 2.8.1. Explanation of the item

An equity instrument is a contract, which provides the grounds for a residual claim to the assets of a company after the deduction of all the associated debts. Equity instruments are entered at the expenditure revenue received minus any directly attributable issue costs. Issue costs are those, which would not have been incurred if the equity instrument had not been issued.

Any buy-backs of equity instruments are directly deducted from the equity capital. No purchases or sales, issues or withdrawals of equity instruments are entered in the profit and loss statement.

Any outside or in-house equity instruments issued by a Group company are classified according to the economic substance of the contractual arrangement and the definitions as financial liabilities or equity.

### 2.8.2. Share-based payments

Share-based payments with compensation through equity instruments to employees and others, who provide comparable services, are assessed at the fair value of the equity instrument on the day that it is granted. Further information about determining the fair value of the share-based payments with compensation through equity instruments is shown below.

The fair value determined when granting the share-based payments with compensation through equity instruments is entered in linear fashion over the period until its non-forfeiture as expenditure with a corresponding increase in

equity (provision for benefits to employees provided in equity) and is based on the Group's expectations with regard to the equity instruments, which were probably non-forfeitable. The Group must check its estimates regarding the number of equity instruments, which become non-forfeitable, on each reporting date for the accounts. The effects of the changes to the original estimates must be entered to affect the net income, if they exist. The entry takes place in such a way that the total expenditure reflects the change in estimate and leads to a relevant adaptation of the reserve for benefits to employees with compensation through equity instruments.

Share-based payments with compensation through equity instruments to employees and different parties are assessed at the fair value of the goods or services received, unless the fair value cannot be reliably determined. In this case, they are assessed at the fair value of the equity instruments granted at the time when the Company receives the goods or the opposing party provides the services. In the case of share-based payments with cash compensation, a liability is entered for the goods or services obtained and is assessed at the fair value when they accrue. Until the debt is settled, the fair value of the debt is newly determined on each reporting date for the accounts and on the settlement date and all the changes to the fair value are entered to affect the net income.

### 2.8.3. Share option programme

Share option programmes were introduced to supplement the normal remuneration to improve the loyalty and motivation of leading employees and those who provide special services.

According to Section 4a (1) and (2) of the articles of association, the Management Board was entitled to grant subscription rights to individual share certificates to as part of the share option programme, provided that the Supervisory Board approves these measures. The share options are exclusively for subscription by members of the GK Software SE Management Board, selected managers and other senior employees at GK Software SE and for subscription by members of the management team and selected managers and other leading employees in companies, which are independently associated firms in a relationship with GK Software SE in the sense of Sections 15 and 17 of

the German Companies Act. The decisions taken at the annual shareholders' meeting on 28 June 2012 (contingent capital II), 29 June 2015 (contingent capital III) and 29 June 2018 (contingent capital V) empowered the Management Board to issue subscription rights to GK Software SE shares with a term of up to five years provided that each share option grants the right to subscribe to one GK Software SE share.

A decision taken at the annual shareholders' meeting on 16 June 2016 empowered the Management Board to issue on one or several occasions option and/or convertible bonds, profit participation certificates or participating bonds made out to the holder or name or a combination of these financial instruments and exclude the subscription rights to these instruments or their combination until 15 June 2021, provided that the Supervisory Board agrees.

The individual conditions are recorded in the following tables.

The options exercised during the reporting period involved an average share price of EUR 113.36 (previous year: EUR 114.89).

#### Development of outstanding options that have been exercised and lapsed or forfeited

T.18	Number of options
Options outstanding on 1 January 2017	129,575
Options granted during the course of the 2017 financial year	25,000
Options lost during the reporting period	(16,875)
Options redeemed during the reporting period	(34,875)
Options expiring during the reporting period	0
Options outstanding on 31 December 2017	102,825
Exercisable options on 31 December 2017	0
Options outstanding on 1 January 2018	102,825
Options granted during the course of the 2018 financial year	37,000
Options lost during the reporting period	0
Options redeemed during the reporting period	(1,600)
Options expiring during the reporting period	(400)
Options outstanding on 31 December 2018	137,825
Exercisable options on 31 December 2018	0

We would refer to the following summaries to provide an overview of the individual share option programmes.

## Options granted and obstacles to exercising them

## T.19

Issue date	Issue options Number	of which forfeited Number	of which lapsed of which redeemed Number	Options remaining Number	Exercise price EUR	Exercise period Years	End of exercise period
28.8.2014	3,500	1,500	400	1,600	41.78	4 1/4	28.8.2018
1.12.2014	21,825	4,000	0	0	37.77	4 1/4	1.12.2018
20.6.2017	8,500	0	0	0	92.10	4 1/4	21.6.2021
<b>Contingency capital II</b>				<b>26,325</b>			
1.11.2015 <sup>1</sup>	5,000	2,500	0	0	28.62	4 1/4	1.11.2019
30.11.2015 <sup>1</sup>	25,625	1,575	0	0	33.98	4 1/4	30.11.2019
29.8.2016	31,900	450	0	0	45.98	4 1/4	29.8.2020
4.12.2017	16,500	0	0	0	116.69	4 1/4	3.12.2021
<b>Contingency capital III</b>				<b>74,500</b>			
19.10.2017	96,774	0	0	0	155.00		19.10.2022
<b>Contingency capital IV</b>				<b>96,774</b>			
26.11.2018	37,000	0	0	0	75.16	4 1/4	28.11.2022
<b>Contingency capital V</b>				<b>37,000</b>			
<b>Total amount</b>				<b>234,599</b>			

1 - Change compared to previous year's figures

## Currency rates, interest rates and volatility

## T.20

Issue date	Term from issue date Years	Stock exchange price on assessment date EUR	Retention period Years	Risk-free interest rate %	Volatility %	Shares for Management Board Number	Total value EUR K
28.8.2014	4 1/2	43.99	4	0.10	30.01	—	18
1.12.2014	4 1/2	35.80	4	0.02	29.50	6,000	116
20.6.2017	4 1/2	93.00	4	(0.52)	31.97	—	195
1.11.2015 <sup>1</sup>	4 1/2	30.50	4	(0.17)	29.37	—	16
30.11.2015 <sup>1</sup>	4 1/2	37.80	4	(0.29)	27.70	5,000	203
29.8.2016	5	44.20	4	(0.60)	31.64	10,000	294
4.12.2017	4 1/2	116.30	4	(0.47)	32.01	10,000	468
26.11.2018	4 1/2	76.20	4	(0.36)	29.08	8,000	633

1 - Change compared to previous year's figures

## Distribution of expenditure entered

## T.21

Issue date	Fair value/ option	Probable average exercise period on the balance sheet reporting date	Assumed annual dividend per share	Distribution of expenditure entered	of which Management Board
	EUR	Months	EUR	EUR K	EURK
28.8.2014	9.179	0	0.50	3	—
1.12.2014	6.420	0	0.50	31	12
20.6.2017	22.934	29	0.50	49	—
1.11.2015	6.533	10	0.50	6	—
30.11.2015	8.302	10	0.50	59	8
29.8.2016	9.202	19	0.50	71	22
4.12.2017	28.370	35	0.50	117	71
26.11.2018	17.100	47	0.50	16	3
<b>Total amount</b>				<b>352</b>	<b>116</b>

The process of determining the fair values per option took place on the basis of 10,000,000 simulations using the Monte Carlo procedure. The total value per share option scheme was determined by taking into account each option. This figure must be entered as personnel expenditure on a pro-rata basis for the elapsed qualifying period and assigned to the capital reserves. The exercise price, the exercise hurdle and the exercise period were taken into consideration in the underlying observation.

The volatility was calculated according to IFRS 2 B25(b) in line with an estimated average term of the option rights of 4 ¼ years based on the company's historical share price during the last four years on the relevant granting date.

The average weighted remaining terms for the options amounted to 2½ years.

## 2.9. Statutory provisions for pensions

The costs for providing benefits in the case of defined benefit pension plans are determined using the projected unit credit method, where an actuarial assessment is conducted on each balance sheet date. Any new assessments, consisting of actuarial gains and losses, changes, which are the result of the use of the upper asset threshold and the revenues from the plan assets (without any interest on the net debt), are entered directly under "Other income" and therefore form a direct part of the balance sheet. The new assessments entered under "Other income" form part of the

other provisions and are no longer reclassified in the profit and loss statement. Any past service costs are entered as expenditure when the change of plan comes into effect.

The net interest is the result of multiplying the discount rate with the net debt (pension obligation minus the plan assets) or with the net asset value, which occurs at the start of the financial year, if the plan assets exceed the pension obligation. The defined benefit costs contain the following elements:

- Past service costs (including current service costs, past service costs to be calculated subsequently and any gains or losses from the change to or reduction of the plan),
- Net interest expenditure or revenues on the net debt or the net asset value,
- A new assessment of the net debt or the net asset value.

The Group reports the first two elements in the profit and loss statement under "Personnel expenditure" and "Financial expenditure" or "Financial revenues". Any gains or losses from plan reductions are entered on the balance sheet as "Past service costs" to be calculated subsequently.

The defined benefit obligation entered in the consolidated accounts represents the current shortfall or excess in cover for the Group's defined benefit pension plans. Any excess cover, which accrues as a result of this calculation, is restricted to the

cash value of any future economic benefit, which is available in the form of repayments from the plans or reduced future contributions to the plans.

Payments for defined benefit pension plans are entered as expenditure if the employees have performed the work, which entitles them to the contributions.

## 2.10. Financial liabilities and financial assets

Financial liabilities and financial assets are entered if a Group company becomes a contractual party to a financial instrument.

The classification and assessment of the financial liabilities and assets is determined using the business model already used and the structure of the cash flows. A financial liability/financial asset is classified as an "ongoing purchase cost" the first time when it is used, as "fair value with a neutral entry on changes in value under other earnings" or as "fair value with an entry of changes in value on the profit and loss statement". No financial assets, which were recognised as ongoing purchasing costs according to IAS 39 and are now assessed as fair value according to IFRS 9, were entered on the balance sheet at 31 December 2018.

No financial instruments existed at GK Software SE on the balance sheet reporting date, with the exception of trade accounts payable/receivable and the issued convertible bond (subsection 3.11), which were entered on the balance sheet as ongoing purchase costs. They were assessed as ongoing purchase costs according to the effective interest method. This is a method for calculating the ongoing purchase costs of financial instruments and allocating the interest expenditure/earnings to the relevant periods. The effective interest method is the rate of interest, with which the estimated future outgoing/incoming payments – including all the fees and paid or received charges, which are an integral part of the effective interest rate, transactions and premiums or discounts – are discounted from the net carrying amount of their initial entry over the expected term of the financial instrument or over a shorter period.

No financial instruments were entered at their fair value with a neutral entry on changes in value

under other earnings. All the profits or losses resulting from the assessment were credited without affected earnings. The net profits or losses included the paid/received for the financial liability and were entered under "Other provisions in equity". For detailed assessments of fair value, we would refer you to subsection 8.1.1.

The interest and currency swap was entered at its fair value with an effect on the changes in value on the profit and loss statement. All the profits or losses resulting from the assessment are credited to net income here. The net profits entered in the Group's profit and loss statement included the interest paid/received for the financial liability and were entered under "Other earnings/other expenditure". For detailed assessments of fair value, we would refer you to subsection 8.1.1.

The Group removes a financial liabilities and financial assets from the accounts if the relevant obligation has been settled, cancelled or has lapsed, or the inflow of cash and cash equivalents meets the account receivable, or cannot be recovered.

### 2.11. Loan capital costs

General and specific loan capital costs, which accrue directly in conjunction with the acquisition, construction or production of a qualified asset, are capitalised during the period that is necessary to make the asset and prepare for its intended usage or sale. Qualified assets are assets, for which a considerable period of necessary until they have been made for their intended usage or sale.

Earnings generated from the temporary formation of specially received loan capital until its expenditure for qualified assets are deducted from the loan capital costs that could be capitalised.

No loan capital costs were capitalised in 2018. The other loan capital costs were entered as expenditure during the period, in which they were incurred.

### 2.12. Public sector subsidies

Public sector subsidies are not included in the figures until appropriate collateral exists for them

that the Group will meet the conditions attached to the subsidies and the subsidies are also actually granted.

Public sector subsidies must be entered as expenditure according to schedule in the Group's profit and loss statement, particularly during the course of the periods when the Group values the corresponding expenditure, which the public sector subsidies are supposed to compensate for. Public sector subsidies, the most important condition for which is the sale, construction or other kind of purchase of non-current assets, are entered on the balance sheet as accruals and deferrals and are entered on a systematic and reasonable basis so that they affect the results over the term of the relevant asset.

Other public sector subsidies are entered as a type of revenue over the period, which is necessary to allocate them on a systematic basis to the relevant expenditure that they are designed to balance out. Public sector subsidies, which are granted in order to compensate expenditure or losses that have already been incurred or for the purpose of providing immediate financial support to the Group, for which there will not be any corresponding costs in the future, are entered to affect the net income during the period in which the claim for their entitlement arose.

### 2.13. Provisions

Provisions are formed if the Group has a current obligation (of a legal or factual nature) from a past event and it is likely that the meeting of the obligation is related to an outflow of resources and a reliable estimate of the amount of the provision is possible.

The assessed amount of the provision is the best estimated value, which is the result of the remuneration required to settle the current obligation on the reporting date of the accounts. Inherent risks in the obligation and uncertainties must be taken into consideration here. If a provision is assessed on the basis of the flows of funds estimated to meet the obligation, these flows of funds must be discounted if the interest effect plays a major role.



If it can be assumed that parts of or the complete economic benefit required to meet the provision will be repaid by an outside third party, this claim shall be capitalised as an asset if the repayment is as good as certain and its amount can be reliably estimated.

#### 2.13.1. Legal disputes

Provisions for legal disputes are entered, as soon as the event forming the basis for the dispute creates a payment obligation with adequate certainty and the amount can already be reliably assessed.

#### 2.13.2. Onerous contracts

Current obligations, which arise in conjunction with onerous contracts, are entered as a provision. The existence of an onerous contract is assumed if the Group is a contract partner in an agreement, from which there is an expectation that the unavoidable costs of meeting the agreement will exceed the economic benefits accruing from this contract.

#### 2.13.3. Warranties

Provisions for the expected expenditure arising from warranty obligations according to national purchase contract law shall be assessed at the sale time for the products concerned according to the best estimate of management with regard to the necessary expenditure to meet the Group's obligation.

#### 2.13.4. Severance payments

A debt for benefits arising from the ending of an employment relationship shall be entered if the Group can no longer withdraw the offer of these kinds of benefits or, if earlier, the Group has entered associated costs for restructuring in the sense of IAS 37.10.

### 2.14. Income taxes

The expenditure/earnings on income tax represent the account balance for current tax expenditure and deferred taxes.

Current or deferred taxes are entered as expenditure or earnings in the Group's profit and loss statement, unless they relate to items that were directly entered under "Other income" or under "Equity". In this case, the current or deferred tax is also entered under "Other income" or directly

under "Equity". If current or deferred taxes result from the first time that a corporate merger is entered on the balance sheet, the tax effects shall be included in the balance sheet entries of the corporate merger.

#### 2.14.1. Current taxes

The current tax expenditure is determined on the basis of the income that is subject to tax during the year. The income, on which tax is to be paid, is different from the consolidated net income from the Group profit and loss statement, as it excludes expenditure and revenues that will not attract tax in later years or at any time or can be offset against tax. The Group's liability for current taxes will be calculated on the basis of current tax rates that apply or those that will apply at the expected time of taxation from the point of view of the balance sheet date.

#### 2.14.2. Deferred taxes

Deferred taxes are entered to cover the temporary differences between the carrying amount of assets and liabilities in the consolidated accounts and the relevant tax valuation rates as part of calculating the taxable income and they are entered on the balance sheet according to the balance sheet liability method. Deferred tax debts are entered on the balance sheet for all temporary differences in taxes and deferred claims for taxes are entered if it is probable that taxable profits will be available, for which these temporary differences can be used to offset tax payments. These assets and liabilities are not entered if the temporary differences result from goodwill or from the initial entry of other assets and liabilities (except in the case of company mergers), which result from events that do not affect the taxable income or the consolidated net income.

Deferred tax liabilities are formed for temporary differences in tax payments, which arise from shareholdings in subsidiaries, unless the Group can manage the reversal of the temporary differences and it is probable that the temporary difference will not reverse within the foreseeable future.

The carrying amount of the deferred tax claims is checked every year on the balance sheet date and is reduced, if it is no longer probable that sufficient taxable income will be available in order to realise the claim completely or in part. A deferred

tax asset is entered for the amount of unused tax losses and unused tax credits, which have been carried forward, if it is probable that a future taxable profit will be available, which can be used against the tax losses and the unused tax credits not yet used.

Deferred tax claims and tax liabilities are determined on the basis of the expected tax rates (and tax laws), which will probably apply at the time when the debt has to be paid or when the asset value is realised. The valuation of deferred tax claims and tax liabilities reflects the tax consequences, which would arise from the manner that the Group is expecting on the balance sheet date in order to settle the liability or realise the asset value.

Deferred tax claims and tax liabilities are balanced out if there is an enforceable right to offset current tax claims with current tax liabilities and if they are related to income taxes that are collected by the same tax office and if the Group intends to settle its current tax claims and tax liabilities on a net basis.

There is mathematically a balance of deferred tax assets (outside basis differences) arising from the differences between the assets for the subsidiaries entered on the consolidated balance sheet and the tax balance figure for the shares held by the parent company in the subsidiaries. As there are no plans to sell these shares in the foreseeable future and therefore no recognition of these deferred taxes is likely, an estimate of these deferred taxes has been waived.

## 2.15. Revenue recognition

Turnover revenues are evaluated at their fair value of the equivalent received or to be received and are reduced by expected customer returns, discounts and other similar deductions.

### 2.15.1. Selling goods

Sales revenues from the sale of goods are entered, if the following conditions have been met cumulatively:

- The Group has transferred the major risks and opportunities arising from the ownership of the goods to the purchaser
- The Group neither retains an ongoing right of disposal, such as is usually connected to ownership, nor does it have any effective power of disposal over the sold goods
- The amount of sales revenues can be reliably determined
- It is probable that the economic benefits from the business transaction will accrue for the Group and the expenditure incurred or still to be incurred in connection with the sale can be reliably determined.

### 2.15.2. Providing software services

Revenues from software service contracts are entered according to the degree to which they have been completed, if the results of any software service business can be reliably estimated. In more detail, revenue recognition takes place as follows:

#### Earnings from licences:

Revenue recognition takes place at the time that a functioning software solution or the productive checkout system is handed over to a customer.

#### Earnings from services (customising) and earnings from adjustments outside the contractually agreed service (change requests):

The revenue recognition in principle takes place at the time when the agreed service is handed over to or accepted by the customer. The services are valued according to IAS 15 in order to guarantee revenue recognition that meets the requirements of IFRS. In the case of software service business, for which it was impossible to reliably assess the

results – particularly those where the degree of completion is hard to determine – we have only entered this item in terms of expectations about the recovery of costs that were incurred. In the case of those projects where the results can be reliably assessed, the turnover has been entered in line with the degree of completion. Both the amount of revenues and the amount of costs incurred in the business and also the expected total costs of the business transaction can be reliably determined. It is also probable that the economic benefits will accrue for the Group.

The degree of completion is determined according to the completion of the software service needing to be provided and - prior to the first measurement date or between two measurement dates - according to the actual expenditure already incurred and the planned work to complete the overall service until the next measurement date. The amount of contract revenues is determined from the agreed job total for performing the work by the measurement date or – prior to the first measurement date or between two measurement dates – proportionate to the actual work performed in terms of the total work performance planned by the reporting date as a share of the job total prior to the next measurement date.

### **2.15.3. Revenues from maintenance work:**

Revenues from maintenance work are included in the accounts at the contractually agreed rates for the number of hours that have been worked and any costs that have been directly incurred on a monthly basis. If there is no direct reference to specific work performed and payments are made for servicing work beyond the period of one month, revenue recognition takes place at a monthly pro rata temporis rate.

## **2.16. Estimation uncertainties and assessment decisions**

In preparing the annual statements, assumptions have to be made to a certain degree and estimations are made, which have an effect on the level and statements of assets and liabilities or earnings and expenditure entered on the balance sheet. The assumptions and estimations largely relate to an assessment of the intrinsic value of intangible assets (including goodwill), the standard definition of the economic serviceable life of property, plant and equipment and intangible assets, the valuation of inventories and accounts receivable related to the intrinsic value of capitalised deferred taxes and the balance sheet entries and assessment of provisions. The assumptions and estimations are based on premises, which in turn are founded on the level of awareness that is available at the current time. Particularly with regard to the expected future development of business, the circumstances, which exist at the time when the net income for the period is prepared, and a realistic assessment of the future development of the global and sector-based business environment form the basis of the estimations. The amounts that have been entered may deviate from the originally expected estimated values as a result of developments in these general conditions, which differ from the assumptions and lie beyond the sphere of influence of management. If actual developments differ from those that are expected, the premises and, if necessary, the carrying amounts of the assets and liabilities that are affected are adjusted accordingly. At the time when the consolidated annual statements were prepared, the assumptions and estimations, on which they were based, were not subject to any major risks; so that it is assumed that no major adjustments of the carrying amounts of the assets and liabilities indicated on the balance sheet will be necessary in the following financial year from a current point of view.

### **2.16.1. Main sources of estimation uncertainties**

The following indicates the most important assumptions made about the future and the other major sources of estimation uncertainties on the balance sheet date. A major risk may arise as a result of these and mean that a major adjustment to the assets and liabilities recorded here becomes necessary within the next financial year.

#### Intrinsic value of goodwill

As a result of the acquisition of the operating business of Solquest GmbH by SQ IT-Services GmbH in 2009, the Group entered an intangible asset worth 6,403K euros as goodwill for the very first time. Following scheduled amortisation in 2014 amounting to EUR 870 K, this asset was entered in the consolidated accounts with a value of EUR 5,533 K on 31 December 2018. The value of this figure was checked on 31 December 2018. There were no indications that the expected and achievable influx of funds from the unit generating cash and cash equivalents being assigned to this goodwill figure might fall below the carrying amount of the goodwill. The calculation of the value in use requires the estimation of future cash flows from the cash-generating unit and a suitable discount rate for the cash value calculation. Although the expected and achievable cash inflows exceeded the carrying amount of the goodwill, management decided to apply a flat-rate haircut to the future forecasts due to the analysis of past expectations and the actual amount of inflows achieved. No revaluation was necessary with regard to this planned haircut.

Goodwill of EUR 244 K was entered on the balance sheet as a result of the corporate merger with AWEK as part of the final purchase price allocation on 10 December 2012 and as an accrual in the goodwill item on the consolidated balance sheet. The goodwill has been fully attributed to the "IT Services" unit generating cash and cash equivalents. This value of this figure was checked on 31 December 2018. There were no indications that the expected and achievable influx of funds from the unit generating cash and cash equivalents being assigned to this goodwill figure might fall below the carrying amount of the goodwill. The calculation of the value in use requires an estimation of future cash flows from the unit generating the cash and cash equivalents and an estimate of a suitable discount rate for calculating the cash value.

Through the partial acquisition of the operational business of DBS Data Business Systems Inc. by GK Software USA Inc., the Group entered an intangible asset amounting to EUR 9,838 K (31 December 2018: EUR 9,330 K) as goodwill. The intrinsic value of this figure was checked on 31 December 2018. There were no indications that the expected and achievable influx of funds from the unit gen-

erating cash and cash equivalents being assigned to this goodwill figure might fall below the carrying amount of the goodwill.

The calculation of the value in use requires the estimation of future cash flows from the cash-generating unit and a suitable discount rate for the cash value calculation.

By acquiring the holding in prudsys AG amounting to 80.12 percent on 1 November 2017, goodwill amounting to EUR 122 K resulted through the relevant attribution of the purchase price for the assets acquired.

By acquiring valuephone GmbH on 31 May 2018, goodwill amounting to EUR 2,622 K resulted through the relevant attribution of the purchase price for the assets acquired.

#### Intrinsic value of customer bases

The Group entered an intangible asset of EUR 458 K as the customer base due to the business shares in AWEK GmbH acquired by GK Software. The customer base is amortised as expenditure in a linear fashion over the expected period of use of ten years and was entered with a value of EUR 179 K on the balance sheet reporting date (previous year: EUR 225 K).

Through the partial acquisition of the operational business of DBS Data Business Systems Inc. by GK Software USA Inc., the Group entered an intangible asset amounting to EUR 5,433 K (31 December 2018: EUR 5,108 K) as its customer base. The customer base is amortised as expenditure in a linear fashion over the expected period of use of ten years and was entered on the consolidated balance sheet at a value of EUR 3,193 K on the balance sheet reporting date (previous year: EUR 3,536 K). There was no information indicating the need to make a value adjustment beyond this.

As a result of the acquisition of 80.12 percent of the shares in prudsys AG on 1 November 2017, the Group entered an intangible asset in the form of the acquired customer base amounting to EUR 1,642. The customer base is amortised on schedule in a linear fashion over a period of 10 years from the time of the acquisition. The carrying amount was valued at EUR 1,451 K on the reporting date.

A customer based valued at EUR 1,562 K was entered with the acquisition of valuephone GmbH on 31 May 2018. This will be amortised in a linear fashion over a period of 7 years from the date of acquisition and was entered on the balance sheet with a value of EUR 1,432 K on 31 December 2018.

The intrinsic value of customer relationships is the result of a comparison drawn from the past of the underlying turnover from existing customer relationships with the turnover actually achieved and the revenues generated from them on the basis of the business planning underlying the procurement costs that have been entered as part of allocating the purchase price and the expectations for the further development of these key figures.

#### Intrinsic value of goodwill

Software that is acquired is amortised in a linear fashion over a period of 3 to 7 years. The software acquired through the purchased holdings (prudsys AG and valuephone GmbH) are being amortised in a linear fashion over a period of 7 years. There was no information regarding necessary reductions in value that were not scheduled.

#### Intrinsic value of contractual assets

The intrinsic value of the assets entered on the balance sheet are checked by ongoing project monitoring. The course of the projects concerned largely matches the planning work and even the opportunity arising from recognition difficulties did not create a situation where an adjustment of the contractual assets needed to be made, as the recognition difficulties would not lead to any expected expenditure, which would exceed the revenues or even made it impossible to recognise the amounts.

#### Estimation and assessment of deferred tax assets

The estimation and assessment of deferred taxes assets from any losses carried forward assumes that the Group companies concerned will in future once again generate profits which allow for the utilisation of the tax losses carried forward. This is done by planning the economic development of the individual companies in the Group.

#### Estimation and assessment of provisions

The valuation and assessment of provisions in conjunction with pending legal disputes or other outstanding claims subject to settlement, mediation, arbitration or government regulation are linked to

estimates by the Group to a considerable extent. In this way, the assessment of the probability that pending legal proceedings will be successful or lead to a liability or the quantification of the possible amount of payment obligations is based on the assessment of the respective individual circumstances. In addition, the determination of provisions for taxes and legal risks is linked to substantial estimates. These estimates can change on the basis of new information. When collecting new information, the Group primarily uses the services of internal experts and external advisers such as actuaries or legal consultants.

#### Assessments of fair value and assessment procedures

In order to determine the fair value of assets and debts, the Group uses observable market data, as far as possible. If these input parameters are not available in stage 1, the Group sets appropriate assessment procedures and input parameters. Details of the assessment techniques used and input parameters when determining the fair values of the different assets and debts can be found in 8.1.

Other sources of uncertainty regarding estimates exist with regard to the useful serviceable life of assets, with the assessment of the intrinsic value of trade accounts receivable and the valuation of inventories.

### 3. Notes on the Consolidated Balance Sheet

#### 3.1. Property, plant and equipment

##### Property, plant and equipment in 2017

#### T.22

EUR K	Real estate and buildings	Operating and business equipment	Initial payments made and facilities under construction	Technical equipment and machines	Total
<b>Purchasing or production costs</b>					
Figures on 1 January 2017	4,772	8,261	3,198	0	<b>16,231</b>
Accruals	3,965	3,076	80	0	<b>7,121</b>
Accruals through corporate mergers	0	67	0	6	<b>73</b>
Disposals	0	122	5	0	<b>127</b>
<b>Figures on 31 December 2017</b>	<b>8,737</b>	<b>11,282</b>	<b>3,273</b>	<b>6</b>	<b>23,298</b>
<b>Accumulated depreciation</b>					
Figures on 1 January 2017	1,410	5,919	0	0	<b>7,329</b>
Accruals	196	1,706	0	0	<b>1,902</b>
Accruals through corporate mergers	0	0	0	0	<b>0</b>
Disposals	0	116	0	0	<b>116</b>
<b>Figures on 31 December 2017</b>	<b>1,606</b>	<b>7,509</b>	<b>0</b>	<b>0</b>	<b>9,115</b>
<b>Carrying amounts on 31 December 2017</b>	<b>7,131</b>	<b>3,773</b>	<b>3,273</b>	<b>6</b>	<b>14,183</b>

##### Property, plant and equipment in 2018

#### T.23

EUR K	Real estate and buildings	Operating and business equipment	Initial payments made and facilities under construction	Technical equipment and machines	Total
<b>Purchasing or production costs</b>					
Figures on 1 January 2018	8,737	11,282	3,273	6	<b>23,299</b>
Accruals	6,264	4,224	832	0	<b>11,320</b>
Accruals through corporate mergers	0	0	0	0	<b>0</b>
Disposals	0	244	0	6	<b>250</b>
<b>Figures on 31 December 2018</b>	<b>15,001</b>	<b>15,262</b>	<b>4,105</b>	<b>0</b>	<b>34,368</b>
<b>Accumulated depreciation</b>					
Figures on 1 January	1,606	7,509	0	0	<b>9,115</b>
Accruals	356	2,377	0	0	<b>2,733</b>
Accruals through corporate mergers	0	0	0	0	<b>0</b>
Disposals	0	226	0	0	<b>226</b>
<b>Figures on 31 December 2018</b>	<b>1,962</b>	<b>9,660</b>	<b>0</b>	<b>0</b>	<b>11,622</b>
<b>Carrying amounts on 31 December 2018</b>	<b>13,039</b>	<b>5,602</b>	<b>4,105</b>	<b>0</b>	<b>22,746</b>

Some of the plots of land serve as security for liabilities through real property liens; for more details, we refer you to paragraph [3.10](#).

### 3.2. Intangible assets

#### Intangible assets in 2017

##### T.24

EUR K	Capitalised development costs	Industrial property rights and similar rights and values	Goodwill	Customer base	Orders in hand	Total
<b>Purchasing or production costs</b>						
Figures on 1 January 2017	7,988	4,777	16,782	6,751	1,585	<b>37,883</b>
Accruals	0	807	0	0	0	<b>807</b>
Accruals through corporate mergers	0	2,756	122	1,642	0	<b>4,520</b>
Changes caused by exchange rates	0	(165)	(1,227)	(526)	0	<b>(1,918)</b>
Disposals	0	0	0	0	0	<b>0</b>
<b>Figures on 31 December 2017</b>	<b>7,988</b>	<b>8,175</b>	<b>15,677</b>	<b>7,867</b>	<b>1,585</b>	<b>41,292</b>
<b>Accumulated depreciation</b>						
Figures on 1 January 2017	7,079	2,710	870	1,883	1,513	<b>14,055</b>
Accruals	359	735	0	580	72	<b>1,746</b>
Accruals through corporate mergers	0	93	0	39	0	<b>132</b>
Disposals	0	0	0	0	0	<b>0</b>
<b>Figures on 31 December 2017</b>	<b>7,438</b>	<b>3,538</b>	<b>870</b>	<b>2,502</b>	<b>1,585</b>	<b>15,933</b>
<b>Carrying amounts on 31 December 2017</b>	<b>550</b>	<b>4,637</b>	<b>14,807</b>	<b>5,365</b>	<b>0</b>	<b>25,359</b>

#### Intangible assets in 2018

##### T.25

EUR K	Capitalised development costs	Industrial property rights and similar rights and values	Goodwill	Customer base	Orders in hand	Total
<b>Purchasing or production costs</b>						
Figures on 1 January 2018	7,988	8,175	15,677	7,867	1,585	<b>41,292</b>
Accruals	0	685	0	0	0	<b>685</b>
Accruals through corporate mergers	0	1,636	2,622	1,562	0	<b>5,820</b>
Changes caused by exchange rates	0	86	422	153	0	<b>661</b>
Disposals	0	(14)	0	0	0	<b>(14)</b>
<b>Figures on 31 December 2018</b>	<b>7,988</b>	<b>10,568</b>	<b>18,721</b>	<b>9,582</b>	<b>1,585</b>	<b>48,444</b>
<b>Accumulated depreciation</b>						
Figures on 1 January 2018	7,438	3,538	870	2,502	1,585	<b>15,933</b>
Accruals	283	1,259	0	707	0	<b>2,249</b>
Accruals through corporate mergers	0	139	0	130	0	<b>269</b>
Disposals	0	(14)	0	(12)	0	<b>(26)</b>
<b>Figures on 31 December 2018</b>	<b>7,721</b>	<b>4,922</b>	<b>870</b>	<b>3,327</b>	<b>1,585</b>	<b>18,425</b>
<b>Carrying amounts on 31 December 2018</b>	<b>267</b>	<b>5,646</b>	<b>17,851</b>	<b>6,255</b>	<b>0</b>	<b>30,019</b>

The capitalised development costs are amortised according to schedule in a linear fashion over an estimated serviceable life of five years. The amortisation starts in the year of capitalisation with the proportionate amount.

Research costs of EUR 847 K (2017 financial year: EUR 624 K) were entered immediately as expenditure during the 2018 financial year.

The goodwill was allocated to the following units generating cash and cash equivalents for the purpose of checking the impairment:

- StoreWeaver Enterprise Edition (GK/Retail segment)
- IT Services (IT Services segment)
- TransAction+ Products and Services (GK/Retail segment)
- prudsys RDE (GK/Retail segment)

The goodwill was allocated as follows:

<b>Goodwill at GK Software</b>			
<b>T.26</b>	EUR K	31.12.2018	31.12.2017
	StoreWeaver Enterprise Edition	5,533	5,533
	IT Services	244	244
	TransAction+ Products and Services	9,330	8,908
	prudsys RDE	122	122
	valuephone GmbH	2,622	—
	<b>Total</b>	<b>17,851</b>	<b>14,807</b>

#### **The StoreWeaver Enterprise Edition unit**

The unit generating the cash and cash equivalents, which form the basis for this capitalised goodwill, was assessed with the value in use, however by no more than the purchasing costs, determined as part of the purchase price, which cannot be attributed to assets that can be capitalised. This unit was described in the consolidated accounts for 2010 as the “LUNAR project and project business for this partial solution”.

In order to determine the value in use of a unit that generates cash and cash equivalents, assessments were made of the future net cash and cash equivalent accruals. The estimates take place

within the planning horizon as part of the normal principles of Group planning (DCF method). However, these were used with specific parameters for the unit generating the cash and cash equivalents and these parameters are based on the analysis of the actual development of the unit generating the cash and cash equivalents in the past. The planning conventions generally include planning the balance sheet and the profit and loss statement and, derived from these, planning for the expected flows of cash and cash equivalents.

The detailed planning covers the period until 2023. As use is possible and probable beyond this period — historical experience supports the principle of assuming a normal period of use for solutions provided by the unit generating the cash and cash equivalents of 10 - 15 years — the following period was also taken into account. An even growth rate of 2 percent was assumed here.

The flows of payments determined in this way were discounted with an interest rate of 7.78 percent (7.58 percent in the 2017 financial year) and this specified the weighted costs of the capital after income taxes. Capital market data from a group of comparable companies was used in order to determine the weighted capital costs. The pre-tax interest rate determined iteratively amounted to 10.05 percent.

The ability of the unit generating the cash and cash equivalents to continue to deliver its projects in line with contractual arrangements is crucially important for assessing the value in use. If it does not manage to do so, compensation claims from customers and damage to a company's reputation could significantly impair the economic prospects of the unit concerned and the whole Group too. A serious impairment of the unit's ability to deliver could arise if it is not possible to retain the employees involved in the projects within the Group, as these employees are essential to the success of the project. Any significant loss of employees jeopardises the successful completion of a project. The value in use is also affected by the fact that the software solutions of the unit generating the cash and cash equivalents are sold through partners. If they are unable to deliver these sales commitments, this will have a negative impact on the value in use.



We varied the discount rate to check the value in use in terms of the net assets of the unit generating the cash and cash equivalents, to which the value in use is assigned. An increase in the interest rate of 1 percent would create a situation where, other things being equal, a value adjustment in the goodwill would have to take place. A decline in turnover of 25 percent would not require any value adjustment.

These assessments and the expectation that a fundamental impairment of the ability to deliver the goods or services, whether this is because of a lack of resources or fundamentally poorer work than in the past, is not expected and therefore permit the continuation of the goodwill figure entered in the past.

#### **The IT Services unit**

The acquired debts exceeded the identified assets by EUR 244 K in association with the acquisition of the AWEK Group, so that goodwill amounting to this sum was entered on the balance sheet as a result of this transaction on 31 December 2012. According to IAS 36.90, checks on the intrinsic value of the unit generating the cash and cash equivalents took place for the first time on 31 December 2013.

The unit generating the cash and cash equivalents, which form the basis for this capitalised goodwill, was assessed with the value in use, however by no more than the purchasing costs, determined as part of the purchase price, which cannot be attributed to assets that can be capitalised.

In order to determine the value in use of a unit that generates cash and cash equivalents, assessments were made of the future net cash and cash equivalent accruals. The estimates took place within the planning horizon and within the principles that are normal for Group planning. Because of the business model for this unit generating the cash and cash equivalents, which differs from the rest of the Group, specific parameters were used for this unit, which are based on the experience and the analysis of the actual development of the using generating the cash and cash equivalents in the past. The planning conventions generally include planning the balance sheet and the profit and loss statement and, derived from these,

planning for the expected flows of cash and cash equivalents.

The detailed planning covers the period until 2023. As use is possible and probable beyond this period – the unit has been offering its services and products for more than twenty years now – the following period was also taken into account. An even shrinkage rate of 1 percent has been assumed.

The flows of payments determined in this way were discounted with an interest rate of 7.78 percent (7.58 percent in the 2017 financial year) and this specified the weighted costs of the capital after income taxes (10.05 percent before taxes). Capital market data from a group of comparable companies was used in order to determine the weighted capital costs.

In the case of this unit generating the cash and cash equivalents, it is crucially important for assessing the value in use that the company can deliver its projects in line with contracts. If this does not happen, the Group can expect the same consequences as for the "StoreWeaver" unit. The reasons for the impairment of the ability to deliver are identical. However, the opportunities for successfully using other sales forms than direct sales are insignificant for the Group.

The checks on the stability of estimates about the value in use in relation to the carrying amount of the net assets of the unit generating the cash and cash equivalents revealed that this does not respond to an increase in the capitalisation interest rate within an expected interval. Only when the capitalisation interest rate was increased by a ratio of two-and-a-half would the carrying amount of the net assets of IT Services exceed the value in use. Sales targets would have to permanently be missed by almost 20 percent in terms of business developments. We assume that there are no realistic indications to suggest that the main assumptions with regard to the possibility of delivering projects in line with contractual conditions and being able to retain the employees required for this purpose within the Group will diverge significantly from the actual situation. We believe here too that no realistic change in one of the main assumptions quoted above would create a

situation where the carrying amount of the unit exceeded the achievable sum.

#### **The TransAction+ Products and Services unit**

The acquired debts exceeded the identified assets by EUR 9.838 K in association with the acquisition of part of the operational business of DBS Data Business Systems Inc. by GK Software USA (31 December 2017:

(31 December 2018: EUR 9,330 K because of the currency conversion) so that goodwill amounting to this sum was entered on the balance sheet as a result of this transaction on 31 December 2018. Checks on the intrinsic value of the unit generating the cash and cash equivalents took place on 31 December 2018, according to IAS 36.90.

The unit generating the cash and cash equivalents, which form the basis for this capitalised goodwill, was assessed with the value in use, however by no more than the purchasing costs, determined as part of the purchase price, which cannot be attributed to assets that can be capitalised.

In order to determine the value in use of a unit that generates cash and cash equivalents, assessments were made of the future net cash and cash equivalent accruals. The estimates took place within the planning horizon and within the principles that are normal for Group planning. Because of the business model for this unit generating the cash and cash equivalents, which differs from the rest of the Group, specific parameters were used for this unit, which are based on the experience and the analysis of the actual development of the using generating the cash and cash equivalents in the past. The planning conventions generally include planning the balance sheet and the profit and loss statement and, derived from these, planning for the expected flows of cash and cash equivalents.

The detailed planning covers the period until 2023. As use is possible and probable beyond this period – the unit has been offering its services and products for more than twenty years now – the following period was also taken into account. An even growth rate of 2 percent was assumed here.

The flows of payments determined in this way were discounted with an interest rate of 9.2 per-

cent (9.1 percent in the 2017 financial year) and this specified the weighted costs of the capital after income taxes (11.88 percent before taxes). Capital market data from a group of comparable companies was used in order to determine the weighted capital costs.

In the case of this unit generating the cash and cash equivalents, it is crucially important for assessing the value in use that the company can deliver its projects in line with contracts. If this does not happen, the Group can expect the same consequences as for the “TransAction+ Products and Services” unit. The reasons for the impairment of the ability to deliver are identical. However, the opportunities for successfully using other sales forms than direct sales are insignificant for the Group.

We conducted changes to the main parameters to check the stability of estimates about the value in use in relation to the carrying amount of the net assets of the unit generating the cash and cash equivalents. There is no need for a value adjustment if the capitalisation interest rate is increased by two percentage points. At the level of business development, all the new business would have to cease to exist in order to arrive at the need to conduct a new assessment. In the light of this, we assume that there are no realistic indications to suggest that the main assumptions with regard to being able to deliver projects in line with contractual conditions and retain the employees required for this purpose within the Group will diverge significantly from the actual situation. We also believe here that no realistic change in one of the main assumptions quoted above would create a situation where the carrying amount of the unit exceeded the achievable sum.

#### **The prudsys RDE unit**

The debts acquired exceeded the identified assets by EUR 122 K in association with the acquisition of prudsys, so that goodwill amounting to this sum was entered on the balance sheet as a result of this transaction on 31 December 2018. According to IAS 36.90, checks on the intrinsic value of the unit generating the cash and cash equivalents took place for the first time on 31 December 2017.

The unit generating the cash and cash equivalents, which form the basis for this capitalised goodwill,

was assessed with the value in use, however by no more than the purchasing costs, determined as part of the purchase price, which cannot be attributed to assets that can be capitalised.

In order to determine the value in use of a unit that generates cash and cash equivalents, assessments were made of the future net cash and cash equivalent accruals. The estimates took place within the planning horizon and within the principles that are normal for Group planning. Because of the business model for this unit generating the cash and cash equivalents, which differs from the rest of the Group, specific parameters were used for this unit, which are based on the experience and the analysis of the actual development of the using generating the cash and cash equivalents in the past. The planning conventions generally include planning the balance sheet and the profit and loss statement and, derived from these, planning for the expected flows of cash and cash equivalents.

The detailed planning covers the period until 2023. As use is possible and probable beyond this time, the following period was also taken into account. An even growth rate of 2 percent was assumed here.

The flows of payments determined in this way were discounted with an interest rate of 7.78 percent (7.58 percent in the 2017 financial year) and this specified the weighted costs of the capital after income taxes (10.05 percent before taxes). Capital market data from a group of comparable companies was used in order to determine the weighted capital costs.

In the case of this unit generating the cash and cash equivalents, it is crucially important for assessing the value in use that the company can deliver its projects in line with contracts. If this does not happen, the Group can expect the same consequences as for the "StoreWeaver" unit. The reasons for the impairment of the ability to deliver are identical. However, the opportunities for successfully using other sales forms than direct sales are insignificant for the Group.

The checks on the stability of estimates about the value in use in relation to the carrying amount of the net assets of the unit generating the cash

and cash equivalents revealed that this does not respond to an increase in the capitalisation interest rate of plus two points or a decline in turnover of 5 percent. Sales targets would have to permanently be missed by almost 20 percent in terms of business developments. We assume that there are no realistic indications to suggest that the main assumptions with regard to the possibility of delivering projects in line with contractual conditions and being able to retain the employees required for this purpose within the Group will diverge significantly from the actual situation. We believe here too that no realistic change in one of the main assumptions quoted above would create a situation where the carrying amount of the unit exceeded the achievable sum.

#### **The valuephone MCA unit**

The debts acquired exceeded the identified assets by EUR 2,662 K in association with the acquisition of valuephone, so that goodwill amounting to this sum was entered on the balance sheet as a result of this transaction on 31 December 2018. According to IAS 36.90, checks on the intrinsic value of the unit generating the cash and cash equivalents took place for the first time on 31 December 2018.

The unit generating the cash and cash equivalents, which form the basis for this capitalised goodwill, was assessed with the value in use, however by no more than the purchasing costs, determined as part of the purchase price, which cannot be attributed to assets that can be capitalised.

In order to determine the value in use of a unit that generates cash and cash equivalents, assessments were made of the future net cash and cash equivalent accruals. The estimates took place within the planning horizon and within the principles that are normal for Group planning. Because of the business model for this unit generating the cash and cash equivalents, which differs from the rest of the Group, specific parameters were used for this unit, which are based on the experience and the analysis of the actual development of the using generating the cash and cash equivalents in the past. The planning conventions generally include planning the balance sheet and the profit and loss statement and, derived from these, planning for the expected flows of cash and cash equivalents.

The detailed planning covers the period until 2023. As use is possible and probable beyond this time, the following period was also taken into account. An even growth rate of 1 percent was assumed here.

The flows of payments determined in this way were discounted with an interest rate of 5.8 percent and this specified the weighted costs of the capital after income taxes (7.5 percent before taxes). Capital market data from a group of comparable companies was used in order to determine the weighted capital costs.

In the case of this unit generating the cash and cash equivalents, it is crucially important for assessing the value in use that the company can deliver its projects in line with contracts. If this does not happen, the Group can expect the same consequences as for the "StoreWeaver" unit. The reasons for the impairment of the ability to deliver are identical. However, the opportunities for successfully using other sales forms than direct sales are insignificant for the Group.

The checks on the stability of estimates about the value in use in relation to the carrying amount of the net asset from the unit generating the cash and cash equivalents revealed that this does not react to an increase in the capitalisation interest rate of plus two points or a decline in turnover of 5 percent. Sales targets would have to permanently be missed by almost 20 percent in terms of business developments. We assume that there are no realistic indications to suggest that the main assumptions with regard to the possibility of delivering projects in line with contractual conditions and being able to retain the employees required for this purpose within the Group will diverge significantly from the actual situation. We believe here too that no realistic change in one of the main assumptions quoted above would create a situation where the carrying amount of the unit exceeded the achievable sum.

### 3.3. Stocks

Stocks			
T.27	EUR K	31.12.2018	31.12.2017
	Goods	387	798
	Auxiliary materials and supplies	99	192
	Advance payments on inventories	35	54
	<b>Total</b>	<b>521</b>	<b>1,044</b>

### 3.4. Trade accounts receivable

The trade accounts receivable have a term of less than one year. Because of the short term involved and the low interest level at the moment, it is assumed that the fair value in each case will match the carrying amount.

An increase of EUR 607 K was registered in the development of trade accounts receivable until the reporting date resulting from the acquisition of valuephone GmbH. The share of accounts receivable with a due date of more than one year amounted to EUR 800 K.

The number of value adjustments completed during the financial year amounted to EUR 336 K in total (previous year: EUR 208 K). The value adjustments were entered under "Other expenditure". Revenue from the reversal of value adjustments in previous years was entered under "Other operating revenues" and amounted to EUR 24 K (previous year: EUR 327 K). Value adjustments amounting to a total of EUR 630 K were formed on the reporting date (previous year: EUR 318 K).

Trade accounts receivable			
T.28	TEUR	2018	2017
	aus CZK	—	16
	aus USD	2.633	2.851
	aus ZAR	721	1.006
	aus CHF	—	—
	aus RUB	31	—
	aus UAH	1	1
	<b>Saldo</b>	<b>3.386</b>	<b>3.874</b>

### 3.5. Assets

Customer orders, for which turnover revenues were realised, must be shown as assets. This item amounted to EUR 10,289 (previous year: EUR 5,129 K) on the balance sheet reporting date.

No earnings were entered arising from service obligations, which were provided in earlier periods, during the reporting period.

The complete transaction price that was attributed to service obligations, which had not been provided on 31 December 2018, amounted to EUR 14,900 K on the reporting date. Management expects that EUR 9,100 K of the transaction price that was attributed to service obligations, which had not been provided on 31 December 2018, will be entered as revenue in the next reporting period. The remaining EUR 5.800 K will be realised during the 2020 financial year. The amount entered above did not contain any variable service in return that is restricted. All the other contracts involve periods of no more than one year or are being accounted for by a set hourly rate. The transaction price, which is attributed to these service obligations, which have not been provided, has not been revealed, as is permissible according to IFRS 15.

### 3.6. Other accounts receivable, assets and income tax assets

#### Other accounts receivable, assets and income tax assets

T.29	EUR K	31.12.2018	31.12.2017
	Income tax claims	1,045	450
	<b>Intermediate total</b>	<b>1,045</b>	<b>450</b>
	Loans paid to third parties	57	2,237
	Accounts receivable from members of the Management Board	880	33
	Accounts from value-added tax	686	839
	Accounts from asset deferrals	2,133	1,703
	Accounts from interest/currency hedging business	393	895
	Others	525	1,355
	<b>Intermediate total</b>	<b>4,674</b>	<b>7,062</b>
	<b>Total</b>	<b>5,719</b>	<b>7,512</b>

Value adjustments amounting to EUR 53 K (previous year: EUR 53 K) were made on loans paid to third parties.

The receivables from income tax claims largely contained receivables from corporation tax, plus the solidarity surcharge and business tax advance payments.

GK Software took over accounts receivable with the former shareholder in conjunction with the acquisition of valuephone. Of this sum, EUR 842 K was allotted to current Management Board members. The remaining accounts receivable largely amounted to payments in advance for travel expenses, which are granted free of interest.

#### Other accounts receivable in foreign currencies

T.30	EUR K	2018	2017
	from CZK	158	156
	from USD	268	749
	from ZAR	5	45
	from CHF	4	4
	from RUB	3	15
	from UAH	3	2
	<b>Balance</b>	<b>441</b>	<b>971</b>

### 3.7. Cash and cash equivalents (liquid funds)

Cash and cash equivalents are assessed at their nominal value. The item contains cash holdings and current bank deposits with terms of less than three months. Banks credits amounting to EUR 11K (previous year: EUR 11 K) were pledged as part of rent collateral to the bank providing the guarantee. The Management Board is not expecting this security to be used.

### 3.8. Equity

We refer you to the statement of changes in the Group's equity if you wish to gain information on changes to the equity at GK Software on the 2018 balance sheet reporting date.

The Company's share capital amounted to EUR 1,926,475.00 on 31 December 2018 and was divided into 1,926,475 par value, individual share certificates each worth EUR 1. All the shares issued

had been fully paid for by the reporting date. The changes resulted from the exercising of the share option programme.

No shares were owned by GK Software on the balance sheet date.

**Authorised capital** On 28 August 2014, the annual shareholders' meeting passed a resolution authorising the Management Board to increase the ordinary shares of the Company by issuing new, no-par value shares made out to the holder (individual share certificates) in exchange for cash contributions and/or assets in kind by up to a total of EUR 945,000 on one or more occasions until 27 August 2019, provided that the Supervisory Board approves (authorised capital in 2014).

In principle, the subscription right must be granted to shareholders. However, the Management Board is entitled to exclude the subscription right to one or several increases in capital as part of authorised capital in order to balance out fractional amounts or, in the case of increases in capital, in return for assets in kind, particularly when acquiring companies, if the increase in capital takes place in exchange for cash deposits and the issue price does not fall far below the stock exchange price for shares that have already been issued and the ratio of new shares issued and excluded from the subscription right does not exceed 10 percent of the nominal capital according to Section 186 Paragraph 3 Sentence 4 of the German Companies Act and if the new shares have been offered for sale to persons, who have a working relationship with the Company, or have been transferred to them.

**Contingent capital.** Contingent capital (contingent capital II EUR 50,000; contingent capital III EUR 75,000; contingent capital IV EUR 250,000; contingent capital V EUR 37,000) exists. These contingent increases in capital are only performed if the owners or creditors of convertible bonds or share options make use of their conversion or subscription rights.

We would refer to Section 2.8 of the notes on the consolidated accounts with regard to the issue of share options and the amount of contingent capital.

The revenue reserves item not only contains the adjustment to the statutory reserve funds, but also differences in amounts due to the initial switch to IFRS.

Extra charges arising from the issue of shares are shown in the capital reserves.

Currency exchange differences arising from the conversion of foreign business operations and the actuarial profits/losses from defined benefit schemes are entered under "Other income".

### 3.9. Statutory provisions for pensions

GK Software and the subsidiaries AWEK GmbH and AWEK microdata GmbH have issued pensions benefit plans in the form of defined benefit plans.

The pension benefit plans have been organised so that they form a life-long, fixed retirement pension, which is to be paid once employees reach the age of 65 or 68 or 67. As this involves fixed pension sums, no adjustments are made in line with the final salary paid or the preceding salaries or the length of services or revenues in the fund. No fixed pension adjustment has been agreed. There are also individual entitlements in case somebody suffers invalidity or a widow's pension is necessary if somebody dies.

The plans in Germany mean that the Group is normally exposed to the following actuarial risks:

**Investment risks.** The cash value of the defined benefit obligation in the plan is determined by using a discount rate. This is determined on the basis of the profits of high-grade corporate loans with a fixed interest rate. As soon as the yields from the plan asset fall below this interest rate, this creates a shortfall in cover for the plan. The plan currently has a relatively balanced investment portfolio of equity instruments, debt instruments and property. Because of the long-term nature of the plan liabilities, the administration board of the pension fund believes that it is advisable to invest an appropriate part of the plan asset in equity instruments and property in order to increase the chances of increasing profits.

**Risks associated with changes in interest rates.**

A reduction in the loan interest rate will lead to an increase in the plan liability, but this is partially offset by an increased yield from the plan asset investment in debt instruments with fixed interest rates.

**Risks arising from longevity.** The cash value of the defined benefit obligation from the plan is determined on the basis of the best possible estimate of the probability of death for the employees benefiting from the scheme, both during their working relationship and also after this ends. Any increase in life expectancy on the part of the employees benefitting from the scheme leads to an increase in the plan's liability.

The cash value of the defined benefit obligation and the associated current service costs are determined using the current single premium method.

The calculations are based on the following assumptions:

**Assumptions for calculating cash values**

	FY 2018	FY 2017
Pensionable age (m/f)	60-68/60-68	60-68/60-68
Discount factor(s) on 1 January	1.95% p.a.	1.40% p.a.
Discount factor(s) on 31 December	2.05% p.a.	1.95% p.a.
Rate of pension increase	1.50% p.a.	1.50% p.a.

The calculations are based on the "2018G Guide-line Tables" published by Klaus Heubeck.

The assets of the associated plan assets in question here are pension fund special assets. In this respect, it is not possible to provide any other information on investment categories. The cover funds in the pension fund were generated during the year under review.

A reconciled financial statement of the opening and final balances of the cash value of the defined benefit obligations with the reasons for changes provides the following picture:

**Reconciliation account to determine the cash values**

EUR K	FY 2018	FY 2017
Figures on 1 January:	3,523	3,698
+ Interest expenditure	68	51
+ Working period costs	446	96
+ Working period costs to be additionally calculated	0	305
- Benefits paid out	(93)	(93)
+ Actuarial profits (losses in the previous year)	16	(534)
of which adjustments based on experience	16	(216)
of which changes in financial assumptions	0	(318)
<b>Figures on 31 December</b>	<b>3,960</b>	<b>3,523</b>

The development of the plan assets is shown as follows:

**Development of the plan assets**

EUR K	FY 2018	FY 2017
Figures on 1 January	1,643	1,931
+ Expected yields from plan assets	53	24
+ Contributions	758	190
- Benefits paid out	(52)	(55)
- Actuarial losses (-)/ profits	0	(447)
<b>Figures on 31 December</b>	<b>2,402</b>	<b>1,643</b>

This therefore gave rise to a plan deficit of EUR 1,558 (previous year: EUR 1,880), which was entered as a pensions provision.

The following amounts were entered in the overall results with regard to the defined benefit plans:

### Statutory provisions for pensions

T.34	EUR K	2018	2017
	Current service costs	446	96
	Net interest expenditure	15	27
	Components of the defined benefit costs entered in the profit and loss statement	461	123
	<b>Reassessment of net debt from the defined benefit plan</b>		
	Gains from plan assets (with the exception of the amounts contained in the net interest)	0	(447)
	Actuarial gains and losses from the change in financial assumptions	16	534
	of which adjustments based on experience	16	216
	of which changes in financial assumptions	0	318
	Components in the defined benefit costs entered under "Other income"	16	87
	<b>Total</b>	<b>477</b>	<b>210</b>

In terms of the current annual expenditure amounting to EUR 461 K (previous year: EUR 122 K), interest revenues amounting to EUR 53 K (previous year: EUR 24 K) and interest expenditure amounting to EUR 68 K (previous year: EUR 51 K) were entered under "Interest results" and the remaining expenditure amounting to EUR 466 K (previous year: EUR 95 K) was entered as "Expenditure for old-age pensions".

The reassessment of net debt from a defined benefit plan was entered under "Other income".

The cash value of the defined benefit obligation and the fair value of the plan assets developed as follows:

### Development of the cash values of defined benefit obligations and plan assets

T.35	EUR K	Cash value of the defined benefit obligation	Fair value of the plan assets	Shortfall (-) surplus (+)
	<b>FY 2018</b>	<b>3,960</b>	<b>2,402</b>	<b>(1,558)</b>
	FY 2017	3,523	1,643	(1,880)
	FY 2016	3,698	1,931	(1,767)
	FY 2015	3,232	1,772	(1,460)
	FY 2014	3,277	1,613	(1,664)

The adjustments based on experience can be represented as follows during the last five years:

### Development of the plan liabilities and plan assets

T.36	EUR K	Liabilities in the plan	Assets in the plan
	<b>FY 2018</b>	<b>8</b>	<b>0</b>
	FY 2017	(199)	0
	FY 2016	273	(12)
	FY 2015	(65)	(5)
	FY 2014	362	(22)

We assume that contributions amounting to EUR 744 K (previous year: EUR 190 K) will be paid into the plan during 2019.

The crucial actuarial assumptions, which are used to determine the defined benefit obligation, are the actuarial interest rate and the pension trend. The sensitivity analyses shown below were carried out on the basis of the possible changes to each assumption on the balance sheet date determined by prudent judgment, although the remaining assumptions remained unchanged in each case.

- If the actuarial interest rate increases [falls] by 1 percent, the defined benefit obligation will be reduced by EUR 331 K [increased by EUR 422 K] (2017: reduced by EUR 358 K [increased by EUR 455 K]).
- If the pension trend increases [falls] by 1 percent, the defined benefit obligation will be increased by EUR 275 K [reduced by EUR 229 K] (2017: increased by EUR 289 K [reduced by EUR 242 K]).

The aforementioned sensitivity analysis should not represent the actual change in the defined benefit obligation, as it is improbable that any deviations from the assumptions made will occur in isolation, as some of the assumptions are connected to each other.

The cash value of the defined benefit obligation in the aforementioned sensitivity analysis was also determined using the current single premium method on the balance sheet reporting date, i.e. the same method as that used to calculate the defined benefit obligation entered on the consolidated balance sheet.

The promised benefits from the defined benefit pension plans have the following effects on the



flows of payments (expected pension payments) for the balance sheet years following the reporting date:

#### Benefits from the plan in the following years

T.37	EUR K	Value	Value p.y.
	Fiscal year 1	93	92
	Fiscal year 2	93	64
	Fiscal year 3	92	97
	Fiscal year 4	92	100
	Fiscal year 5	91	104
	Fiscal year 6-10	433	1,033

On the reporting date, the average weighted term (duration) of the defined benefit payment obligation was 24.42 years up to 31.71 years (previous year: 19.21 - 32.52) at GK Software or 4.92 years (previous year: 5.41) at AWEK GmbH and 8.81 years (previous year: 9.27) at AWEK Microdata GmbH.

### 3.10. Non-current and current bank liabilities

The non-current and current bank liabilities involved all the loans taken out by the Company. There is a summarised list in T.54 (8.1 Financial instruments).

Repayment shares of up to one year for non-current bank liabilities are entered under current bank liabilities.

In addition to this, the current bank liabilities also include utilised credit card limits amounting to EUR 149 K (previous year: EUR 152 K) and a current account credit lines that were used. Details on the latter are made available in Table T.56.

We would refer to paragraph 3.19 for information on collateralised loans.

### 3.11. Convertible bond

With the agreement of the Supervisory Board, the Management Board at GK Software SE decided on 18 October 2017 to issue secondary, unsecured convertible bonds with a total nominal value of up

to EUR 15,000,000 and with a term that runs until 26 October 2022.

The convertible bonds have a term of 5 years and were issued at 100 percent of their nominal value of EUR 1,000,000 per convertible bond and, if they were not converted or repurchased and retracted in advance, will be repaid at the nominal amount according to the bond conditions when they are finally due.

The bonds attract interest of 3 p.a. on the nominal amount from 26 October 2017 onwards. The interest must be paid annually in arrears on the relevant interest payment date.

The convertible bonds must be converted into ordinary shares for the parent company or paid for on 26 October 2022, according to the holder's choice. The initial fair value of the outside capital share of the bond was determined with a market interest rate for a bond of the same value without any conversion option on the issue date. The liability is then entered on the basis of the depreciated purchase costs until it has lapsed by the conversion or the due date of the convertible bond. The remaining revenues are assigned to the conversion option and entered under "Equity" and then not reassessed at a later date.

### 3.12. Deferred public sector grants

This item concerns investment subsidies subject to tax from the Free State of Saxony (provided by the Sächsische AufbauBank) as part of its regional business stimulus programme and investment grants that are not subject to tax.

The amortisation of the subsidies and grants takes place in a linear fashion over the serviceable life of the assets that have been supported by public funds.

### 3.13. Deferred taxes

Please refer to [74.11](#).

### 3.14. Provisions

Provisions					
T.38	EUR K	Personnel department	Production department	Other departments	Total
	Situation on 1 January 2018	246	920	180	<b>1,346</b>
	Amounts used	226	1	186	<b>413</b>
	Liquidation	28	259	7	<b>294</b>
	Additional funds	279	40	273	<b>592</b>
	<b>Figures on 31 December 2018</b>	<b>271</b>	<b>700</b>	<b>260</b>	<b>1,231</b>

The provisions in the production department exclusively cover warranties.

The calculations for warranty provisions are based on warranty costs in the past and estimates regarding future costs. An amount totalling EUR 1 K was used from provisions additionally formed in previous years for projects.

### 3.15. Trade accounts payable

Trade accounts payable are still due for settlement within one year.

Trade accounts payable in foreign currencies			
T.39	EUR K	2018	2017
	from CZK	57	47
	from USD	653	167
	from ZAR	12	5
	from CHF	—	—
	from RUB	—	—
	from UAH	1	1
	<b>Balance</b>	<b>723</b>	<b>220</b>

### 3.16. Contractual liabilities

As in the previous year, the contractual liabilities had a term of up to one year. Contractual liabilities amounted to USD 476 K on the balance sheet reporting date (previous year: USD 224 K).

### 3.17. Income tax liabilities

Income tax liabilities			
T.40	EUR K	31.12.2018	31.12.2017
	Income tax liabilities	282	488
	thereof in Germany	224	457
	thereof in Czech Republic	—	—
	thereof in Switzerland	25	25
	thereof in USA	18	—
	thereof in South Africa	—	—
	thereof in Ukraine	4	6
	thereof in Russia	11	—

### 3.18. Other current liabilities

The tax liabilities cover outstanding income tax and value-added tax payments.

Other current liabilities			
T.41	EUR K	31.12.2018	31.12.2017
	Tax liabilities	2,101	1,295
	Liabilities from wages and salaries	8,636	9,714
	Other liabilities towards members of staff	27	5
	Liabilities from the acquisition of companies	0	542
	Others	14,166	11,882
	of which an overpayment by customers	8,323	7,048
	of which from deferrals	2,394	2,614
	<b>Total</b>	<b>24,930</b>	<b>23,438</b>

**Other liabilities in foreign currencies**

<b>T.42</b>	EUR K	2018	2017
	from CZK	754	661
	from USD	2,755	3,368
	from ZAR	104	63
	from CHF	219	146
	from RUB	5	—
	from UAH	8	1
	<b>Balance</b>	<b>3,845</b>	<b>4,239</b>

**3.19. Secured liabilities**

Two investment loans were taken out with Commerzbank AG Plauen in the 2007 financial year. The loans are secured by the registered land charges on the business real estate (carrying amount including business buildings of EUR 6,887 K), recorded in the land register for Schöneck, Plauen Local Court, page 1895. Two other loans were taken out (DZ Bank, KfW) during the 2009 financial year as a result of the extension of the new building, the aforementioned rescheduling and the acquisition of Solquest. Land register debts were entered in the land register for Schöneck, Plauen Local Court, Pages 999, 1378 and 1895 as collateral for the DZ loan. The last-mentioned loan from the Sparkasse bank was collateralised by assigning the repayment claims from the land charges mentioned above. The loan taken out with the Commerzbank in 2018 was collateralised by the mortgage with entries in the land register for Schöneck, Plauen Local Court, pages 1255 and 1362.

The remaining loans with the Sparkasse bank were granted without any special securities; it is, however, entitled to demand securities at any time.

## 4. Notes on the Consolidated Profit and Loss Statement

### 4.1. Turnover revenues

The turnover revenues are exclusively the result of the sale of hardware and software and the provision of services for international and national customers.

Deferred turnover from contractual assets and amounting to EUR 13,764 K (EUR 6,893 K in the previous year), which was determined according to IAS 18.20, was entered during the financial year.

Overall, all the customer orders had an assets-side balance and were entered with a figure under "Contractual assets" (cf. [2.6](#)). Contractual liabilities from customers amounting to EUR 4,0.163 K were entered on the balance sheet. The expenses incurred after the reporting date amounted to EUR 5,367 K (previous year: EUR 3,769 K).

As regards the make-up of the significant categories of revenues, we would refer to Section [7](#) entitled "Segment Reporting". The warranty provisions formed during the financial year for these revenues have been entered in the Table [T.38](#) under Production department.

### 4.2. Other revenues

#### Other revenues

T.43	EUR K	FY 2018	FY 2017
	Reversals of other uncertain liabilities and provisions	749	158
	Vehicle benefits in kind	1,308	1,102
	Earnings from reversals of deferred public grants	131	44
	Reductions in value adjustments	67	327
	Market value of interest and currency swap	—	856
	revenues from currency differences	378	927
	adjustments to liabilities from corporate acquisitions	—	1,480
	Others	984	303
	<b>Total</b>	<b>3,617</b>	<b>5,197</b>

### 4.3. Expenditure on materials

#### Expenditure on materials

T.44	EUR K	FY 2018	FY 2017
	Cost of auxiliary materials and supplies	1,447	2,649
	Expenditure on purchased services	6,286	5,881
	<b>Total</b>	<b>7,733</b>	<b>8,530</b>

### 4.4. Expenditure on personnel

#### Expenditure on personnel

T.45	EUR K	FY 2018	FY 2017
	Wages and salaries	58,274	49,193
	Social security contributions	10,517	8,616
	of which expenditure on retirement benefits	444	631
	<b>Total</b>	<b>68,791</b>	<b>57,809</b>

On average, 1,129 people were employed during the 2018 financial year (961 in the previous year). 1,205 people were employed on the reporting date of 31 December 2018 (1,011 in the previous year).

With 680 staff members (previous year: 537), a large proportion of the Group's employees are employed at GK Software SE. The number of employees increased to 234 (previous year: 207) at the Czech subsidiary, Eurosoftware s.r.o., in Plzen. 101 employees were employed at AWEK GmbH (previous year: 106). AWEK microdata GmbH employed 26 people (previous year: 24). 1 person was employed at OOO GK Software RUS (1 in the previous year). 64 people were employed at GK Software USA Inc. (previous year: 51). GK Software Africa Ltd had 23 employees (previous year: 16). TOV Eurosoftware-UA employed 22 people (previous year: 13). 5 people were employed at the Swiss subsidiary StoreWeaver GmbH (previous year: 5). There were 49 people employed at prudsys AG (previous year: 51).

### 4.5. Depreciation and amortisation

As in the previous year, this item exclusively covers scheduled depreciation on property, plant and

equipment (↗T.23) and the amortisation of intangible assets(↗T.25).

The deferred taxes are included in the following balance sheet items:

#### 4.6. Other expenditure

##### Other operating expenditure

T.46	EUR K	FY 2018	FY 2017
	Legal and consulting fees	2,862	2,139
	Advertising and travel costs	6,619	5,670
	Room and operating costs	3,447	2,276
	Vehicle costs	4,518	3,047
	IT costs	1,800	1,868
	Administrative and distribution costs	2,453	1,811
	Others	4,712	3,726
	<b>Total</b>	<b>26,411</b>	<b>20,537</b>

#### 4.7. Financial results

##### Financial results

T.47	EUR K	FY 2018	FY 2017
	Interest income	138	133
	Interest expenditure	(1,563)	(786)
	<b>Account balance</b>	<b>(1,425)</b>	<b>(653)</b>

#### 4.8. Income taxes

##### Income taxes

T.48	EUR K	FY 2018	FY 2017
	Current tax liabilities	533	588
	Deferred tax expenditure	(1,285)	(132)
	thereof short term	(238)	(761)
	thereof long term	(1,047)	629
	<b>Account balance</b>	<b>(752)</b>	<b>456</b>

##### Income tax rates

T.49	Percent	31.12.2018	31.12.2017
	Group tax rate (parent company)	29.1	29.1
	thereof in Germany	28.4 - 31.6	28.4 - 31.6
	thereof in Czech Republic	19.0	19.0
	thereof in Switzerland	25.8	25.8
	thereof in USA	25.0	39.0
	thereof in South Africa	28.0	28.0
	thereof in Ukraine	18.0	18.0
	thereof in Russia	20.0	20.0

### Deferred taxes

#### T.50

EUR K	31.12.2018		31.12.2017	
	Assets	Liabilities	Assets	Liabilities
Loss carried forward	4,957	0	3,377	0
Intangible assets	353	4,075	283	2,952
Other fixed assets	47	5	77	4
Provisions for guarantees	11	0	9	0
Provisions for pensions	971	200	617	366
Changes in exchange rates	167	157	92	231
Accounts receivable from ongoing work	0	1,642	0	907
Trade accounts receivable	228	18	65	234
Interest and currency swap	90	85	169	157
Payables/ other provisions in previous year	22	0	460	0
Balancing	(2,812)	(2,812)	0	0
<b>Total according to the balance sheet</b>	<b>4,034</b>	<b>3,370</b>	<b>5,149</b>	<b>4,851</b>

Deferred tax claims/liabilities developed as follows:

### Deferred tax claims/liabilities

#### T.51

EUR K	31.12.2018			
	Initial balance	Changes related to the income statement	Changes not related to the income statement	Final balance
Interest and currency swap	12	73	(79)	<b>6</b>
Provisions for pensions	251	563	(43)	<b>771</b>
Changes in exchange rates	(140)	0	149	<b>9</b>
Other fixed assets	73	(31)	0	<b>42</b>
Provisions for guarantees	9	2	0	<b>11</b>
Intangible assets – in-house developed software	(161)	78	0	<b>(83)</b>
Intangible assets – in-house developed software (development expenses at AWEK)	(40)	40	0	<b>0</b>
Acquired intangible assets as part of the corporate acquisition (acquired technologies)	(240)	147	0	<b>(93)</b>
Acquired intangible assets as part of the corporate acquisition (customer relations)	(1,111)	(902)	0	<b>(2,013)</b>
Intangible assets acquired as part of the purchase of the company (orders on hand)	0	0	0	<b>0</b>
Intangible assets acquired through the Solquest purchase (customer relations)	103	(13)	0	<b>90</b>
Goodwill	(1,220)	(402)	0	<b>(1,622)</b>
Accounts receivable from ongoing work	(907)	(735)	0	<b>(1,642)</b>
General value adjustments (general value adjustments in previous year)	(168)	368	0	<b>200</b>
Payables (other provisions in previous year)	460	(431)	0	<b>29</b>
Loss carried forward (other assets in previous year)	3,376	1,583	0	<b>4,959</b>
<b>Total</b>	<b>297</b>	<b>340</b>	<b>27</b>	<b>664</b>

Tax expenditure for the financial year can be transferred to the profits for the period in the following way:

## Transfer of tax expenditure

T.52	EUR K	2018	2017
	Pre-tax earnings	171	4,340
	Anticipated average tax expenditure of 26.3% (prev. year: 27.25%)	45	1,183
	Tax expenditure according to domestic legislation	533	588
	Tax impact on non-deductible company spending	1	1
	Tax impact on tax-free income	(6)	(6)
	Deferred taxes	(1,285)	(132)
	Other tax effects	5	5
	<b>Actual tax expenditure</b>	<b>(752)</b>	<b>456</b>
	Effective tax ratio	n/a	10.5%

## 4.9. Earnings per share

The earnings per share are determined as a quotient of the total results and the weighted average of the number of shares in circulation during the financial year. The average number of shares in circulation during the 2017 financial year was 1,920,685 (previous year: 1,903,200). The consolidated surplus for 2018 amounted to EUR 923 K (previous year: EUR (3,884 K)). As a result, earnings per share amounted to EUR 0.48 for 2018 (previous year: EUR 2.05).

When calculating the diluted results per share, the total number of shares, the number of existing and possible new shares from the share option programmes and the convertible bond were all taken into consideration. The earnings from the period

## 31.12.2017

Initial balance	Changes related to the income statement	Changes not related to the income statement	Final balance	
(4)	(140)	156	<b>12</b>	Interest and currency swap
579	(323)	(5)	<b>251</b>	Provisions for pensions
50	0	(190)	<b>(140)</b>	Changes in exchange rates
93	(20)	0	<b>73</b>	Other fixed assets
152	(143)	0	<b>9</b>	Provisions for guarantees
(265)	104	0	<b>(161)</b>	Intangible assets – in-house developed software
(84)	44	0	<b>(40)</b>	Intangible assets – in-house developed software (development expenses at AWEK)
(145)	(95)	0	<b>(240)</b>	Acquired intangible assets as part of the corporate acquisition (acquired technologies)
47	(1,158)	0	<b>(1,111)</b>	Acquired intangible assets as part of the corporate acquisition (customer relations)
39	(39)	0	<b>0</b>	Intangible assets acquired as part of the purchase of the company (orders on hand)
110	(7)	0	<b>103</b>	Intangible assets acquired through the Solquest purchase (customer relations)
(890)	(330)	0	<b>(1,220)</b>	Goodwill
(1,110)	203	0	<b>(907)</b>	Aaccounts receivable from ongoing work
462	(630)	0	<b>(168)</b>	General value adjustments (general value adjustments in previous year)
260	200	0	<b>460</b>	Payables (other provisions in previous year)
2,177	1,199	0	<b>3,376</b>	Loss carried forward (other assets in previous year)
<b>1,471</b>	<b>(1,135)</b>	<b>(39)</b>	<b>297</b>	<b>Total</b>

were also increased by the interest-rate advantage from the convertible bond and reduced by the resulting tax effect.

The diluted earnings per share amounted to EUR 0.48 (previous year: EUR 2.00).

#### 4.10. Currency conversions

Currency differences were present in the following items in the profit and loss statement:

Currency conversions			
T.53	EUR K	2018	2017
	Other expenses	219	1,251
	Other income	(378)	(927)
	<b>Balance</b>	<b>(159)</b>	<b>324</b>

#### 4.11. Deferred taxes

Allocations to the other reserves according to IAS 21 and IAS 19 also covered the deferred taxes, which were calculated with a figure of 29.13%.

## 5. Notes on the Cash Flow Statement

We have entered any interest and taxes that have been paid in the cash flow from operating business. Any interest received has been entered under the cash flow from investment activities. Any dividends paid are taken into account in the cash flow from financing activities.



## 6. Corporate Mergers

### 6.1. Acquisition and taking control

GK Software SE took over all the business shares in valuephone GmbH by means of the notarised purchase agreement dated 18 May 2018. valuephone GmbH is entered in the Commercial Register at Chemnitz Local Court under number HRB 22883 and the company was founded in 2006. The company's nominal capital was assigned to three shareholders, the last of which declared its consent for the agreement on 29 May 2018. One of the shareholders of valuephone was a closely associated firm in the sense of IAS 24.

### 6.2. Background to the transaction

The platform developed and operated by the company for individual customer loyalty and "one-2one" marketing forms the basis. This "360-degree mobile loyalty" platform particularly enables retailers to use permanent mobile marketing and the system can be used as a high-speed retail solution in an extensive manner and without depending on any provider. Retail companies can offer their customers a wide variety of mobile services with their own brand via this platform: shopping apps, promotions, mobile couponing, mobile payments, mobile bonus points programmes, "shop & go" (self-scanning and checkout operations), a mobile dashboard or mobile terminals. The white label applications can be easily integrated in existing marketing strategies. Retailers can optimise their loyalty management with the company's solutions as part of their omni-channel strategy. The software solutions are made available as cloud-based software-as-a-service systems (SaaS). The company also offers system integration and advice for mobile customer loyalty strategies. This range of solutions complements the omni-channel solutions provided by GK Software in an ideal manner.

### 6.3. Transferred trade-offs

The business shares have been acquired in cash for a purchase price, which is composed of an absolute amount, which will be reduced according to particular developments in accounts receivable

and accounts payable, and a conditional amount. The conditional amount is determined by the turnover generated by the software solution used by valuephone GmbH. The agreed absolute purchase price amounted to EUR 4,400 K and was reduced by EUR 1,959 K through a loan from GK Software to valuephone, which existed earlier. An advance payment amounting to EUR 1,800 K, which can be recovered, was made on the conditional amount, if the agreed conditions occur for the conditional payments; this matched the fair value of the expected conditional purchase price payment. The purchase-related costs amounting to approx. EUR 35 K were entered directly as expenditure.

### 6.4. Acquired assets and debts

#### Acquired assets and debts

T.54	EUR K	Fair value
<b>Current assets</b>		
		<b>1,403</b>
	Cash and cash equivalents	294
	Trade receivables and other receivables	1,073
	Stocks and inventories of unfinished work	36
<b>Non-current assets</b>		
		<b>3,179</b>
	Acquired technology (software development)	1,617
	Customer relationships	1,562
<b>Current liabilities</b>		
		<b>(157)</b>
	Trade accounts payable and other payables	(88)
	Current provisions	(69)
<b>Non-current liabilities</b>		
		<b>(845)</b>
	Deferred tax liabilities	(845)
	Minus business transactions that already exist	(1,959)
	<b>Total</b>	<b>1,621</b>

#### Goodwill accruing with the acquisition

T.55	EUR K	Carrying amount
	Transferred trade-offs	4,243
	minus the fair value of the net assets acquired	(1,621)
	<b>The goodwill accruing with the acquisition</b>	<b>2,622</b>

#### Net outflow of cash and cash equivalents

T.56	EUR K	Carrying amount
	Transferred trade-offs	4,243
	minus acquired cash and cash equivalents	(294)
	<b>Net outflow of cash and cash equivalents</b>	<b>3,949</b>

### 6.5. Effects of the acquisition on the consolidated results

A balance amounting to EUR 102 K was entered in the Group's consolidated accounts and this was attributed to the business activities of valuephone GmbH since the time of the acquisition. valuephone contributed EUR 909 K to the Group's turnover revenues. If the acquisition of the company had taken place on 1 January 2018, the share of consolidated turnover generated by valuephone would have amounted to EUR 1,314 K. valuephone generated earnings of EUR (214) K during the months January to May. The earnings attributed to the Group contained amortisation on the customer base and acquired software for seven months and amounted to EUR 242 K. The amortisation on this will amount to EUR 414 K p.a. during the following six years.

### 6.6. Details on corporate acquisitions in previous periods

The contingent earn-out owed from the acquisition of the retail division of DBS Data Business Systems, Inc. covering USD 2.5 million was reassessed and most recently assessed at USD 650 K. During the checks on the payment for the final accounting period up until August 2018, it was discovered that the amount of turnover target was missed and no use was made of this. The amount was entered under Other earnings.

## 7. Segment Reporting

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The SQRS product line joined the main software solution marketed by the Group – GK/Retail – when the operating business of Solquest GmbH was taken over in 2009; dedicated resources ensure that the former product is available in the market place.

The key components needing to be checked include the segment sales with third parties and the total operating performance of a segment and its earning power, which is determined on the basis of earnings before income taxes (EBIT).

The Group sells its GK/Retail and Solquest Retail Solutions (SQRS) products within a licensing framework and provides introductory and adjustment services as well as services related to maintaining these products. The Group also sells hardware for store IT solutions to a limited degree, but this is manufactured by third parties. The subdivision of turnover according to fields of work is part of the reporting process.

The share of turnover attributed to SQRS has constantly fallen during the last few years. This is no longer a segment worthy of separate reporting and is therefore not presented as a separate item in internal reports. The field of business activity has been totally absorbed within the GK Retail segment.

The IT Services segment offers services for operating IT systems at store-based retailers. The software services include user support and monitoring and maintaining hardware and software.

A subdivision of turnover in terms of products and fields of work provides the following general overview:

## Turnover by segments

T.57

EUR K	GK/Retail		IT Services		Eliminations		Group	
	FY 2018	FY 2017	FY 2018	FY 2017	FY 2018	FY 2017	FY 2018	FY 2017
<b>Turnover with third parties</b>	96,373	75,595	9,778	14,857	—	—	106,151	90,453
Product licences	16,621	8,964	738	867	—	—	17,359	9,831
Customer individual development (Services incl. Maintenance)	6,224	6,348	—	—	—	—	6,224	6,348
<b>Sum of licences</b>	<b>22,845</b>	<b>15,312</b>	<b>738</b>	<b>867</b>	<b>—</b>	<b>—</b>	<b>23,583</b>	<b>16,179</b>
Maintenance	22,019	20,209	6,195	8,987	—	—	28,214	29,196
Services	51,415	39,568	1,595	1,451	—	—	53,010	41,019
GK Academy	238	390	—	62	—	—	238	452
Other business	(115)	141	1,288	3,550	—	—	1,173	3,691
Revenue reductions	(29)	(26)	(38)	(60)	—	—	(67)	(86)
<b>Turnover with other segments</b>	<b>—</b>	<b>68</b>	<b>879</b>	<b>608</b>	<b>(879)</b>	<b>(676)</b>	<b>—</b>	<b>—</b>
<b>Depreciation</b>	<b>(5,035)</b>	<b>(3,463)</b>	<b>(202)</b>	<b>(317)</b>	<b>—</b>	<b>—</b>	<b>(5,237)</b>	<b>(3,780)</b>
<b>EBIT segment</b>	<b>1,140</b>	<b>1,974</b>	<b>754</b>	<b>3,204</b>	<b>(299)</b>	<b>(308)</b>	<b>1,595</b>	<b>4,871</b>
<b>Assets</b>	<b>119,624</b>	<b>110,556</b>	<b>5,657</b>	<b>11,037</b>	<b>(14,100)</b>	<b>(15,116)</b>	<b>111,181</b>	<b>106,477</b>
<b>Debts</b>	<b>82,323</b>	<b>74,241</b>	<b>620</b>	<b>6,589</b>	<b>(12,017)</b>	<b>(12,901)</b>	<b>70,926</b>	<b>67,929</b>
<b>Cash and cash equivalents</b>	<b>11,765</b>	<b>26,691</b>	<b>24</b>	<b>3,788</b>	<b>—</b>	<b>—</b>	<b>11,789</b>	<b>30,479</b>

Work based on software servicing contracts, which imitate the normal segment revenues in their outside markets, is charged between the segments. Administrative work is accounted for on the basis of general service contracts. The amount cross-charged corresponds to the original costs of providing the administrative work based on our experience of estimating the time involved.

Turnover of EUR 50,220 K (previous year: EUR 42,924 K) was generated with customers that have their administration headquarters located outside Germany. The share of turnover generated by the IT Services business unit amounted to EUR 0 K here (previous year: EUR 517 K). In addition, there were sales with customers, which have their headquarters in Germany, but which asked the Company to render accounts to the relevant national firms receiving the services. This turnover amounted to EUR 2.901 K (previous year: EUR 838 K), but was valued as domestic turnover because of the contractual basis and was fully assigned to the GK/Retail business segment.

Turnover with customers, which each have a share of sales that is greater than 10 percent, amounted to approximately EUR 33,4 K (previous year: EUR 20,5 K) or 31.5 percent in 2018 (previous year: 22.7 percent) of total turnover.

## 8. Other Information

The Group views all the financial assets, which can be apportioned to the Group, as capital. It intends to maintain these assets and control them in such a way that they are adequate to enable it to meet its financial liabilities in good time. The Group is not subject to any capital requirements apart from those dictated by German legal stipulations. In line with conserving capital, the Group is pursuing an extremely conservative investment strategy in order to prevent any loss of capital.

## 8.1. Financial instruments

The financial instruments include original and derivative financial instruments.

As regards assets and liabilities and the transactions that are performed, GK Software is subject to certain risks, particularly loan, currency and credit-worthiness risks. The Company's risk management system is explained in greater detail in the management report. The Company manages its capital structure with the aim of achieving its corporate goals through financial flexibility.

The original financial instruments largely comprise trade accounts receivable on the assets side, other financial assets as well as other liabilities. On the liabilities side, the original financial instruments largely comprise the convertible bond, bank liabilities, trade accounts payable as well as other liabilities. The portfolio of original financial instruments is shown on the balance sheet. The Company is subject to a possible default risk, mainly with trade accounts receivable. GK Software uses the simplified approach according to IFRS 9 in order to measure the expected credit losses; as a result, the credit losses expected over the term are used for all trade accounts receivable. In order to measure the expected credit losses, trade accounts receivable have been summarised on the basis of common credit risk features and overdue dates. If any default risks are recognisable within the financial assets, these risks are entered by means of value adjustments. Apart from value adjustments, no balancing of financial assets or financial liabilities takes place.

## Carrying amounts and the fair value of financial instruments

## T.58

EUR K	Recognised as ongoing purchase costs	Recognised at their fair value on the basis of publicly listed market prices (stage 1)	Recognised at their fair value: on the basis of observable market data (stage 2)	Recognised at their fair value: on the basis of non-observable input factors (stage 3)	Non-financial assets/ liabilities	Carrying amount
<b>31 December 2018</b>	<b>(IFRS 9)</b>	<b>(IFRS 9)</b>	<b>(IFRS 9)</b>	<b>(IFRS 9)</b>	<b>(IFRS 9)</b>	
Trade accounts receivable	26,030	—	—	—	—	<b>26,030</b>
Other financial assets	3,595	—	393	—	686	<b>4,674</b>
Cash and cash equivalents	11,790	—	—	—	—	<b>11,790</b>
Total financial assets	41,415	—	—	—	—	<b>41,415</b>
Convertible bond	13,418	—	—	—	—	<b>13,418</b>
Bank liabilities	21,401	—	—	—	—	<b>21,401</b>
Trade accounts payable	2,365	—	—	—	—	<b>2,365</b>
Other financial liabilities	14,193	—	—	—	10,736	<b>24,929</b>
<b>Total financial liabilities</b>	<b>51,377</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>10,736</b>	<b>62,113</b>
<b>31 December 2017</b>	<b>(IAS 39)</b>	<b>(IAS 39)</b>	<b>(IAS 39)</b>	<b>(IAS 39)</b>	<b>(IAS 39)</b>	
Trade accounts receivable	17,711	—	—	—	—	<b>17,711</b>
Other financial assets	5,367	—	856	—	839	<b>7,062</b>
Cash and cash equivalents	30,479	—	—	—	—	<b>30,479</b>
Total financial assets	53,557	—	856	—	839	<b>55,252</b>
Convertible bond	13,149	—	—	—	—	<b>13,149</b>
Bank liabilities	19,174	—	—	—	—	<b>19,174</b>
Trade accounts payable	1,835	—	—	—	—	<b>1,835</b>
Other financial liabilities	12,429	—	—	—	11,009	<b>23,438</b>
<b>Total financial liabilities</b>	<b>46,587</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>11,009</b>	<b>57,596</b>

No grouping between the categories took place during the year under review.

As the financial assets are normally not covered by securities, the maximum default risk corresponds to their gross carrying amount minus value adjustments, therefore leaving the net carrying amount that is shown. As a result, the circumstances at GK Software correspond to securities that the IASB assumes to be the normal case (IFRS 7.B9) and other risk-minimising arrangements do not normally need to be taken into account at this point.

The Group's financial assets were subject to impairment amounting to EUR 630 K on 31 December 2018 (previous year: EUR 340 K). EUR 630 K (previous year: EUR 340 K) of this amount was due to individual value adjustments on accounts receivable.

A hedging mechanism in the form of a maximum rate agreement (cap) was agreed for a loan from the Commerzbank (EUR 450 K) with a term until 30 June 2017 and with a cap rate of 0.0 percent p.a. The derivative financial instruments (interest rate caps) were not assessed at their fair value for

material points of view. The cap premiums were reported under "Other assets" with figures of EUR 9 K (previous year: EUR 10 K) and were reversed on a pro rata temporis basis and entered as interest expenditure. For this reason, this figure was not classified under the "Financial assets assessed at their fair value in terms of affecting the net income" category. The market value of these interest capping mechanisms on a nominal volume of EUR 214 K (derived from the mid-market price through bank assessments) amounted to a total figure of EUR 0 K on the balance sheet date (previous year: EUR 0 K).

An interest exchange rate swap was taken out to secure the cash flow arising from the acquisition of the Retail & Programming division of DBS Inc. in the USA for repaying the investment loan at IKB. The interest and currency swap started on 31 December 2015 and ends on 31 March 2021. Quarterly repayments amounting to USD 529 K and approx. USD 100 K in interest must be paid to IKB from the first half of 2016 onwards. Bank assessments were used to determine the fair value on the balance sheet reporting date. The market value of this interest and currency swap covering a nominal volume of USD 10,595 K (EUR 10,000 K) amounted to EUR 393 K (previous year EUR 856 K) on the balance sheet reporting date - derived from the mid-market price. This amount was entered on the balance sheet under "Other liabilities" ("Other assets" in the previous year). No valuation unit was formed.

The Group only has (with the exception of the interest rate caps – for an explanation, see above) the financial tools of loans and accounts receivable and financial liabilities, which are valued at amortised costs.

The following earnings and costs emerged in relation to these categories:

Loans and accounts receivable				
T.59	EUR K	Notes No.	31.12.2018	31.12.2017
	Write-ups for amortised accounts receivable	4.3.	24	328
	Expenditure from the allocation to valuation adjustments	3.4.	(336)	(190)
	<b>Account balance</b>		<b>(312)</b>	<b>138</b>

As the addresses of those with whom accounts receivable and financial assets exist or are being kept safe in the form of cash and cash equivalents either have an excellent reputation or are individually known and have met their obligations towards the Group regularly in the past, the Management Board does not believe that there is any adequate reason to doubt the intrinsic value of the accounts receivable or financial assets or the claims to issue the cash and cash equivalents that are being held, even if they are not yet due for payment of have not been subjected to a value adjustment.

Concentrations of risks only emerge for the Group if temporarily available excesses of cash and cash equivalents are only held in particular classes of assets on account of the principle of seeking to maintain the value of the assets. If these classes of assets are affected by negative influences (e.g. highly available money market assets applicable at this time or demand deposits), this affects all the financial assets held in this class of asset - in the example here, the cash and cash equivalents. The Group is seeking to minimise the relevant risks in the light of its goals by spreading the affected assets in a relevant manner. Address risks could become default and liquidity risks for the Group, if, for example, asset decisions and derivative financial instruments are placed at the same address. The Group is seeking to reduce this risk within its capabilities by selecting banks with an excellent reputation. Default risks in the area of trade accounts receivable or contractual liabilities may similarly accumulate because interdependence exists with the relevant contract partners among each other. Operational market observations help to manage these kinds of risk culminations and recognise these kinds of concentrations.

### Default risk on trade accounts receivable

#### T.60

EUR K	Not overdue	1 to 30 days overdue	31 to 90 days overdue	More than 90 days overdue	Total
<b>31.12.2018</b>					
Expected loss ratio	0.0 %	9.6 %	100.0 %	100.0 %	
Trade accounts receivable	24,314	1,898	170	278	<b>26,660</b>
Assets	10,289	—	—	—	<b>10,289</b>
Value adjustments	—	182	170	278	<b>630</b>
<b>31.12.2017</b>					
Expected loss ratio	0.0 %	0.0 %	0.0 %	91.9 %	
Trade accounts receivable	16,393	932	358	346	<b>18,029</b>
Assets	5,129	—	—	—	<b>5,129</b>
Value adjustments	—	—	—	318	<b>318</b>

The remaining financial receivables were not fully due for payment on the balance sheet reporting date.

Any trade accounts receivable overdue by more than 30 days do not provide any reason for further value adjustments, apart from the value adjustments already carried out. The generally high degree of payment behaviour in the retail sector has almost completely enabled the Company to avoid any default situations during its corporate history. The accounts receivable shown above contain amounts, which are overdue on the reporting date, but for which the Group has not conducted any write-downs. This is based on the fact that the credit-worthiness has not been subject to any major changes and the Company believes that it will be possible for it to collect the outstanding amounts.

The value adjustments on trade accounts receivable developed as follows during 2018:

#### Changes in value adjustments according to IFRS 7.16

EUR K	2018	2017
Situation at the start of the year	318	437
Value adjustments on accounts receivable	336	209
Reversal of value	(24)	(328)
<b>Situation at the end of the year</b>	<b>630</b>	<b>318</b>

Value adjustments amounting to EUR 630 K were formed at the end of the year, which affected all the trade accounts receivable. These value adjustments were partially an expression of the experi-

ence that it is not possible to recoup all the payments that have been promised in agreements for a wide variety of reasons. If the due date is 30 days or more, a checking process starts and this investigates the reasons for the overdue payments and leads to specific value adjustments for individual accounts receivable. This affected accounts receivable amounting to EUR 630 K with value adjustments of EUR 336 K on 31 December 2018. In these cases, it is normally true that customers do not recognise parts of the accounts receivable because of the work performed and the questionable parts are waived on the basis of an accommodating arrangement.

The due dates for financial liabilities, which need to be shown, concern the loans taken out by the GK Software. The remaining financial liabilities (mainly accounts payable and payments to employees) have very short remaining terms of less than 3 months – in line with normal practice.

The parent company had taken out the following loans on 31 December 2018:

## Loans

## T.62

EUR K	31.12.2018		31.12.2017	
	Balance	Thereof short term	Balance	Thereof short term
Loan Commerzbank	3,167	323	214	23
Loan Sparkasse	4,030	616	4,645	616
Loan IKB	5,000	2,125	6,500	2,000
Loan DZ-Bank (variable)	3,570	3,570	5,187	5,094
Other loans	26	18	71	17
Current account credit and credit card	5,608	5,608	2,557	2,557
<b>Account balance</b>	<b>21,401</b>	<b>12,260</b>	<b>19,174</b>	<b>10,307</b>

The debts existing on the balance sheet reporting date has been divided into current and non-current debts in the consolidated accounts. The current shares therefore match the repayments that are due within one year.

**Market risks:** The Group is exposed to risks associated with exchange and interest rates as a result of its business activities. The exchange rate risks result from the business sites maintained in different currency areas and increasingly from customer relations that go beyond the eurozone. The interest rates are the result of selected types of funding to enhance the Group's financial latitude. The Group typically accepts additional conditions (so-called "covenants") in addition to the general loan conditions when funding projects with loans that are provided by banks and they relate to general financial figures or other conditions. Failure to meet these additional conditions normally entitles the bank concerned to make the loans in question due for payment in full immediately, regardless of whether the main loan contract obligations are being met and probably can continue to be met or not. The Group handles this risk by monitoring the covenants and communicating with the banks concerned in an appropriate manner.

In order to have some protection against these market risks, the Group uses derivative financial instruments like interest rate caps to provide certain security against increases in the interest rate that is charged. As the Group's exposure to currency risks has increased considerably in absolute terms, larger items of business will be safeguarded by exchange rate hedging mechanisms like cross currency swaps to safeguard payments made in the non-functional currency in proportion to the functional currency.

**Exchange rate risks:** We normally handle business transactions in the operational currency of the Group firm concerned. Operational business transactions are not handled in the operational currency in individual cases so that there is a currency risk for monetary financial instruments. There were accounts receivable amounting to CAD 1,140 K on 31 December 2018 (previous year: CAD 799 K). Currency rate fluctuations in conjunction with our original monetary financial instruments do not have any major effects on our profits.

The Group's exchange rate risk sensitivity mainly increased due to the change in its exposure to US dollars in mathematical terms. However, the following description does not include the interest and currency swap taken out to safeguard the financial risks. After taking this effect into account, the currency risk did not increase significantly in comparison with the previous year.

According to the Company's managers, the sensitivity analysis does not represent the full exchange rate risk, as the risk at the end of the reporting period only reflected the risk to a certain extent because of fluctuations during the year. This was because of accounting fluctuations, particularly at the end of the first quarter of a financial year for work, which is assessed in Czech crowns, but is only accounted for once a year.

**Interest risks:** The Group is exposed to interest risks, as the Group's companies take out financial resources at fixed and variable interest rates. The risk is controlled by the Group by maintaining an appropriate ratio because it takes out a mixture of fixed and variable interest rates on funds. This takes place by using interest rate caps.



The interest risk on the Group's financial assets and financial liabilities is fully described in the section on managing the liquidity risk.

The interest risks are the result of interest payments agreed within the loan contracts. There is no link with the exchange rate risk here, because all the loans are nominated in euros or the interest rates and exchange rates were agreed at a fixed rate for the term of the loans. During the current year, interest payments of EUR 932 K were made and interest expenditure of EUR 1,513 K was recognised on the income statement. The interest rate on the loan with the DZ Bank is fixed for the complete term, so that no interest risks arise from this contract. The same applies to the loans with the IKB denominated in euros for EUR 10,000 K; the exchange rate and interest rate were fixed for the complete term. The interest rate is set quarterly at a rate of 1.5 percentage points above the 3-month EURIBOR rate in the case of the investment loans taken out with the Commerzbank to the value of EUR 450 K. The interest risk has been restricted by an interest rate cap of 0.0 percent p.a. If there were an extreme change in the three-month EURIBOR rate by one percentage point, this would trigger a change in the interest expenses amounting to EUR 21 K during 2018 (determined using the factual interest expenses during 2018 with a changed interest rate). There are no risks related to interest on deposits because of the current low interest rates for deposits. Despite this, the company is keeping a close eye on the development of interest on deposits. The investment strategy can be quickly adapted because only short-term investments are being used.

**Credit default risks:** We understand a credit default risk to be the risk of a loss for the Group if one contractual party does not meet its contractual obligations. In principle, the Group only maintains business relations with those contractual parties where any deviation from the contractual obligations does not appear to be probable.

Trade accounts receivable exist with all the Group's current customers. The maximum credit risk corresponds to the carrying amount of the trade accounts receivable. All the Group's customers are companies with an outstanding position in their respective markets. The probability of any default by failing to meet the obligations agreed

with the Group is therefore slight. This situation is monitored closely by observing the customer's payment behaviour, the market environment and drawing on external sources such as reports from the relevant specialist press. If this monitoring process gives rise to an assumption that the general economic situation for individual customers has changed, further measures are adopted in agreement with the management team in order to restrict any possible losses. Write-downs may occur if customers believe that work has not been complete or is inadequate. In these cases, the Group basically carries out individual value adjustments for precautionary reasons to the degree that there is some expectation that settlements on a fair dealing basis – without any recognition of legal grounds – might be made. Interest revenues have not been entered from these depreciated financial assets.

The default risk on liquid funds is slight, as the banks managing the accounts are all members of the German deposit protection scheme or they have an outstanding reputation with corresponding credit ratings.

Overall, the Management Board believes that the value adjustments currently performed have taken into account all the probable risks for the Group to an appropriate degree.

**Liquidity risks and due dates for financial obligations:** The Group controls the liquidity risks by having available appropriate reserves, credit lines and similar credit facilities and by monitoring the deviations between forecast and actual cash flows.

The following table shows the contractual remaining terms of the Group's non-derivative financial liabilities. The tables are founded on non-discounted cash flows for financial liabilities based on the earliest date when the Group may be obliged to make payments. The table contains both interest charges and repayments. The contractual due dates are based on the earliest possible time when the Group may be obliged to make payments. As the interest rate for instruments with variable interest rates has been secured using interest rate caps, we have assumed the highest rate from the interest rate cap as the interest charge when determining the interest payments for these instruments.

## Interest on liabilities

T.63	EUR K	Weighted average interest rate	Less than 1 month	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Total
<b>31 December 2017</b>								
	Interest-free	—	11,729.00	13,719.00	858.00	488.00	—	<b>26,794.00</b>
	Variable interest rate	1.281	2,405.00	—	228.00	852.00	1,775.00	<b>5,260.00</b>
	Fixed interest rate	2.30/4.10/ 2.19/3.92	—	—	7,526.00	19,362.00	—	<b>26,888.00</b>
	Financial guarantees	—	—	—	11.00	50.00	—	<b>61.00</b>
<b>31 December 2018</b>								
	Interest-free	—	11,453.00	16,267.00	1,509.00	283.00	—	<b>29,512.00</b>
	Variable interest rate	1.281	5,429.00	—	224.00	838.00	1,566.00	<b>8,057.00</b>
	Fixed interest rate	2.30/4.10/2.19/3.92/1.6/1.2	—	—	6,397.00	18,277.00	1,663.00	<b>26,337.00</b>
	Financial guarantees	—	—	—	11.00	221.00	—	<b>232.00</b>

The Group safeguards part of its variable interest obligations by interest rate caps. This business relates precisely to the financial instrument that is being secured in each case.

The Group can resort to credit lines amounting to EUR 9,000 K. In greater detail, this involves the following:

## Credit lines

T.64	EUR K	31.12.2018	31.12.2017
<b>Non-collateralised current account lines</b>			
		<b>4,000</b>	<b>4,000</b>
	of which: taken up	4,018	7
	of which: not taken up	(18)	3,993
<b>Collateralised current account lines</b>			
		<b>5,000</b>	<b>5,000</b>
	of which: taken up	1,411	2,403
	of which: not taken up	3,589	2,597

Another assurance regarding a further general loan amounting to EUR 1,500 K exists.

### 8.1.1. Assessments at fair value

We explain below how the Group determines the fair values of various financial assets and debts.

The Group has an asset in the form of the interest and currency swap taken out and worth USD 10,595 K, which needed to be entered on the balance sheet for the first time on 31 December 2015. This asset was valued at USD 5,298 K on the balance sheet reporting date. The item was entered as another account receivable with a fair value of EUR 393 K on the basis of the bank assessment in 2018 (previous year: EUR 856 K). A loss was entered in the total income statement, as a result.

The interest and currency swap described was repeatedly valued by the liaising bank using observable market prices (mark-to-market, input facts in stage 1). No regrouping into assessment stage 2 took place.

The contingent liability assessed at USD 0.65 million was paid out in 2018.

The Group does not have any other financial assets or debts that can be assessed regularly at their fair value apart from these.

In the case of financial assets, which cannot be regularly assessed at their fair value, but where the fair value must be specified, we view the carrying amounts entered on the balance sheet as a good approximation of the fair values.

## 8.2. Contingent liabilities and financial obligations

Contingent liabilities cover possible obligations, but their existence is only confirmed if one or several uncertain future events actually take place and there is no possibility of exercising complete control over these factors. However, this term also covers existing obligations, which will probably create no outflow of assets. According to IAS 37, contingent liabilities are not entered on the balance sheet.

Guarantee loans amounting to EUR 232 K (previous year: EUR 60 K) existed for contingent liabilities and they were granted by Volksbank Vogtland e.G. (EUR 23 K), Commerzbank (EUR 190 K) and

DZ-Bank (EUR 8 K). The securities act as normal coverage for renting the business premises in Berlin, Cologne and St. Ingbert. The rental guarantee is secured by pledging bank credit balances amounting to EUR 11 K (previous year: EUR 11 K). The Management Board does not expect it to be necessary to make use of the guarantee.

Procurement obligations for office and business equipment amounted to EUR 987 K (previous year: EUR 1,255 K). Purchasing obligations for building work also existed amounting to EUR 1,000 K.

The operating leasing agreements relate to vehicle leasing arrangements. The payments entered as expenditure for the 2018 financial year amounted to EUR 1,737 K (previous year: EUR 1,467 K).

There were payment obligations arising from operating leasing contracts amounting to EUR 3,850 K (previous year: EUR 3,569 K). EUR 1,868 K is due for repayment within one year (previous year: EUR 1,776 K) and EUR 1,982 K (previous year: EUR 1,793 K) within five years. There were no finance leasing agreements.

### 8.3. Subsidiaries

#### Subsidiaries of GK Software SE

##### T.65

Name of the subsidiary	Headquarters	Capital share in %	Voting right share in %	Initial consolidation	Main business	Annual results in EUR K
Eurosoftware s.r.o.	Plzen/Czech Republic	100.0	100.0	2008	Software development, software programming	874
StoreWeaver GmbH	Dübendorf/Switzerland	100.0	100.0	2008	Software development, software programming	256
1. Waldstraße GmbH	Schöneck	100.0	100.0	2009	Software development, software programming	(4)
OOO GK Software RUS	Moscow, Russian Federation	100.0	100.0	2011	Software development, software programming	6
AWEK GmbH	Hamburg	100.0	100.0	2015	IT Services	(395)
AWEK microdata GmbH	Hamburg	100.0	100.0	2015	Software development, software programming	652
GK Software USA Inc.	Raleigh/USA	100.0	100.0	2013	Software development, software programming	98
GK Software Africa (Pty) Ltd	Bryanston/South Africa	100.0	100.0	2015	Software development, software programming	400
TOV Eurosoftware-UA	Lviv, Ukraine	100.0	100.0	2016	Software development, software programming	28
prudsys AG	Chemnitz	80.12	80.12	2017	Software development, software programming	(9)
valuephone GmbH	Berlin	100.0	100.0	2018	Software development, software programming	102

All the companies named here are fully consolidated in these consolidated accounts; valuephone GmbH has been included on the basis of seven months.

#### 8.4. Details of associated persons and firms

There was no need for any expenditure on value adjustments or irrecoverable debts with related persons or these items did not exist.

Business transactions between GK Software and its consolidated subsidiaries have been eliminated as part of the consolidation process.

##### 8.4.1. Parent company

The direct parent company of GK Software SE is GK Software Holding GmbH, Schöneck. Commercial relationships existed as part of an agency agreement during 2018. Revenue of EUR 1 K from this was included under "Other income".

##### 8.4.2. Management Board

The following people are members of the Management Board:

- Mr Rainer Gläss, Schöneck, CEO, engineering graduate
- Mr André Hergert, Hamburg, CFO, business graduate

The annual shareholders' meeting on 29 June 2015 decided in line with Sections 286 Paragraph 5 and 314 Paragraph 2 Sentence 2 of the German Commercial Code to forego the disclosure of the individual salaries according to Sections 285 No. 9 Letter a) Sentences 5 – 8 and 314 Paragraph 1 No. 6 Letter a) Sentences 5 – 8 of the German Commercial Code for the financial years 2015 to 2019. As a result, no detailed information is made available here.

Their current due benefits amounted to EUR 1,268 K in all. This included EUR 840 K in fixed earnings, EUR 330 K in variable earnings and monetary benefits amounting to EUR 98 K. The variable earnings relate to the degree to which targets were met in the financial year and the previous year.

Forfeitable share provisions (share options) are granted as long-term share-based remuneration. If they are exercised, the options are serviced by the issue of new non-par value company shares made out to the holder with a calculated share in the nominal capital of EUR 1 from the authorised capital without any additional payment. In terms of the organisation of the stock awards, the same general conditions apply to the Management Board as to leading members of staff. Reference is made to this in section [2.8.3](#) "Share option scheme". The options kept for the Management Board members on 31 December 2018 and the expenditure entered for this can be found in the tables [T.20](#) and [T.21](#). Therefore, the total remuneration for

the Management Board amounted to EUR 1,385 K, including options.

10,000 options are held by two former members of the Management Board.

#### Pension provisions for members of the Management Board

T.66	EUR K	31.12.20168	31.12.2017
	Provisions for pensions	1,574	1,005
	thereof for board members	1,131	707
	thereof for former board members	443	298
	Settlement amount of the provision	2,686	2,206
	thereof for board members	2,016	1,537
	thereof for former board members	670	669
	Fair value of net contribution margin	1,112	1,200
	thereof for board members	885	830
	thereof for former board members	227	370
	Working period costs	446	400
	thereof for board members	335	300
	thereof for former board members	111	100

We would refer you to section 2.9 for the form of the pension commitments.

Those who are or were members of the Company's Management Board or Supervisory Board during the 2018 financial year directly held the following shareholdings in GK Software on 31 December 2018:

#### Shareholdings held by members of the Management Board and the Supervisory Board

T.67	Name	Number of shares	in %
	Rainer Gläss	52,792	2.76
	Herbert Zinn	1,000	0.05
	André Hergert	500	0.03

Mr Gläss indirectly held a further 449,500 shares through Gläß Vermögenverwaltungs GmbH & Co KG on 31 December 2018.

#### 8.4.3. Supervisory Board

The following people are members of the Supervisory Board:

- Mr Uwe Ludwig, Neumorschen, management consultant, Chairman of the Supervisory Board
- Mr Herbert Zinn, Ebersburg, business administrator
- Mr Thomas Bleier, Oelsnitz, savings bank economist

The total earnings of the Supervisory Board at GK Software SE amounted to EUR 80 K during the 2018 financial year (previous year: EUR 80 K). They represent current due benefits.

No other claims for remuneration exist.

No agreements exist between members of the Supervisory Board and the parent company, which envisage severance payments or other benefits for the members of the Supervisory Board when they finish their membership of this body. There are no conflicts of interest between their obligations towards the Company and their private interests or other obligations at the moment.

There are no agreements with the Company regarding pensions for the members of the Supervisory Board.

#### Accounts receivable from associated firms and persons

T.68	EUR K	31.12.2018	31.12.2017
	Loans to associated firms, which are not part of the consolidated group	0	1,982
	Other claims from members of the management team in key positions (Management Board members)	880	59
	Accounts receivable from associated firms, which are not part of the consolidated group	706	254
	<b>Total</b>	<b>1,586</b>	<b>2,295</b>

One loan to a closely associated firm was granted for an indefinite period with a current account credit line of up to EUR 20 K and is subject to an interest rate of 6%. The current balance amounts to EUR 0 K (previous year: EUR 0 K).

The other accounts receivable with members of the Management Board covered various advance payments for purchases, travel expenses and simi-

lar items and they were therefore not subject to interest. These accounts receivable can be recovered at any time.

The trade accounts receivable largely consist of service relationships with Hotel Tannenhäuser UG.

#### Expenditure and earnings with associated firms and persons

T.69	EUR K	31.12.2018	31.12.2017
<b>Expenses with related companies</b>			
		<b>906</b>	<b>2,073</b>
	thereof external services	858	749
	thereof project services	0	1,271
	thereof rents/leases		53
<b>Earnings with related companies</b>			
		<b>463</b>	<b>220</b>
	thereof provided cars and services	53	148
	thereof rents/leases	150	—
	thereof internal charging	260	—
	thereof social benefits	0	72

The other purchased services were largely travel and hotel services.

All the business transactions with closely related firms involved other related companies in line with the categorisation in IAS 24.19.

#### 8.5. Auditor's fees

The Group's auditor charged fees amounting to EUR 220 K for auditing services in 2018.

#### 8.6. Declaration of compliance

The declaration on the German Corporate Governance Code according to Section 161 of the German Companies Act has been submitted and has been published on GK Software SE's home page at <https://investor.gk-software.com> in the "Corporate Governance" section.

#### 8.7. Information after the annual accounts reporting date

Information about circumstances, which was available on the reporting date for the annual

accounts, was taken into account if the Management Board knew about it by 24 April 2019.

By making use of contingent capital, the total number of voting rights at GK Software SE amounted to 1,929,050 on 31 March 2019.

#### 8.8. Details of Group affiliation

GK Software SE, and therefore the GK Software Group, are subject to the direct control of GK Software Holding GmbH (HRB 24111 Chemnitz), which has its headquarters in Schöneck and is the senior parent company.

#### 8.9. Date on which the accounts were approved for publication

The Management Board approved these consolidated accounts to be forwarded to the Supervisory Board on 24 April 2019. The Supervisory Board has the job of checking the consolidated accounts and stating whether it endorses them or not.

Schöneck, 24 April 2019

The Management Board

## Guarantee by the Legal Representatives

We guarantee to the best of our knowledge that the consolidated accounts present a realistic view of the actual circumstances in the assets, financial and earnings situation at GK Software SE in line with the relevant accounting principles and that the consolidated annual report reveals the course of business including the business results and the situation within the Group in such a way that it communicates a view, which reflects the actual cir-

cumstances, and describes the main opportunities and risks for probable developments at the Company.

Schönebeck, 24 April 2019

The Management Board



Rainer Gläss  
Chief Executive Officer



André Hergert  
Chief Financial Officer

# Independent Auditor's Report

To GK Software SE, Schöneck / Vogtland

## Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

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### Audit Opinions

We have audited the consolidated financial statements of GK Software SE (formerly GK Software AG), Schöneck / Vogtland, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of GK Software SE for the financial year from January 1 to December 31, 2018. We have not audited the Corporate Governance Statement according to § 289a HGB and § 315d HGB in accordance with the German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to [§ [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] ] § 315e Abs. 1 HGB, and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover to the content of the above-mentioned corporate governance statement.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

### Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Annual Financial Statements and of the Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appro-



appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

### Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

- 1 Recoverability of goodwill**
- 2 Accounting for deferred taxes**
- 3 Revenue recognition and allocation of revenue to correct periods**

Our presentation of these key audit matters has been structured in each case as follows:

- 1 Matter and issue
- 2 Audit approach and findings
- 3 Reference to further information

Hereinafter we present the key audit matters:

#### 1 Recoverability of goodwill

- 1 Goodwill amounting in total to EUR 17.851 K (representing 16 % of total assets and 44 % of equity) is reported under the „Intangible assets“ balance sheet item in GK Software SE (formerly GK Software AG)'s consolidated financial statements. Goodwill is tested for impairment by the Company once a year or when there are indications of impairment to determine any possible need for write-downs. Impairment testing is carried out at the level of the cash-generating unit to which the rel-

evant goodwill has been allocated. The carrying amount of the cash-generating unit, including goodwill, is compared with the corresponding recoverable amount in the context of the impairment test. The calculation of the recoverable amount generally employs the value in use. The present value of the future cash flows from the cash-generating unit normally serves as the basis of valuation. The present values are calculated using discounted cash flow models. For this purpose, the medium-term business plan adopted by the Group forms the starting point for future projections. Expectations relating to future market developments and assumptions about the development of macroeconomic factors are also taken into account. The discount rate used is the weighted average cost of capital for the cash-generating unit. The impairment test determined that no write-downs were necessary. The outcome of this valuation exercise is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows from the cash-generating unit, the discount rate used, and other assumptions, and is therefore subject to considerable uncertainty. Against this background and due to the complex nature of the valuation, this matter was of particular significance in the context of our audit.

- 2 As part of our audit, we reviewed the methodology employed for the purposes of performing the impairment test, among other things. After matching the future cash inflows used for the calculation against the medium-term business plan adopted by the Group, we assessed the appropriateness of the calculation, in particular by reconciling it with general and sector-specific market expectations. In the knowledge that even relatively small changes in the discount rate applied can have a material impact on the value of the entity calculated using this method, we focused our testing in particular on the parameters used to determine the discount rate applied, and verified the calculation procedure. We reproduced the sensitivity analyses performed by the Company, in order to reflect the uncertainty inherent in the projections. Taking into account the information available, we determined that the carrying amount of the cash-generating unit, including

the allocated goodwill, were adequately covered by the discounted future net cash inflows. Overall, the measurement inputs and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

- 3 The Company's disclosures about impairment testing and the balance sheet item „Intangible assets“ are contained in the section „Accounting and measurement methods“ and section 3.2 „Intangible assets“ of the notes to the consolidated financial statements.

## 2 Accounting for deferred taxes

- 1 In the consolidated financial statements of GK Software SE, deferred tax assets of T€ 4,034 and deferred tax liabilities of T€ 3,370 are shown after netting. Before offsetting against congruent deferred tax liabilities, deferred tax assets of € 6,846 thousand have been recognized. They are accounted for to the extent that it is probable, based on the estimates of management, that taxable profit will be available in the foreseeable future against which the deductible temporary differences and unused tax losses can be utilised. To this end, if there are insufficient deferred tax liabilities, forecasts of future tax results are determined on the basis of the approved budget. In total, no deferred tax assets were recognised on unused tax losses of € 543 thousand, as it is not probable that they will be used for tax purposes when offset against taxable profits.

In our opinion, the recognition of deferred taxes in our audit was of particular importance because it is highly dependent on estimates and assumptions made by management and is therefore subject to uncertainties.

- 2 As part of our audit, we took a critical look at the internal processes and controls used to account for tax matters and the accounting principles used to determine, account for and measure deferred taxes. We also assessed the recoverability of deferred tax assets on deductible temporary differences and unused tax losses on the basis of internal forecasts of the Company's future earnings situation and

assessed the appropriateness of the underlying estimates and assumptions.

Based on our audit procedures, we are convinced that the estimates and assumptions made by the legal representatives are justified and adequately documented.

- 3 The Company's statements on deferred taxes are contained in the sections „Accounting policies“ and 3.14 of the notes to the consolidated financial statements.

## 3 Revenue recognition and allocation of revenue to correct periods

- 1 Revenue amounting to EUR 106,151 K is reported in the Consolidated Profit and Loss Statement of GK Software SE. The company recognizes revenue from the sale and temporary granting of licenses, the provision of installation services and advice, maintenance and other services.

The recognition of revenue from the sale of licenses depends on the existence of a binding contractual arrangement, the transfer of material rights to the buyer and the ability to reliably determine the consideration paid. Proceeds from services are realized as at the date the services are rendered, while maintenance revenue and proceeds from the temporary granting of licenses is realized over the performance period. These various services rendered by the company can be the object of agreements with customers, either individually or in various constellations. In this connection, the company must also identify contracts relating to multiple components and account for agreed individual services individually.

In light of the complexity of the customer agreements underpinning revenue recognition, these significant items are subject to particular risk. Against this background, the correct application and deferral of revenues under the Group-wide application of the new accounting standard IFRS 15 is considered to be complex and is based in some respects on estimates, assumptions and discretion used by the executive directors, with the result that this matter was of particular importance for our audit.

Against this background, the correct recognition and deferral of revenues under the Group-wide application of the new accounting standard IFRS 15 is to be regarded as complex.

- 2 As part of our audit, we assessed, among other things, the correct presentation of revenue in the consolidated financial statements on the basis of the accounting policies applied by GK Software SE (formerly GK Software AG) in relation to the recognition of software revenue in accordance with the relevant IFRSs, in particular IFRS 15.

To do so, we first identified the material controls implemented by the Group to ensure the correct identification of contracts and performance obligations and the subsequent recognition of revenue, assessed their appropriateness and tested their effectiveness in preventing and detecting errors. In our audit, we also assessed the effects of the first-time application of IFRS 15. Among other things, we assessed the design of the processes set up to represent the transactions in accordance with IFRS 15.

In addition, we have performed detailed revenue recognition reviews of individual significant transactions and other transactions on a test basis, including reviewing customer contracts, identifying performance obligations and assessing whether these services were rendered over a specified period or at a specified time and what transaction prices were received.

In this connection, we also assessed the appropriateness and mathematical correctness of individual assumptions made by management to determine the transaction price to be allocated to the individual benefit obligations under multi-component contracts and recognized them in the balance sheet.

Based on our audit procedures, we satisfied ourselves that the estimates and assumptions relating to revenue recognition made by the executive directors were adequately documented and justified.

- 3 The Company's disclosures on revenue recognition are contained in sections "Accounting and measurement methods" and "4.1 Sales revenues" of the notes to the consolidated financial statements.

### Other Information

The executive directors are responsible for the other information. The other information comprises the the statement on corporate governance pursuant to § 315d HGB and § 315d HGB.

The other information comprises further the remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report as well as our auditor's report and the separate non-financial report pursuant to § 289b (3) HGB and § 315b (3) HGB.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

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

### Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consoli-

dated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

#### **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether

the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism during the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

## Other Legal and Regulatory Requirements

### Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on June 21, 2018. We were engaged by the supervisory board on September 24, 2018. We have been the group auditor of GK Software SE (formerly GK Software AG), Schöneck / Vogtland, without interruption since financial year 2017.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

### German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Andreas Kremser.

Erfurt, 24 April 2019

PricewaterhouseCoopers GmbH  
Auditing company



Carl Erik Daum  
Auditor



Andreas Kremser  
Auditor



# Financial Calendar

**29 May 2019**

Interim statement as of 31 March 2019

**20 June 2019**

Annual shareholders' meeting 2019 in Schöneck/V.

**29 August 2019**

Interim report as of 30 June 2019

**25 – 27 November 2019**

Analyst conference in Frankfurt/M.

**26 November 2019**

Interim statement as of 30 September 2019

**29 April 2020**

Annual report as of 31 December 2019

**28 May 2020**

Interim statement as of 31 March 2020

**18 June 2020**

Annual shareholders' meeting 2020 in Schöneck/V.

**27 August 2020**

Interim report as of 30 June 2020

**November 2020**

Analyst conference in Frankfurt/M.

**26 November 2020**

Interim statement as of 30 September 2020





# Imprint/Notes

## Imprint

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Dipl.-Kfm. André Hergert, CFO

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Image archive GK Software SE,  
Title: istockphoto

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## Notes

### **Note to the Report**

This Annual Report is the English translation of the original German version. In case of deviations between these two the German version prevails. This Annual Reports in both languages can be downloaded at <https://investor.gk-software.com>.

### **Note regarding the rounding of figures**

Due to the commercial rounding of figures and percentages small deviations may occur.

### **Disclaimer**

This annual report includes statements concerning the future, which are subject to risks and uncertainties. They are estimations of the Board of Management of GK Software SE and reflect their current views with regard to future events. Such expressions concerning forecasts can be recognised with terms such as "expect", "estimate", "intend", "can", "will" and similar terms relating to the Company. Factors, which can have an effect or influence are, for example (without all being included): the development of the retail and IT market, competitive influences including price changes, regulatory measures and risks with the integration of newly acquired companies and participations. Should these or other risks and uncertainty factors take effect or should the assumptions underlying the forecasts prove to be incorrect, the results of GK Software SE could vary from those, which are expressed or implied in these forecasts. The Company assumes no obligation to update such expressions or forecasts.

