First Sensor

2018 Annual Report

Key Figures 2018 at a Glance

iin € million, unless otherwise indicated (rounding differences may occur)	2014	2015	2016	2017	2018
Sales revenues	124.0	137.7	150.1	147.5	**155.1**
Industrial	68.4	74.1	72.5	75.1	**80.4**
Medical	20.4	23.8	30.7	27.9	**34.6**
Mobility	35.2	39.8	46.9	44.5	**40.2**
EBITDA	13.5	11.4	19.4	19.6	**21.3**
EBITDA margin (%)	10.9	8.3	12.9	13.3	**13.7**
EBIT	4.1	1.2	10.0	10.6	**12.2**
EBIT margin (%)	3.2	0.9	6.7	7.2	**7.9**
EBITA	5.3	2.5	11.2	12.8	**14.5**
Earnings before taxes	1.7	1.2	8.7	7.2	**10.4**
Net profit for the period	0.4	-1.5	6.1	4.4	**7.5**
Earnings per share (€)	0.02	-0.17	0.57	0.40	**0.72**
Cash flow from operating activities	12.2	5.0	16.6	16.0	**15.9**
Free cash flow	7.5	-1.8	10.0	3.5	**6.2**
Balance sheet total	144.9	153.5	154.0	159.6	**168.4**
Shareholders' equity	72.0	71.3	77.5	81.9	**88.8**
Equity ratio (%)	49.7	46.4	50.3	51.3	**52.7**
Net debt	29.7	33.0	24.4	22.8	**19.5**
Working capital	30.3	36.5	35.7	37.5	**37.3**
ROCE (%)	3.4	1.0	8.5	8.6	**9.9**
Incoming orders	139.3	142.3	132.9	163.7	**159.6**
Orders on hand	86.4	90.7	82.2	92.5	**97.6**
Book-to-bill-ratio	1.12	1.03	0.89	1.11	**1.03**
Employees (FTE average of the period)	719	770	791	787	**835**
Number of shares in thousand as of Dec. 31	10,131	10,167	10,208	10,216	**10,222**

ABOUT THIS REPORT

For the first time, we are publishing our annual report exclusively in digital format. It is available as a full-content PDF and as a condensed online summary, which summarizes the highlights of this report. The First Sensor Annual Report 2018 is available in German and English, the online summary in English only.

For better readability, we refrain from references to rounding differences in this publication and use only the masculine form. It refers to persons of any gender.

The reporting period is the financial year from January 1 to December 31, 2018. To ensure this report is as current as possible, it includes all relevant information available up to the Responsibility Statement dated March 12, 2019. The consolidated financial statements and the Group Management Report are prepared in accordance with the International Financial Reporting Standards (IFRS), as adopted by the European Union (EU), as well as additional requirements pursuant to the German Commercial Code (Handelsgesetzbuch– HGB).

The internal control system (ICS) provides reasonable assurance regarding the reliability of financial reporting and compliance with applicable laws and regulations. To monitor the effectiveness of the ICS, accounting-related processes are regularly reviewed.

This report contains statements which are forward-looking and do not represent any incitement to purchase shares of First Sensor AG, but rather are intended exclusively for information purposes with regard to possible future developments at the company. Forward-looking statements are those that address activities, events or developments that management intends, expects, projects, believes or anticipates will or may occur in the future. By their nature, forward-looking statements are subject to numerous factors, risks and uncertainties that could cause actual outcomes and results to be materially different from those projected. Our results will be subject to many of the same risks that apply, among others, to the semiconductor, automotive, medical technology and industrial industries, such as general economic conditions, interest rate fluctuations, consumer spending patterns and technological changes. All future-oriented specifications in this consolidated financial report were produced on the basis of a probability-based plan and represent reasonable forward-looking statements regarding the future which cannot be guaranteed. It should be noted that all forward-looking statements only speak as of the date of this report and that First Sensor AG does not assume any obligation, except as required by law, to update any forward-looking statement or to conform any such statement to actual events or developments.

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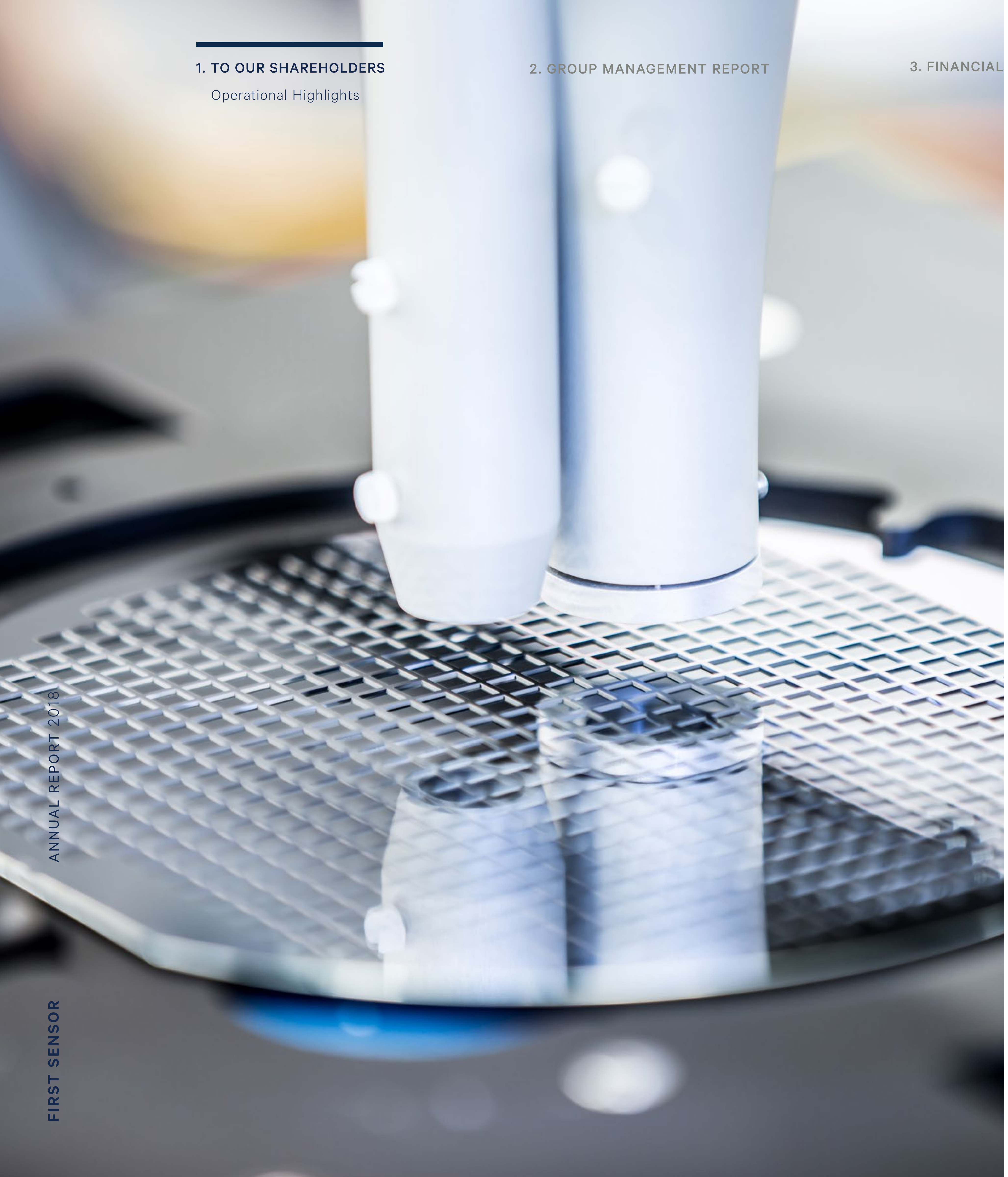
01 To our Shareholders



Q1 2018

LOW PRESSURE CHIP EXPANDS PRESSURE SENSOR PORTFOLIO

JANUARY

The cost efficient sensor chip will broaden the 10 millibar to 100 millibar sector.

With the development of a low pressure chip, we are pushing the implementation of a new generation of pressure sensors in accordance with our technology and product roadmap. The cost efficient sensor chip will expand the standard pressure portfolio of First Sensor in the 10 millibar to 100 millibar sector. It will also strengthen our position as a supplier of high precision standard pressure sensors and customer-specific sensor solutions. First Sensor covers a vast product portfolio from low pressure to high pressure sensors. Our low pressure sensors are put to use, among other things, in medical devices for artificial respiration and dialysis. The roadmap also includes an update of the H family and further development of senseEdge technology.

SHOW WEBSITE

NEW TECHNOLOGY FOR ADVANCED GAS MEASUREMENT PATENTED

The innovative measuring principle allows for much faster and lower-energy measurement than before.

In order to capture the growing market for gas sensor technology, we have applied for a patent for a new type of gas property sensor system which allows for much faster and lower-energy measurement than before. The overall market is expected to grow from USD 812.3 million in 2016 to USD 1,3 billion by 2023. The innovative measurement principle has been developed at our Canadian site in Montreal. Using technology based on active flow generation, four different gas properties can be determined at the same time and the composition of gas mixtures can therefore be detected on a continuous basis. The new sensor system can be used in industrial applications such as smart gas meters, or in a medical context for monitoring anesthetic gases. Potential customers can test out an evaluation kit with gas property sensors, flow sensors, and pressure sensors. There are also plans for the expansion of a PC app and for data analysis on the sensor.

FEBRUARY

MARCH

SERIES PRODUCTION OF „BLUE NEXT“ CAMERA STARTS

An international tier-1 supplier uses our cameras to replace traditional rear-view mirrors. They help to prevent accidents caused by blind spots.

The cameras are being developed and produced at First Sensor Mobility GmbH in Dresden. Volume production of the first camera solution started here for an international tier-1 supplier. The supply agreement for the key customer initially covers the period up to 2022. „We expect an enquiry of 10-20,000 systems by 2019 alone,“ explains Wilhelm Prinz von Hessen, our Vice President of Mobility. The „Blue Next“ cameras replace traditional rearview mirrors and help to prevent accidents caused by the blind spot. Being more aerodynamic, they also contribute to lower consumption costs. The industrialized camera generation supplements batch production of the predecessor „Blue Eagle“ model and the analog „Red Hawk“ series. Its features include a large selection of digital interfaces for simple and flexible integration into vehicle electrical systems and driver assistance systems.

SHOW WEBSITE

Q2 2018

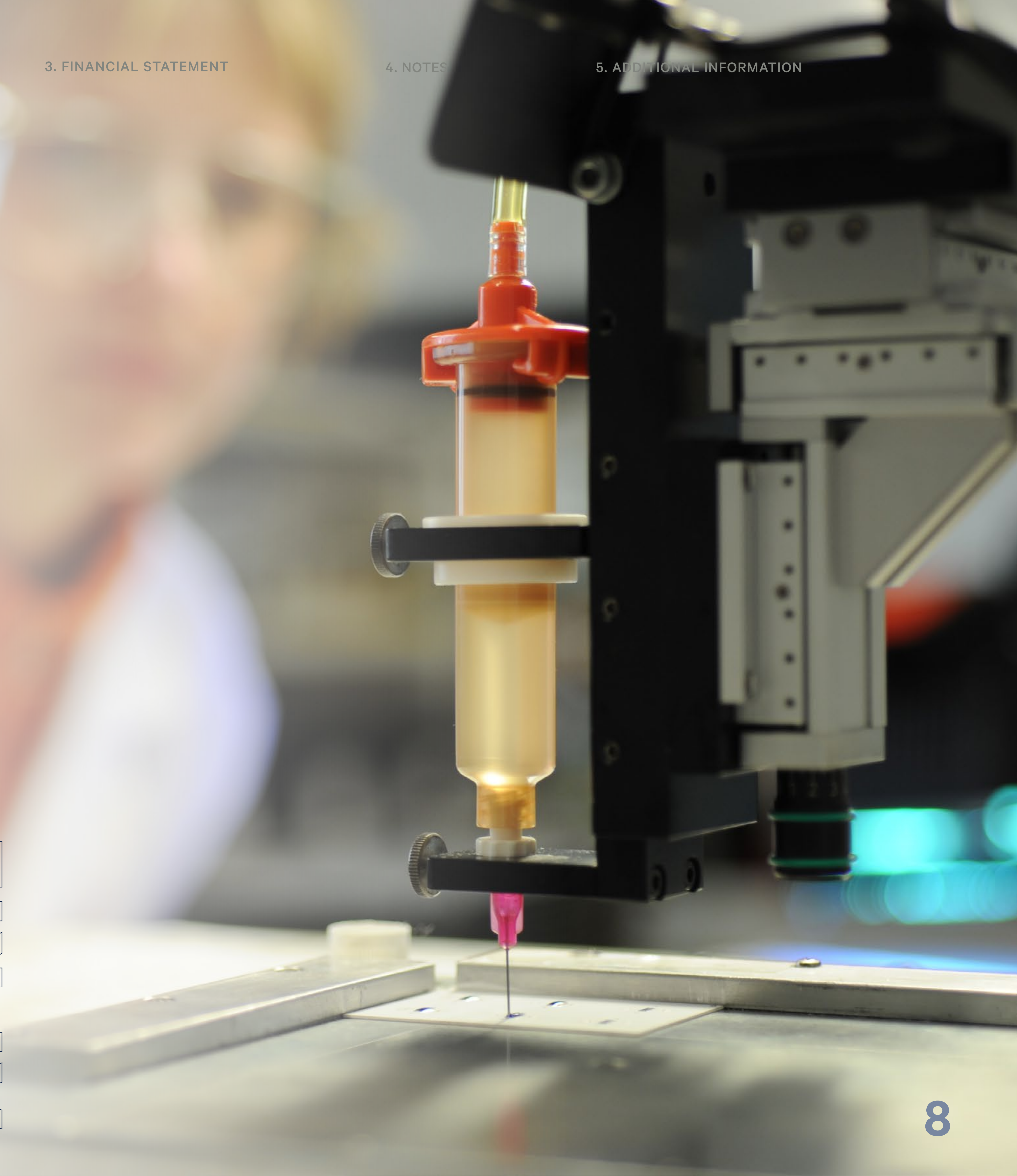
SETTING THE COURSE FOR FURTHER GROWTH IN MEDICAL TECHNOLOGY

First Sensor confirms the quality of its production network and expands the capacities.

Medical technology is subject to the highest quality standards because it saves lives every day. A renewed ISO 13485:2012 certification testifies to the performance of the First Sensor production network with the current increased demand for highly sensitive and reliable pressure sensors. „For example, a Swiss medical technology manufacturer has doubled its demand for high-precision pressure sensors for ventilator systems, meaning that we expect a sales increase of more than €1 million with this customer alone in 2018. We now have the task of adapting our capacity in line with the increased unit volumes in order to cover the requirements of this and other customers. The certification is an important step in this context," says our CEO Dr. Dirk Rothweiler. The ISO 13485:2012 certification confirms the introduction and use of a comprehensive management system for the design and manufacture of medical products at our German production sites in Berlin-Weißensee and Puchheim as well as the Canadian site in Montreal.

SHOW WEBSITE

APRIL



STRENGTHENED COLLABORATION WITH CANADIAN TECHNOLOGY LEADER

MAY

One of the key factors for the expansion is the technological expertise in the processing of optical sensors.

We are taking over the production of image sensor boards for a new camera series of a Canadian technology leader in the field of machine vision. „Today, almost every household display, from mobile screens to TVs, is inspected by products from our customer to ensure an optimal visual experience for consumers“, explains our CEO Dr. Dirk Rothweiler. The agreement, which will initially run until May 2019, has an anticipated sales volume of around €2 million. It supplements an already existing order for the packaging of image sensors for camera boards. Our collaboration with the customer has been ongoing for 15 years. One of the key factors for the expansion is the technological expertise of Dresdner First Sensor Microelectronic Packaging GmbH in the processing of optical sensors and in the assembly of large and long chips.

SHOW WEBSITE

SERIES PRODUCTION OF MULTI SENSOR SYSTEM FOR SMART AIR CONDITIONING STARTS

JUNE

The system will detect the condition of filters imbedded in the monitoring system of an international HVAC specialist.

Series production of a LMI multi sensor system for an international air conditioning technology specialist starts at our packaging site in Berlin-Weißensee. The HVAC developer has announced that they will acquire a four-digit number of the customized solution annually. We have taken on the design of the circuit board, installation and connection technology as well as quality control for the customer. From the development work originated a system with four flow sensors, electronics and customized casing. In the future, the system will detect the condition of ventilation filters imbedded in the monitoring system of our customer. Intelligent air conditioning systems use this information to provide fresh air in buildings and to keep power consumption at a minimum.

SHOW WEBSITE

Q3 2018

EXPANDED COLLABORATION WITH CHINESE COMPANY

JULY

The supply of standard sensors for pressure transmitters has created a demand for a solution.

We have signed an extension to our contract with a leading Chinese process automation company for the development and production of customer-specific pressure sensor components. „The aim is to achieve total annual sales of several million euro per year in the medium term,“ explains our CEO Dr. Dirk Rothweiler. The order supplements a supply agreement for standard sensors that has been in place since 2012. Our customer uses the pressure sensor components of the K series in high-precision pressure transmitters. The supply of standard sensors with double-digit growth rates has created a demand for a solution that enables even better stability and measuring quality. Over the last four years, First Sensor has achieved average sales growth of around 9% in Asia. Thus, China is the largest sales market. The most important application fields are industrial process control and length measurement.

SHOW WEBSITE

AUGUST

AUTOMOTIVE CERTIFICATION VERIFIES EXCELLENCE IN PRODUCTION

The IATF-certification is applied throughout the whole automotive supply chain and confirms the quality of our production processes.

With the IATF 16949 certification for the automotive industry, our two subsidiaries in Dresden and our location in Berlin-Oberschöneweide confirm the quality of the First Sensor production network and form the basis for making visions of autonomous driving and green mobility a reality. „With our APDs for the LiDAR technology, our cameras for driver assistance systems and our pressure sensors for energy-saving vehicles, we have a highly attractive range of products for the automotive industry. With the IATF 16949 certification, we have now laid the foundation for growth with current and new customers through these products and solutions," says our CEO Dr. Dirk Rothweiler. The IATF certificate, which is valid for three years, is used across the entire automotive industry supply chain. The goal of the IATF standard is to constantly improve quality in order to increase customer satisfaction.

SHOW WEBSITE

SEPTEMBER

POLYPHOTONICS EXPERTISE ENHANCES PACKAGING TECHNOLOGY

First Sensor has succeeded in combining electronic and optical functions with a new poly-transceiver.

First Sensor is expanding its packaging expertise along the strategic technology and product roadmap, and adding polyphotonics technology to our microelectronic structural design and connection technology. Proof-of-concept is an innovative poly-transceiver for 5G broadband expansion. As an expert in advanced electronics, we are combining optical and electronic functions with the transceiver for the first time. This connection increases the module's performance advantages and generates clear cost advantages compared with current manufacturing procedures. We have been working on developing the module together with different partners since 2016 and will take over production following series maturity from 2020 onwards. With the proof-of concept, we now have our eyes firmly set on further sensor applications for the innovative polymer-chip technology.

Q4 2018

OCTOBER

INCREASED PRODUCTION CAPACITY FOR H SERIES

The pressure sensors measure ultra-low pressures of dry, non-corrosive gases.

Demand for our powerful pressure sensors for medical and industrial applications is so high that we are increasing the production capacities for the standard sensors from the H series. Weekly output will rise by 70% compared to last year by the end of 2018. Measures at the Berlin-Weißensee location include optimization of batch sizes and product mix. In addition, new systems have been installed and a new shift model introduced. Furthermore, additional calibration capacity has been built up at our location in Puchheim, near Munich, thus ensuring greater flexibility in the production network. Our H series pressure sensors measure ultra-low pressures of dry, non-corrosive gases in various applications. Besides the DACH region – its largest sales market – demand for the H series is growing in Asia and North America above all. First Sensor will therefore further increase output in 2019.

NOVEMBER

NEXT STEP TOWARDS SENSOR DATA FUSION

Up to six cameras as well as further sensors can be combined with a new Embedded Electronic Control Unit.

First Sensor is moving sensor data fusion forward with the introduction of a scalable hardware and software platform for driver assistance systems. The sensor manufacturer is already using samples to promote the Embedded Electronic Control Unit (ECU) to various companies. “With the control unit, we are expanding our capabilities in the future-oriented field of partially and fully autonomous driving and offering OEMs an attractively priced solution for integrating different types of sensors and software applications,” explains our CEO Dr. Dirk Rothweiler. The ECU is being developed and produced at First Sensor Mobility GmbH in Dresden. Up to six cameras as well as further sensors such as LiDAR, radar or ultrasound can be combined with the platform. In addition, various software applications have already been implemented, which customers can augment with their own applications.

DECEMBER

LIDAR EXPERT FROM ISRAEL RELIES ON FIRST SENSOR

Technological precision and performance strength in the customized APDs impressed the company.

The Israeli system manufacturer is making use of our customer-specific avalanche photodiodes (APDs) in a novel solid-state LiDAR system designed for use with autonomous vehicles. We were able to make the optical sensors available within a few months. First Sensor is currently providing different companies with samples of a new generation of APD and is preparing for the LiDAR systems to enter series production. „Our task is to get volume production started as quickly as possible with an accelerated cost roadmap,“ says our CEO Dr. Dirk Rothweiler. The technological precision and performance strength of our APDs is also confirmed in the recently published “Global APD Avalanche Photodiode Market 2018” report. This marks the second time First Sensor has been ranked the top APD manufacturer in this publication.

SHOW WEBSITE

FOREWORD BY THE EXECUTIVE BOARD

Dr. Dirk Rothweiler, CEO (right)
and **Dr. Mathias Gollwitzer,** CFO (left)

Dear shareholders and business partners,

What changes are we seeing in the business world in which our company operates? What innovations will be shaping the future? These are the questions that drive us every single day. And the answers? Our sensors and sensor solutions – the products that have enabled us to grow from a Berlin-based technology startup into one of the leading global sensor companies. Our success is based on pioneering ideas, a commitment to excellence and close collaboration with our customers. Thanks to our expertise in chip design and production as well as microelectronic layout and connection technology, we develop and produce customized and standard sensor solutions in the fields of photonics, pressure and advanced electronics for the growing number of applications in our target markets Industrial, Medical and Mobility. And this is something we have done with sustained success.

With sales of €155.1 million, we ended the fiscal year within the guidance and achieved 5.2% more growth than the previous year. This growth was driven by the target markets Industrial and Medical as well as the sales regions of North America and Asia, where sales grew considerably. We want to – and will – continue this growth in 2019, too. After all, sensor technology is and will always be an innovation driver, and our products are the essential building blocks for the megatrends of digitalization and connectivity.

In Industry 4.0, for example, our solutions are essential for controlling interactions with robots or initiating maintenance measures before a problem occurs. In the world of medical technology, they help to improve diagnostics and support personalized care thanks to mobile e-health devices. And in the automotive industry, they are needed for green mobility – low consumption and low emissions – and for helping us to move into the age of autonomous vehicles. This is why volatile geopolitical developments and the impact of new standards and legislation, which are reflected in the sales in the target market of Mobility, represent only a snapshot of the current situation and why we can expect further growth here in 2019.

To achieve growth in all three target markets, we do not want to depend solely on a subsistence strategy and on market experts, who also expect economic growth and increasing demand for sensor technology in the coming years. Instead, we want to intensify our key account management to promote ongoing and comprehensive dialog with our key customers, invest in a new generation of our key products, upgrade our production facilities and expand both our production capacity and international presence. This will help us to further increase our market share in the DACH region and Europe as well as in Asia and North America. Our focus here will be on our key growth drivers: pressure, LiDAR and camera technology.

We will be continuously enhancing our L-series, H-series, transmitters and senseEdge products, which cover the measurement range from 1 millibar to 1,000 bar, and further expanding our production capacities – both internally and in collaboration with external partners.

To ensure that we play just as active a role in the introduction of advanced driver assistance systems and autonomous vehicles as we do in the increased use of industrial robotics, we are continuously enhancing and refining our avalanche photodiodes for LiDAR applications and are working on scalable LiDAR structures. We are expecting a sustained increase in the demand for such products, a position shared by industry experts and the recently published Global APD Report and one that is supported by the ever-increasing demand in the market.

We are also looking to significantly increase our camera sales over the course of this year. We laid the foundations for this back in early 2018 when our Blue Next camera entered series production. In addition, as part of our strategic target of forward integration, the end of last year saw the market launch of our embedded electronic control unit (ECU), a scalable hardware and software platform for sensor fusion in driver assistance systems. But we do not want to deploy our camera know-how exclusively in the target market Mobility – instead, we have already started tapping into new, highly specific application fields for our camera solutions in the smart home segment.

Across all target markets, key customers, key products, sales regions and growth drivers, and provided that the geopolitical and economic situation remains stable, we are expecting sales of between €160 million and €170 million in this fiscal year. Over the medium term, we are aiming to achieve year-on-year growth of 10%. We will also be looking to improve our profitability.

After our EBIT margin has for a long time been significantly less than 5%, the measures we have introduced to improve operational excellence and our clear focus on generating and leveraging economies of scale are starting to bear fruit: With an EBIT margin of 6.7% in 2016 and 7.2% in 2017, we ended the last fiscal year on 7.9%, which corresponds to an EBIT of €12.2 million – or a 16% increase compared with the previous year. This means that we are within our guidance here, too. We are looking to further increase our profitability and, based on our sales guidance, are striving for an EBIT margin of 8.5% to 9.5% for fiscal year 2019. By 2020, we want to have an EBIT margin of 10%.

To achieve these targets, we need our team to stay every bit as committed as it always has done, every single day. We need a team to keep on working together on solutions for everyday challenges. A team to look beyond the horizon and to shape our future. I would like to thank every single one of our 972 employees for their service, their creativity and their passion and for their commitment to achieving profitable growth, even if this involves overcoming hurdles along the way.

Equally, I would like to thank our shareholders, who have been accompanying us on our path of successful development, some of them already for many years. We are looking forward to embarking on the next stage together with you.

Your Executive Board

Dr. Dirk Rothweiler	Dr. Mathias Gollwitzer
CEO	CFO

REPORT OF THE SUPERVISORY BOARD

PROF. DR. ALFRED GOSSNER, CHAIRMAN OF THE SUPERVISORY BOARD

"THE COMPANY IS WELL POSITIONED FOR CONTINUED PROFITABLE GROWTH."

Dear Ladies and Gentlemen,

In the reporting year, the Supervisory Board fulfilled its duties as prescribed by law, the articles of incorporation and the rules of procedure. It advised the Executive Board in the course of its management of the company on an ongoing basis, and regularly reviewed and monitored its activity. In addition, it was directly involved at an early stage in all decisions of strategic and fundamental importance to the company. All relevant information was passed on promptly and extensively to the Supervisory Board. Over the course of the year and beyond, the Executive Board regularly, promptly, and comprehensively informed the Supervisory Board in both written and verbal form of the current business situation, the business development and the economic situation. The risk situation, risk management, and relevant issues relating to compliance, strategy, and planning were also elements of regular reporting. Deviations from planning and changes to targets in relation to the internally forecast business development and measures derived therefrom were communicated to the Supervisory Board, explained, and discussed with the Executive Board. The Supervisory Board approved transactions requiring its approval.

Six meetings in person took place in the past fiscal year and were also attended by the Executive Board; details of their content are provided below. In addition, one circular resolution was adopted. Five meetings were attended by all members of the Supervisory Board; only at the meeting in March was with Götz Gollan one Supervisory Board member absent. The subject of all Supervisory Board meetings was the Executive Board's reports on the business situation of First Sensor AG and its subsidiaries, particularly the current revenue and earnings development and the financial position and net assets. The Supervisory Board obtained detailed information on and discussed important transactions, the strategy and its implementation, and the company's risk management. All members of the Supervisory Board have enough time to fulfill their mandates. They always had sufficient opportunity to deal with and discuss the reports and draft resolutions submitted by the Executive Board before the meetings and in their plenary sessions. The Executive Board also provided the Supervisory Board with monthly reporting with a comprehensive presentation of the First Sensor Group's current net assets, financial position and results of operations as well as risks including deviations from targets and detailed comments. The Chairman of the Supervisory Board also maintained regular contact with the Executive Board. The Chairman of the Executive Board promptly informed the Chairman of the Supervisory Board of significant events that were important for assessing the company's situation and development and for managing the company.

At the meeting on February 1, 2018, the Executive Board and the Supervisory Board discussed the provisional result of fiscal year 2017, current business development and the priorities for the fiscal year 2018. The focus was on the scheduled introduction of a new ERP system as at January 1, 2018. In addition, the Executive Board reported on the strategy conference which had taken place in January. The Supervisory Board and the Executive Board then talked about the priorities for 2018, particularly with regard to the strategy for profitable growth. The agenda items of the Annual General Meeting 2018 were also discussed. A further topic was changing the research service provider from M.M.Warburg & CO KGaA to equinet Bank AG, now Pareto Securities AS. Finally, the target attainment of the Executive Board and managers for 2017 together with the related variable remuneration and the Executive Board's targets for 2018 were discussed.

In the Supervisory Board meeting which took place on March 15, 2018, the single-entity financial statements of First Sensor AG and the consolidated financial statements for fiscal year 2017 were presented by Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungs- und Steuerberatungsgesellschaft Hanover, scrutinized by the Supervisory Board, and then adopted and approved. In addition, the Executive Board and the Supervisory Board resolved to propose to the Annual General Meeting that a dividend of EUR 0.16 per share be distributed. Subsequently the Executive Board reported about current business, in particular the restricted supply capacity resulting from the introduction of the new ERP system. Together with the increasing shortage of qualified staff, this was also a topic in the subsequently discussed risk report. In addition, the Director of Quality at First Sensor AG was invited to the meeting to speak about quality in the First Sensor Group. Another key topic was the company's strategy, which was the subject of intensive dialog between the Executive Board and the Supervisory Board. Furthermore, the agenda of the Annual General Meeting 2018, including the proposed dividend payment, was resolved. Other topics of the meeting were a regular examination of the D&O insurance and the discussion and approval of a specific investment project in line with the rules of procedure. Finally, the Executive Board's targets for the year 2018 were discussed.

At the meeting held on May 22, 2018, the members of the Supervisory Board prepared for the forthcoming Annual General Meeting and reached an agreement on the individual agenda items. In addition, the current business development was discussed, in particular progress in the process in introducing the new ERP system. Furthermore, the targets for the Executive Board in fiscal year 2018 were determined. Finally the Executive Board reported on the current status of the Honeywell case.

As part of an ordinary Supervisory Board meeting on August 15, 2018, the current business development of the AG was discussed. The Vice President Production provided details on topics such as production optimization and in this connection indicated initial improvements as a result of the new ERP system as well as potential for optimization. Also, the Vice President Sales & Marketing was invited to the meeting to report on initiatives to improve margin optimization. Subsequently, the Vice President of Development and Managing Director of First Sensor Mobility GmbH spoke about LiDAR and the Mobility 2.0 strategy. In addition, the Executive Board provided information on current topics in the areas of quality and risk management.

The Supervisory Board meeting on October 11, 2018 primarily dealt with the planning for 2019 and beyond. Margin optimization was also discussed. Additionelly, the Executive Board and Supervisory Board dealt with the Group's compliance management system. On this basis it was resolved to convene a compliance committee.

At the meeting on December 5, 2018, the strategic and operational development of the company was presented to the Supervisory Board in detail. In this context, the Director of Development and the Managing Director of First Sensor Mobility GmbH provided an update on the perspectives of LiDAR and on the Mobility target market. The Supervisory Board and Executive Board also discussed in detail the budget planning for 2019 to 2021. Moreover, the Executive Board and Supervisory Board exchanged information on the cooperation with the investment bank Goldman Sachs, which was to provide the company support in a possible change of the shareholder structure.

In addition to the scheduled meetings, a range of meetings about operative and strategic questions were held between the Executive Board and members of the Supervisory Board. No separate committees were formed. The requirements for the independent financial expert as defined in section 100 (5) AktG were and are fulfilled by Götz Gollan, who is a banker and business administration graduate (UAS) and whose main occupation since 2002 has been as an Executive Board member for banks/finance.

An efficiency review of the Supervisory Board's activity was conducted using a standardized process of Wirtschaftsprüfungs- und Steuerberatungsgesellschaft Ebner Stolz GmbH & Co. KG, Hanover. This did not give rise to any anomalies or a clear need for improvement.

As per statutory regulations, the auditor Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungs- und Steuerberatungsgesellschaft Hanover, was appointed by the Annual General Meeting on May 23, 2018, to audit the annual financial statements and the consolidated financial statements for fiscal year 2018. Prior to submitting a proposal for appointment, the Supervisory Board obtained a declaration of independence from the auditors.

The audit reports, the documents relating to the financial statements, the CSR report, and the Executive Board's proposal for the appropriation of earnings for fiscal year 2018 were sent to all supervisory board members in good time. At the meeting on March 11, 2019, they were discussed intensively and in detail by the Supervisory Board. At this meeting, the responsible auditor, Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungs- und Steuerberatungsgesellschaft Hanover, also reported on the key findings of his audit in person and was available for additional questions and information. Both the annual financial statements of First Sensor AG for fiscal year 2018, which were prepared by the Executive Board in accordance with the regulations of the German Commercial Code (HGB), and the consolidated financial statements for fiscal year 2018, which were prepared on the basis of the International Financial Reporting Standards (IFRS) in accordance with section 315a HGB, as well as the combined management report, were audited by the auditor, and were each granted an unqualified audit opinion. Based on the final result of its own review of the annual financial statements, the consolidated financial statements, and the combined management report, the Supervisory Board did not raise any objections to the findings of the audit of the financial statements. Accordingly, the separate financial statements of First Sensor AG have been adopted and the consolidated financial statements have been approved in accordance with section 172 AktG. After performing its own review, the Supervisory Board agreed with the Executive Board's proposal for the appropriation of earnings. The CSR report was not audited by third parties. The auditor satisfied itself that the related information was available and the Supervisory Board reviewed the lawfulness, correctness, and expediency of the sustainability reporting.

The declaration of compliance of First Sensor AG in accordance with section 161 AktG was also approved at the same supervisory board meeting. It was subsequently made permanently available on the company's website. Detailed information is provided in the company's corporate governance report.

I would like to take this opportunity - both personally and on behalf of my colleagues on the Supervisory Board - to thank the Executive Board and all employees for their firm commitment and outstanding performance over the past fiscal year, and wish them every success in future projects and challenges.

We are also grateful for the trust placed in us by our shareholders. We would greatly value your continued support as an investor in First Sensor AG.

Berlin, March 12, 2019

First Sensor AG

Gossner

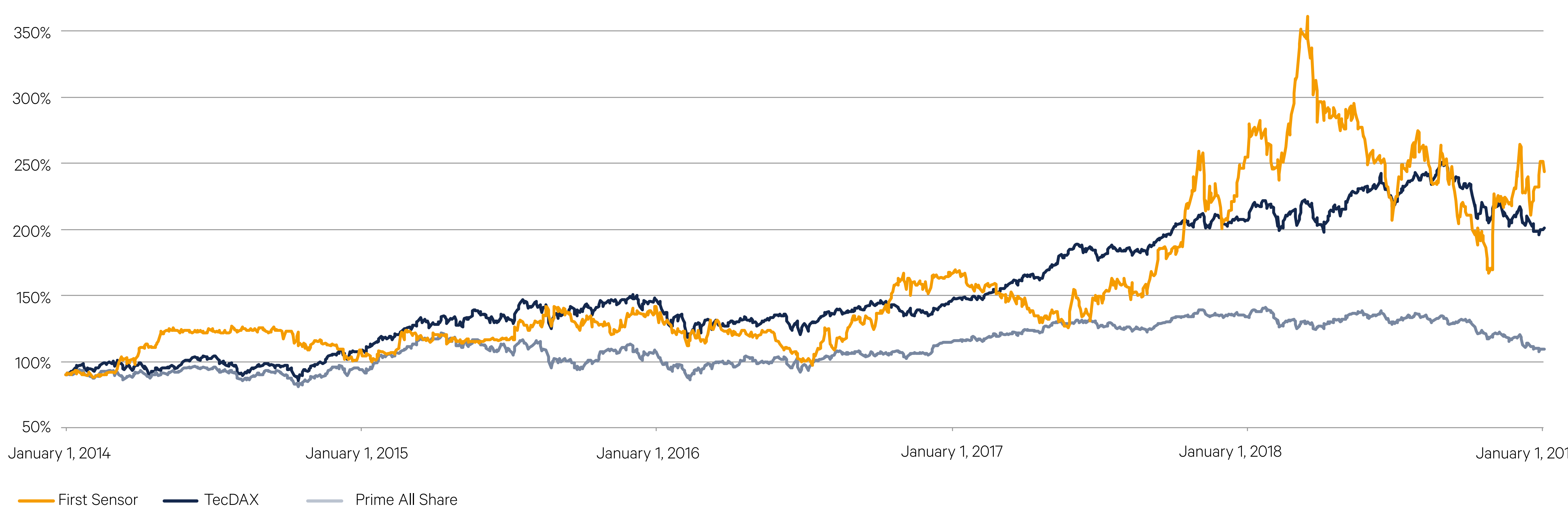
Prof. Dr. Alfred Gossner
Chairman of the Supervisory Board

First Sensor closes 2018 stock market year at previous year's level in a difficult environment

First Sensor shares started the new fiscal year up slightly on the 2017 closing price at €23.00, and maintained this level throughout the first few weeks of the year. Publication of the provisional figures on February 16, 2018, which promised a result above the guidance, subsequently triggered an upward trend, driving the shares up to a high of €31.80 for the year over the course of March 15, 2018. However, before publication of the consolidated financial statements for 2017 on March 22, 2018, there was an onset of profit-taking, which pushed the share price back down to the level seen at the start of the year until mid-May.

During this period, the stock market environment was already marked by increasing political uncertainty. Negative factors affecting European indexes included not only the US trade war, which had been impacting equity markets since February, but also the dispute over Italy's budget and indebtedness, discussions surrounding a disorderly Brexit and also the ECB's scaled-down bond purchases. These circumstances caused the First Sensor share price to fall to €21.80 until early June. Teslin Capital Management BV, Netherlands, was one of the parties that took advantage of this level to acquire another 3.36% of First Sensor's share capital from its managed fund.

Performance over the past 5 years

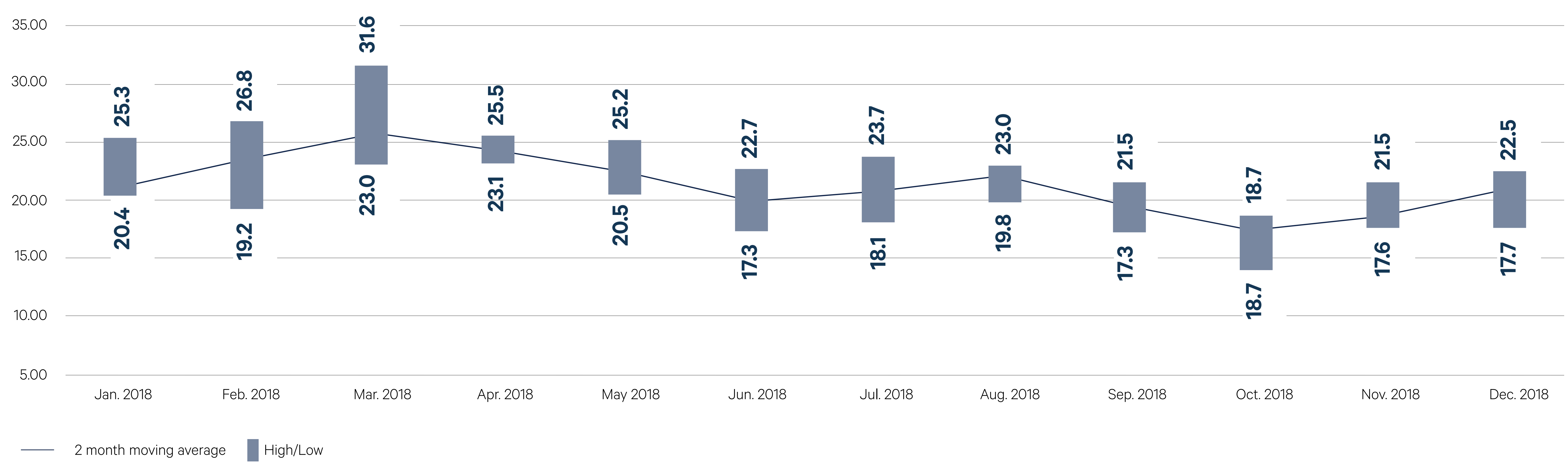


From mid-June, the stock market environment was impacted not only by political uncertainty but also by profit warnings from 42 companies in the Prime Standard segment, including five DAX companies. The fact that one in four of these companies was assigned to the automotive sector meant that the negative automotive sector sentiment was also reflected in First Sensor's share price. During this period, Teslin Capital Management increased its shareholding in First Sensor AG further to over 10% and announced on July 12, 2018 in accordance with section 43 paragraph 1 WpHG (Wertpapierhandelsgesetz) within this notification its intention to acquire more shares. At the same time, the investor told the company that it was not seeking any changes to First Sensor AG's capital structure with respect to the ratio of equity and debt financing and the dividend policy.

Having closed the first half of 2018 at a price of €18.40, in July and August First Sensor shares hovered around a price level of €21.10, bolstered by a good half-year result, before being forced to relinquish ground from September onwards as the automotive industry crisis continued to manifest itself. By October 26, the intraday share price had plunged to its lowest point of the year at €14.00. Success stories on the impact of the profitable growth strategy and DPE Deutsche Private Equity GmbH's announcement that it was contemplating the sale of its shares in First Sensor AG held via FS Technology Holding S.à.r.l. provided a boost and ushered in another upward trend from the start of November, driving the shares up to a closing price of €21.30 by the end of the year. This equates to a mildly negative performance of -1.4% compared with the previous year, with comparative indexes (TecDAX and Prime All Share Index) suffering losses of around 3% and 17% respectively in the same period.

The trading volume of First Sensor shares was almost constant compared with the previous year. According to Bloomberg, in the 2018 stock market year an average of 21,715 shares changed hands every day on the XETRA market (previous year: 22,219 shares), with a peak trading volume of as many as 30,288 shares per day.

Monthly highest and lowest rate of the First Sensor share in €



Key figures for First Sensor shares

The company's share capital amounted to €51,111,980.00 as at the end of the reporting period (previous year: €51,081,980.00), divided into 10,222,396 (previous year: 10,216,396) no-par value bearer shares each with a notional interest in the share capital of €5.00. The difference of 6,000 shares is due to the exercise of share options in the past fiscal year. Given the encouraging operating results in 2018, the solid financial position and the optimistic view of the management regarding the company's long-term growth prospects, the Executive Board and Supervisory Board of First Sensor AG intend to propose to pay a dividend of €0.20 per share in circulation at the Annual General Meeting on May 3, 2019. Provided the Annual General Meeting gives its approval, the dividend will be paid on May 8, 2019.

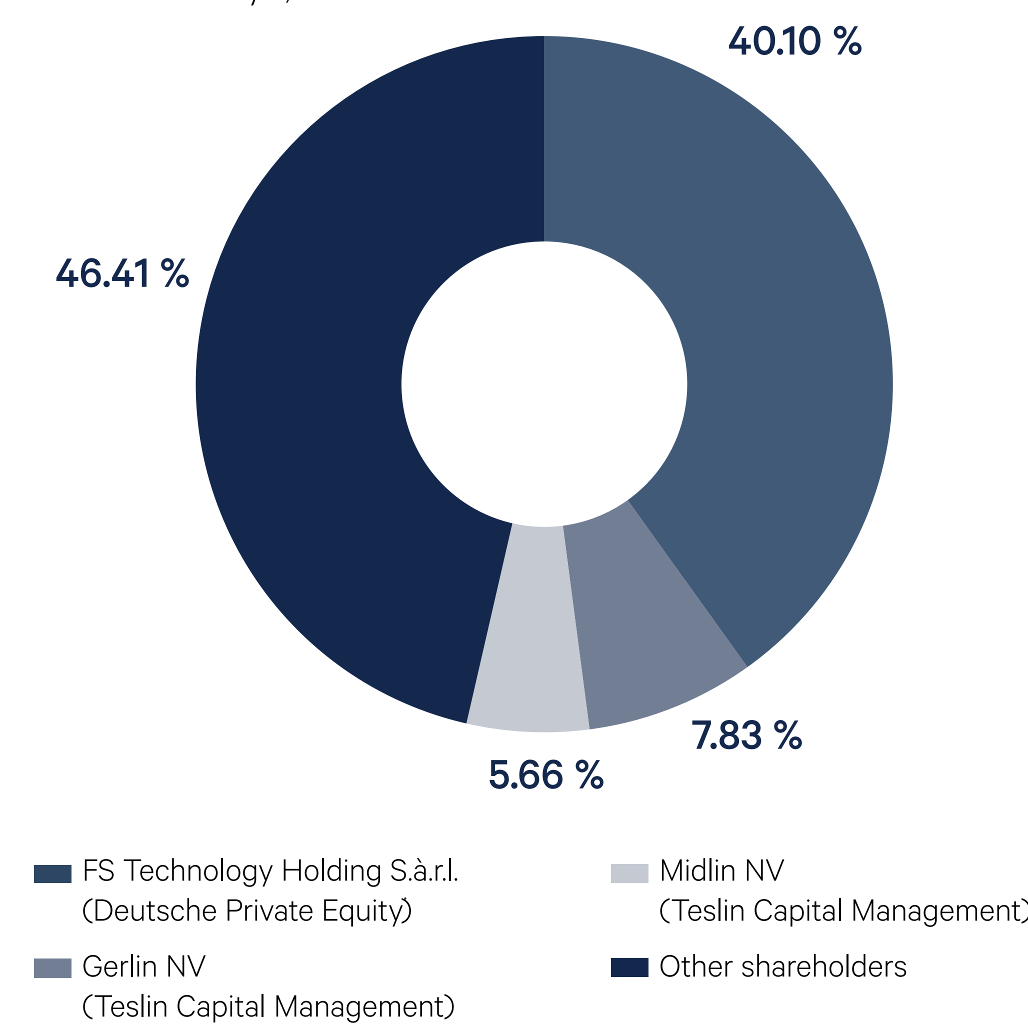
in € thousand, unless otherwise indicated	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Share capital (€)	51,081,980	51,111,980	30,000	0.1
Number of shares (weighted, diluted)	10,216,396	10,222,396	6,000	0.1
Number of shares (basic)	10,259,565	10,355,012	95,447	0.9
Earnings per share (€, diluted)	0.40	0.72	0.32	80.0
Earnings per share (€, basic)	0.40	0.71	0.31	77.5
Year-end price (€), XETRA closing price	21.76	21.30	-0.46	-2.1
Highest price (€)	22.93	31.80	8.87	38.7
Lowest price (€)	11.13	14.00	7.13	25.8
Market capitalization[1]	222,309	217,737	-4,572	-2.1
Dividend per share (€)	0.16	0.20[2]	0.04	25.0
Total dividend (€)	1,633,837	2,043,312	409,475	25.1
Dividend yield	0.7	0.9	0.2	28.6
Average trading volume per trading day[3]	22.219	21.715	504	-2.3

[1] Based on number of shares as of Dec. 31, 2018 [2] Subject to approval by the Annual General Meeting [3] Based on number of shares traded on Xetra

Shareholder structure according to available information

Teslin Capital Management BV exceeded the 10% threshold with share purchases in June 2018. Available information suggests that via its Midlin NV and Gerlin NV funds, it currently holds 13.5% of the share capital of First Sensor AG. DPE Deutsche Private Equity GmbH, which currently has a shareholding of 40.1% via FS Technology Holding S.à.r.l., announced on October 31, 2018, that it was considering selling its shares.

Status: February 1, 2019



Corporate Governance Report and declaration on Business Management

Compliance with the German Corporate Governance Code and declarations of compliance

The Executive Board and the Supervisory Board of First Sensor AG are guided by the principles of good corporate governance as defined in the German Corporate Governance Code (GCGC). The code is generally reviewed once a year in the context of national and international developments and is adjusted where necessary. For this reason, the Executive Board and the Supervisory Board of First Sensor AG examine at least once a year whether the company follows the recommendations and suggestions set out in the code. After being jointly approved by the Executive Board and the Supervisory Board, the declaration of compliance in accordance with section 161 of the German Stock Corporation Act (AktG) is then published on the company's website in the Investor Relations, Corporate Governance section. It was last issued on March 12, 2019, in relation to the GCGC version dated February 7, 2017 (published in the Federal Gazette on April 24, 2017).

With regard to the more than 100 recommendations and 10 suggestions in the Corporate Governance Code, the Executive Board and the Supervisory Board report once a year on the current status of implementation in the company. According to the declaration of compliance on March 12, 2019, First Sensor AG deviates from seven recommendations; these deviations are presented and justified in the declaration. All but one of the suggestions are taken into account. The only exception is that the Annual General Meeting has not been broadcast online so far. In the future, however, it should be made easier for shareholders to follow the Annual General Meeting. Therefore, the Executive Board and the Supervisory Board will propose the approval of a corresponding amendment to the Articles of Association at the Annual General Meeting. Both current and previous declarations of compliance with the German Corporate Governance Code are available on the company's website in the Investor Relations section.

This corporate governance report also includes the declaration on business management in accordance with section 289f of the German Commercial Code (HGB), which is also published on First Sensor AG's website in the Investor Relations, Corporate Governance section, and the disclosure of the main features of the compliance management system in accordance with section 4.13 of the GCGC.

Corporate governance declaration in accordance with section 289f HGB

Management and supervision at First Sensor AG are geared toward good, responsible, and sustainable value creation. Great importance is attached to close and efficient cooperation between the Executive Board and the Supervisory Board, regard for shareholders' interests, open corporate communication, proper accounting and auditing, and responsible handling of risks and of legal and internal regulations. In accordance with section 289f HGB, First Sensor AG has to submit a declaration on business management. The declaration forms part of this report and is permanently available on the company's website.

Compliance management system

Compliance is a key element of sustainable business management at First Sensor. In order to ensure that the legal provisions and company-specific principles (Code of Conduct) are followed, a Group-wide compliance management system (CMS) has been established. The main features of this system are permanently available on the company's website in the Our Responsibility, Compliance section. The goals of compliance management are derived from the company's mission statement and define the desired conduct and actions – reliable, fair, honest, and trustworthy – of all employees with each other, including in relations with customers and suppliers. Internal and external whistle-blowers can report infringements of our principles and other compliance requirements confidentially to the Compliance Officer or completely anonymously to an external ombudsman. The Compliance Committee is responsible for assessing the reports received and taking measures if necessary. It also periodically reviews the effectiveness of the CMS and initiates changes if necessary. Violations of the compliance guidelines by the Executive Board result in the Supervisory Board being informed directly.

The Supervisory Board

In accordance with the Articles of Association, in fiscal year 2018 First Sensor AG's Supervisory Board was made up of four members who were elected by the Annual General Meeting.

Targets for the composition and competence profile of the Supervisory Board

In line with item 5.4.1 of the GCGC, the Supervisory Board has resolved the following specific targets to take account of the company's specific situation, especially in relation to the size of the company and the Group, the international activity, potential conflicts of interests, the number of independent members of the Supervisory Board and diversity:

- Ideally, one supervisory board member shall embody the criterion of internationality to a certain degree, whether this entails a foreign nationality and/or significant experience abroad.
- Moreover, at least three members of the Supervisory Board must be independent
- The Supervisory Board strives to find optimal members in line with specialist criteria and the requirements of the company's situation. Here, the requirements profile that has been established shall be used regardless of the gender of potential applicants and women with the same qualifications and experience shall be given preference.

The targets set by the Supervisory Board were met in the 2018 financial year.

The Supervisory Board has neither specified an age limit for its members nor a regular limit for the length of membership, as limits in these areas did not appear to be in the interests of the company.

The creation of committees is rejected due to the low number of Supervisory Board members and the short decision-making processes that exist.

Prof. Alfred Gossner is a member of an Advisory Board of DPE Deutsche Private Equity (DPE). In this function, he has no statutory authorizations, neither does he serve special interests of the DPE. However, since this activity can constitute a business relationship under the GCGC Number 5.4.2, Prof. Alfred Gossner is described as a not-independent member as a precautionary measure. None of the Supervisory Board members are in a personal or business relationship with the company or its bodies that could create a significant conflict of interests that is not only of temporary nature.

The Supervisory Board has defined the professional and personal requirements to fulfill its duties in a competence profile. The diversity of responsibilities and duties within the Supervisory Board should be reflected by the specialisms of its members (e.g. accounting and controlling, knowledge of sectors and sensor technology, R&D, compliance). In addition to professional suitability, personal criteria such as entrepreneurial experience and internationality should also be considered when selecting members.

The Supervisory Board analyzes the competence profile on a regular basis and compares it with potential areas that are represented by its members. This results in the basis for continued education for relevant individuals and staff planning. The Supervisory Board came to the conclusion that the current members matched the Supervisory Board's competence profile to a high degree in fiscal year 2018.

Diversity and equal opportunities

As an international company, First Sensor attaches great importance to diversity. We consider diversity and equal opportunities as key principles at work and have thus also signed the Diversity Charter in May 2018. Employees from many different countries were working for the First Sensor AG Group as of December 31, 2018. 36.1% of these 972 employees were women.

On December 20, 2017, the Executive Board resolved the establishment of targets for the quota for women at the two management levels below the Executive Board in accordance with section 76 (4) AktG, which contains the following:

a. The two management levels below the Executive Board are made up of First Sensor AG employees who, as managers/directors of companies included in consolidation, bear responsibility for a region or a business area and/or staff, employees working at the headquarters who, owing to their key area of responsibility, perform management functions and/or bear responsibility for staff in addition to department heads with staff responsibility. The two management levels below the Executive Board are made up of 20 employees, four of whom are female (a share of 20%).
b. In accordance with section 76 (4) AktG, the company's Executive Board has established a target of 20% for the

quota for women at the two management levels below the Executive Board by June 30, 2022. This target was met in fiscal year 2018.

On September 27, 2017, the Supervisory Board resolved the establishment of targets for the quota for women on the Executive Board and on the Supervisory Board in accordance with section 111 (5) AktG, which contains the following:

a. For the Executive Board, a target of 0% by June 30, 2019, was established for the quota for women in accordance with section 111 (5) AktG. Naturally, in the selection of members of the Executive Board, in addition to the specialist qualification the Supervisory Board also pays attention to diversity. Thus, in the medium and long term, the aim is for a woman to become a member of the company's Executive Board. However, it was not able to reach this objective with the short maximum deadline set by the legislator to reach this target. To avoid setting a goal which the Supervisory Board does not deem realistic with the means it has available and which it does not consider to be in the company's interest, the Supervisory Board has limited itself to setting a target of 0% which corresponds to the current status quo. Of course, should a position on the Executive Board unexpectedly become vacant, this does not exclude the possibility that the Supervisory Board would take into account the target of increasing the woman quota when filling the Executive Board position.

b. For the Supervisory Board, a target of 0% by June 30, 2019, was established for the quota for women in accordance with section 111 (5) AktG. To date, women are not represented on the Supervisory Board.

Reportable securities transactions and shareholdings of the Executive Board and Supervisory Board

Reportable transactions in accordance with article 19 of the market abuse regulation, particularly by members of the governing bodies and persons closely associated with them, are published immediately by First Sensor AG in accordance with the legal requirements. They can be accessed in the company register and on the company's website in the Investor Relations, Corporate Governance, Directors' Dealings section.

In fiscal year 2018, Dr. Dirk Rothweiler, CEO, accepted 80,000 share options as part of the participation program on March 23, 2018. The vesting of stock options depends in particular on the successful fulfillment of targets and the end of the four-year vesting period.

Dr. Mathias Gollwitzer, CFO, accepted 25,000 share options as part of the participation program on March 26, 2018.

On June 29, 2018, Prof. Alfred Gossner, Chairman of the Supervisory Board, purchased a total of 660 shares at an average price of €18.45 and a total of 500 shares at an average price of €19.65 on July 4, 2018. On July 12, 2018, Prof. Alfred Gossner purchased a total of 730 shares at an average price of €20.96 and sold 300 shares at an average price of €21.00.

Remuneration report

The Chairman of the Supervisory Board informed the Annual General Meeting on the main features of the remuneration system. Details of the remuneration system for the Executive Board are to be found in the consolidated management report. The itemized list by individual regarding payments to the Executive Board and Supervisory Board can be found under item 32 of the consolidated financial statements.

Share option programs

The share option programs are described as part of the remuneration report in the management report; further details can be found in the notes to the consolidated financial statements (item 11 and item 18).

Non-Financial Reporting (CSR-Report)

DECLARATION OF COMPLIANCE OF FIRST SENSOR AG FOR FISCAL YEAR 2018

Dear shareholders and business partners,

In this CSR report we disclose for the fourth time the aspects of sustainability that are of particular significance within our company. For us, the term CSR, that is corporate social responsibility, encompasses more than environmental protection measures. It is much rather a question of acting in a sustainable manner and taking responsibility for our company's impact on society. In view of this, our CSR activities are oriented toward a long-term contribution rather than short-term effects.

Last year we defined our first targets and measures in this context. You can read about our progress in this year's report. At the same time, our work on the various issues also made clear to us that we must set priorities in a meaningful way: What are the areas in which a little effort already goes a long way? And which issues are of such minor significance in view of the overall picture that we can defer them so as to direct our efforts toward more essential aspects?

Further development of our materiality analysis endorsed an even more focused approach. In the 2017 reporting year we asked our internal and external stakeholders; that is employees, managers and Works Council, but also customers and suppliers, partners and the general public, what issues they considered important in relation to First Sensor. This year we took an additional question into consideration: What issue, having an effect on the company itself or caused by the company, would have the greatest impact? This enabled us to identify the really relevant issues even more clearly and thus to concentrate on them, both in this report and in other respects.

When preparing this report for the period from January 1 to December 31, 2018, we were once again guided by the format of the German Sustainability Code. However, as in the previous year, we also worked within the framework of the GRI standard; some references in the text therefore refer to this. The CSR report by First Sensor is published together with the Annual Report 2018. Nevertheless, it is conceived as a self-contained report, which makes no reference to passages of the annual report. On the one hand, this complies with the format of the German Sustainability Code and, on the other, it makes the report coherent for readers.

In this report we provide an insight into our actions and into the responsibility we have assumed: responsibility based on perseverance, responsibility with a focus on the really important issues and responsibility for the things which can make a difference.

The First Sensor CSR Team

1. General information

The First Sensor Group consists of the parent company First Sensor AG, based in Berlin, and ten subsidiaries (GRI 102-1). The company has been listed since 1999. According to the information available, its biggest shareholder is DPE Deutsche Private Equity GmbH, which holds 40.1% of the shares of the company via FS Technology Holding S.à.r.l. (GRI 102-5).

In fiscal year 2018, First Sensor generated sales of €155.1 million with 972 employees (863 FTEs) (GRI 102-7). The DACH region accounted for 49.2% of sales, while sales generated from customers in the rest of Europe accounted for 25.9%. 12.4% of sales are attributable to North America and 12.5% of sales were generated in Asia (GRI 102-6). As at December 31, 2018, the Group's total assets amount to €168.4 million, while the equity ratio stands at 52.7% (GRI 102-7).

In the growth market of sensor systems, First Sensor develops and manufactures standard products and customer-specific solutions for the ever-increasing number of applications in the Industrial, Medical, and Mobility target markets (GRI 102-6). The portfolio of these standard products is supplemented by products from partner companies.

First Sensor is characterized by two core competencies within these fields. Firstly, the company specializes in detecting physical parameters thanks to the design and manufacture of its silicon-based sensor chips. Secondly, it uses its expertise in microelectronic layout and connection technology to continue to process the sensor chips with the best "form factor" for the application. In this context, First Sensor is an expert in the areas of photonics, pressure and advanced electronics. In addition, First Sensor is generating growth in its target markets through new applications such as system solutions (so-called sensor systems), for example. They do not just measure; they react intelligently to the measurement results and communicate with other systems. (GRI 102-2).

We ensure compliance with sanctions and export control restrictions before delivering to customers based internationally. As an international legal instrument, export control aims to ensure that armaments are not circulated unchecked. It is also used as part of terrorism prevention. As the use of some First Sensor products for military purposes cannot be ruled out, First Sensor checks whether export control restrictions could apply, both during the process of initiating new business as well as before delivery. For example, technical product parameters and evidence of intended use are used here, effectively preventing the inadmissible supply of products in the event of anomalies (GRI 102-2).

First Sensor plans to go beyond compliance with this regulatory requirement by establishing a commission to safeguard its own ethical business interests. The aim of this commission will be to review potentially critical customer requests and make decisions even before statutory export control measures take effect. In fiscal year 2018 we already agreed on key aspects in preparation for this. We intend to call in external support for developing a suitable concept prior to possible implementation in the 2019 fiscal year in order to define responsibilities and decision-making powers in advance and benefit from experiences in other companies.

Employees (GRI-102-8)

First Sensor hired further new employees in 2018 as part of its growth strategy. The total number of permanent employees rose by 5.8% to 972. The proportion of women remained at the previous year's level of 36.1%. To handle fluctuations in utilization and temporarily fill vacant positions, First Sensor works with temporary employment agencies that meet general quality standards. It is not uncommon for the temporary staff employed to subsequently enter into an employment relationship. The proportion taken on permanently in the last fiscal year amounted to 46.3%.

Employees (Heads)	Permanent employees (m/f)	Temporary employees (m/f)
Germany	577/331	46/20
Rest of Europe	26/13	1/0
North America	16/9	0/0
Total	**619/353**	**47/20**

First Sensor offers staff a variety of working time models to take into account the wishes and needs of employees due to the demands of family life or dependents requiring temporary care, as far as possible.

This approach stems from our conviction that the happiness of employees has a direct effect on their level of commitment and motivation. The proportion of part-time employees in the 2018 fiscal year was 14.4% (previous year: 15.1%).

	Permanent employees (m/f)	Temporary employees (m/f)
Germany	532/247	45/84
Rest of Europe	26/2	0/11
North America	16/9	0/0
Total	**574/258**	**45/95**

Strategic analysis and measures

The various aspects of sustainability can be seen in a variety of activities performed by the companies of the First Sensor Group. Long-term business success is thus combined with environmental and social responsibility as sustainable business practices contribute to orientating the company for a successful future as well as making it an attractive employer and a good neighbor at its locations. This impression has also been confirmed in the analysis of this report.

In addition to the traditional areas, such as energy conservation measures and the reduction of water consumption or prevention of waste, many locations engage in lively dialog with their local areas. This includes Girls Day, the idea of which is to get young women involved in STEM careers, and the Long Night of Industry, aimed at the interested public in general, as well as monetary donations and donations in kind to local charities or schools. For this reason, too, we decided to expand on this bottom-up approach (GRI 103-2), because materiality in particular still varies considerably from location to location. For instance, a production location focuses on different areas than a sales office. To satisfy these different approaches, a general strategy should only be formulated for the entire Group if it can appropriately unite the different points of view (GRI 102-14).

The effects of our business activities on people and the environment are analyzed continuously, not only for the purposes of this report. First Sensor also uses its products to make a contribution to sustainable development, for example, in medical technology or in looking for solutions for safe and environmentally friendly mobility. Sustainability is also important because it provides business opportunities. The corresponding risks are carefully minimized and monitored. For this reason, an indicator system that makes it possible to measure and manage the key parameters is essential. The foundations for the development of this system have been laid. We are aware that First Sensor still has a lot of development work to do here.

Transparency, as provided by this report for example, is important to the company. This is why it actively seeks dialog with its stakeholders – not only in relation to the materiality analysis but also based on the belief that understanding and trust can only grow through dialog (GRI 103-2).

Internal guidelines were adopted some time ago in order to give this trust a basis. These guidelines encompass not only the mission statement and values of the Group, presented in a way that is understandable for everyone, but also include a code of conduct that stipulates how it should deal with customers, suppliers, employees and other stakeholders. This means that every employee and every manager knows the expectations of the company in terms of the legal and ethical standards of their actions.

Furthermore, the standards First Sensor applies orient it toward internationally recognized principles and guidelines (GRI 102-12). These include:

- The German Corporate Governance Code
- The Universal Declaration of Human Rights
- ILO Core Labor Standards
- The UN Guiding Principles for Business and Human Rights
- The ten principles of the UN Global Compact

The sustainability report is not audited by third parties. However, the Supervisory Board reviews the lawfulness, correctness and expediency of the sustainability reporting in accordance with the legal provisions (GRI 102-32).

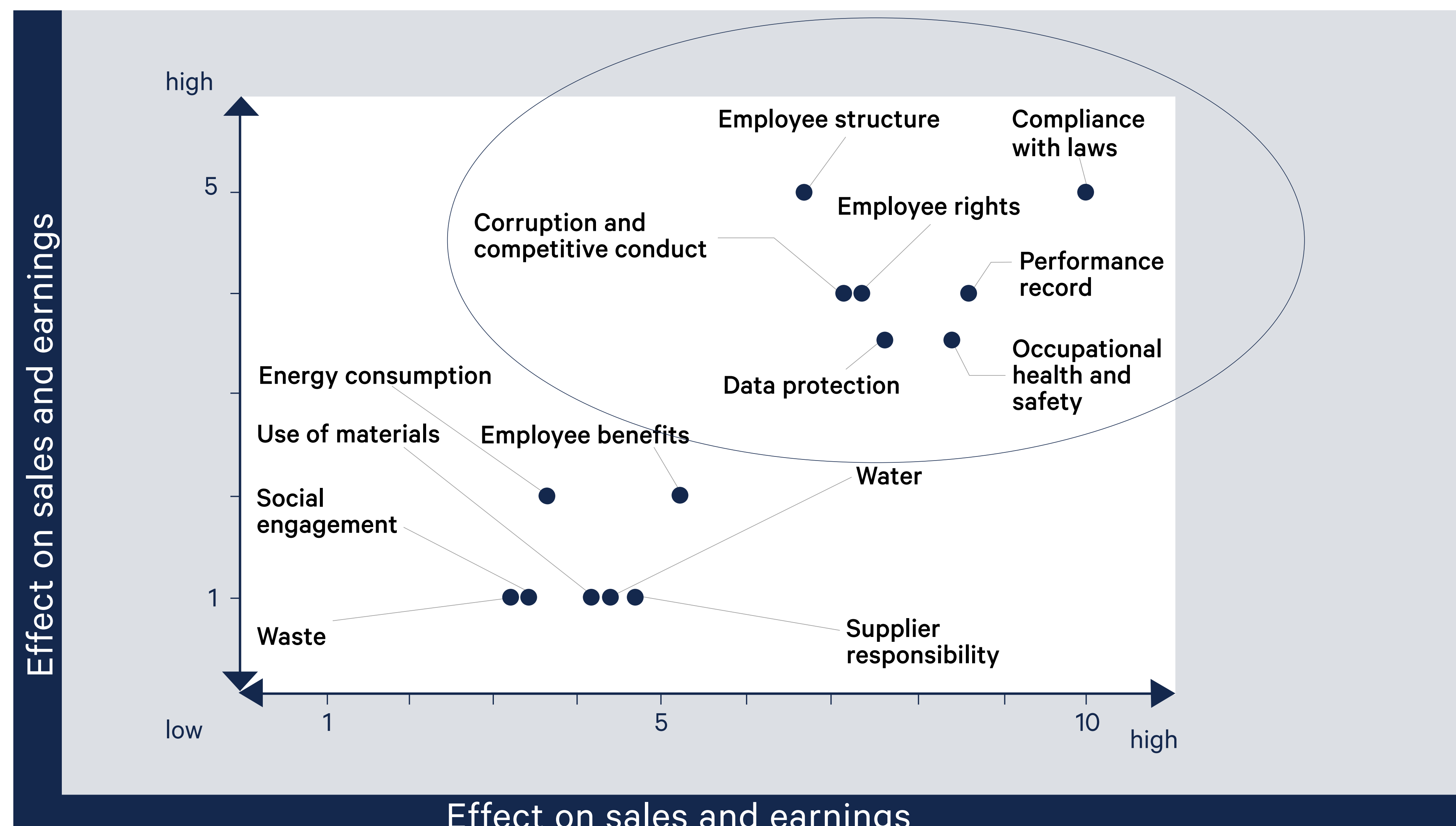
Opportunities and risks

As a listed company, First Sensor has established a risk and compliance management system as an integral part of corporate governance (GRI 102-11). First Sensor AG's Executive Board is responsible for ensuring it is effective, while the Supervisory Board advises on and monitors this. At First Sensor, risk and compliance management are linked together and mapped in a permanent Group-wide Enterprise Risk Management (ERM) process covering all locations and business divisions. The risk and compliance situation is continuously analyzed along different dimensions throughout this process. The identified risks are assessed, managed and monitored. The integrated risk and compliance management system therefore not only ensures that corporate risks are effectively managed but also guarantees that the ethical principles of corporate governance, as set out in the Code of Conduct that came into effect in 2018, and the statutory provisions are used as guidelines for acting. The goal for the 2019 fiscal year is to systemize opportunity management yet further in a similar way to risk and compliance management in order to optimize Group-wide analysis, assessment and management further.

2. Materiality

Materiality analysis plays a key role in the development of a sustainability strategy. It is the basis for determining what issues are of particular importance for First Sensor and should be the focus of targets and measures. In 2017, therefore, the first materiality analysis was carried out by means of a structured survey of internal stakeholders (employees, managers, works council) and external stakeholders (representatives of customers and suppliers, partners, associations and politics, the general public and the capital market) (GRI 102-15). This resulted in an overview of the aspects these stakeholders considered particularly important for the development of First Sensor. The company addressed these issues in depth and reported on corresponding targets and measures for the first time in 2018.

First Sensor did not conduct a new survey for this report as opinions on and attitudes to such fundamental issues do not change dramatically. Instead, the existing analyses were extended to include the "impact", i.e. the effects on the company itself or the effects caused by the company. The combination of sales and earnings was used as an equivalent measure of performance (GRI 102-49).



The graphic shows the result of the modified materiality analysis: The summary assessment of all stakeholders was mapped on the x-axis and the identified effect on sales and earnings on the y-axis. All the issues in the circled area are top issues that First Sensor will subsequently focus on in particular.

Taking into account this additional impact assessment in 2018, the following issues are of particular importance for First Sensor (in descending order of importance):

- Compliance with laws
- Employee structure
- Performance record
- Employee rights
- Corruption and competitive conduct
- Data protection
- Occupational health and safety

These issues were allocated to the following blocks:

Economic performance

- First Sensor performance record (GRI 201)

Society

- Occupational health and safety (GRI 403)
- Employee rights (GRI 202-1, 401-3, 402-1, 404, 405, 406)
- Employee structure (GRI 401-1)

Compliance

- Compliance with laws (GRI 307, 419)
- Data protection (GRI 418)
- Corruption and competitive conduct (GRI 205, 206)

Some issues that were classified as less relevant in the materiality analysis will nevertheless be followed up. This includes, for example, social engagement at the various company locations. This stems from our conviction that this is worthwhile and makes a difference. We also believe that sustainable actions start as early as when selecting business partners. We will therefore maintain the focus on our suppliers' responsibility for environmental and social matters (GRI 308, 414). For this reason, additional information on these issues can also be found below.

The plan for subsequent years is to review the materiality analysis regularly in terms of the selected criteria and their potential effect on the development of the company in order to adjust the strategy and measures initiated where necessary in the event of significant changes.

3. Goals

In accordance with the analysis of material aspects, First Sensor is developing specific goals for the short and medium-term focus of the associated activities (GRI 103-2). As we still have no integrated sustainability strategy and this is to be developed, as described, as the result of a bottom-up approach, it is currently not possible to answer some questions. Processes need to be implemented, requirements formulated, objectives and provisions determined, and existing projects and initiatives transferred to a "master plan."

4. Depth of the value chain

As a manufacturer of chips, sensors and sensor systems, First Sensor purchases raw materials and components from suppliers (GRI 102-9). The total volume amounted to €76.1 million in 2018 (previous year: €69.3 million). First Sensor's customers include the company in the implementation of their sustainability strategies, and First Sensor in turn includes its suppliers (GRI 103-2). This ensures that aspects pertaining to sustainability are actively anchored throughout the entire value chain. As a result, this is a concrete element of procurement management to oblige suppliers to comply with certain minimum standards. In 2018, this was enshrined in a Supplier Code of Conduct. Suppliers also undergo inspections during supplier audits (GRI 102-10). In addition, First Sensor began examining the entire value chain in even more detail in 2018. Particular issues here are to be the ecological quality of upstream products and suppliers' compliance with minimum social and environmental standards (GRI 413-2). Supplier self-disclosure was therefore updated in 2018. Before a business relationship is commenced, potential suppliers receive a comprehensive questionnaire which, in addition to general company information, also contains questions on aspects such as procurement, warehousing and packaging policies, environmental management and dealing with the RoHS and REACH directives, as well as a statement on the Dodd-Frank Act. The aim is to link this supplier self-disclosure even more closely with the Code of Conduct and the general purchasing terms.

Another positive aspect in terms of sustainability is the long service life of First Sensor products. "Distributors" as defined in regulations, customers receive information about responsible disposal at an early stage. The analysis did not identify any business activities of First Sensor with a significant actual or potential negative impact on the local community (GRI 413-2).

5. Responsibility

The subject of corporate social responsibility (CSR) and the responsibility for the development of a sustainability strategy rests with the Executive Board. The large number of Group-wide activities is managed by various departments, which report to the CEO as well as to the CFO. Environmental aspects are primarily monitored and managed by the Quality Department, social issues are assigned to HR and Corporate Communications, compliance topics are managed by the Business Process, Risk Management & Compliance central unit (GRI 102-20). The entire team develops the CSR strategy in accordance with the triad of economic, environmental and social responsibility and is in charge of its implementation (GRI 102-26). It is responsible for communicating the objectives agreed upon with the Executive Board and attracting the necessary level of attention at all levels of the company.

The team also launches new projects, reports on their status, initiates measures and coordinates their implementation within the company. CSR should form part of the integrated management system, which has been documented in the form of a Group management handbook.

In accordance with the legal provisions, the Supervisory Board reviews the lawfulness, correctness and expediency of the sustainability reporting (GRI 102-32). This also includes the annual review of the effectiveness of the risk management processes with regard to economic, environmental and social issues (GRI 102-30, -31).

6. Rules and processes

First Sensor uses a management handbook to implement regulations and processes that are applicable across the Group. This instrument is also suitable for supporting their implementation after the development of a sustainability strategy (GRI 103-2). Based on the principle “as centralized as necessary, as decentralized as possible,” rules, processes and structures that clearly regulate the responsibilities across the Group in the form of guidelines and clear instructions are provided for various areas. In this way, a requirement has been laid down to the integrate changes in daily workflows and the mindset of all employees at all levels of the company. Local quality management systems, which are increasingly geared towards standardized, Group-wide requirements complement these guidelines in terms of sustainability

7. Control

First Sensor AG is currently engaged in a process of gradually defining performance indicators for the material action areas identified (GRI 102-31). As well as economic performance, the issues that were identified as part of the materiality analysis include society and compliance. Based on internationally recognized standards, the parameters that will be used to monitor and manage the issues are determined after the process has been completed to ensure that the data analyzed is always comparable. This will form part of future reports.

An essential requirement for business success is the responsible management and monitoring of the company. The guiding principle for this is the German Corporate Governance Code presented by the Government Commission. First Sensor effectively fulfills the requirements of the code, providing reasons for any deviations in the annual declaration of compliance.

First Sensor has Group-wide guidelines that describe its values, principles and standards and are binding for all employees (GRI 102-16). This includes the mission statement, which sets out the jointly defined Group-wide values of innovation, excellence and proximity for the company. In addition, the Code of Conduct describes First Sensor’s expectations of honest work, i.e. legally correct work characterized by ethical principles. It furthermore contains information on the various ways to provide information, including anonymously, to the responsible person at First Sensor in the event that violation of the code or compliance requirements is suspected. In 2018, a supplier code was developed based on the Code of Conduct which expresses the expectation that suppliers and business partners should also align their actions with the principles of the Code of Conduct.

In important cases, such as suspected compliance violations by members of the Executive Board, the Supervisory Board is informed directly. This also applies for any concerns that employees may have regarding the implementation of the sustainability system (GRI 102-33). In fiscal year 2018, there were no suspected cases or findings reported to the Supervisory Board (GRI 102-34).

8. Incentive systems

The remuneration system for the Executive Board of First Sensor AG is intended to promote value-oriented business management geared toward sustainably increasing the company's success. This includes remuneration in line with the market and an incentive system that is geared toward the achievement of ambitious and not only short-term targets. The Supervisory Board determines the remuneration, taking account of the duties of the respective member of the Executive Board, their personal performance, and the financial situation and success of the company. It reviews the achievement of targets on an annual basis that were agreed upon. The elements of the remuneration system also include a long-term component in the form of share option plans or comparable instruments. Further details can be found in the consolidated management report and the remuneration report (GRI 102-35).

In addition to a fixed salary, the company's managers, as well as some employees, also receive variable remuneration based on the achievement of company goals as well as operating and personal objectives. Members of the Supervisory Board are remunerated as established in the Articles of Association. There continues to be no provision for a component oriented toward sustainability.

Performance-oriented remuneration in line with the market is important to First Sensor (GRI 102-36). Otherwise, it would not be possible to ensure the company's need for motivated staff in the competition for talented employees. However, the company still does not consider a vertical comparative analysis between the highest remuneration within the company and that of other employees (GRI 102-38) to be an appropriate way to assess the fairness of First Sensor's remuneration system.

9. Stakeholder participation

The First Sensor Group seeks out and maintains dialog with its stakeholders on many levels – both at Group level and at the locations of its subsidiaries. Generally, this includes employees, customers, suppliers, partners, investors, neighbors, politicians, authorities, the science community and non-governmental organizations (GRI 102-42). The knowledge gained from this contact with stakeholders is used, for example, in the development of new products, the key areas of sustainability management and reporting. A selection from these groups was made for the materiality analysis. The survey involved representatives of customers and suppliers, partners, associations and politics, the general public and the capital market (GRI 102-40, -43).

Dialog with stakeholders with regard to economic, environmental, and social issues is the responsibility of the Executive Board (GRI 102-21). If required, the Supervisory Board is also available to answer any questions, e.g. for investors, as stipulated in the Corporate Governance Code. This dialog is a concrete element of the management agenda, as open and transparent communication is the basis for growing understanding and trust.

As a commercial enterprise, First Sensor is closely integrated into the value chain of its suppliers and customers. Supplier and customer audits help to create a tightly knit relationship that leads to the interactive exchange of information on sustainability topics. As an employer, the Group has a social commitment and seeks to employ the best employees in a market where there is a shortage of specialists. Participation in job and trade fairs allows the company to position itself as an attractive employer. The company participated in 11 job fairs and 21 national and international trade fairs in fiscal 2018.

Thanks to its close cooperation with research institutions and membership of professional bodies, First Sensor is able to identify technological changes at an early stage and respond appropriately.

First Sensor is integrated into the immediate environment at its different locations and has contact with the authorities and the respective local neighborhoods. Various formats exist to keep these different stakeholder groups adequately informed and promote dialog. These include Girls Day, general apprentice days and contact with local universities. Furthermore, First Sensor is also particularly engaged on a social level, supporting, for example, schools and charities with which it has a specific connection via its employees.

Last but not least, the capital markets and financing banks are informed about First Sensor's sustainability policy comprehensively and in good time. In accordance with the disclosure requirements relevant to listed companies all relevant information is also available on the company's website. Shareholders can also exercise their rights of information and consultation directly at the Annual General Meeting. The company presents itself and, there, also discusses aspects of sustainability at events for investors and media representatives, such as the annual press conference, analyst events and roadshows. In order to align the sustainability strategy closer to the expectations of civic stakeholder groups such as investors, dialog with these groups was increased further as planned. In total, First Sensor participated in four capital market conferences and one roadshow in 2018 and also held 20 individual meetings at Executive Board level alone.

10. Product and innovation management

First Sensor develops sensors and sensor solutions, from the chip to the entire sensor system. In fiscal year 2018, €10.2 million was invested in research and development (previous year: €8.6 million). With its products, the company also supports its customers in making their processes more efficient and environmentally friendly, by providing greater energy efficiency and ensuring reduced emissions, for example.

In several decentralized applications, energy consumption is a key criterion to fulfill customer requirements and secure competitive advantages for both product buyers and the company itself. This is why great emphasis has been placed on the energy consumption of sensors and sensor systems in the development process. However, despite First Sensor's contribution it must be noted that the energy consumption of applications in which sensors and sensor systems are ultimately used is often several times higher. Overall, the contribution towards energy savings at First Sensor itself only fluctuates in the per-mil range compared with the energy requirements of the end products (GRI 302-4). The social and environmental impacts of the key products have not yet been determined (GRI 416-1).

With regard to its own activities, the company focuses on reducing environmental impacts by using energy, resources and materials as efficiently as possible, especially in production. As well as the use of energy, this includes the use of raw materials and supplies in addition to the supplied materials and components. The employees make a significant contribution when it comes to potential improvements. Thanks to an extensive knowledge of the processes, their ideas can provide vital information. Work is therefore underway on a company suggestions scheme that provides a structure for examining employees' suggestions for improvements and implementing them in processes where appropriate. This is not only done in the interest of reducing the environmental impact of the company's own activities but is, of course, also in the company's economic interest.

Product specifications are very closely aligned with customers and market requirements during development in order to rule out use of the products having a negative impact on customers and the environment. Safeguarding the quality of processes, materials and products throughout the entire value chain plays a crucial role in regards to longevity in use.

Environment

11. Use of natural resources

Two production locations (First Sensor AG, Berlin-Weißensee location, First Sensor Microelectronic Packaging GmbH) have already implemented an environmental management system in accordance with ISO 14001. Beyond this, however, the potential for First Sensor to have an influence along the value chain is limited. It is therefore not possible to use raw materials obtained from a recycling process, for instance (GRI 301-2). The company does not collect information about the resource consumption of its products in customer applications, such as energy consumption (GRI 301-2).

The question about what environmental impacts the company's activity has cannot currently be answered in detail as of yet either (GRI 103-2). As the materiality analysis has not given any indication of the increased relevance of issues such as input and output of water, land, waste, energy, surfaces, biodiversity and emissions for the lifecycle of products and services these issues are being deferred for the time being.

However, last year we began addressing the responsibility of our suppliers for environmental issues in greater depth (GRI 308-1). Therefore, we have recently started querying aspects of environmental management via supplier self-disclosure. This way, we can identify where our suppliers are having actual or potential adverse effects on the environment. On this basis we can decide which steps must be taken to prevent, reduce or eliminate these impacts. We will also examine whether further criteria are useful for evaluating existing and new suppliers.

12. Resource management

First Sensor identifies the qualitative and quantitative objectives the company would like to use to achieve resource efficiency, for the use of renewable energy, the increase in raw material productivity and decrease in the use of ecosystem services and how these objectives must be attained. At the moment, no reliable data has been identified yet. As a result, no efficiency or savings targets can be set for the main resources. As the materiality analysis does not identify a high level of relevance in this area either, the priority is to follow up on other issues for the time being. However, it is known from current surveys that no surface water, water from wetlands, rivers, lakes or oceans, groundwater, rainwater or waste water from other companies is used at the Group's locations – only water from the municipal suppliers (GRI 303-1).

13. Climate relevant emissions

Reducing greenhouse gas emissions as a result of energy consumption is a key aspect as combating climate change is a task for the global community, and one that First Sensor has set for itself too. However, internal and external assessments of this issue have not given any indication that First Sensor has a particular responsibility for making a material contribution here. Considerations as to how to save energy are nevertheless included at many points in the processes as this is necessary from an ecological and economic standpoint alone. However, relevant values relating to emissions are not systematically recorded at present (GRI 305-1).

SOCIETY

14. Employee rights

As a company whose highly qualified and motivated employees are a decisive factor for future success, First Sensor does not limit itself to compliance with only the minimum standards of national and international standards. The health of and professional training opportunities for employees are key issues, which are of significant importance in the area of strategic HR management in order to bind the best talents to the company in the long run. Of course, this includes anti-discriminatory recruitment and a work environment in which diversity is perceived as an asset every day (GRI 103-2, 406-1). In light of this, the Diversity Charter was signed in the 2018 fiscal year. Furthermore, the Code of Conduct expressly states that discrimination is not tolerated. No incidents of discrimination were reported in the reporting period. The Group companies are not bound by collective wage agreements. In 2018 initial negotiations were commenced with a union to investigate a possible affiliation. One Berlin location is subject to a time-limited company collective agreement. In addition, agreements are negotiated with the respective employee representation bodies and recorded in works agreements (GRI 102-41).

The materiality analysis assigned the aspect of occupational health and safety (GRI 403-1, -2, -3) a high priority. The physical well-being of employees and safety at work play a significant role within our HR work, too. All employees are made aware of and sensitized to the individual hazards at their place of work, which is supported by intensive training and seminars. In the 2018 fiscal year work commenced on providing an online tool for this training. The plan for 2019 is to involve the Berlin locations following a successful test phase at the Munich location. The aim is to prevent accidents at work and reduce the possible consequences. Where required, employees are provided with appropriate personal protective equipment. Hazardous substances, such as those used in production, are labeled appropriately and according to regulations. This is to prevent chronic and acute illnesses. Noise is avoided as far as possible or appropriate protective measures taken. Of course, every employee is entitled to refuse to perform any work that he/she considers to be dangerous. At the same time, information of this kind is valuable because it highlights opportunities to identify weak areas and remedy them as soon as possible.

First Sensor is obligated to report accidents at work. However, the reporting obligation applies only to accidents that lead to an incapacity to work of more than three days(GRI 403-2). At the end of 2018 the company began preparing monthly analyses in order to monitor occupational health and safety even more closely. The data currently available is too rudimentary for analysis at present. Nevertheless, the plan for 2019 is to record these data for all production locations on a continuous basis to enable us to derive analyses and determine measures. Accordingly, statistics about health and safety, including information about the different types of accidents at work and the resulting absences due to illness are to be published together with the CSR report for fiscal year 2019.

Additional measures aimed at better protection of health have been introduced, particularly at the production locations. These include free fruit baskets, flu vaccinations, additional clothing for industrial employees, hand sanitizers, organization and promotion of sports events and implementation of health days with different health checks at the First Sensor AG headquarters. The possibility of also holding health days at other locations in the future is under consideration.

15. Equal opportunities

First Sensor supports all initiatives that contribute to preserving and promoting equal opportunities and diversity within the company. Equal opportunities do not only apply in relation to men and women, but also in relation to younger and older employees and colleagues of different religions, cultural groups, and skin colors, for example. The impartial integration of people with disabilities in the work process naturally contributes to this as well.

Owing to the aging structure, it is also important to create the conditions required to help employees find a healthy work-life balance. This includes efforts to make individual working hours more flexible. Furthermore, it goes without saying that women and men receive the same wages for the same work. This is based on a grading system that has been used to evaluate all of the positions at the company – regardless of the employee's gender (GRI 405-2). Further information on pay transparency at First Sensor is to be provided in an annual report as of 2019. 36.1% of employees are women, which is an excellent ratio for a high-tech company. Since First Sensor currently has locations only in countries that have similarly high standards, these declarations affect all company locations (GRI 102-4).

The materiality analysis indicated that issues surrounding employee rights are highly relevant. These include the application of the German Minimum Wage Act, experiences of parental leave, the involvement of the works council in key organizational decisions, training and education, diversity within the corporate bodies and among employees, remuneration of male and female employees, and discrimination in general (GRI 202-1, 401-3, 402-1, 404, 405, 406). Due to the significant workload of the HR team last year in connection with hiring new employees as a basis for future growth, relevant indicator systems on which observations of these specific issues can be based have not yet been established. A review of what indicators have priority and how these can be recorded and monitored is to be carried out in 2019. However, First Sensor is already fully aware of its responsibility and takes into account all the relevant regulations, including in its own interest.

16. Qualifications

Training and education is a high priority at First Sensor as it ensures that employees can always meet the increasing challenges of their professional environment. In fiscal year 2018 €380 thousand (previous year: €315 thousand) was spent on relevant measures (GRI 404-1). However, due to the switch to new ERP software and corresponding trainings, interest in additional training was lower than usual in many areas. First Sensor is also a qualified training organization. Based on long-term personnel planning, the aim is to cover the requirements for talented young staff members by also providing high-quality, needs-based training in the company's own ranks. First Sensor provides professional training for microtechnologists (20), industrial clerks (6), specialists in warehouse logistics (3), mechatronics engineers (2) and specialized technicians (1). Therefore, 32 apprentices were employed at the company at the end of 2018 (previous year: 33). First Sensor concentrates primarily on Berlin when fostering new talent; the apprentice ratio there is now 5.0%, which is considerably higher than the average of 3.2% calculated for Berlin at the end of 2017. In Dresden the ratio is 6.4%, with 10 apprentices at First Sensor Microelectronic Packaging GmbH. Across all its German locations First Sensor is now achieving a ratio of 3.7%.

Only 30.9% of employees at the First Sensor Group are over 50 years old. Nevertheless, the Executive Board is aware that this is no reason to ignore the challenges of demographic trends in the long run.

Below 30 years of age	15%
Age 31-40	33%
Age 41-50	21%
Above 51 years of age	31%

At 35.9%, First Sensor has a comparatively high proportion of academics for a production company due to the high technological demands. As a growth company, therefore, the challenge continues to lie in recruiting qualified specialist staff in a competitive market.

17. Human rights

The company's own code of conduct ensures that human rights, fundamental principles and employment rights are fully recognized, supported and promoted by First Sensor wherever possible. Among other things, this means the company's support for the protection of international human rights and its efforts to ensure to the best of its knowledge and beliefs that it is not complicit in human rights violations (GRI 412-2). Due to the regional distribution of the locations of First Sensor and the statutory provisions applicable there, it can be ruled out that the employee rights to freedom of association or collective bargaining could have been potentially violated or seriously threatened. The same applies to the business locations and, if applicable, to the investment agreements and contracts that do not contain any human rights clauses due to the regional focus of the business and/or that have not be reviewed in terms of human rights aspects as the appropriate standards can be expected (GRI 412-1, -3).

Suppliers from regions considered to be at risk in respect of human rights violations will be considered based on the usual supplier surveys (GRI 407-1). With the future in mind, relevant reviews were carried out as part of the reorganization of supplier management (GRI 414-2). Anchoring the principles of the Code of Conduct in the First Sensor supplier code supports this expectation. The intention to abolish all forms of forced labor and child labor and to eliminate discrimination in recruitment and employment are also a matter of course. These principles are also conveyed in the supplier code as expected behavior among partners in the supply chain.

18. Community

For the shareholders of First Sensor, a listed stock corporation, the monetary benefits of their investments are paramount. They expect their commitment to be profitable, primarily through an increase in the stock market price of their shares. However, many other groups also benefit from sustainable business development including customers, employees, suppliers and, not least, society in general. Last year, a total of €7.2 million (previous year: €6.4 million) was paid in taxes in Germany alone. This amount comprises all types of taxes that First Sensor was required to pay. The materiality analysis concluded that the economic performance of First Sensor is extremely relevant for internal and external stakeholders. The economic value generated and its distribution are shown below in the value added statement for fiscal year 2018 (economic value generated and distributed, GRI 201-1):

in € million	
Sales revenues	155.1
Financial results	0.7
Other operating income	2.6
Achieved economic value	158.4
Operating expenses	-93.6
Depreciation and amortization	-9.0
Net economic value generated	55.8
Personnel expenses	-49.0
Financial expenditure	-2.5
Distribution to shareholders	-1.6
Payments to public authorities	-1.5
Donations	0*
Distributed economic value	54.6
Balance retained by the company	1.2

* The amount of donations was €4.272,86. Due to the presentation in million euros, this results in a rounding to €0.

This economic contribution safeguards jobs with First Sensor and its suppliers and enables shareholders to share in its economic success. Moreover, the company is supporting local charitable initiatives. A conceptual basis was developed for these types of activities to link this social commitment even more closely with the company's mission statement and values in the future. In future, social activities will be implemented in three main areas under the banner of "First Sensor helps". This includes (1) showing appreciation of voluntary work by employees via a donation to the organization they are supporting as well as (2) supporting activities at the locations, such as donating PCs to a local school, and (3) supporting an overarching social issue or a charitable organization. The company began supporting activities at the locations (2) as planned in 2018 and has already supported four initiatives altogether. The aim in 2019 is now also to roll out financial support for voluntary work by employees (1) and identify approaches for Group-wide social engagement (3).

19. Political influence

First Sensor does not exert political influence based on basic considerations and does not give donations to political parties (GRI 415-1). First Sensor is a member of various initiatives and associations. This network primarily serves for professional exchange, and there is no political influence connected with the membership (GRI 102-13).

Compliance

20. Compliance with the law and regulations

Compliance with the law is a top priority at First Sensor. This is in line with the materiality analysis, in which the issue featured as a prominent stakeholder interest.

In addition to the statutory framework, the specific expectations of the company with regard to compliance are enshrined in the Code of Conduct. The code thus combines the obligation to comply with the law with the particular requirements of ethical conduct as the basis for business activities. The content of the Code of Conduct covers all the key aspects: the general principles of conduct including non-discrimination, how to deal with business partners and third parties including information on competition law and anti-corruption, the prevention of conflicts of interest, how to handle (confidential) information, data protection, employee rights, and the environment, health and safety. Interested parties can find more information on the website under "Corporate responsibility" in the "Company" section and can also request a copy of the Code of Conduct. It serves as a binding framework for the activities of members of the Supervisory Board and the Executive Board as well as all employees and managers (GRI 102-17).

Compliance with the principles of the Code of Conduct is integrated in the structures and processes of the Group-wide risk management system (GRI 205-1). With its four pillars, the First Sensor Risk House based on the COSO ERM framework maps significant risk categories for the company and also includes compliance issues. There is also a reporting procedure for violations of the code (whistle-blowing). Every employee can make complaints to their manager, the responsible compliance coordinator, an external ombudsman (legal council), the HR manager or an employee representative or notify them of a violation of this Code of Conduct or other breaches of rules or regulations, on a confidential or anonymous basis. Where required, appropriate measures will immediately be taken to eliminate a detected violation or to prevent it from happening again. In fiscal year 2018, one suspected case was reported, which was confirmed upon closer examination. The manager responsible successfully took appropriate measures (GRI 205-3).

The guidelines of the Code of Conduct are dynamic, meaning that they are adapted to new standards of conduct if necessary. The Code of Conduct is the responsibility of the compliance coordinator, who is also responsible for its implementation and the relevant training. The compliance coordinator reports to the Chief Financial Officer. The prevention of corruption is a particularly important part of compliance. Corruption is not just a trivial offense to give the company a supposed advantage in the short term. In reality, it represents a major risk because it can permanently damage the company's market position (GRI 205-1). Fairness towards all business partners, customers, suppliers, and employees is a condition for long-term corporate success. This is why a detailed section of the Code of Conduct has been dedicated to dealing with business partners and third parties. In particular, clear boundaries are formulated for the granting and acceptance of benefits which do not leave any room for interpretation and describe the clear expectation that corruption should be avoided. This expectation is communicated not only to all members of the Supervisory Board and the Executive Board as well as all employees and managers but also to suppliers via supplier management and the supplier code (GRI 205-2).

In 2018, First Sensor was once again not fined or sanctioned in connection with legal violations or violations of economic or social provisions (GRI 419-1).

02 Group Management Report

Consolidated Management Report: This report summarizes the report on the situation of the company and the report on the situation of the Group of First Sensor AG.

Basic information on the First Sensor Group

Group structure and business activities

Group legal structure

The First Sensor Group (hereinafter also referred to as "First Sensor" or "the Group") consists of the parent company First Sensor AG, based in Berlin, and ten subsidiaries in which First Sensor AG holds a majority stake or all the shares. An overview can be found in the notes under "Basis of consolidation."

Segments

We operate as a company which encompasses the development, production and sale of sensor chips, sensor components, sensors and sensor systems. We also monitor our sales by target market (Industrial, Medical, Mobility) and geographically according to the origin of our customers (DACH region, Europe, North America, Asia). Market and sector developments are thus compared with the company's own positioning and corresponding measures derived for strategic orientation. Operational management at Group level is implemented in line with the principles described under "Management system."

Locations

The Group has a total of nine development and production locations that specialize in different products and stages of the value chain. Most development work and production is "made in Germany". There are locations in Berlin (Oberschöneweide and Weißensee), Dresden (Albertstadt and Klotzsche), Oberdischingen, and Puchheim, as well as international locations in Dwingeloo (the Netherlands), Westlake Village (USA), and Montreal (Canada). There are another six locations that act as sales companies in Paris (France), Shepshed (Great Britain), Valkenswaard (the Netherlands), Copenhagen (Denmark), Kungens Kurva (Sweden), and Mansfield (USA). An in-house sales organization is currently being established in China. The international sales companies ensure local proximity to customers in order to tap further market potential.

Products, services and business processes

In the growth market of sensor systems, First Sensor develops and manufactures standard products and customer-specific solutions for the ever-increasing number of applications in the Industrial, Medical, and Mobility target markets.

Value creation is characterized by two core competencies in particular. Firstly, the Group specializes in detecting physical parameters thanks to the design and manufacture of its silicon-based sensor chips. Secondly, it uses its expertise in microelectronic layout and connection technology to continue to process the sensor chips with the best "form factor" for the application. In this context, First Sensor is an expert in the areas of photonics, pressure and advanced electronics. In addition, First Sensor is generating increasing growth in its target markets through new applications that are created via system solutions (so-called sensor systems), for example. They do not just measure; they react intelligently to the measurement results and communicate with other systems.

First Sensor develops, produces and sells a wide range of its own standard sensors. This extensive range of its own standard products is supplemented by other sensors and complementary products from partner companies. In addition, First Sensor uses its decades of expertise in sensor systems to offer customers tailored solutions to meet the application-specific challenges posed by their products. We increasingly support our customers with systematic approaches to sensor technology in conjunction with a wide range of technical solutions in the area of actuation systems and embedded software. For this reason, product and technology development is an important core process for the company.

Processes ranging from market analysis to customer support and from qualification as a supplier of the customer to the conclusion of a contract are bundled within the Group's own sales organization. In this process, First Sensor focuses on specialized key account management for markets and applications that puts the emphasis on sales of customer-specific sensor solutions. This is supplemented by regional oriented sales, which concentrates on high-volume sales of standard products as well as securing potential solutions customers. The sales organization furthermore encompasses the product management and marketing departments and is also supported by a global network of trading partners in a variety of countries.

Sales markets

In the growth market of sensor systems, First Sensor focuses on customer-specific solutions and standard products for the ever-increasing number of applications in the Industrial, Medical, and Mobility target markets. In fiscal year 2018, sales of €80.4 million were generated in the Industrial target market, corresponding to 51.8% of total sales. The company generated sales of €34.6 million in the Medical target market, representing a 22.3% share of sales. And in the Mobility target market, sales of €40.2 million or 25.9% of total sales were generated.

The company strengthened its international presence further in the last fiscal year. It generated 12.4% of its sales in North America, with a focus on the USA. 12.5% of sales were attributable to Asia, with a focus on China. First Sensor generated 74.1% of its sales in European countries, although its focus continues to be on the German-speaking countries. The share of sales attributable to the DACH region (Germany, Austria, Switzerland, Liechtenstein) was thus 49.2% in 2018.

External influences

External influences that cause a change in customers' demand-related behavior and regulatory frameworks are of key importance to First Sensor.

With its focus on the three target markets of Industrial, Medical, and Mobility business, First Sensor is participating in the rapidly growing number of sensor applications developed for new functions, as well as safety, comfort, and efficiency. In the mobility target market, optical sensors and camera systems are used in connection with the introduction of partially and fully autonomous driving. Pressure sensors are also required for use in plug-in hybrid vehicles or vehicles for the shaping of a low-emission mobility.

The complexity of applications within the target markets is increasing due to the growing requirement for integrated solutions and the need to extend the use of intelligent sensor systems. These systems can analyze measured data themselves and communicate with other systems, for example. First Sensor is in an excellent position to cover this rising demand thanks to its many years of experience as a provider of solutions along the entire value chain, from chips to sensor systems. The company is expanding its product and technology portfolio in a targeted fashion in order to increase its own added-value share further through forward integration.

The sales markets on which First Sensor focuses are also subject to an economic cycle that can neither strengthen nor curb its growth. As a result of focusing on different technology-oriented sectors, economic fluctuations in individual industries should have only a limited influence on business as a whole.

Targets and strategies

Strategic orientation of business units

First Sensor's strategy is geared toward sustainably increasing value through profitable growth. With this orientation in mind, the company is working to generate and utilize economies of scale via the five pillars of focus, which are (1) target markets, (2) key customers and products, (3) forward integration, (4) internationalization, and (5) operational excellence.

As part of the first pillar, First Sensor is already participating in the promising growth of the technologically driven Industrial, Medical, and Mobility target markets. The significance of sensor systems is continuously increasing in these target markets, which means that the company will also benefit from the megatrends driving these markets in the future. These include Industry 4.0, digital and miniaturized medical technology and new mobility with partly and fully autonomous low-emission vehicles.

Intelligent networking of products and production processes as part of Industry 4.0 is driving growth in the Industrial target market, while sensors are creating the basis for advancing digitalization in the industrial environment and helping to make processes more efficient and improve human-machine interaction. In order to meet growing demand, First Sensor provides tailored solutions and standard products for customers based on tried-and-tested technology platforms.

Developments in the Medical target market are also heading in the direction of ever more intelligent and precise solutions for diagnostics and treatment. The focus in imaging procedures is on high-definition images of the human organism. Furthermore, operation robots are increasingly used for precise, minimally invasive procedures. In addition, advancing miniaturization enables the mobile use of medical devices. Respiratory and dialysis systems designed for home use and equipped with sensitive standard sensors and customer-specific developments have long been part of everyday life. A growth market for e-health applications is emerging in parallel to this, which enables continuous monitoring of a patient's health thanks to networked sensor systems.

Vehicle manufacturers and suppliers in the Mobility target market are working on specific applications for the introduction of autonomous driving. Advanced driver assistance systems promise greater comfort and road safety, which can only be realized via the use of networked sensor systems. A further driver of growth is the implementation of green mobility, in which sensor systems feature as key elements of low-consumption and low-emission drives. Based on the several million units First Sensor has delivered the company is known as a reliable partner among leading automotive groups and suppliers and will also play an increasingly important role in the next steps toward environmentally friendly mobility.

In all three target markets, First Sensor is focusing on key customers and key products as the second strategic pillar for profitable growth. Key customers are customers that purchase high unit quantities. First Sensor develops tailored solutions for them and supplies large volumes over a long period of time. The high cost of acquiring customers and development work is thus seen alongside attractive economies of scale and orders covering several years. This cooperation leads to long-term and trusting partnerships, with which new projects can be developed with significantly less expense. Smaller customers or customers with low unit quantities rely on key products from the standard portfolio as developing individual solutions is often not efficient for them. Nevertheless, it is possible to derive modifications from First Sensor's platform strategy, which is an important feature that distinguishes it from the competition.

With regard to the third pillar of the strategy for profitable growth, First Sensor is pressing ahead with forward integration along the value chain as an expert in the areas of photonics, pressure and advanced electronics. This is based on the growing demand for complex solutions that combine several functions in customer applications. In order to strengthen its position as a solution provider the company is focusing on further developing the core competencies of chip design and production as well as layout and connection technology and is also building and expanding expertise in other process technologies, as well as in software and sensor communication. In addition, integrating third-party products, which are required for successful business as a system provider, also plays an important role.

As a manufacturer of sensors and sensor systems that are "made in Germany," First Sensor is extending its international presence in a targeted manner with a focus on Asia and North America in order to develop additional sales potential. This internationalization forms the fourth pillar of the strategy for profitable growth. The company is also working on strengthening its strong position in the German-speaking countries. The aim is to acquire both standard and solution customers in all sales regions.

Operational excellence is the fifth strategic pillar of the strategy for profitable growth. In this connection First Sensor has already successfully initiated and partly already implemented fundamental measures such as the introduction of SAP and refined core processes. Furthermore, the Group is adding long-term measures aimed at reducing lead times, development in line with targeted costs (design to cost) and improving delivery reliability and quality through ongoing optimization of the product portfolio, targeted involvement of external partners to make the cost structure more flexible and expansion of technological expertise, for example in the field of 3D printing.

Strategic equity investments

First Sensor is well positioned to play an active role in ongoing consolidation in the highly fragmented sensor systems market. For the company, "attractive fit" companies are those that can provide support in driving forward the implementation of the strategy for profitable growth. In view of this, as part of a "buy-and-build" strategy, strategic equity investments, through which additional Applications in the target markets of Industrial, Medical, and Mobility can be tapped into, are reviewed as regularly as investments that expand our own technological expertise and abilities along the value chain. Furthermore, investments that can drive forward wider access to customers or tap into the growth markets of North America and Asia are also conceivable.

Strategic financing measures

In order to support the operating business First Sensor relies on a balanced financing structure in line with the corporate strategy. Besides self-funding from the operating business and working capital management, this is also done by means of maturity-matched financial hedging of business activities with borrowing. A KfW loan of €13.0 million agreed back in 2017 was drawn on in November 2018. The term is 10 years and the interest rate is 1.15% p.a. The funds from this ERP digitalization and innovation program of the German state-owned development bank Kreditanstalt für Wiederaufbau (KfW) will serve to finance the Group's further growth. In addition, there are currently three promissory note loans totaling €28.0 million that were placed in 2015. The first tranche is in portions of €7.0 million and €18.0 million and has a term of five years. The second tranche of €3.0 million has a term of seven years. The company aims to optimize capital turnover in conjunction with working capital management and occasionally uses liquidity management instruments such as agreeing payment terms, discounts or forfaiting, and has rigorous accounts receivable management.

Furthermore, as a listed company, First Sensor AG also has the opportunity to use the capital market.

Internal management system of the company

The Executive Board comprises two people and is responsible for the strategic orientation of the company. The Supervisory Board advises it on and monitors this. The interests of customers, employees, investors and suppliers are taken into account to the best possible extent when determining strategic objectives. The medium-term plan for a three-year period is updated once a year based on the strategic objectives. The detailed annual plan for the following year prepared on this basis is subsequently coordinated with the Supervisory Board and implemented.

The employees in the first management level below the Executive Board form the management team, with which the Executive Board regularly debates strategic and significant operating issues, analyzes the current business development, and discusses the identification of opportunities and risks. In this context, the Executive Board also manages the business operations of the First Sensor Group. The Executive Board is monitored in this task by the Supervisory Board in accordance with the Articles of Association, the rules of procedure and statutory requirements.

At this point, management of the First Sensor Group is focused primarily on communicating and monitoring the implementation of annual and medium-term planning. The aim is to identify deviations as early as possible so that suitable measures can be implemented promptly where required. The persons accountable for the results report on their areas each month and set out the financial situation for the Executive Board based on a comparison of actual financial figures with the target figures and the prior-year figures, as well as describing day-to-day business and any exceptional transactions.

Key performance indicators used

The operating units of First Sensor AG and its subsidiaries are primarily managed based on the targets for sales and for the EBIT margin (EBIT = earnings before interest and taxes according to the income statement). At Group level, EBITDA (EBIT before depreciation and amortization) and ROCE (return on capital employed) are also monitored. In addition, the Group monitors the main key figures for working capital (equivalent to current assets less current liabilities), in particular: DIH (days inventory held), DSO (days sales outstanding), and DPO (days payable outstanding). Investments are monitored by a profitability analysis, in addition to the planned pay-back period.

Renumeration systems

Renumeration system for the Executive Board

The remuneration system for the Executive Board of First Sensor AG promotes value-oriented business management geared toward sustainably increasing the company's success. This includes competitive remuneration and an incentive system that is geared toward the achievement of ambitious short and medium-term targets. The Supervisory Board determines the remuneration, taking into account the duties of the respective member of the Executive Board, their personal performance, and the financial situation and success of the company. The elements of the remuneration system consist of a fixed and a variable cash component, participation in share option plans and in a scheme that is dependent on share price performance and length of service as a long-term incentive, as well as additional benefits.

The fixed component of the annual cash component amounts to between 50% and 75% of the total remuneration, depending on the contractual arrangement, and is paid in 12 equal monthly installments. The variable cash component is linked to the achievement of up to five quantitative and qualitative annual targets. They are agreed between the Supervisory Board and the members of the Executive Board. In the event of unforeseen extraordinary developments, this remuneration component may be adjusted by the Supervisory Board. A further part of the variable cash component of remuneration is calculated based on length of service and share price performance during this period.

In addition, the members of the Executive Board participate in two share option plans (2016/II and 2017/I) that were resolved by the respective Annual General Meeting as a long-term incentive system. Further details of the share option plans can also be found in sections 18 and 32 of the notes and in the agendas of the 2016 and 2017 Annual General Meetings.

In accordance with the conditions for the share option plans, the Supervisory Board may issue a total of up to 400,000 subscription rights for shares to the members of the Executive Board at its discretion until the end of 2019. In fiscal year 2018, 105,000 subscription rights were issued to the sitting members of the Executive Board (Previous year: 105,000). In addition to the achievement of a performance target, a condition of exercising the share options is that the beneficiary must have acquired one share in the company for every ten share options granted no later than six months after the issue date and must still hold these shares when exercising the options.

In addition, the members of the Executive Board have contractually agreed claims to additional benefits such as use of a company car and laptop, an allowance for health and long-term care insurance, temporary allowances for accommodation in Berlin for those with primary residences outside Germany, and reimbursement of expenses. Furthermore, the company has taken out term life insurance, as well as third-party financial loss insurance (D&O insurance) with an appropriate deductible, for the benefit of members of the Executive Board and pays the premium for this.

In the event of a change of control, the members of the Executive Board have individually agreed claims to a one-off payment if they leave the company following the takeover. This one-off payment shall not exceed twice the amount of annual remuneration. This limitation does not apply to the share option plans described above. An individualized overview of the Executive Board remuneration paid and granted in the 2018 fiscal year can be found in section 32 of the notes.

Renumeration system for the Supervisory Board

Remuneration of the Supervisory Board is determined by the Annual General Meeting and is set out in Article 13 of the Articles of Association. Members of the Supervisory Board subsequently receive remuneration of €20 thousand for each full year of membership of the Supervisory Board. This increases to €50 thousand for the Chairman and to €30 thousand for the Deputy Chairman. In the interests of the company, the members of the Supervisory Board are covered by D&O insurance taken out by the company at an appropriate level. The company pays the premiums for this insurance. No deductible is envisaged. The company reimburses each member of the Supervisory Board for any reasonable expenses incurred in the performance of their duties for which proof has been provided and for any value-added tax that applies to their remuneration. Remuneration for the four members of the Supervisory Board amounted to €120 thousand in fiscal year 2018 (previous year: €112 thousand). Supervisory Board members do not receive any performance-related remuneration and do not participate in the company's share option plan.

in € thousand	2017	2018
Prof. Dr. Alfred Gossner (Vors.)	50	50
Götz Gollan (Stellv. Vors.)	30	30
Marc de Jong	20	20
Prof. Dr. Christoph Kutter	12	20
Total	**112**	**120**

Research and development

Innovative applications based on the diverse possible new uses of sensors and sensor systems are driving the target markets in which First Sensor operates. For this reason, development plays a key role in the success of the Group. Firstly, it shapes the implementation of customer-specific solutions and determines the production development process and the construction of prototypes. Secondly, its high priority as a key business process is due to the fact that it provides the key technologies in the two core competencies of chip design and layout and connection technology, thus creating the basis for First Sensor's platform and technology strategy.

Development bundles the Group's expertise into five areas of responsibility across locations. The Design & Simulation unit is responsible for semiconductor development and designing sensors. The responsibilities of the LCT & Process Development unit range from layout and connection technology to prototype construction. The Sensor Electronics unit designs circuits, programs microcontrollers, and conceptualizes testing and calibration technology. The Software & Systems unit focuses on complex sensor systems. It concentrates on designing assemblies and systems, integrating sensors and electronic circuits and providing software for communicating, processing and interpreting data. Project management coordinates the units within the product development projects to ensure the project targets are met. Given the significance of development within the company, processes and interfaces undergo continuous reviews to identify potential areas for optimization, and adjustments made where required.

Approaches and key areas

First Sensor's development activities are based on a structured process. This applies irrespective of whether the impetus for a new development project comes from the customer or ourselves. Before the project begins the business case is reviewed, taking into account not only the cost and time frame, but also its potential for First Sensor. Aspects such as the expected production volume and the duration of production can usually already be estimated before development starts. Development therefore provides important indications for medium-term corporate planning. In the event of a positive decision, implementation of the project follows, from creating a design to producing prototypes to preparing for series production. The organization of development projects is based on a multistage process. It ensures that the results at every stage are in line with the desired goal by using pre-defined milestones and standardized reporting requirements, while deviations are recognized, analyzed, and processed in a timely manner.

Medium and short-term development activities are guided by a strategic technology and product road map. This guarantees that projects that provide high sales volumes or are implemented together with key customers are prioritized, taking into consideration the overarching corporate strategy. The focus is firstly on new sensor solutions and thus developing new sensor chips, for example for avalanche photodiodes or low pressure and flow rate sensors. These are supplemented by innovative signaling electronic systems and layout and connection technologies such as polyphotonics to enable particularly precise and reliable detection of physical parameters. Secondly, the requirements for the use of sensor systems are constantly becoming smarter and more complex: They are not only expected to measure, but also to interpret data, communicate with other systems, require little space and energy, and work reliably. Therefore, among other things, First Sensor is pushing ahead with the fusion of LiDAR and camera modules, building software expertise for detecting gas properties and developing multi-sensor systems for condition monitoring. It is also important to have the best "form factor" for the relevant application, i.e. to be particularly robust, for example. Furthermore, customers expect innovations that are still state-of-the-art in three to five years while still being competitive in terms of price.

Cooperations

To ensure technically excellent solutions and short development times for demanding customers, First Sensor follows an approach of opening up innovation processes and entering into strategic alliances with strong industrial partners and research institutes. Each partner benefits from sharing expertise and can contribute its respective core competencies in the context of joint development projects and coordination of road maps in selected areas. Through regular close dialog with research institutes, Development ensures that scientific findings are transferred into useful innovations.

Apart from devising new sensor solutions, Development also focuses on optimizing existing products and production processes. To this end, First Sensor continuously enhances its core competencies in chip development and in microelectronic layout and connection technology and focuses on stable cooperations with key suppliers. First Sensor also relies on purchasing development services from third parties such as institutes of Fraunhofer Gesellschaft with the aim of making its cost structure more flexible or drawing on specialist knowledge. However, their economic scale is of minor significance.

The Group does not conduct its own research outside the existing cooperations.

R&D key figures

The annual R&D expenses are based on a budget. Project costs are determined within the context of internal orders and are integrated in the income statement as expenses. Costs for individual customer projects are recorded separately and are passed on or amortized over the term of the products where this has been agreed. Strategic development projects are also recognized separately; these are activated only if the criteria in accordance with IAS 38 are met.

in € thousand, unless otherwise indicated	2017	2018
R&D expenses	8,578	10,171
R&D ratio in %	5.8	6.6
New capitalization of development costs	1,612	1,642
Carrying amounts of capitalized costs	5,107	6,121
Amortization of capitalized development costs	748	460
Number of R&D employees (FTE)	94	104
Number of patents and licenses	39	43

In fiscal year 2018, R&D expenses rose by 18.6% to €10.2 million. The R&D ratio came to 6.6% of sales. With 104 employees, 12.5% are now employed in Development, compared to 12.0% in the previous year. Recruitment chiefly focused on developing the system and software component in relation to forward integration.

R&D results

One area of focus in the field of photonics was on designing LiDAR receivers for driver assistance systems and self-propelled vehicles consisting of multichannel detector chips, a scalable packaging platform and receiver electronics for evaluation kits and system demonstrators. First Sensor has also developed customer-specific camera modules for demanding applications in industrial inspection and aerial surveillance. The chip-on-board structures of various very large imager chips comply with the highly precise mechanical tolerances required by the applications. Furthermore, First Sensor presented an embedded electronic control unit (ECU) as a scalable hardware and software platform for driver assistance systems. Applications such as area view, rear mirror substitutes and object recognition have already been implemented and customers can add to them.

A key development project in the area of pressure was the provision of a customer-specific pressure sensor component for industrial transmitters. The solution is based on precise sensor chips from semiconductor production in Berlin Oberschöneweide which are combined with tailored layout and connection technology for the highest level of precision and long-term stability. A further development is an innovative gas property sensor system for fast and efficient detection of gas mixtures.

In the key area of advanced electronics the company combined optical and electronic functionality with an innovative poly-transceiver for 5G broadband expansion for the first time. First Sensor is cooperating with other development partners in the PolyPhotonics Berlin growth center in connection with this.

Development projects like the examples mentioned above usually contribute to the Group’s sales within 6 to 24 months. Patents and utility models are registered only selectively. Therefore, the company first examines whether the benefits of an application exceed the risks of disclosure, whether there is a strategic need for it, and whether an application is required for competitive reasons. Patents are subsequently subject to an annual review. If the market situation or the strategic orientation of the company have changed, or if their value can no longer be proven, the company decides to let certain patents expire.

Economic Report

General economic and sector conditions

General economic and sector conditions

According to an assessment by the Kiel Institute for the World Economy (IfW), the global economy lost momentum over the course of 2018. Although the experts anticipated growth of 4.0% as late as March 2018, they revised their forecast to 3.8% in September and to 3.7% in December. In addition to increasing concern in relation to trade conflicts, this was due to the tightening of monetary policy in the United States, which led to a sudden change in international capital movements, thus slowing economic expansion in emerging countries. From a country-specific perspective, a very varied picture emerged: While the USA even increased its rate of expansion and many Asian countries and Russia hardly felt the downturn, the economy in the euro zone slowed considerably. Following revision of the IfW growth forecast for Europe from 2.4% to 2.1% in September 2018, this was reduced by a further 0.2 percentage points to 1.9% in December. The reasons for the subdued sentiment were the fear of trade disputes and a disorderly Brexit, as well as the discussion regarding Italy's indebtedness. The impact of this has been particularly pronounced in Germany, where a sharp decline in automotive production combined with the introduction of new standards for measuring emissions and the uncertainty resulting from "Dieselgate" have been palpable. Production was also adversely affected by low water levels in the Rhine, which slowed economic output in the third quarter of 2018 significantly. According to the German Federal Statistical Office (Destatis), growth in Germany consequently amounted to just 1.5% in 2018, although the IfW had still anticipated growth of 2.5% at the start of the year. Economic output thus declined for the first time in three years.

Development of the sensor market

The sensor systems market also continued to grow in 2018. According to the industry association AMA, the strongest drivers of growth were the digitalization and artificial intelligence megatrends, which cannot be implemented without sensor systems. At the same time, only the intelligent use of sensors is enabling industry to make technical innovations. The experts therefore anticipate further steady growth in the sector. However, the slower economic growth in Germany, Europe and the world has also slowed growth in the sensor systems industry. The German Electrical and Electronic Manufacturers' Association (ZVEI) calculated growth of just 1.9% for the German electrical and electronics industry, to which sensor systems are assigned, in 2018. However, the long-term growth trend remains intact. Optical sensors continue to drive growth here. According to surveys by market research company Research and Markets, they are expected to post global growth at an average rate of 7.3% p.a. between 2018 and 2024. Studies by research company Mordor Intelligence attribute the highest annual growth to China at 10.0%. The market for optical sensors is expected to grow by an average of 7.7% between 2017 and 2026 in Japan, and by 6.7%, 5.7% and 5.2% p.a. in North America, Europe and South Korea in the same period. This growth is partly driven by demand for new optical diagnostics devices, the increasing use of sensors in factory automation and investments in performance and safety for passenger cars and trucks.

In addition to optical sensors, pressure sensor technology is making a significant contribution to growth in the sector. For Europe, Mordor Intelligence predicts average growth of 7.0% p.a. between 2017 and 2022. This trend will be driven by demand for MEMS and piezoelectric sensors as well as pressure transmitters for the automotive industry, medical technology, and the petrochemical and oil and gas industries. Japan and China are posting even higher annual growth rates in this area at 7.8% and 8.1%, while growth in South Korea and North America is slightly lower than in Europe at 5.6% and 5.3%.

Development of the target markets

Industrial

German industry reflected the mood in the global economy in 2018: The fiscal year was impacted by geopolitical issues. World trade developed more slowly than expected, which had a negative effect on German exports. Production only grew slowly and incoming orders declined slightly. At the beginning of the year, the German Federal Ministry of Economics and Technology (BMWi)'s forecast for German industry still predicted that gross domestic product would increase by 2.4%, but revised its forecast to 1.8% in October. According to the year-end result reported by Destatis, gross domestic product adjusted for price changes ultimately rose by just 1.5% in 2018. Stronger growth – driven in particular by Industry 4.0 – is exhibited by sensor systems. Its average annual growth based on industrial applications is 7.3%.

Medical

The medical technology sector remains a growing market. According to a sector report by the German Medical Technology Association (BVMed), sales in medical technology climbed by an average of almost 6% globally in 2018, and by 4.2% in Germany. The rise in sales is primarily attributable to volume growth resulting from demographic trends and to new treatment methods. Germany ranks second after the USA in terms of both patent applications and share of world trade. Almost two thirds of products produced in Germany are exported – half of the exports went to European countries, followed by North America and Asia with around a fifth each. The growth in the medical technology sector is also reflected in increasing demand for sensor systems for optical diagnostics and pressure sensors. Market research company Yole Développement (Yole) expects an average growth rate of 5.7% between 2018 and 2021.

Mobility

The automotive industry was impacted by the introduction of the new WLTP approval procedure on September 1: The significantly more complex procedure led to substantial bottlenecks in the registration of new vehicles due to a lack of testing capacity. Registrations of new German vehicles consequently fell by more than 30% in September. Automotive production was dampened as a result, leading to negative effects on the upstream and downstream sectors of industry. According to IfW estimates, WLTP-related output reductions subdued the gross domestic product by 0.4 percentage points in the third quarter. In addition to this there were the loss of trust in the automotive sector caused by the diesel scandal, and the repercussions of trade conflicts. In the USA, newly introduced tariffs led to major losses for American automotive manufacturers. The Chinese automotive market shrank for the first time since the start of the 1990s as a result of the trade dispute with the USA. This also had an impact on Germany: Passenger car exports plummeted by 7% in 2018. Overall, the German automotive market only posted results at the previous year's level in the 2018 fiscal year. The automotive industry nevertheless remains a key growth area for the sensor systems sector as new sensor technologies are gaining ground in terms of "more sensors per vehicle" in relation to increasingly autonomous and low-emission vehicles. For the LiDAR systems market alone, Yole anticipates growth of \$726 million to \$5 billion in 2023 and \$28 billion in 2032.

Financial position, net assets and results of operations

Business performance in 2018 and comparison with the forecast development

The First Sensor Group continued its growth course in fiscal year 2018, with sales increasing to €155.1 million. Stronger momentum developed in the second half of the year, with around €6.5 million more sales than in the first half of the year. Profitability also improved further. At the end of the year the EBIT margin was at 7.9%.

The target markets made varying contributions to the growth in sales. Sales in the Industrial target market developed positively with an increase of 7.0%. Sales in the Medical target market enjoyed a growth surge of 23.7% as rising demand for standard H series pressure sensors was met through expanded production capacity. By contrast, sales in the Mobility target market recorded a decline of -9.6%, reflecting the volatile geopolitical developments that have burdened the automotive industry in the last year.

Besides growth, the figures of fiscal 2018 show the further positive effects of implementing the strategy for profitable growth and operating excellence. The company is therefore well prepared for the future development.

Targets for key performance indicators for fiscal 2018

For fiscal 2018, the aim was for consolidated sales in the range of €150 and €160 million. An EBIT margin between 7% and 9% was anticipated. These targets were published on March 22, 2018 and confirmed during the year.

Comparison of target and actual figures for 2018

The table below shows the figures achieved in the previous year, the guidance and the figure achieved in the past fiscal year:

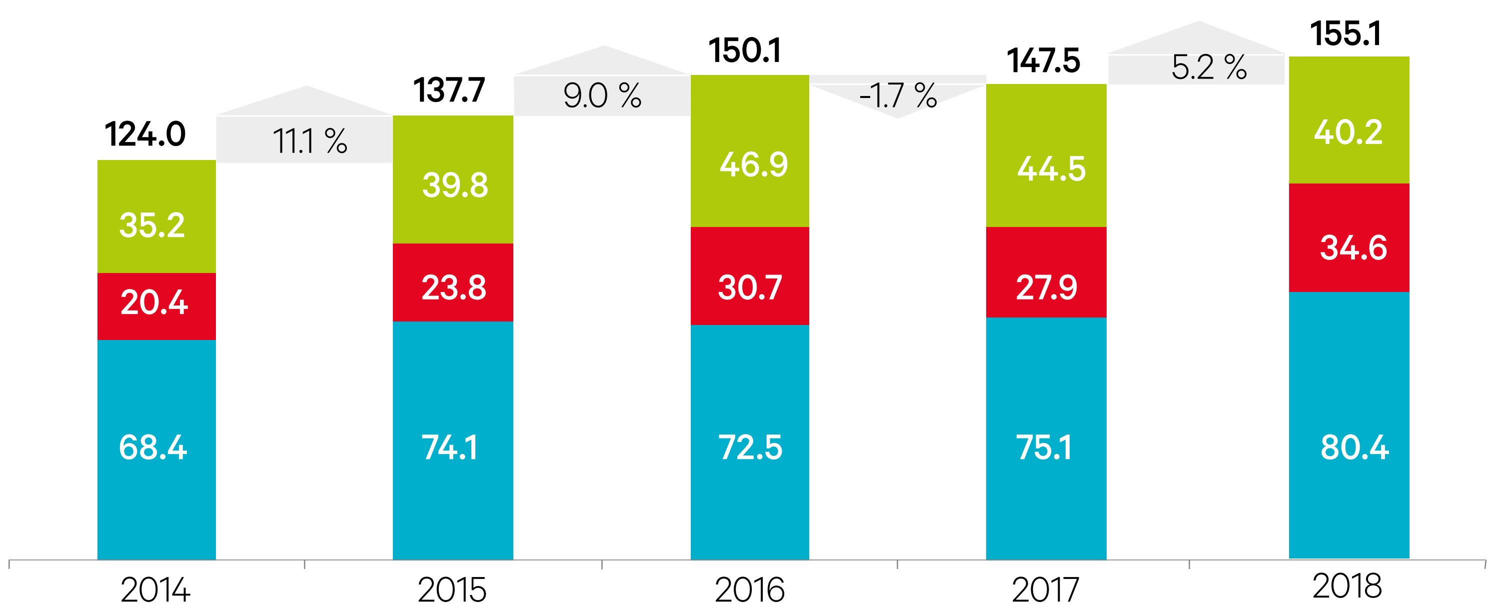
	2017	Guidance 2018	2018
Sales in € million	147.5	150 - 160	**155.1**
EBIT margin in %	7.2	7 - 9	**7.9**

After an initially restrained first quarter, sales and profitability improved in line with expectations over the course of the year. The sales and earnings forecast for fiscal year 2018 was thus confirmed.

Sales development

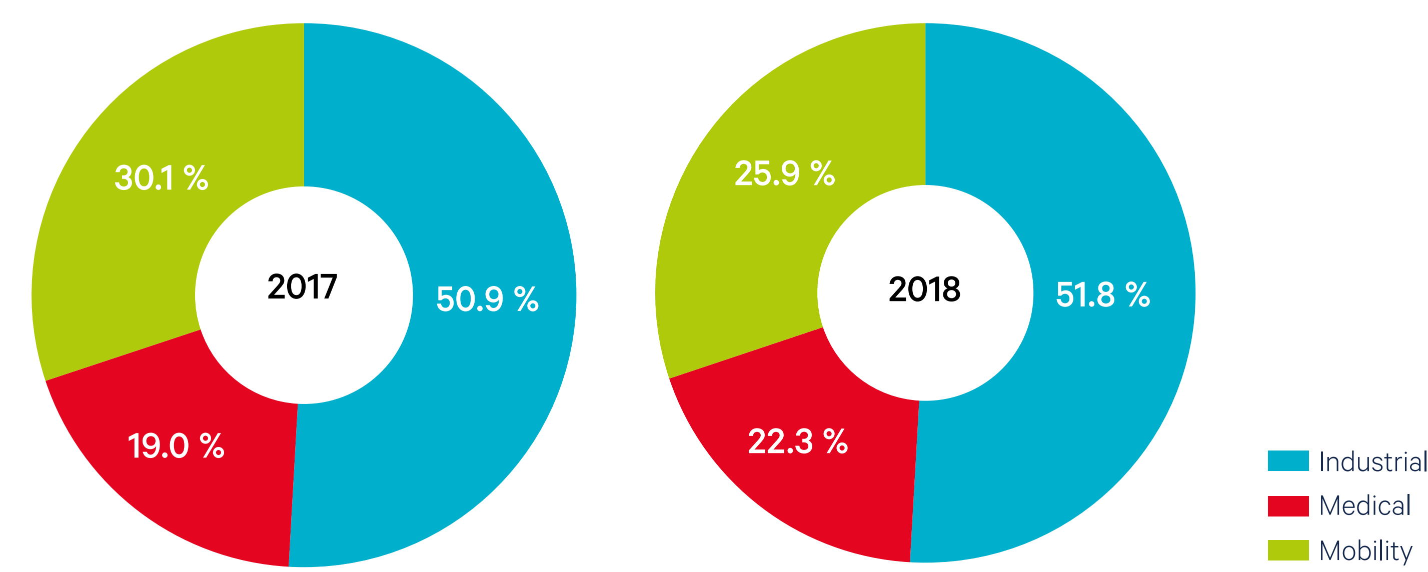
In fiscal 2018, sales in the First Sensor Group were €155.1 million (previous year: €147.5 million). The growth of €7.6 million or 5.2% is attributable to growing demand for sensors and sensor solutions in the Industrial and Medical target markets, which more than offset the decline in the Mobility target market. The company's medium-term strategy is targeting average annual growth of 10%.

The graph below shows the development of consolidated sales during the last five years:



in € thousand	2017	2018	Δ absolute	in %
Industrial	75,096	80,387	5,291	7.0%
Medical	27,943	34,559	6,616	23.7%
Mobility	44,461	40,202	-4,259	-9.6%
Total	**147,500**	**155,148**	**7,648**	**5.2%**

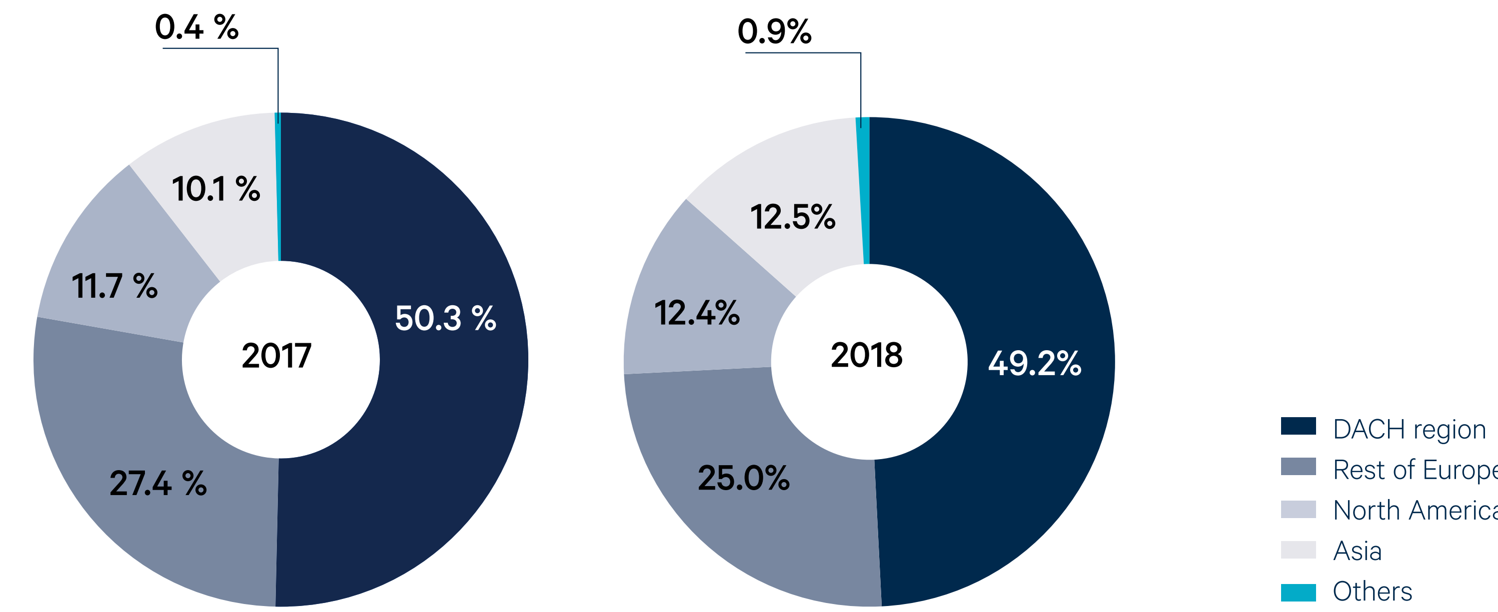
The Industrial target market thus continued to contribute the largest share of total sales with 51.8%, followed by Mobility (25.9%) and Medical (22.3%).



Sales developed positively in the Industrial target market in which roughly half of the sales are generated. Growth of 7.0% to €80.4 million (previous year: €75.1 million) was generated here. Rising demand and a simultaneous increase in production capacity in the Medical target market led to a 23.7% increase in sales to €34.6 million (previous year: €27.9 million). Sales in the Mobility target market amounted to €40.2 million (previous year: €44.5 million). The decline reflects the volatile geopolitical developments that burdened the automotive industry in the last year

Looking at the seven top-selling countries, First Sensor again achieved the majority of its sales in Germany, posting €63.2 million (previous year: €62.9 million) in the fiscal year of 2018. In the USA, the sales revenues have increased by 4.3% to €14.6 million (previous year: €14.0 million). The sensor and sensor solutions business continued to grow in China. The increase of €4.4 million was generated through the acquisition of new projects in the field of optical sensor technology and further expansion of the pressure transmitter business. The drop in sales in Hungary resulted from the burdens on the automotive industry, the €1.2 million increase in sales in Switzerland is attributable to higher demand for the H series.

In € thousand	2017	2018	Δ absolut	in %
Germany	62,915	63,228	313	0.5
USA	14,015	14,622	607	4.3
China	9,180	13,561	4,381	47.7
Hungary	10,423	9,390	-1,033	-9.9
Switzerland	7,985	9,142	1,157	14.5
Great Britain	7,484	7,089	-359	-4.8
Netherlands	5,975	6,011	369	0.6



However, business has not only been expanded in the USA, sales have also increased in Canada. Thus, sales revenues in North America overall increased by €2.0 million. The share of sales now amounts to 12.4%. Asia's share of total sales also climbed, supported by the growth in China. It now amounts to 12.5%. Accordingly, the shares of sales generated by the DACH region and the rest of Europe have declined slightly to 49.2% and 25.0% respectively.

In € thousand	2017	2018	Δ absolut	in %
DACH*	74,303	76,378	2,075	2.8
Rest of Europe	40,414	38,790	-1,624	-4.0
North America	17,293	19,244	1,951	11.3
Asia	14,911	19,416	4,505	30.2
Others	579	1,320	741	127.9
Total	**147,500**	**155,148**	**7,648**	**5.2**

*Germany, Austria, Switzerland, Liechtenstein

Order situation

Demand for the First Sensor Group's sensors and sensor solutions remains high. In fiscal 2018 incoming orders totaled €159.6 million. The order backlog rose by €5.1 million in the 2018 fiscal year. It now amounts to €97.6 million, with about 80.0% scheduled for 2019. This already provides a good starting point for a successful new fiscal year.

In € thousand	2017	2018	Δ absolute	in %
Sales	147,500	155,148	7,648	5.2
Incoming orders	163,674	159,634	-4,040	-2.5
Orders on hand	92,465	97,619	5,154	5.6
Book-to-bill-ratio	1.11	1.03	-0.08	-7.2

Earnings

With sales growing by €7.6 million to €155.1 million in 2018 (previous year: €147.5 million) and pre-production in order to safeguard supply capability at the beginning of 2019, inventories were increased by €5.9 million to €17.9 million (previous year: €12.0 million). Other capitalized costs fell by €0.5 million to €2.0 million. The decline is attributable to conclusion of the introduction of SAP at the First Sensor AG locations. At the same time, own capital contributed for the commissioning of equipment and new projects in the R&D sector rose slightly. Consequently, total operating performance amounted to €161.6 million (previous year: €148.5 million).

With the 8.1% increase in total operating performance, cost of material including purchased services rose by €6.8 million to €76.1 million (previous year: €69.3 million). Gross income improved by €5.5 million to €88.1 million (previous year: €82.5 million). In percentage terms the gross income margin, adjusted for other operating income, remained almost constant at 52.9% (previous year: 53.3%). Projects aimed at increasing material efficiency have been initiated. Larger numbers of temporary workers were hired in order to meet the growing demand at short notice. The costs for this were €0.7 million higher than in the previous year and are part of the cost of material.

Personnel expenses increased year-on-year, amounting to €49.0 million (previous year: €46.6 million). The main reasons for this were wage adjustments to ensure competitiveness on the labor market and the recruitment of new highly qualified employees for expansion of the camera business.

Overall, it was not possible to reduce other operating expenses further year-on-year. They rose slightly by around €1.5 million from €16.3 million to €17.8 million. The reasons for this include increased costs for maintenance of buildings and production equipment, as well as recruitment costs.

Despite increased costs, EBITDA (earnings before interest, taxes, depreciation and amortization) improved from €19.6 million in the previous year to €21.3 million. The EBITDA margin thus climbed from 13.3% to 13.7%.

Depreciation on property, plant and equipment and amortization of intangible assets and from purchase price allocations (PPA) amounted to €9.0 million in fiscal year 2018 and was thus almost unchanged (previous year: €9.1 million). Adjusted for amortization of intangible assets income resulted in EBITA of €14.5 million (previous year: €12.8 million), corresponding to a margin of 9.3% (previous year: 8.7%). EBIT improved correspondingly, achieving €12.2 million (previous year: €10.6 million), an upturn of 16.0%. The EBIT margin reached 7.9% on a whole-year basis (previous year: 7.2%).

The contribution to earnings from currency gains and losses also improved considerably, having amounted to €-1.6 million in the previous year due partly to the early reversal of currency option contracts (TARF). These losses melted away in 2018, resulting in a net figure of €-0.2 million.

Net interest improved by €237 thousand in the last fiscal year as further loans were repaid as planned in 2018. Tax expenses increased marginally to €2.9 million (previous year: €2.8 million). This corresponds to a tax rate in the Group of 27.6% (previous year: 38.8%). This development can be explained by the increasing earnings contributions from individual foreign group companies and the use of previously unrecognized tax loss carryforwards.

We can thus report significantly increased consolidated net income (before minority interests) of €7.5 million for fiscal 2018 (previous year: €4.4 million). Earnings per share in circulation were €0.72 (previous year: €0.40).

Financial position

Principles and aims of the financial management

The aim of First Sensor's financial management is to ensure adequate liquidity for the production processes, growth and investments. It is managed centrally by First Sensor AG. It primarily includes liquidity management, borrowing of external funds, and management of interest rate and exchange rate risks.

The company counters the risk of interest rate increases by using interest rate swaps for variable-interest loans. First Sensor counteracts foreign currency risks arising from purchases of materials and purchased services in USD, particularly in Asia, by optimizing customer payments in USD (natural hedge) and making distributions from foreign subsidiaries in USD.

A Group-wide Financial Risk Management Directive was adopted in the 2018 fiscal year. This monitoring tool enables early identification of exchange rate and interest rate risks and regulates permissible hedging instruments. As at December 31, 2018, the outcome of the measurement of the risk limit and materiality limits did not result in any need for action in terms of concluding hedging transactions for the coming quarter.

Capital structure

As at December 31, 2018, the Group's equity amounted to €88.8 million (previous year: €81.9 million). Based on the balance sheet total of €168.4 million, this corresponds to a sound equity ratio of 52.7% (previous year: 51.3%). Financial liabilities amounted to €48.0 million (previous year: €48.3 million).

A €28.0 million portion of financial liabilities results from taking out promissory note loans maturing in 2020 and 2022. In 2015, First Sensor placed three promissory note loans totaling €28.0 million: two tranches – one of €7.0 million and one of €18.0 million – with a term of five years and one tranche of €3.0 million with a term of seven years. An issue in 2013 resulted in another tranche of €12 million, which was settled on maturity as planned in 2018. In November 2018, First Sensor AG drew on the €13.0 million KfW loan taken out in 2017 as agreed. The funds from the ERP digitalization and innovation program will serve to finance the planned growth further. This financing structure allows the company to choose between investing surplus liquidity in company growth or using it for repayment in the coming years.

In connection with the KfW loan and the promissory note loans, contractual covenants have been agreed to the end of the year in each case. As at December 31, 2018, First Sensor fulfilled all required key financial ratios.

In € thousand	2017	2018
Leverage, net debt to EBITDA	1.16	0.92
Interest cover ratio, EBITDA to interest expense	11.0	13.2
Equity ratio	43%	45%

In 2018, net debt (as financial liabilities less cash and cash equivalents) decreased further from €22.8 million to €19.5 million and was composed as follows:

In € thousand	2017	2018	Δ absolute	in %
Non-current financial liabilities	32,184	44,111	11,927	37.1
Current financial liabilities	16,115	3,891	-12,224	-75.9
Cash and cash equivalents	25,505	28,534	3,029	11.9
Net debt	22,794	19,468	-3,326	-14.6

The ratio of net debt to equity (gearing) amounted to 21.9% as of the balance sheet date (previous year: 27.8%).

As at December 31, 2018, First Sensor also had unused credit lines of €10.1 million (previous year: €11.1 million). The volume-weighted average cost of capital as at the end of the fiscal year came to roughly 2.9%.

There were no restrictions in 2018 with regard to the availability of the loans granted. The long-standing business relationships with our banks once again proved stable. It can also be assumed for the future that First Sensor will be in a position to finance planned growth from the resources at its disposal. Utilization of the capital market is not planned in the foreseeable future.

First Sensor does not use off-balance sheet financing instruments.

Investments

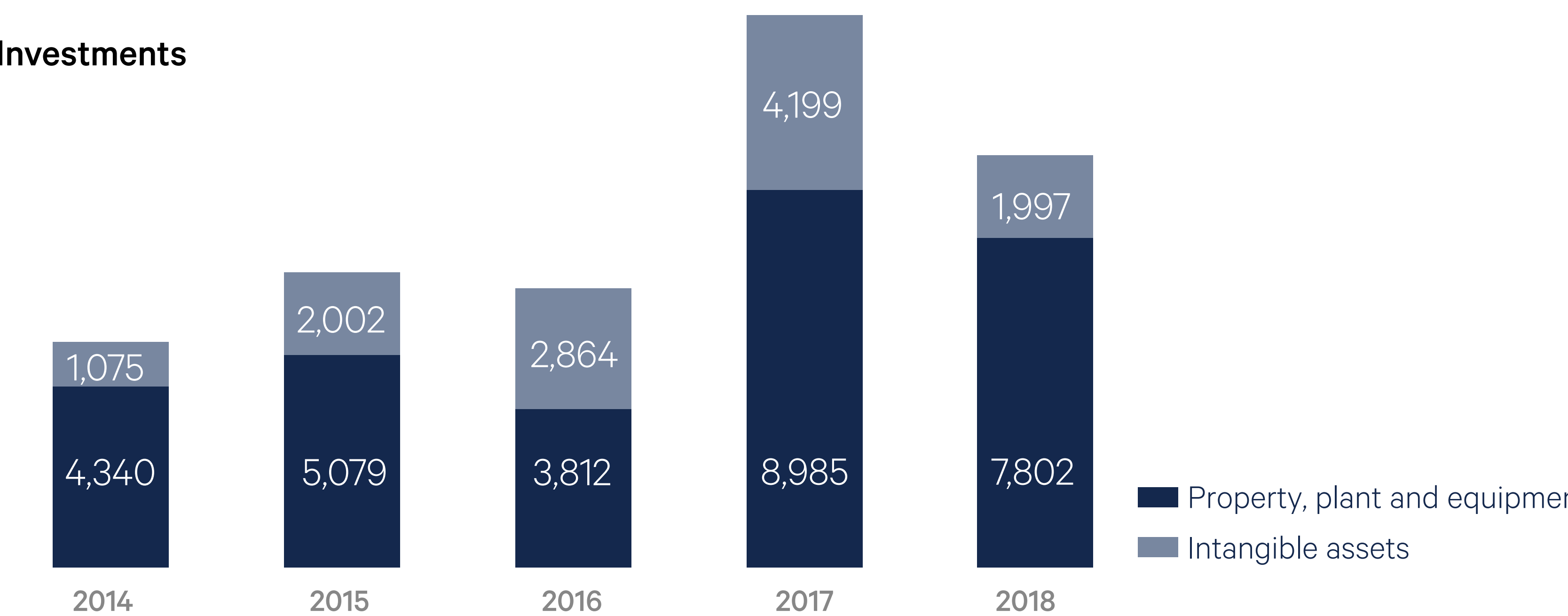
Investments in the area of intangible assets amount to €2.0 million (previous year: €4.2 million) and related mainly to the capacity required for commissioning equipment and new projects in the R&D sector. In the area of property, plant and equipment, €7.8 million (previous year: €9.8 million) of investments related primarily to new machinery and equipment for expanding capacity (for example in H series and wafer production) and for stabilizing and improving processes at the Berlin and Dresden locations.

In € thousand	2017	2018	Δ absolute	in %
Investments in intangible assets	4,199	1,997	-2,202	-52.4
Investments in property, plant, and equipment	8,985	7,802	-1,183	-13.2
Investments	13,184	9,799	-3,385	-25.7
Disposal of non-current assets and investments	589	91	-498	-84.6
Other effects	62	37	-25	-40.3
Cash flow from investment activities	-12,533	-9,671	2,862	22.8
Amortization of intangible assets	3,757	3,555	-202	-5.4
Depreciation of property, plant, and equipment	5,327	5,470	143	2.7
Depreciation and amortization	9,084	9,025	-59	0-1.0

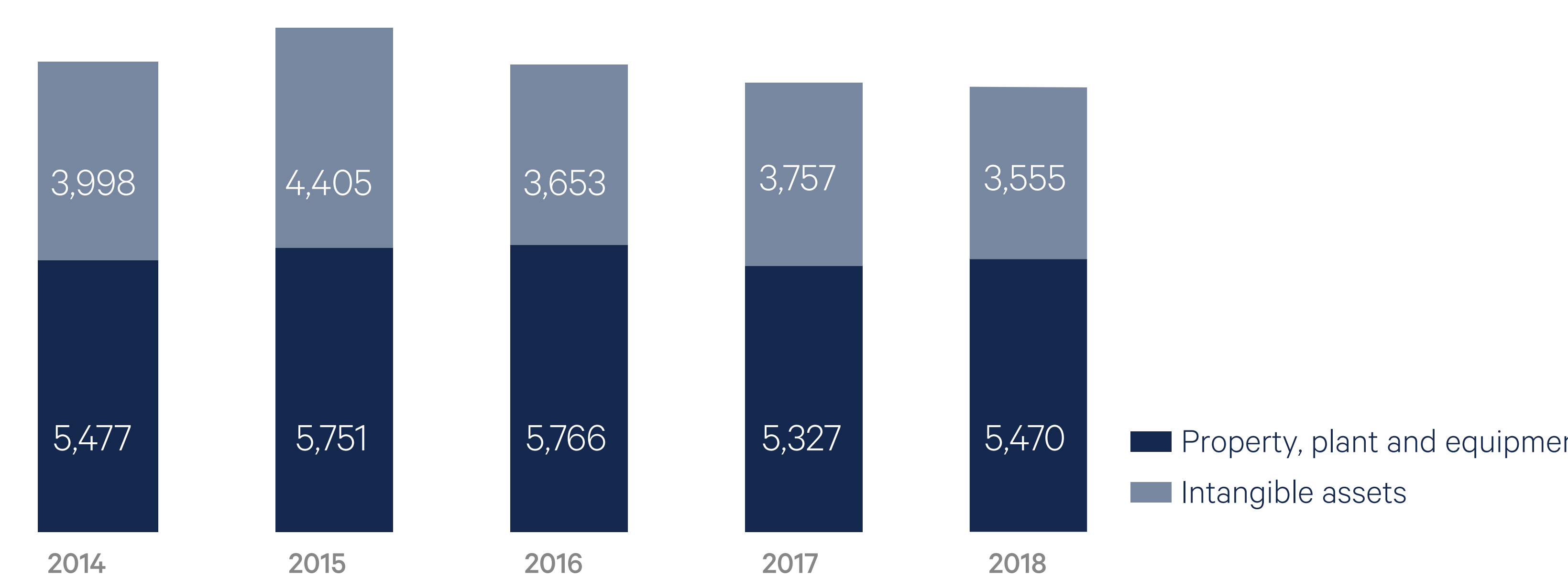
Investments were at the same level as depreciation and amortization.

The following graphs show investments and depreciation and amortization over the last five years:

Investments



Depreciation and amortization



Liquidity

Operating cash flow was down 0.6% year-on-year and amounted to €15.9 million (previous year: €16.6 million). Although cash flow from investing activities decreased by €2.9 million, it still reflects the high level of investment required by First Sensor as an innovative high-growth company. It amounted to €-9.6 million following €-12.5 million in the previous year, when the standard ERP software was acquired. The investments in 2018 largely related to new machinery and equipment for expanding vertical integration, process improvements and increasing capacity. Free cash flow, which represents the balance of the operating cash flow and cash flow from investing activities, developed positively and amounted to €6.3 million (previous year: €3.5 million).

In € thousand	2017	2018	Δ absolut	in %
Cash flow from operating activities	16,005	15,923	-82	-0.5
Cash flow from investment activities	-12,533	-9,671	-2,862	-22.8
Cash flow from financing activities	-1,704	-3,409	-1,705	-100.1
Change in cash and cash equivalents	1,768	2,844	1,076	60.9
Exchange differences	-54	186	240	444.4
Cash and cash equivalents at the beginning of the financial year	23,791	25,505	1,714	7.2
Cash and cash equivalents at the end of the financial year	25,505	28,534	3,029	11.9
Free-cash flow	3,472	6,252	2,780	80.1

Cash flow from financing activities totaled €-3.4 million (previous year: €-1.7 million) and included the dividend distribution of €1.6 million. Cash and cash equivalents increased from €25.5 million to €28.5 million in fiscal 2018. From the perspective of the Executive Board, the Group's liquidity position thus remains comfortable. First Sensor will thus again be able not only to meet its payment obligations from operating business and repay its debt financing at all times in 2019 but also to pay a dividend to shareholders.

To assess First Sensor's solvency, the following table shows the company's liquidity in the form of liquidity ratios. To calculate the cash ratio, cash and cash equivalents are shown in relation to current liabilities. The quick ratio includes current receivables, while the current ratio also takes inventories into account. The following changes arise in comparison to the previous year:

In %	2017	2018	Δ PP
Cash ratio	72.7	115.5	42.8
Quick ratio	141.3	203.6	62.3
Current ratio	211.5	333.9	122.4

Net assets

Total assets increased to €168.4 million in fiscal 2018 (previous year: €159.6 million). As a result of the retained earnings for fiscal 2018 and the issue of shares from contingent capital (share option program), the equity ratio rose by 1.4 percentage points to 52.7%.

Assets

The volume of investments in fiscal 2018 exceeded scheduled depreciation of property, plant and equipment and amortization of intangible assets by €0.8 million. Non-current assets amounted to €85.9 million (previous year: €85.3 million). The amount of goodwill remained unchanged at €29.8 million.

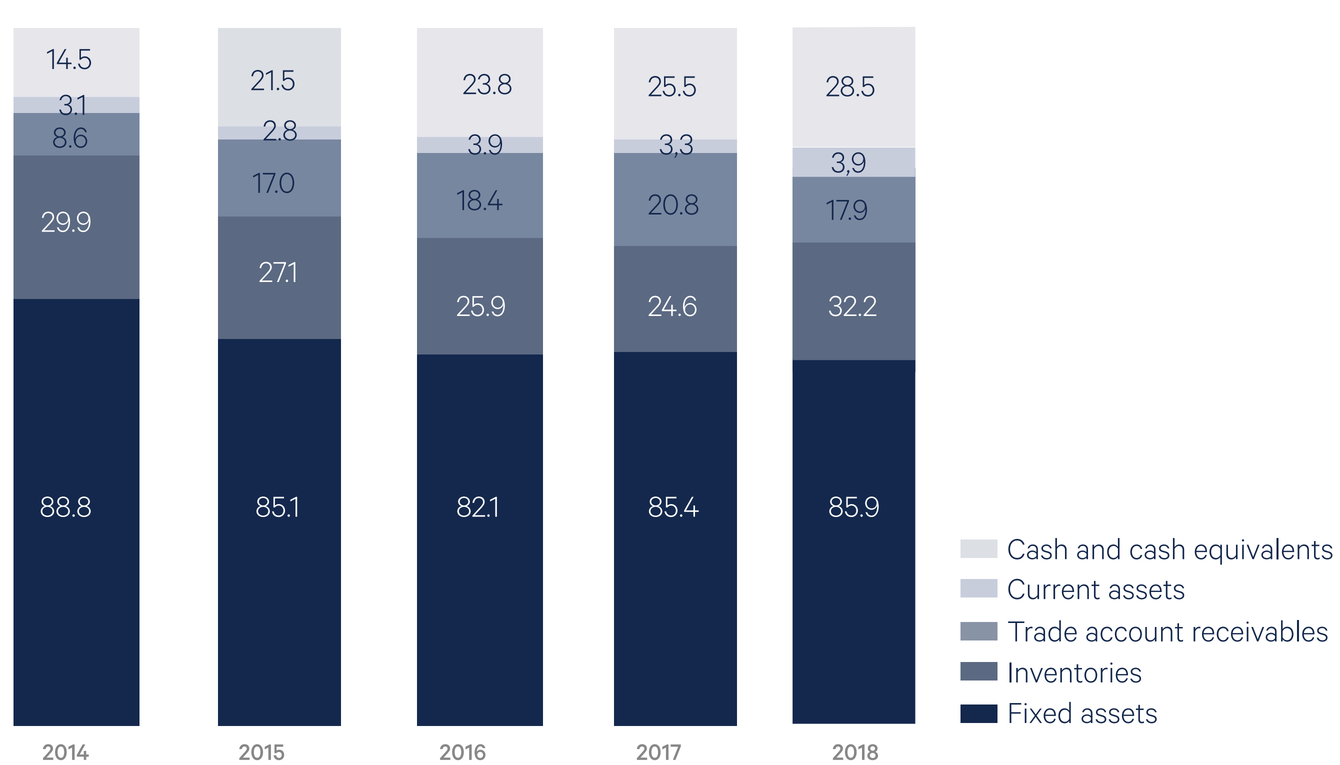
Current assets recorded an increase of €8.3 million to €82.5 million. Inventories were increased by €7.6 million in view of the market and order situation. Conversely, accounts receivable were reduced by €2.9 million to €17.9 million owing to rigorous receivables management and the use of factoring. These measures also contributed to the further rise in cash and cash equivalents, which improved by €3.0 million compared with the previous year and form a solid basis for further investments in the future.

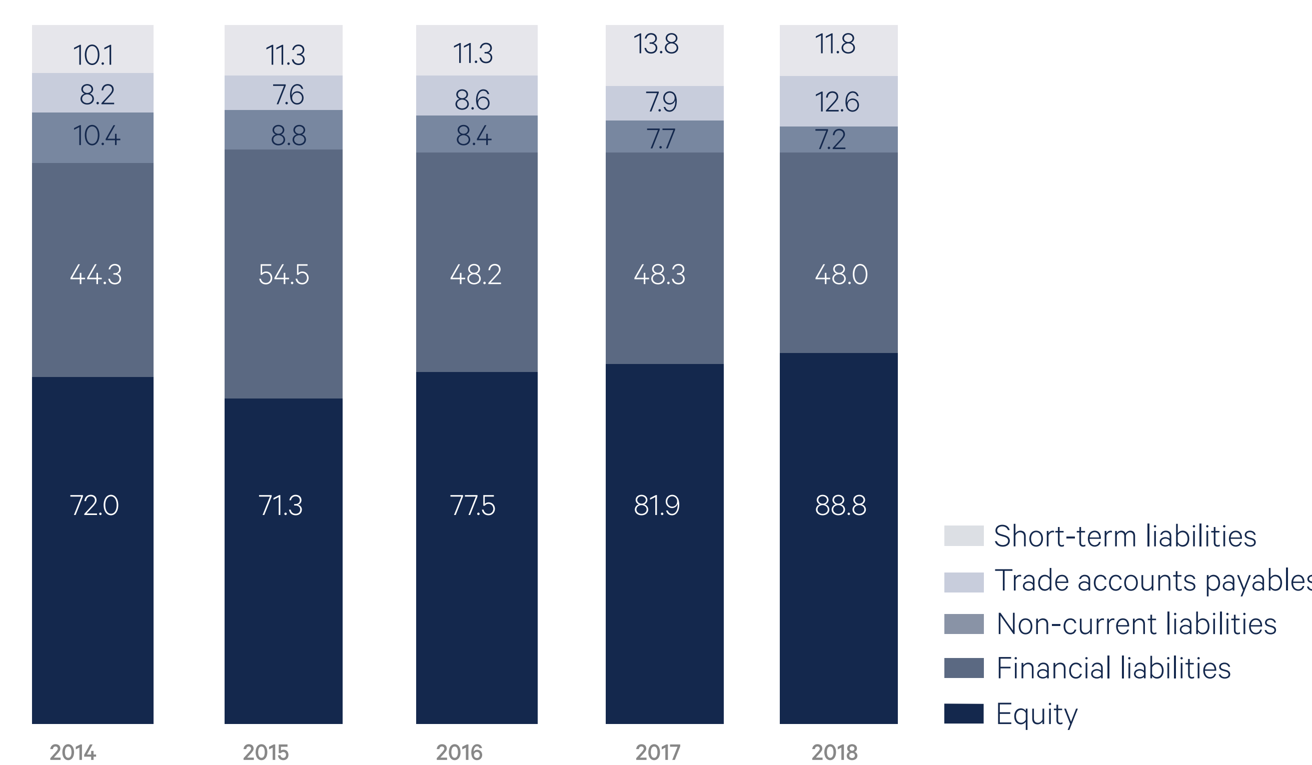
Equity and liabilities

On the equity and liabilities side of the balance sheet, equity increased by €6.9 million to €88.8 million (previous year: €81.9 million). Subscribed capital increased slightly due to issuing 6,000 shares from the share option plans. Retained earnings climbed to €18.1 million (previous year: €12.4 million) as a result of net income.

Non-current liabilities rose by €11.9 million, primarily due to the disbursement of a KfW loan. Current liabilities fell by €9.5 million to €28.3 million. The decisive factor here was the scheduled repayment of a promissory note loan of €12.0 million. Trade payables recorded a rise of €4.7 million, which also reflects the contractual arrangements in accounts payable management.

On balance, working capital remained almost unchanged at €37.3 million (previous year: €35.7 million) due to changes in the individual items mentioned above amounting to €-0.2 million. Capital employed was also very similar, deviating by €0.3 million to €123.2 million (previous year: €122.9 million). ROCE developed positively from 8.6% in the previous year to 9.9% in fiscal 2018.





Results of operations, financial position and net assets of First Sensor AG (HGB)

In contrast to the consolidated financial statements, the annual financial statements of First Sensor AG are not prepared in accordance with International Financial Reporting Standards, but in accordance with the rules of the Handelsgesetzbuch (HGB – German Commercial Code). First Sensor AG's management report and consolidated management report for fiscal 2018 are combined in accordance with section 315(5) HGB in connection with section 298(2) HGB. The combined management report also comprises all mandatory elements for First Sensor AG. In addition to the reporting on the First Sensor Group, the development of First Sensor AG is explained below.

First Sensor AG's results of operations

Sales revenues grew by €7.9 million year-on-year to €81.4 million (previous year: €73.5 million). Inventories were increased by €3.1 million. Key reasons for this were the significantly improved order situation in the second half of the year and the necessity of safeguarding supply capability.

Other capitalized costs declined by €0.7 million to €0.7 million. Own capital contributed related mainly to new projects in the R&D sector and the commissioning of equipment. No additional own capital was contributed in connection with the successful introduction of ERP software. Other operating income chiefly comprised investment grants and changes in provisions and fell by €1.3 million to €2.2 million (previous year: €3.5 million). Total operating performance including other operating income increased by €9.1 million to €87.0 million (previous year: €77.9 million). This equates to a growth of 11.9%.

The higher sales volume and increase in inventories caused costs of materials to climb 11.7% to €40.1 million (previous year: €35.9 million). Gross income improved from €38.5 million to €44.7 million, resulting in a gross income margin of 52.7% (previous year: 51.8%). Personnel expenses in direct and indirect areas climbed to €27.2 million (previous year: €26.7 million) owing to wage and salary increases and the expansion of personnel levels for H series and chip manufacturing. This corresponds to a personnel expenses ratio of 33.4% (previous year: 36.3%).

Depreciation relates to machinery and equipment, operating and office equipment and production and office buildings. It remained almost unchanged year-on-year at €6.2 million (previous year: €6.1 million).

Other operating expenses amounted to €12.1 million (previous year: €11.9 million), only rising by €0.2 million overall despite a €0.4 million increase in expenses for maintenance and repair of equipment and buildings.

First Sensor AG reported a positive result with EBIT of €1.3 million. This represents a significant rise of €3.9 million on the previous year (€-2.6 million). Costs for central functions in the Group remained almost the same at €8.3 million (previous year: €8.3 million). In 2018, preparations were made for transferring these costs to the subsidiaries on a pro rata basis and this will be implemented for the first time in 2019.

There are profit and loss transfer agreements in place with First Sensor Microelectronic Packaging GmbH and First Sensor Lewicki GmbH. The profit and loss transfer agreements resulted in income of €6.5 million (previous year: €5.7 million). In addition, distributions by two subsidiaries resulted in income from investments of €2.7 million (previous year: €1.2 million).

Other interest and similar income totaled €0.1 million (previous year: €0.4 million). Interest and similar expenses dropped to a normal level of €1.3 million again after having risen to €3.0 million in the previous year due to non-recurring effects.

Earnings before taxes were significantly higher at €9.3 million (previous year: €2.5 million), while the tax rate fell from 30.1% to 26.3%.

For fiscal 2018, First Sensor AG's net income amounts to €6.8 million (previous year: €1.7 million), corresponding to a net margin of 8.4% (previous year: 2.3%). €1.6 million of the retained earnings of €4.1 million from the previous year was distributed to the shareholders. The remaining amount of €2.4 million was allocated to retained profits. This thus results in retained earnings for the current fiscal year of €9.3 million in total.

Shareholders are also expected to participate in these earnings. The Executive Board and the Supervisory Board intend to propose to the Annual General Meeting that a dividend of €0.20 per share in circulation be distributed (previous year: €0.16 per share). With 10,222,396 shares outstanding, this corresponds to a total distribution of €2.0 million or 22.0% of retained earnings, or 38.5% of growth in retained earnings in fiscal 2018.

First Sensor AG's income statement (HGB)

In € thousand	Jan. 01.- Dec. 31, 2017	Jan. 01.- Dec. 31, 2018	Δ absolute	in %
Sales	73,471	**81,415**	7,944	10.8
Change in inventories of finished goods and work-in-progress	-484	**2,615**	3,099	640.3
Other own work capitalized	1,468	**738**	-730	-49.7
Other operating income	3,474	**2,217**	-1,257	-36.2
	77,929	**86,985**	**9,056**	**11.6**
Cost of materials	-29,925	**-32,260**	-2,335	-7.8
Expenses for services	-5,962	**-7,830**	-1,868	-31.3
	-35,887	**-40,090**	**-4,203**	**-11.7**
Salaries and wages	-22,776	**-23,050**	-274	-1.2
Expenses for social securities	-3,907	**-4,174**	-267	-6.8
	-26,682	**-27,224**	**-542**	**-2.0**
Depreciation and amortization of intangible assets and property, plant, and equipment	-6,024	**-6,176**	-152	-2.5
Write-downs of current assets	0	**0**	0	0
Other operating expenses	-11,923	**-12,162**	-239	-2.0
Earnings before interest and taxes (EBIT)	**-2,587**	**1,333**	**3,920**	**151.5**
Income from profit transfer agreement	5,678	**6,501**	823	14.5
Income from investments	1,200	**2,741**	1,541	128.4
Income from appreciations to fixed assets	973	**0**	-973	-100.0
Interest income	406	**107**	-299	-73.6
Write-downs of financial assets	-222	**0**	222	100.0
Interest expenses	-2,954	**-1,296**	1,658	56.1
	5,082	**8,052**	**2,970**	**58.4**
Results from ordinary operations	**2,495**	**9,385**	**6,890**	**276.2**
Income taxes	-760	**-2,478**	-1,718	-226.1
Other taxes	-34	**-53**	-19	-55.9
Net loss for the financial year	**1,701**	**6,854**	**5,153**	**303.0**
Retained earnings	2,361	**4,062**	1,701	72.0
Appropriation/distribution of earnings	0	**-1,635**	-1,635	-100.0
Net profit	**4,062**	**9,282**	**5,220**	**128.5**

First Sensor AG's financial position and net assets

On the assets side, the extension of the balance sheet by €7.8 million is primarily due to the increase in inventories and the positive development of cash and cash equivalents and investments in fixed assets. The increase in inventories is the result of positive sales growth and serves to safeguard supply capability. The measures introduced in the area of accounts payable and accounts receivable management made an impact.

The ongoing expansion of capacity required for further growth and improvements in efficiency made further investments in fixed assets necessary. Extending the pool of equipment and machinery made it possible to implement targets related to improving processes and further expanding vertical integration.

The following table shows the balance sheet as at December 31, 2018:

Assets

In € thousand	2017	2018	Δ absolute	in %
Intangible assets	2,327	3,746	1,419	61.0
Internally-generated intangible assets	2,375	2,482	107	4.5
Goodwill	20,220	18,063	-2,157	-10.7
Advance for customers	2,632	779	-1,853	-70.4
Property, plant, and equipment	28,284	29,779	1,495	5.3
Shares in affiliated companies	33,533	33,533	0	0
Non-current assets	**89,371**	**88,382**	**-989**	**-1.1**
Inventories	15,854	19,696	3,842	24.2
Trade accounts receivables	7,155	7,411	256	3.6
Due from affiliated companies	8,080	9,075	995	12.3
Other assets	316	1,479	1,163	368.0
Cash and cash equivalents	15,993	18,514	2,521	15.8
Current assets	**47,399**	**56,176**	**8,777**	**18.5**
Prepaid expenses	418	415	-3	-0.7
Deferred tax assets	0	0	0	0
ASSETS	**137,188**	**144,972**	**7,784**	**5.7**

EQUITY AND LIABILITIES

In € thousand	2017	2018	Δ absolute	in %
Share capital	51,082	51,112	30	0.1
Capital reserves	20,626	20,686	60	0.3
Earning reserves	1,004	1,004	0	0
Net profit	4,062	9,282	5,220	128.5
Equity	**76,774**	**82,084**	**5,310**	**6.9**
Special account with reserve characteristics	3,270	3,068	-202	-6.2
Provisions	6,335	6,588	253	4.0
Liabilities to banks	40,000	28,000	-12,000	-30.0
Promissory note loans	1,954*	13,843	11,889	608.5
Payments received on account of orders	196	260	64	32.7
Trade accounts payables	3,253	6,145	2,892	88.9
Due to affiliated companies	196	384	188	95.9
Other liabilities	4,474*	3,826	-648	-14.5
Deferred tax liabilities	736	774	38	5.2
EQUITY AND LIABILITIES	**137,188**	**144,972**	**7,784**	**5.7**

*In fiscal 2018, rental lease liabilities were recognized under other liabilities (Previous year liabilities to banks). The 2017 figures have been adjusted accordingly in order to enhance comparability.

On the equity and liabilities side of the balance sheet, First Sensor AG's equity amounted to €82.1 million on the balance sheet date (previous year: €76.8 million). Higher retained earnings had an impact here. The equity ratio climbed slightly to 57% (previous year: 56%). Based on a resolution adopted by the Annual General Meeting on May 23, 2018, a portion of the retained earnings from 2017 amounting to €1.6 million was used for distributing a dividend. The remaining amount of €2.4 million was allocated to retained profits. As a result, retained earnings increased by €5.2 million to €9.3 million (previous year: €4.1 million).

The tranche of the promissory note loan of €12.0 million issued in 2013 was repaid in fiscal 2018 as planned. The KfW loan taken out in 2017 was drawn on in November 2018, thus reducing liabilities from promissory note loans and to banks by €0.1 million overall. Trade payables rose to €6.2 million (previous year: €3.2 million) as a result of further improvements in accounts payable management and are hedged by the existing liquidity reserve.

Provisions changed only marginally against the previous year. The €0.6 million decrease in other liabilities was attributable to the settlement of hire purchase agreements as scheduled. Please refer to the notes at Group level for a detailed presentation of the financing situation.

Operating cash flow rose from €8.9 million to €12.7 million. This positive development is attributable to the increase in net income. Cash flow from investing activities declined to €-5.3 million (previous year: €-9.2 million). This was due to the investment made in a standardized ERP system in 2017. Payments for intangible assets fell by €2.4 million in the 2018 fiscal year. As a result, free cash flow increased by €7.8 million to €7.4 million (previous year: €-0.4 million). Cash and cash equivalents increased to €18.5 million (previous year: €16.0 million).

Opportunities and risks

Due to its role in the Group, business development at First Sensor AG is subject to the same risks and opportunities as the Group. To that extent, we refer the reader to the risk and opportunities report of the Group.

Outlook

The sales forecast of the previous year (between €70 million and €75 million) was exceeded at €81.4 million. For fiscal year 2019, the Executive Board anticipates sales of €85 million to €90 million based on corporate planning.

As in the previous year, a positive result from ordinary activities was achieved in the financial year 2018. A positive result for ordinary business activity is also anticipated for 2019.

Employees

First Sensor AG had 469 employees (FTEs – full-time equivalents) as at the end of the year (previous year: 431) as well as 21 apprentices (previous year: 20). The following table provides a breakdown of the workforce across the individual units.

Employees (FTE)	2017	2018	Δ absolute	in %
Berlin-Oberschöneweide	208	220	17	8.4
Puchheim by Munich	71	74	3	4.2
Berlin-Weißensee branch	156	174	18	11.5
Chemnitz branch	1	1	0	0
Total	**431**	**469**	**38**	**8.8**

Overall statement

Sales reached €155.1 million and were therefore within the guidance confirmed at the beginning of the year and during the year (€150 million to €160 million). Sales in the Medical target market developed positively in particular (up 23.7%), but the Industrial target market also recorded growth (up 7.0%). By contrast, sales in the Mobility target market (down 9.6%) reflected the volatile geopolitical developments that have burdened the automotive industry in the last year. This temporary effect was compensated by the strategic orientation toward three target markets, enabling the First Sensor Group as a whole to achieve year-on-year growth of 5.2% in 2018.

The company also continued to improve its profitability with the sales it realized in 2018. EBIT thus reached €12.2 million, which represents growth of 16%. The EBIT margin for the year as a whole is therefore 7.9% and thus in line with the plan of 7% to 9%.

Overall, the business performance in fiscal 2018 was thus in line with the forecasts.

Development of non-financial performance indicators

The non-financial reporting can be found as a coherent, separate section in the Annual Report 2018.

Employees

The First Sensor Group had a total of 863 employees (FTEs – full-time equivalents) as at the reporting date of December 31, 2018 (previous year: 798 FTEs). This equates to growth of 8%. The new jobs were created to secure further growth, primarily in the areas of production and development. In addition, 32 apprentices were employed at First Sensor as at the reporting date December 31, 2017 (previous year: 33).

To handle fluctuations in utilization and temporarily fill vacant positions, First Sensor works with temporary employment agencies. At December 31, 2018, the number of temporary workers was 67 (previous year: 52).

At €49 million, personnel expenses in the year under review were 5.2% higher than the prior-year level of €46.6 million. This is due to the hiring of new staff as well as salary increases. These exceeded the previous year's level. Further information on the breakdown of personnel costs can be found in the notes.

The age structure of employees has remained stable. Around half of employees are under 40 years old. In view of demographic change and the resulting shortage of skilled workers, which is predicted to rise, an important part of our personnel strategy involves ensuring that we meet our requirements for skilled labor by providing in-house training. Based on long-term personnel planning, the aim is to cover the requirements for talented young staff by providing high-quality, needs-based training in the company's own ranks, too. First Sensor provides professional training for microtechnologists (20), industrial clerks (6), specialists in warehouse logistics (3), mechatronics engineers (2) and specialized technicians (1). At the end of 2018, a total of 32 apprentices were employed at the company (previous year: 33).

Aging structure of employees in %	2017	2018
Age under 30 years	15	15
Age between 31 and 40 years	32	33
Age between 41 and 50 years	22	21
More than 51 years	31	31
Total	**100**	**100**

The need for staff development within the company is determined once a year as part of the budget in an analysis of further training requirements. Based on this analysis, €382 thousand was invested in staff training in fiscal 2018 (previous year: €315 thousand).

The sickness absence rate rose slightly in the last fiscal year, amounting to around 5.8% (previous year: 5.6%) and was heavily impacted by a wave of influenza. For this reason, new measures such as free fruit, flu vaccinations, additional cold-weather clothing for industrial employees and hand sanitizers were introduced. Furthermore, proven measures such as the implementation of health days and health checks, support for team sport activities, and provision of employee bicycles were continued.

The proportion of female employees remained virtually the same year-on-year and amounted to 36.1% (previous year: 36.2%) as at the reporting date. This ratio is comparatively high for a technology company. With a global grading system, First Sensor evaluated all positions at the company using an analytical procedure. This helps ensure performance-oriented, competitive remuneration in line with the importance of the respective position, regardless of gender of the incumbent.

At 35.9%, more graduates are employed at the company than in the previous year (34.0%).

Quality management

Cross-site harmonization of the processes relevant to quality continued, led by Corporate Quality Management. The aim of this is to ensure that standardized and cost-effective processes are employed throughout the First Sensor Group in the areas of quality management and quality assurance. Defined interfaces and responsibilities as well as key figures to measure effectiveness and efficiency are leading to increased cooperation internally and, externally, to a uniform image to customers and suppliers. This way, quality management is fulfilling ever-growing customer demands for robust processes and high product quality and supporting the strategic orientation of the Group and its growth course.

A key topic in the last fiscal year was the adjustment of processes following introduction of a cross-site ERP system. The quality assurance processes in incoming goods, production and supplier management as well as the processing of customer complaints were adapted in line with the changed requirements and redefined in parts. In addition, the existing CAQ software, a key specialized quality management tool, was adapted in line with the changed requirements and the interfaces aligned with the new ERP system.

A further area of focus was on standardized, Group-wide supplier management. Contract templates were created in cooperation with the purchasing department and uniform criteria introduced for supplier assessment and auditing. The necessary data are now provided centrally, too. This also implemented a further element of the purchasing risk management system in practice.

Activities also focused significantly more on HSE management, with uniformly defined processes and centralized requirements being used for the first time. This also established the conditions required for other Group locations to be able to use the system in the future.

Significantly increased use of the existing HSE software ensures the HSE processes are implemented in practice and is also a component of corporate social responsibility (CSR) reporting.

Based on the conditions established in the previous year, all locations met the increased demands of the new quality management standards and passed the certifications in line with the requirements of current standards.

The following certifications are currently audited at First Sensor:

- IATF 16949 Quality management systems for the automotive industry
- DIN EN ISO 13485 Quality management systems for medical products
- DIN EN 9100 Quality management systems for the aerospace and defense industry
- DIN EN ISO 9001 Quality management systems
- DIN EN ISO 14001 Environmental management systems

Supplementary Report

The company is not aware of other key events following the end of the fiscal year, which will affect the net assets, financial position and results of operations.

Forecast, Opportunity and Risk Report

Forecast report

General economic and sector conditions

The global economy lost momentum over the course of 2018 - a development which is likely to continue according to the Kiel Institute for the World Economy (IfW). The economic experts anticipate economic growth to slow slightly from 3.7% to 3.4%. Even though these expansion rates do not indicate any pronounced economic weakness, capacity utilization in the advanced economies is hardly likely to increase. In many emerging countries production is likely to expand at only a moderate pace in view of what are frequently unfavorable general economic and political situations and a difficult financial environment. As a result, the experts are anticipating that the upturn in world trade which was 3.2% in 2018 will decline considerably in 2019, to 2.3%. From an international perspective, the key risk is further intensification of the trade conflicts. In Europe concern about the ability of Italy to service its debts, the delay of reforms in France and not least the potential of a hard Brexit could result in the economy developing more weakly than even one year ago.

Thus the experts are forecasting that the economic momentum in the USA has peaked and that the gross domestic product will decline from 2.9% in 2018 to 2.5% this year. In this connection, the Federal Reserve policy on interest rates could have a attenuating impact on the development of the economy. The rate of expansion in Asia is also declining: after 6.6% in 2018 an upturn of only 6.2% is anticipated for the current fiscal year. China (6.1%) is still expanding considerably more rapidly than South Korea (2.4%) and Japan (1.0%). For 2019 economic output in the euro zone is expected to grow more slowly at 1.7% (previous year: 1.9%). In German-speaking countries, Switzerland at 2.2% is expected to grow more quickly than Germany and Austria. Both economies are slated to rise by 1.7%.

Development of the sensor market

According to the industry association AMA, the sensor systems market is likely to continue its growth in 2019. Growth drivers remain the digitalization and artificial intelligence megatrends, which cannot be implemented without sensor systems. However, the experts are anticipating that growth will slow to 5% (previous year: 10%). The German Electrical and Electronic Manufacturers' Association (ZVEI) makes a similar assessment, and anticipates that the German electrical and electronics industry, to which sensor systems are assigned, will move up by 1.0% in 2019, after 1.9% in the previous year.

However, Yole, the market research company, sees the global sensor market as being dominated by nine megatrends in the medium term. These include Smart Automotive (autonomous driving, electromobility, connected cars), Healthcare, and Industry 4.0. Driven by the resulting steady increase in demand for sensors, the experts anticipate that the market for MEMS sensors and sensor systems alone will grow at an average rate of approximately 17% to 2023.

Until 2022 Mordor Intelligence expects an average growth rate of 7.0% p.a. for the pressure sensors sector in Europe. Japan and China are even likely to post somewhat higher annual growth rates in this area at 7.8% and 8.1% respectively, while at 5.6% and 5.3% growth in South Korea and North America is slightly lower than growth expectations for Europe. This trend is driven by demand for MEMS and piezoelectric sensors, pressure transmitters deployed in the petrochemical and oil and gas industries as well as in medical technology and the automotive industry.

For optical sensors , market research company Research and Markets expects global growth at an average rate of 7.3% between 2018 and 2024. Studies by research company Mordor Intelligence attribute the highest annual growth to China at 10.0%. The market in Japan is expected to grow by an average of 7.7% to 2026, and by 6.7%, 5.7% and 5.2% p.a. in North America, Europe and South Korea in the same period. This growth is partly driven by demand for new optical diagnostics devices, the increasing use of sensors in factory automation and investments in performance and safety for passenger cars and trucks.

Development of the target markets

Industrial

The IfW anticipates that equipment investment will grow in 2019 by 2.7% (previous year: 4.2%). After 2.0% in 2018, exports are expected to rise this year by 3.6% . At the same time, progress is being made in the practical implementation of networking production systems. Under the general umbrella of "Industry 4.0", with increasing use of sensor systems, a range of applications are being provided with local processing power, as well as digital interfaces and wireless and wireline data transfer possibilities. Alongside the established areas of deployment for highly precise pressure sensors in process control and level measurement in industrial facilities, optical technologies play a decisive role for machine room monitoring, industrial process automation and predictive maintenance. Here, using sensors for early identification of wear and tear can prevent system downtimes. For this application alone, annual growth exceeding 20% is being forecast.

Medical

The industry association Spectaris is anticipating sales growth of approximately 4% in the medical technology industry in 2019, with a further rise in employee figures. This is driven by increasing demand for individual treatment solutions and the steady increase in life expectancy in Europe, North America and Asia, combined with the ongoing industrialization of the emerging countries. It is not only the classical treatment methods which are currently the focus, but increasingly innovative technologies such as point-of-care medicine, robot-supported surgery or diagnostic implants.

Mobility

According to the German Association of the Automotive Industry, German car production in January 2019 slumped 19% year-on-year, thus continuing the trend which started in the second half of 2018. But carmakers are facing problems not only because of the weak German market with the issues of diesel and WLTP approval backlog, global demand is also declining. In January 2019, car exports declined year-on-year by 20.3%. If the US administration were to intensify the trade conflict with China and in this connection also levy tolls on vehicles "Made in Germany", this could result in further negative repercussions on the market. At the same time, parallel to autonomous driving as a megatrend, ADAS (advanced driver assistance systems) and green mobility are increasing structural demand for sensors. Thus Yole Développement, the market research company, is anticipating growth rates of almost USD 8 billion in the area of cameras, USD 1.4 billion for LiDAR and USD 1.6 billion for pressure sensors, which also play a significant role with new drive technology or CO2-neutral air conditioning systems. Driverassistance systems are being deployed increasing not only in cars, but also in off-highway vehicles and commercial vehicles such as trucks and buses. Key factors here include not only safety aspects, but also business advantages for the logistics industry.

Forecast for the business development in 2019

Sales revenues

The First Sensor Group achieved sales of €155.1 million in the fiscal year 2018, in line with the corridor provided in the guidance. In the same period, profitability also increased, and was with an EBIT margin of 7.9% in the expected range.

In fiscal year 2019, First Sensor expects the strategy for profitable growth to continue taking effect. After sampling new customer-specific solutions for key customers, they are being taken into series production and becoming standard products with greater volumes. In addition, as a result of organizational changes, the business in Asia and North America is being strengthened further, which should result in an initial impact on sales as soon as in 2019.

For 2019, First Sensor thus anticipates sales of between €160 million and €170 million. This planning is the result of a bottom-up process that subsequently undergoes an intensive plausibility check, taking account of general economic conditions and markets, the applications, products and customers, and thus represents a real-case scenario. By systematically implementing our strategy, we aim to achieve the target of annual growth rates of around 10% in the medium term.

Industrial

As a result of their high precision and reliability, demand for First Sensor Photonic products is increasing. More and more applications are being added in the aerospace industries and for unmanned vehicles, such as drones, where the highest possible requirements on reliability under extreme conditions must be met. What is more, on the basis of their short response times, high reaction sensitivities and the large dynamic range, First Sensor products are being used in fully automatic industrial environment perception. This will form an important element of the LiDAR sales in the First Sensor Group. First Sensor is also experiencing high demand for MEMS-based pressure sensors and transmitters and has developed a customized multi-sensor system that is going into series production.

Medical

In 2018, in the Medical target market First Sensor concluded agreements for period over several years with new and existing customers for pressure sensors such as the H series. On the basis of the considerably expanded capacity in chip production and packaging and as a result of the qualification of a contract manufacturer in Eastern Europe, there will be a considerable sales contribution as early as 2019. For Photonics a key customer in imaging diagnostic equipment has registered increased volume requirements. In addition, as a result of successful design-ins in recent years, series ramp-ups for new products are scheduled for 2019.

Mobility

Compared with the previous year, in the Mobility target market, First Sensor moved into fiscal year 2019 with a high order backlog, in line with planning. On the basis of framework agreements in the area of pressure sensor technology as well as new LiDAR and camera project ramp-ups in the field of photonics, the objective is again to generate positive growth in the current fiscal year. However, due to the ongoing geopolitical conflicts and more stringent emission regulations, the year 2019 is another year of business challenges for the automobile industry. At the same time, the general slowing of economic growth could result in higher levels of consumer restraint when buying a car.

Earnings

First Sensor anticipates that from a further sales upturn it will be able to generate and leverage economies of scale, at the same time further improving efficiency and productivity. On this basis, the EBIT margin is expected to again improve against 2018 and achieve a sales revenue of €160-170 million as well as a target figure of 8.5% to 9.5% in fiscal year 2019. This planning is the result of a bottom-up process that subsequently undergoes an intensive plausibility check and thus represents a real-case scenario. The planning does not include EBIT effects from any possible acquisitions.

Fiscal year 2018 and guidance 2019	**2018**	**Guidance 2019**
Sales in € million	155.1	**160 - 170**
EBIT-margin [%]	7.9	**8.5 – 9.5**

Financial position and net assets

For fiscal year 2019, investments are planned at a similar level to depreciation and amortization at around €10 million. Part of this is attributable to shifts from the previous year. The investments will focus on the production facilities in order to expand capacity, modernize existing facilities, and achieve improvements in efficiency. To help finance these investments, a loan is to be used which was provided in 2018 under a KfW digitalization and innovation program.

Based on further solid free cash flow, cash and cash equivalents will increase slightly again over the course of 2019. We will use part of this liquidity to repay a promissory note loan of €12 million from 2013 as at the end of the year.

On the basis of optimized inventory management and a more efficient design of the production process, a further buildup of inventories is to be limited.

Overall statement

With the strategic preparations for profitable growth and our measures for operational excellence, we have established the conditions for another successful year for the First Sensor Group in fiscal year 2019. At the same time, the aim is to observe the impact of the muted global economic expectations and the ongoing unsolved geopolitical challenges in the automobile industry and to align the company accordingly. In this context, for 2019, we expect sales between €160 million and €170 million and an EBIT margin between 8.5% and 9.5%. The medium-term target remains sales growth of 10% per year and an EBIT margin of 10% in 2020.

Report on risks and opportunities

In this report, risks and opportunities refer to influences or events that make it likely that the short and medium-term corporate development exceeds or falls short of the management's objectives. The goal of opportunity management is to recognize such opportunities at an early stage and pursue them in a targeted manner, while risk management aims to ensure not only that risks are identified in good time, but also that countermeasures can be taken promptly in order to control the impact on the company and minimize it where necessary.

Risk management system

First Sensor AG and its subsidiaries are exposed to a range of risks in the course of their business activity that are inextricably linked to their business actions. This can have a negative impact on the assets, financial and earnings situation. Handling risks carefully is therefore a fundamental part of responsible corporate governance. Active risk awareness, an open risk culture and an effective risk management system are therefore necessary to ensure short and long-term success of the company.

Risk and compliance management are closely linked together and form an integral part of corporate governance at First Sensor. The Executive Board is responsible for the Enterprise Risk Management (ERM) system, which is used to analyze the risk and compliance situation regularly and assess, manage and control the risks identified. The ERM system is managed by the Business Processes, Risk Management & Compliance central unit in close cooperation with the management of the operating units. This includes all companies, locations, and business divisions. The Supervisory Board is kept regularly informed regarding the company's risk situation in a structured process and monitors the effectiveness of the ERM system within this framework. The ERM system at First Sensor supports both the effective management of corporate risks as well as implementation of and compliance with the ethical principles of corporate governance (Code of Conduct) and statutory provisions that drive the Group's business.

Targets and strategies

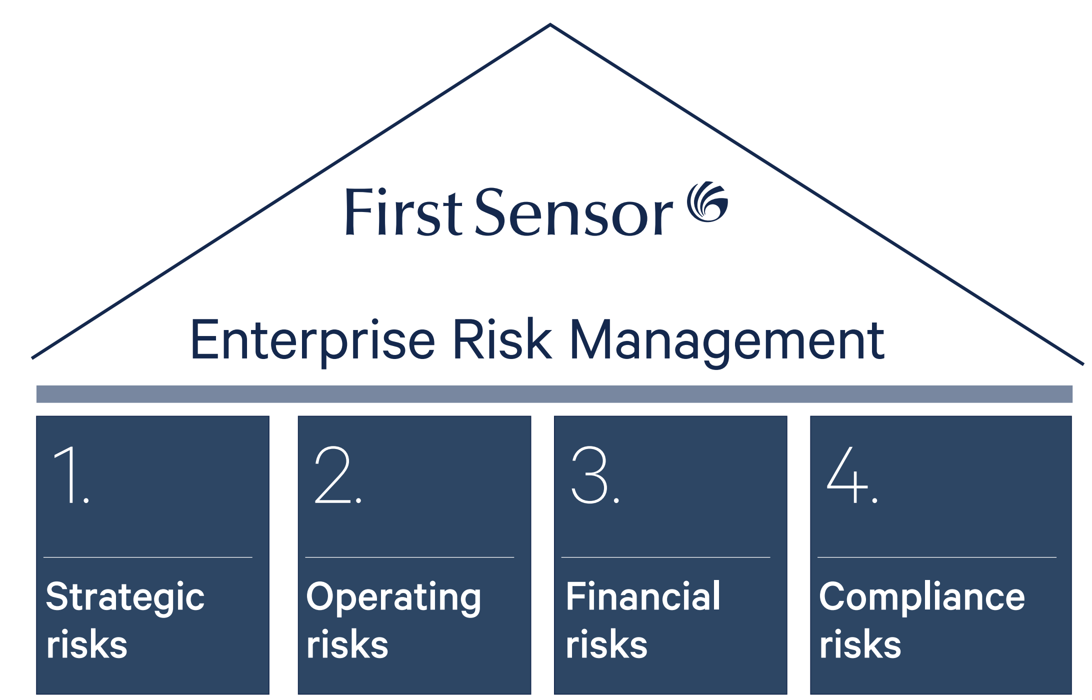
The most important goal of risk and compliance management is to identify potential risks at an early stage, to make a reliable assessment of their probability of occurrence and their possible impact on business performance, to manage them and to reasonably limit them as far as possible. At the same time, opportunities for success are to be utilized, unless their risk content exceeds an appropriate level. On this basis, the risks are managed by appropriate measures in accordance with the First Sensor Group's corporate strategy.

Various strategies are pursued depending on the risk assessment. Risks that could be seriously detrimental to the company's development or would even pose a threat to its continued existence are avoided as fully and consistently as possible. The impact of less significant risks is mitigated. For example, specific maximum values are prescribed for this, regular and systematic checks are carried out and/or the rigorous separation of functions is ensured. Risks are outsourced where possible or expedient, for example to insurers or suppliers. We enter into other risks in a conscious and controlled manner.

Structures and processes

Enterprise Risk Management structures and processes are standardized throughout the Group. They are based on the newly-introduced so-called First Sensor Risk House based on the COSO ERM framework with its four pillars which map significant risk categories for the company and also includes compliance issues:

First Sensor Risk House:



A quarterly risk assessment is conducted within these risk categories to identify and evaluate any potential risks to which the company considers itself exposed. This is carried out on a decentralized basis and documented via appropriate reports. To this end, each reporting entity considers and assesses a large number of risk types within the risk categories. The individual reports created on this basis are then validated in the Group Business Processes, Risk Management & Compliance unit and consolidated into an overall risk situation for the Group. The result of this structured process flows into the quarterly risk report, which is communicated to the Executive Board and the Supervisory Board in writing. This information thus is integrated in the regular business analyses of the Executive Board, location and division managers and is used to derive measures.

The ERM system is supplemented by an internal control system (ICS) to actively limit the risks identified as relevant for First Sensor with appropriate control activities and check the defined control activities regularly for adequacy and effectivity. The scope and effectiveness of the system are monitored regularly and extended where necessary through new control activities in the form of guidelines or process instructions, for example. For instance, new regulations were issued last year to limit risks in the areas of supplier management, data protection, project management and financial management further or manage them more actively. This also includes the new compliance management and whistleblowing system introduced at First Sensor in January 2018 for systematically recording and processing compliance-related matters.

At the end of 2018, First Sensor began preparations for supplementing risk reporting with robust opportunity reporting. As of 2019, the Group's opportunity situation is thus also to be surveyed quarterly in a systematic process in parallel to the risk situation and evaluated within the company.

Risk assessment

Risk assessment is based on a company-specific assessment matrix, which takes into consideration the probability of occurrence and potential amount of damage of possible events and derives priorities as a result. In each case, the probability of occurrence and possible impact are weighted on a rating scale from zero to three and multiplied with each other. If the calculated risk factor is over the materiality threshold of three, measures for managing the risk are defined and its implementation is periodically monitored. The accumulated risks are allocated accordingly to the categories **"low", "medium"** or **"high".**

Probability of occurence	Rating	Potential damage per event	Rating
Very unlikely	0	None	0
Unlikely, but possible	1	<€500 thousand	1
Likely, if no countermeasures are taken	2	>€500 thousand <€2 million/and/or achievement of strategic targets is jeopardized	2
Very likely, if no countermeasures are taken	3	>€2 million and/or achievement of strategic targets is jeopardized and/or compliance with legal requirements and regulations is compromised	3

Principal risks

Principal risks (with a risk factor of three or more), which we will report on below, are defined by the Executive Board as those having an impact on the achievement of the company's goals at the time this report is being prepared and are thus relevant to decision-making for knowledgeable readers. Risks of minor significance are not listed separately.

Strategic risks

Strategic risks include macroeconomic risks, risks from markets and competition, and specific risks from products and technologies.

First Sensor currently assesses macroeconomic risks as "low". However, owing to the large number of influencing factors it is possible that the current volatility in relation to key trade-related decisions and numerous fiscal and economic challenges could lead to a sudden change in the situation. It is not currently possible, therefore, categorically to rule out negative effects on business performance. The company thus monitors risks in this area very closely. For example, a business partner analysis was conducted with reference to Brexit and measures taken to minimize the impact of various scenarios.

The company is recording increasing competitive pressure in relation to markets and competitors as well as products and technologies. However, optical sensor systems is the only sector recording risks that could pose a strategic threat for established products from the First Sensor range. These risks are chiefly countered by the active management of the product portfolio and strategic technology roadmaps that are updated regularly.

As a whole, strategic risks are classified as "medium".

Operating risks

Sales risks, development and technology risks, production risks, quality risks, purchasing and inventory risks, IT risks, and human resources risks are combined under operating risks.

The predominant risk issues in the area of development and technology continue to be manageable capacity bottlenecks as well as quality issues, while IT risks are of minor significance throughout the Group.

The human resources risks faced by the company decreased over the course of the year and are rated as "medium". The measures introduced enabled us successfully to fill numerous vacant positions in key areas of work. Deployment of temporary workers also increased on a demand-led basis, enabling us to reduce periods of high workload for employees and staff turnover. Competition for staff nevertheless remains considerable and intensifies existing risks, particularly in the area of production. In view of this, First Sensor continuously works to boost its attractiveness and prominence as an employer using various approaches, such as management training, prudent wage adjustments, active collective bargaining policies and targeted employer branding.

With regard to purchasing and inventory risks, which are also rated as "medium", First Sensor has been observing a rise in procurement times in certain parts categories for some time now. This also includes electronic components for some key products. The anticipated Brexit has the potential to intensify this situation in individual cases. The company is responding to this with a bundle of short and long-term measures. These include building up safety stocks of critical parts on a needs-oriented basis as well as optimizing contracts with customers and suppliers. However, supply bottlenecks cannot be ruled out in individual cases.

As regards production and sales risks, First Sensor remains confronted with major challenges that are partly influenced by the aforementioned risks and require increased attention at several locations despite the successful expansion of production capacity.

Optimization of the new ERP system introduced at three further locations at the end of 2017/beginning of 2018 therefore continues to commit significant resources in certain areas. The continuing increase in demand from existing customers may lead to longer delivery times. We are continuously reducing these risks through active cooperation with our customers, continued tight-knit incorporation of management and numerous other activities in the aforementioned areas of operating risk. The ongoing targeted insourcing and outsourcing of specific processes continues increasingly to help us react more flexibly to relevant peaks in demand or supply bottlenecks.

The key sales risk is the fact that a total of 20.8% of consolidated sales (previous year: 21.5%) are generated with the three biggest customers, and the biggest customer accounts for 9.5% of sales (previous year: 9.0%). If these customers were to change their order behavior or switch to a different supplier, this may in principle have a significant impact on corporate sales. We consider this risk to be limited overall due to longstanding close relationships with our key customers and supply agreements that generally cover several years. Key market developments are also monitored as part of risk management and the Sales department maintains close dialog with customers so as to manage the relevant risks as far as possible. For these reasons and thanks to its broad positioning the company does not expect the current sales trends in the mobility sector, for example, to have a major impact on the total sales of the Group in the 2019 fiscal year.

Overall, the risks specified above are rated as "medium to high".

Financial risks

Risks from the accounting process and financial reporting, liquidity and exchange rate risks, working capital risks and insurance and liability risks are combined in the financial risks category.

At First Sensor, derivative financial instruments are solely used for hedging interest rate and exchange rate risks and are subject to strict internal requirements. Interest rate swaps existed in the 2018 fiscal year to hedge interest rate risks in connection with the promissory note loans issued. Detailed information can also be found in item 33 of the notes to the consolidated financial statements. The default risk arising from the financial instruments is countered by ensuring that they are concluded solely with banks with a good to very good credit rating. The exchange rate risks, financial liabilities and financial assets are regularly reported to the Executive Board and are subject to a check.

In the area of intangible assets, First Sensor has internally generated intangible assets (€6.1 million) and goodwill of €29.8 million. These are tested for impairment on a regular basis (see notes for details). With respect to own work capitalized, risks primarily relate to the possibility that development projects may not reach market maturity and the forecast income therefore may not be generated. If the economic environment were to deteriorate significantly and/or the reference interest rate to rise substantially, the risk of impairment losses on goodwill could generally increase. The first signs of economic slowdown have been observed and there is the risk that this could generally affect business performance in the coming year. The Executive Board took account of this as far as possible when formulating its sales forecast and guidance for 2019. However, in the opinion of the Executive Board there is currently no significant risk of impairment losses in this connection.

Due to the internal control system, the risk profile for financial risks continued to decrease overall in 2018. The ongoing centralization of financial accounting and the associated standardization of processes and responsibilities are further reducing process-related risks. At Group level, the solid balance sheet ratios and the comfortable financial resources position result in a low liquidity risk. Exchange rate risks that are not already offset by a natural hedge are hedged to an appropriate extent and by instruments customary on the market. These instruments are selected on the basis of the forecast net exposure and the company's ability to bear risks. Errors cannot be completely ruled out here. Careful working capital management and hedging on the basis of accounting measures reduce the risk situation. In this context, First Sensor's insurance portfolio also underwent a critical appraisal and some insurance policies, including for product liability and aerospace insurance, were subsequently extended.

The aforementioned risks thus continue to be rated as "low".

Accounting-related internal control system

The goal of the accounting-related internal control system is to ensure reliable and transparent financial reporting as part of the general ICS at First Sensor AG. In order to achieve this goal, First Sensor implemented appropriate structures, processes, and checks. These aim to ensure that the results of the accounting process are free of errors and available on schedule. Secondarily, the ICS also serves to help ensure efficient management, to safeguard assets, and to prevent or detect criminal offenses and errors. Consequently, all Group companies and operational business processes that generate significant information for the preparation of the consolidated financial statements are included in the ICS.

The accounting-related ICS is developed by the Executive Board and its effectiveness is monitored by the Supervisory Board. It consists of different elements, including guidelines and procedural instructions, such as the Group Financial Manual, the Accounting Manual, the Financial Risk Management Directive or the Approval and Signature Directive. These are supplemented by other general procedural instructions on topics such as the calculation of production-related costs or intercompany charges. These ICS components are accompanied by further checks which examine and validate data relevant to the financial statements at different points. By implementing such checks we are ensuring with the greatest possible certainty that the (consolidated) financial statements are prepared in accordance with the regulations. This includes monthly standardized controlling reports of all Group companies and locations supplemented with target-actual deviation analyses with recommendations for action by Corporate Controlling and monthly business review meetings between the location and division officers and the Executive Board. The Group companies prepare their financial statements on a decentralized basis in accordance with the local legal requirements. Uniform reporting structures are ensured by means of standardized notification formats, IT systems, and IT-based consolidation processes. Together with the financial reporting calendar that is applicable throughout the Group, the process of uniform, correct consolidated accounting in accordance with IFRS forms the basis for the process of preparing the financial statements. In addition, significant local financial statements are initially comprehensively internally examined at the end of the fiscal year before being released for the consolidated financial statements. No tasks are performed by external service providers in the context of preparing the consolidated financial statements. In addition to this, random spot checks and plausibility analyses are carried out at location and Group level on a monthly basis, accompanied by compliance audits. Head office also has access to all the accounting systems and bank accounts within the Group at all times. The Executive Board is kept informed regarding the results of these checks on an ongoing basis. The expected accounting results are compared with the actual results during the course of monthly deviation analyses with the business units. This ensures that the Executive Board can decide on measures at an early stage where necessary to ensure our business success is realized as planned.

Within the scope of the regular checks of the effectiveness of the system, the existing guidelines and work and procedural instructions of the ICS were supplemented further in fiscal year 2018. This includes the Financial Risk Management Directive, which defines clear premises and limits for the use of financial instruments, for example. This ensures that risks are managed in a more structured way and the efficiency and transparency of financial reporting is further increased. Following the introduction of a new ERP system at three further branches in January 2018, an external process and ICS audit, relating to chosen processes, were also carried out at the company's head office in November to serve as an example. The auditors certify that following the change of system First Sensor continues to have a "largely very well-developed internal control system, resulting in only a minor financial risk". The ongoing development and amendment of the accounting-related ICS contribute to guaranteeing that the accounting is reliable and will also continue to improve. However, even appropriate and functional systems cannot guarantee with absolute certainty that risks will be identified and managed.

Regulatory risks

Regulatory risks include political and legal risks as well as compliance-related risks. The compliance management system is therefore an integral part of Enterprise Risk Management at First Sensor. It contributes to the fact that binding rules at the company are known and that infringements are identified in good time. Reports of risks and infringements may also be given anonymously via an external ombudsman (legal council). In the past fiscal year, one case was reported that led to adequate measures.

Within the area of compliance-related risks the company attributes particular significance to export controls. Therefore, additional process instructions, accompanied by in-depth training, were introduced in the 2018 fiscal year to take account of product and country-specific aspects. Data protection was also placed on a new standardized footing in line with the introduction of the EU General Data Protection Regulation in May 2018.

Based on the reasons above, these risks are classified as "low".

Summary of the risk situation

In the opinion of the Executive Board, the risks to which First Sensor is exposed at the time this report is being prepared and for the current planning period are manageable. The present trade-related and financial uncertainties as well as economic risks and their potential impact on the business activities of the Group are subject to close monitoring. We cannot rule out the possibility that they will affect business performance in 2019 and subsequent years. The Executive Board thus took detailed and appropriate account of these risks when formulating its guidance for 2019. In any event, the Executive Board does not consider the continued existence of the Group to be threatened in any way. Despite the comprehensive analysis of risks, their occurrence cannot be completely ruled out.

Opportunity management system

As is the case with risks, opportunities within the Group are also systematically identified, transparently documented and incorporated in business decisions. They represent possible future developments or events that may lead to a positive deviation from forecasts or targets for the company. As with risks, First Sensor differentiates between opportunities based on whether they are of a strategic, operating, financial or regulatory nature.

Strategic opportunities

First Sensor pursues a buy-and-build strategy. If the strategy for profitable growth identifies attractive targets that lead to an acquisition, this may result in additional impetus for sales and earnings.

Operating opportunities

First Sensor operates in growing markets in which new technologies and digitalization are currently ushering in a new era for industry, medical technology and the automotive industry. This opens up new fields of application such as predictive maintenance, e-health and autonomous driving, for example, which may reach significant market volumes faster than expected and could thus lead to additional sales. This also applies to the use of avalanche photodiodes for LiDAR applications in industry and the automotive sector, for which First Sensor is the market leader.

Many customers have concluded framework agreements with terms of one to two years which guarantee purchase volumes while at the same time also defining purchase variances. As positive purchase variances do not flow into operational planning, this may give rise to opportunities for additional contributions to sales.

In the last fiscal year First Sensor also succeeded in initiating a large number of new business opportunities for developing and producing customer-specific solutions for which sampling has already begun or will shortly begin. A sampling process comprises different phases, although the overall duration varies. Therefore, sampling processes that conclude with an order earlier than planned may contribute to sales as early as in the current year.

First Sensor also continues to work on further increasing production capacity through investments in new machinery, extending shift operations, switching to 6-inch production, and targeted outsourcing. If individual measures are realized faster than planned, this could lead to an increase in monthly production volumes and thus to more sales.

Unplanned increased sales would always also have a positive impact on profitability due to economies of scale. Furthermore, under the general term of operational excellence First Sensor is working to optimize a host of processes and structures such as reduction of delivery times, further enhancement of production quality and IT-based professionalization of project management. If these projects take effect faster than planned or if the extent of the planned optimizations is significantly exceeded, the earnings forecast could prove to be too low.

Financial opportunities

First Sensor will further improve working capital management through various measures and simplification of processes, for example in the area of receivables management. Additional guidelines that are currently in preparation will enable an even higher level of transparency as regards the company's value streams in the future and further improve the management of profitability.

Regulatory opportunities

As current trade disputes are settled, further as yet unplanned sales opportunities may arise if uncertainties with regard to tariffs and market access are resolved. This relates, in particular, to US-Chinese economic relations as well as those between the EU and the US.

Summary of the opportunity situation

First Sensor is well positioned to systematically take advantage of opportunities in the Group's strategic target markets with its products and internal measures. Although the company is working purposefully to tap into these opportunities, it is generally unlikely that we will be able to achieve peak success here in the short term. We attach great importance to quarterly reporting to enable our shareholders to participate in this progress in a transparent and timely manner.

Takeover Related Disclosures in Accordance With Sections 289a (1) and 315A (1) HGB

1. Composition of subscribed capital

The composition of subscribed capital is presented in section 11 of the notes. All shares grant identical rights in accordance with the AktG (German Stock Corporation Act).

2. Restrictions affecting voting rights or the transfer of shares

The company's Executive Board is not aware of any restrictions affecting voting rights or the transfer of shares. Otherwise only the statutory provisions in accordance with section 136 (1) AktG and trading bans in accordance with Article 19 (11) MAR apply, especially to members of the Executive Board.

3. Direct interests in the company's share capital of more than 10%

Disclosures on direct or indirect interests in the share capital exceeding 10% of the voting rights can be found in section 34 of the Notes.

4. Holders of shares with special rights conferring control powers

There are no shares with special rights, in particular, no shares conferring control powers.

5. Type of voting right control when employees hold an interest in the share capital and do not exercise their controlling rights directly

Employees who hold an interest in the share capital exercise their voting rights directly.

6. Statutory provisions and Articles of Association concerning the nomination and dismissal of executive board members and amendments to the Articles of Association

Statutory provisions apply concerning the nomination and dismissal of executive board members (sections 84 and 85 AktG) and amendments to the Articles of Association (section 179 AktG).

7. Authorization of the Executive Board to issue shares and repurchase shares

The Executive Board is authorized to increase the company's share capital by up to €25,379,150 by issuing up to 5,075,830 new bearer shares (Authorized Capital 2015/I) up to May 27, 2020, with the approval of the Supervisory Board, in one or more transactions.

Furthermore, the Executive Board is authorized to issue convertible or option bonds with a nominal value of up to €90.0 million up to May 23, 2022 and grant their bearers up to 3.8 million shares with an amount in the share capital of up to €19.0 million (Contingent capital 2017/II).

The capital is also conditionally increased for issuing stock options to the Executive Board and managers. Details of the share option plans can be found in section 18 of the notes.

The Executive Board is authorized to acquire treasury shares up to a maximum of 10% of the share capital. No use has been made of this authorization to date.

8. Agreements that are subject to the condition of a change of control

The company has no significant agreements that are subject to the condition of a change of control as a result of a takeover bid.

9. Agreements on compensation in the event of a takeover bid

In the event of a change of control at First Sensor AG, the payment of a cash component limited in amount to the members of the Executive Board is provided if the respective member resigns within one month of the change of control.

Other Declarations

The declaration of compliance pursuant to Article 161 AktG (German Stock Corporation Act) and the declaration of business management pursuant to Article 289a HGB (German Commercial Code) are permanently available in the Investor Relations/Corporate Governance section of the company's website at www.first-sensor.com.

The consolidated management report contains statements relating to the future. The actual results may deviate materially from expectations regarding probable development, if one of the uncertainties mentioned or other uncertainties occur or the assumptions on which the statements are based prove to be inaccurate.

Berlin, March 11, 2019
First Sensor AG

Dr. Dirk Rothweiler
CEO

Dr. Mathias Gollwitzer
CFO

Financial Statement

Consolidated Balance Sheet (IFRS)

ASSETS

In € thousand	Notes	Dec. 31, 2017	Dec. 31, 2018	Changes
Intangible assets	(3)	13,984	11,248	-2,736
Internally-generated intangible assets	(4)	5,107	6,121	1,014
Goodwill	(5)	29,816	29,816	0
Property, plant and equipment	(6)	36,443	38,696	2,253
Total non-current assets		**85,350**	**85,881**	**531**
Inventories	(7)	24,626	32,194	7,568
Trade accounts receivables	(8)	20,765	17,885	-2,880
Tax refund claims		11	1,122	1,111
Other current assets	(9)	3,320	2,767	-553
Cash and cash equivalents	(10)	25,505	28,534	3,029
Total current assets		**74,227**	**82,502**	**8,275**
Total ASSET		**159,577**	**168,383**	**8,806**

EQUITY AND LIABILITIES

In € thousand	Notes	Dec. 31, 2017	Dec. 31, 2018	Changes
Share capital	(11)	51,082	51,112	30
Capital reserves	(12)	16,863	17,234	371
Revenue reserves	(12)	1,004	1,004	0
Currency translation	(12)	-552	19	571
Revaluation reserves	(12)	-38	-29	9
Retained earnings		12,363	18,125	5,762
Minority interest		1,177	1,302	125
Total equity		**81,899**	**88,767**	**6,868**
Non-current post-employment benefit obligation	(13)	277	272	-5
Other non-current provisions	(14)	0	0	0
Long-term loans, excluding current portion	(15)	32,184	44,111	11,927
Other non-current liabilities	(16)	3,537	3,512	-25
Deferred tax liabilities	(26)	3,913	3,452	-461
Total non-current liabilities		**39,911**	**51,347**	**11,436**
Income tax provisions and liabilities		1,415	2,469	1,054
Other current provisions	(14)	1,259	1,091	-168
Short-term loans and current portion of long-term loans	(15)	16,115	3,891	-12,224
Payments received on account of orders		401	266	-135
Trade accounts payables		7,885	12,558	4,673
Other current liabilities	(17)	10,692	7,994	-2,698
Total current liabilities		**37,767**	**28,269**	**-9,498**
Total EQUITY AND LIABILITIE		**159,577**	**168,383**	**8,806**

Consolidated Statement of Comprehensive Income (IFRS)

CONSOLIDATED INCOME STATEMENT

In € thousand	Notes	Jan. 1 – Dec. 31, 2017	Jan. 1 – Dec. 31, 2018	Changes
Sales revenues	(19)	147,500	155,148	7,648
Other operating income	(20)	3,331	2,590	-741
Changes in inventories in finished goods and work-in-progress	(21)	-1,485	4,471	5,956
Other own work capitalized	(22)	2,507	1,965	-542
Cost of material and purchased services	(23)	-69,314	-76,095	-6,781
Personnel expenses	(24)	-46,586	-49,049	-2,463
Other operating expenses	(25)	-16,315	-17,775	-1,460
Profit from operations (EBITDA)		**19,638**	**21,255**	**1,617**
Depreciation of property, plant and equipment and amortization of intangible assets		-9,084	-9,025	59
Earnings before interest and tax (EBIT)		**10,554**	**12,230**	**1,676**
Interest income		62	37	-25
Interest expenses		-1,915	-1,653	262
Currency gains		398	665	267
Currency losses		-1,948	-891	1,057
Income before tax and minority interest		**7,151**	**10,388**	**3,237**
Income tax expenses	(26)	-2,778	-2,867	-89
Net profit/loss for the period		**4,373**	**7,521**	**3,148**
Net profit/loss for the period attributable to First Sensor AG shareholders		4,131	7,396	3,265
Net profit/loss for the period attributable to minority interest		242	125	-117
Earnings per share in € (basic=diluted)	**(27)**	**0.40**	**0.72**	**0.32**

OTHER COMPREHENSIVE INCOME

In € thousand	Jan. 1 – Dec. 31, 2017	Jan. 1 – Dec. 31, 2018	Changes
Net profit/loss for the period	**4,373**	**7,521**	**3,148**
Actuarial gains and losses on defined benefit plans	-7	-16	-9
Taxes on other comprehensive income	2	5	3
Items not subsequently reclassified to the income statement	**-5**	**-11**	**-6**
Changes from currency translation	-444	571	1,015
Revaluation of derivative financial instruments	449	28	-421
Taxes on other comprehensive income	-135	-8	127
Items that can be subsequently reclassified to the income statement	**-130**	**591**	**721**
Total comprehensive income	**4,238**	**8,101**	**3,863**
Thereof attributable to First Sensor AG shareholders	3,996	7,976	3,980
Thereof attributable to minority interes	242	125	-117

Consolidated Statement of Changes in Equity (IFRS)

In € thousand	Number of shares in thou.	Capital stock	Capital reserves	Revenue reserves	Currency translation	Revaluation reserves	Retained earnings	Minority interest	Total share-holders' equity
As at January 01, 2017	**10,208**	**51,042**	**16,707**	**1,004**	**-108**	**-347**	**8,232**	**935**	**77,465**
Net profit/loss for the period	0	0	0	0	0	00	4,131	242	**4,373**
Other comprehensive income	0	0	0	0	-444	309	0	0	**-135**
Total comprehensive income	**0**	**0**	**0**	**0**	**-444**	**309**	**4,131**	**242**	**4,238**
Share-based remuneration	0	0	140	0	0	0	0	0	**140**
Capital increase	8	40	16	0	0	0	0	0	**56**
Appropriation of earnings	0	0	0	0	0	0	0	0	**0**
As at December 31, 2017	**10,216**	**51,082**	**16,863**	**1,004**	**-552**	**-38**	**12,363**	**1,177**	**81,899**

In € thousand	Number of shares in thou.	Capital stock	Capital reserves	Revenue reserves	Currency translation	Revaluation reserves	Retained earnings	Minority interest	Total share-holders' equity
As at January 01, 2018	**10,216**	**51,082**	**16,863**	**1,004**	**-552**	**-38**	**12,363**	**1,177**	**81,899**
Net profit/loss for the period	0	0	0	0	0	00	7,397	125	**7,522**
Other comprehensive income	0	0	0	0	571	9	0	0	**580**
Total comprehensive income	**0**	**0**	**0**	**0**	**571**	**9**	**7,397**	**125**	**8,102**
Share-based remuneration	0	0	311	0	0	0	0	0	**311**
Capital increase	6	30	60	0	0	0	0	0	**90**
Appropriation of earnings	0	0	0	0	0	0	-1,635	0	**-1,635**
As at December 31, 2018	**10,222**	**51,112**	**17,234**	**1,004**	**19**	**-29**	**18,125**	**1,302**	**88,767**

Consolidated Statement of Cash Flow (IFRS)

In € thousand	Jan. 1 – Dec. 31, 2017	Jan. 1 – Dec. 31, 2018	Changes
Income before tax and minority interest	**7,151**	**10,388**	**3,237**
Interest paid	1,758	1,530	-228
Depreciation of property, plant and equipment and amortization of intangible assets	9,084	9,025	-59
Income from investment grants and allowances	0	0	0
Income/loss from the disposal of fixed assets	233	184	-49
Other non-cash expenses and income	140	311	171
Changes in provisions	-291	-189	102
Changes in working capital	-1,835	-150	1,685
Changes in other assets and liabilities	2,248	-2,899	651
Income tax paid	-2,483	-2,277	206
Cash flow from operating activities	**16,005**	**15,923**	**-82**
Payments for investments in property, plant and equipment and intangible assets	-13,184	-9,799	3,385
Proceeds from disposal of property, plant and equipment, intangible assets and investments	589	91	-498
Cash received from investment grants	0	0	0
Interest received	62	37	-25
CASHFLOW AUS DER INVESTITIONSTÄTIGKEIT	**-12,533**	**-9,671**	**2,862**
Proceeds from shareholders	56	90	34
Paid dividends	0	-1,635	-1,635
Repayments for financial liabilities	-2,885	-14,382	-11,497
Proceeds from loans	2,945	14,085	11,140
Interest paid	-1,820	-1,567	253
Cash flow from financing activities	**-1,704**	**-3,409**	**-1,705**
Net change in cash and cash equivalents	**1,768**	**2,843**	**1,075**
Currency differences from converting funds	-54	186	240
Cash funds at the beginning of the financial year	**23,791**	**25,505**	**1,714**
Cash funds at the end of the financial year	**25,505**	**28,534**	**3,029**

04 Notes

1. Presentation of the Situation at the Group

Parent company

The parent company is First Sensor AG, domiciled in Berlin, Peter-Behrens-Str. 15, 12459 Berlin, and entered in the commercial register of Berlin in Department B under HRB 69326. First Sensor AG is listed in the regulated market on the Frankfurt Stock Exchange in the Prime Standard segment under ISIN DE0007201907.

First Sensor AG and its subsidiaries, referred to hereinafter as "First Sensor", operate in the sensor production and microsystems technology industries. The company's business focuses mainly on the development, manufacture and distribution of customer-specific optical and non-optical semiconductor sensors and sensor systems. First Sensor also develops and manufactures highly reliable customized hybrid circuits and products for microsystem engineering and advanced packaging.

These Consolidated Financial Statements were authorized for issue by the Supervisory Board on March 21, 2019.

Reporting principles

First Sensor's consolidated financial statements for 2018 have been prepared in accordance with the applicable International Financial Reporting Standards (IFRS) as at the balance sheet date and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) that must be applied in the European Union.

The consolidated financial statements were prepared in euro (€). Unless otherwise indicated, all amounts have been stated in thousands of euro (€ thousand). The fiscal year of First Sensor AG and its consolidated subsidiaries corresponds to the calendar year.

The statement of comprehensive income has been prepared using the nature of expense method.

To improve clarity, individual items have been summarized in the balance sheet and the statement of comprehensive income. The notes show a breakdown of these items. Rounding differences may arise.

The accounting policies are basically identical to those used in the previous year. As in the previous year, the balance sheet structure was organized according to descending maturity.

In fiscal year 2018, new standards, amendments to existing standards and new interpretations were approved.

Published standards and interpretations for which application was mandatory for the first time for IFRS financial statements as at December 31, 2018:

Amendments to standards:

- Amendments to IFRS 4 "Insurance Contracts": Consequences of first-time adoption dates for IFRS 9 and IFRS 17 (entry into force on January 1, 2018)
- Amendments to IFRS 2 "Share-based Payment": Various clarifications (entry into force on January 1, 2018)
- Amendments to IAS 40 "Investment Property": Changes in use (entry into force on January 1, 2018)
- Various amendments: IASB 2014 - 2016 Annual Improvement Project (entry into force on January 1, 2018)

New standards:

- FRS 9 "Financial Instruments" (entry into force on January 1, 2018)
- IFRS 15 "Revenue from Contracts with Customers" (entry into force on January 1, 2018)

New interpretations:

- FRIC 22 "Foreign Currency Transactions and Advance Consideration" (entry into force on January 1, 2018)

Published standards and interpretations for which application was not mandatory for IFRS financial statements as at December 31, 2018:

Amendments to standards:

- Amendments to IFRS 19 Plan Amendment, Curtailment or Settlement (entry into force on January 1, 2019) *
- Amendments to IAS 28 "Investments in Associates and Joint Ventures": Long-term Interests (entry into force on January 1, 2019) *
- Amendments to IFRS 9 "Financial Instruments": Prepayment

Features with Negative Compensation (entry into force on January 1, 2019) *
- Various amendments: IASB 2015 - 2017 Annual Improvement Project (entry into force on January 1, 2019) *
- Amendments to IFRS 3 Definition of a Business (entry into force on January 1, 2020) *
- Amendments to IFRS 1 Definition of Material (entry into force on January 1, 2020) *
- Amendments to References to the Conceptual Framework in IFRS Standards (entry into force on January 1, 2020) *

New standards:
- IFRS 16 "Leases" (entry into force on January 1, 2019)
- IFRS 17 "Insurance Contracts" (entry into force on January 1, 2021) *

New interpretations:
- IFRIC 23 "Uncertainty over Income Tax Treatments" (entry into force on January 1, 2019)

* EU endorsement not yet given.

At the present time, the company has taken into account the mandatory application of the new standards and interpretations within the EU and will continue to do so. The new provisions of IFRS 9 and IFRS 15 have no significant effects on the balance sheet and the statement of comprehensive income. The new regulations of IFRS 16 will ceteris paribus result in intangible assets and financial liabilities increasing and the equity ratio falling. In the statement of comprehensive income, other operating expenses will be lower while amortization of intangible assets and interest expenses will rise. Exact quantification of the effect is currently not possible. It is anticipated that intangible assets and financial liabilities will move up by approximately €10 million, while other operating expenses will decline by roughly €2 million. The reduction of other operating expenses is compensated largely by higher amortization of intangible assets and also by increased interest expenses. It is assumed that the financial ratios agreed in the context of loan agreements can be complied with. Some amendments and additional disclosures were required in the Notes.

Important discretionary decisions and uncertainty of estimates

In preparing the consolidated financial statements, some assumptions and estimates have been made which affected the amount and the disclosure of reported assets and liabilities, earnings and expenses. In individual cases, the actual values may deviate from these assumptions or estimates at a later stage. Relevant changes will be made once more accurate information is available. All assumptions and estimates are made to the best of our knowledge and belief in order to provide a true and fair view of the Group's net assets, financial position and results of operations.

Impairment of goodwill and non-current assets

First Sensor annually tests goodwill and other non-current assets for impairment in accordance with IAS 36. The impairment test is performed on the basis of a comparison between the carrying amount of an asset and the recoverable amount that can be generated from the asset or group of assets or the cash generating unit. The recoverable amount is the higher of the fair value less the costs to sell and the value in use.

The recoverable amount is calculated by means of a discounted cash flow analysis. The recoverable amount is calculated based on the income planning for the cash generating unit in question. The WACC was also applied as a discount factor, which reflects the weighted average cost of capital for a corresponding peer group; the cash flow was estimated in a detailed planning phase up to 2021 and then in a terminal value. The income planning is essentially based on previous experience of management expectations regarding the development of the respective cash generating unit and the relevant market. The main non-current assets to be subjected to annual impairment testing are the First Sensor Group's reported goodwill as well as intangible assets resulting from business combinations.

Share based remuneration

First Sensor has granted selected employees and board members share based remuneration. The measurement of the personnel expenses for this share based remuneration contains estimates regarding the extent to which the conditions of these options are met as well as of relevant market parameters.

2. Principles of Consolidation

Basis of consolidation

The Group's consolidated financial statements comprise First Sensor AG and the companies under its control. First Sensor AG is deemed to control those companies where it directly or indirectly holds over 50% of the voting rights of the company's subscribed capital and/or is in a position to control the financial and business policy of a company such that it profits from the company's activities.

Non-controlling interests held by third parties (minorities) are reported separately in the statement of comprehensive income and in equity in the consolidated balance sheet. Recognition under equity is presented separately from the parent shareholders' equity. When non-controlling interests are acquired, the carrying amounts for the parent shareholders and the non-controlling interests are adjusted accordingly. Any difference between the adjustment of the non-controlling interest and the received or paid contingent consideration is recognized directly in equity and allocated to the parent company equity holders.

Losses by a subsidiary are also assigned to minority interests even when this leads to a negative balance if there is a matching right to reimbursement vis-à-vis the minority interests.

The following companies were included in the consolidated financial statements as fully consolidated:

Company	Site	Core business activity	Ownership interest
First Sensor Lewicki GmbH	Oberdischingen, Deutschland	Development, microelectronic assembly and sale of components and modules; power electronics	100%
First Sensor Microelectronic Packaging GmbH	Dresden, Deutschland	Development, microelectronic assembly and sale of components and modules and sensors	100%
First Sensor Mobility GmbH	Dresden, Deutschland	Development, production and sale of microelectronic and mechanical components, modules, sensors and sensor systems	85%
First Sensor France S.A.S.	Paris, France	Sale of standard sensors and sensor solutions of the whole First Sensor Group	100%
First Sensor Inc.	Westlake Village, USA	Production of sensor modules and sensors, sale of standard sensors and sensor solutions of the whole First Sensor Group	100%
First Sensor Singapore (FSG) Pte. Ltd.	Singapore	Not operationally active	100%
Klay Instruments B.V.	Dwingeloo, Netherlands	Development, production and sale of pressure transmitters	100%
First Sensor Technics Ltd.	Shepshed, County Leicestershire, England	Sale of standard sensors and sensor solutions of the whole First Sensor Group	100%
First Sensor Corp.	Montreal, Canada	Development and production of flow sensors	100%
First Sensor Scandinavia AB	Kungens Kurva, Sweden	Sale of standard sensors and sensor solutions of the whole First Sensor Group	51%

Consolidation methods

The financial statements for the subsidiaries and affiliated companies included in the consolidated financial statements are based on uniform accounting standards and reporting periods and dates which match those of the parent company.

Internal Group balances and transactions and resulting internal Group profits and dividends between consolidated companies were eliminated in full.

Business combinations are reported according to the purchase method. The costs of a company acquisition are calculated as the total of the consideration transferred, assessed at its fair value at the acquisition date, and the non-controlling shares in the acquired company. In any business combination, the non-controlling shares in the acquired company are measured either at fair value or as the relevant proportion of identifiable net assets.

Costs incurred as a result of the business combination are recognized as expenditure. If the Group acquires a company, it assesses the appropriate classification and designation of the financial assets and liabilities assumed in accordance with the contract terms, economic conditions and the prevailing conditions at the time of the acquisition.

The agreed contingent consideration is recognized at fair value at the time of the acquisition. Subsequent changes to the fair value of a contingent consideration representing a financial asset or a financial liability are recognized in the income statement in accordance with IFRS 9. A contingent consideration classified as equity is not remeasured and its subsequent payment is accounted for as equity capital.

Upon initial recognition, goodwill is valued at cost, calculated as the surplus of the transferred consideration over the acquired identifiable assets and liabilities assumed by the Group. If this consideration is lower than the fair value of the acquired subsidiary's net worth, the difference is recognized in the statement of comprehensive income.

Following initial recognition, goodwill is valued at cost minus accumulated impairment losses. For the purposes of impairment testing, the goodwill gained from a business combination is allocated, as at the acquisition date, to the Group's cash generating units that are expected to profit from the business combination. This applies irrespective of whether other assets or liabilities of the acquired company are assigned to these cash generating units.

If goodwill has been assigned to a cash generating unit and a division of this unit is sold, the goodwill of the disposed unit is included in the calculation of the result of the sale as part of the carrying amount of the relevant division. The value of the portion of goodwill sold is determined on the basis of the relative values of the business division sold and the remaining portion of the cash generating unit.

Currency translation

The reporting currency of the First Sensor Group is euro, which is also the functional currency of the parent company. Financial statements of consolidated companies prepared in foreign currency are converted on the basis of the functional currency concept in accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates" using the modified reporting date method. As subsidiaries run their business independently from a financial, economic and organizational viewpoint, the functional currency is identical to the local currency of the company concerned.

Upon initial recognition, foreign currency transactions are translated from the foreign currency into the functional currency at the spot rate applicable on the date of the respective business transaction. Any exchange differences resulting from the settlement of monetary items or the translation of monetary items at exchange rates other than those in force at the time of initial recognition are recognized in the income statement as an expense or income.

Non-monetary items measured in a foreign currency at historical cost are translated using the exchange rate valid at the date of the transaction. Non-monetary items measured in a foreign currency at fair value are translated using the exchange rate valid at the time of the measurement of fair value.

Foreign subsidiaries

All foreign First Sensor subsidiaries included in consolidation are considered financially independent foreign units since they are financially, economically, and organizationally autonomous. Their functional currencies correspond to their local currency. The balance sheets of foreign subsidiaries are translated at the exchange rate valid on the reporting date using the rates shown below:

Exchange rates	Dec. 31, 2017	Dec. 31, 2018
US Dollar USD	1.1993	1.1450
British Pound GBP	0.8872	0.8945
Swedish Krona SEK	9.8438	10.2548
Singapore Dollar SGD	1.6024	1.5591
Canadian Dollar CAD	1.5039	1.5605

The income statements are converted at the average monthly exchange rate.

Currency translation is recognized directly in equity, i.e. all exchange differences that arise are recognized as a separate component of equity under exchange equalization items.

Cash and cash equivalents

Cash and cash equivalents include cash, term deposits with remaining terms of up to three months and sight deposits. The cash equivalents shown in the cash flow statement are defined in accordance with the company's cash management and are identical to cash.

Funds with limited availability and remaining terms of over three months are recognized under other assets.

Financial assets

Financial assets are generally broken down into the following categories:

– receivables and loans granted,
– derivatives which meet the requirements of hedge accounting,
– securities in fixed assets.

A financial asset is initially recognized at the acquisition cost, which corresponds to the fair value of the consideration; transaction costs are included. Financial assets from usual sales and purchases are recognized as at the day of trading.

Loans and receivables are non-derivative financial assets with fixed or determinable payments which are not quoted in an active market. After initial recognition, loans and receivables are measured at amortized cost applying the effective interest method minus any impairment costs. Amortized costs are calculated taking into consideration any discounts or premiums at acquisition and include all fees which are an integral part of the effective interest rate and the transaction costs.

Gains and losses are recorded in the net profit for the period if loans and receivables are derecognized or impaired as well as those resulting from amortization.

Financial assets are reviewed for impairment at the balance sheet date. When it is improbable, in the case of financial assets carried at amortized cost that the company will be able to collect all loans and receivables due under the terms of the contract, an impairment or value adjustment of the receivables is recognized in the income statement. A value adjustment previously expensed will be corrected in the income statement if the subsequent partial recovery (or reduced impairment) can be objectively measured.

However, an increase in value will be recognized only insofar as it does not exceed the amount of amortized cost.

Derecognition/impairment

Financial assets or a part of financial assets are derecognized if First Sensor loses control over the contractual rights from which the asset arises.

Recognition of derivatives which meet the requirements of hedge accounting is explained in the notes under “Derivative financial instruments”.

First Sensor assesses at the balance sheet date whether a financial asset is impaired. If there is objective evidence of impairment on loans and receivables recognized at amortized cost, the amount of the loss is determined as the difference between the carrying amount of the asset and the cash value of expected future cash flows (excluding future credit losses that have not been incurred), discounted at the financial asset's original effective interest rate (i.e. the interest rate originally recognized).

The carrying amount of the asset is then either reduced directly or an allowance account is used. The amount of the loss is recognized in the income statement. First Sensor first assesses whether there is objective evidence of impairment of financial assets that are significant. It then assesses whether there is objective evidence of impairment of financial assets that are not significant, individually or collectively. If the Group determines that in the case of a financial asset assessed individually, whether significant or not, there is no objective evidence of impairment, it includes this asset in a group of financial assets with a similar default risk profile and examines them collectively for impairment. Assets individually assessed for impairment and for which an impairment loss is or continues to be recognized are not included in a collective impairment assessment.

Offsetting

Financial assets and liabilities are offset so only the net amount is reported in the balance sheet. This only happens if there is a legal right to offset the recorded amounts with each other at the present time and if the intention is to effect compensation on a net basis or to redeem the liability associated with the asset in question at the same time it is realized.

Fair value

The fair value of financial instruments traded on active markets is determined by the market price quoted on the reporting date or the publicly quoted price (bid price for long positions and asking price for short positions) without any deduction for transaction costs.

The fair value of financial instruments not traded on any active market is determined using valuation measurement methods.

Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow methods and other valuation models.

Please refer to "Derivative financial instruments" in the notes for an analysis of the fair values of financial instruments and other details of how financial instruments are valued.

The company assumes that the fair values of financial assets and financial liabilities essentially correspond to their carrying amounts.

The net result for financial assets and liabilities amounted to €-184 thousand for the fiscal year (previous year: €-1,609 thousand). The negative net result in the previous year was essentially the result of closing out early three foreign exchange derivatives and one interest rate swap.

Inventories

Materials and other supplies held for use in the production of inventories are measured at cost and not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. Sale costs still to be incurred are also taken into account. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realizable value, the materials are written down to net realizable value.

Work in progress and finished goods are valued at cost or at the market value if lower. Manufacturing costs comprise direct personnel costs, costs of materials and the attributable portion of production overheads. They are determined using cost unit accounting. Interest on borrowing is not capitalized. Obsolete articles and those with low turnover are adjusted in value appropriately.

The values of any identified excess capacity are adjusted as part of marketability and inventory range analyses.

Property, plant, and equipment

Tangible assets are accounted for at cost less accumulated amortization.

Interest on borrowing, which can be assigned directly to the acquisition, construction or manufacture of a qualified asset, are capitalized. No interest on borrowing was capitalized in the last fiscal year. On disposals of tangible assets, their historical cost and accumulated amortization are derecognized and a gain or loss from the disposal of the asset is recognized in the income statement.

Scheduled amortization is recognized over the following useful lives in accordance with the straight line method:

Buildings	25 – 33 years
Office equipment	1 – 15 years

The useful lives and amortization method are reviewed regularly to ensure the economic benefit matches the period of amortization.

Plants under construction are capitalized at cost and amortized from completion and commissioning. Cost includes the production-related full costs. These include production costs and production overheads, which were caused in connection with the construction of plants through work performed by the Group's own employees.

Intangible assets

Intangible assets are capitalized by First Sensor if:
- as a result of past events, the company retains beneficial ownership of the asset,
- it is to be assumed that the company will continue to have beneficial ownership of this asset in the future,
- the asset costs can be reliably measured.

This is the method applied when intangible assets are acquired externally. Internally generated intangible assets are measured at the directly attributable development costs if all the requirements of IAS 38 are met. Overheads necessary to generate the asset and that can be directly attributed to it are also capitalized. Capitalization ceases once the product is completed and available for general use.

The following six requirements must be met for capitalizing development costs under IAS 38.57 and have been met in full in the present cases:
- Technical feasibility of completing the asset exists so that it will be available for internal use and/or sale.
- The intention is to complete the intangible asset, use or sell it.
- The ability exists to use or sell the intangible asset.
- There is evidence of the expected future economic benefit.
- Adequate technical, financial, and other resources are available to complete the development and to use or sell the intangible asset.
- The company is able to measure reliably the expenditure attributable to the intangible asset during its development.

Furthermore, acquired developments (manufacturing expertise) are recognized as intangible assets if they can be measured reliably and the company controls exploitation of the results of these development projects.

Intangible assets subject to wear and tear are recognized at cost minus accumulated depreciation and accumulated impairments. Intangible assets not subject to wear and tear (goodwill) are recognized at cost minus accumulated impairment losses. According to IAS 38, intangible assets subject to wear and tear are amortized uniformly over the estimated useful life. The amortization period starts as soon as the asset can be used. The amortization period and amortization schedule are reviewed annually at the end of the fiscal year.

(a) Software
Software is capitalized at cost and reported as an intangible asset provided this cost does not constitute an integral part of the associated hardware. Software is amortized over a period of three to five years using the straight-line method.

(b) Goodwill
On initial recognition, goodwill is measured at cost. The cost is calculated as the excess of the consideration received and the amount of the non-controlling interest over the acquired identifiable assets and liabilities assumed by the Group.

Irrespective of whether any indication of impairment exists, the recoverable amount for the cash generating unit (CGU) to which the goodwill applies is calculated annually. If the carrying amount exceeds the recoverable amount, a valuation allowance is recognized. If the recoverable amount is only 10% more than the carrying amount, the theoretical potential for valuation allowances is calculated in a sensitivity analysis. To do this, the underlying earnings before interest and tax (EBIT) are reduced by 10% and the risk-free basic interest rate is raised by 1 percentage point, and the effects on capitalized goodwill are calculated.

(c) Research and development costs
Expenditure on research and development activities is recognized in income in the period in which it is incurred unless the requirements of IAS 38 can be demonstrated in the case of development costs.

(d) Developments
First Sensor has acquired development work as part of one of its acquisitions. This is subject to scheduled amortization over 20 years. Amortization is taken when marketing the development starts.

(e) Brands
Identified assets were acquired in the form of brands as part of the acquisition of the Sensortechnics Group. The Klay brand is not subject to scheduled amortization because it has no defined useful life. The Sensortechnics and ELBAU brands were written off in full as at December 31, 2015, since both brand names are no longer used as a result of concentrating on the "First Sensor" umbrella brand.

(f) Customer base
Customer bases have been acquired as a result of the acquisition of the Sensortechnics Group and have been recognized as intangible assets. Customer bases are amortized on a straight-line basis over an expected useful life of 6 to 10 years.

(g) Impairment of non-current assets
Property, plant and equipment and intangible assets are tested for potential impairment if, owing to events or changes in external circumstances, there are indications that the recoverable value for the asset at the balance sheet date will remain less than its carrying amount, or if annual impairment tests are required (goodwill and intangible assets unused to date). If the carrying amount of an asset exceeds the lower fair value, impairment is recognized with respect to property, plant and equipment and intangible assets reported at cost. The recoverable amount is the higher of the fair value less the costs to sell and the value in use. The fair value less costs to sell is the amount that can be achieved by sale of the asset in a normal transaction between knowledgeable parties.

The value in use is the present value of estimated future cash flows expected to arise from continuing use of an asset and from its disposal at the end of its useful life. The recoverable amount of each individual asset must be estimated or, if this is not possible, for the smallest identifiable cash generating unit.

Provisions

In accordance with IAS 37, provisions are reported for obligations with respect to which the timing or amount are uncertain. Provisions should be recognized when, and only when:
- the company has a present obligation (legal or constructive) as a result of a past event;
- it is probable (i.e. more likely than not) that an outflow of resources embodying economic benefit will be required to settle the obligation and
- a reliable estimate can be made of the amount of the obligation

The amount recognized as a provision should be the best estimate of the expenditure required to settle the present obligation at the balance sheet date, in other words, the amount the company would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party.

Non-current provisions are discounted at a pre-tax interest rate provided that the effect of discounting is significant. If provisions are discounted, the increase in the provision with the passage of time is reported as financial expenditure.

Liabilities relating to a potential obligation resulting from a past event and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise are reported in the Notes as contingent liabilities. Contingent liabilities may also result from a current obligation related to past events but not recorded, because:

- it is not probable that an outflow of resources embodying economic benefits will be required to settle this obligation; or
- the amount of the obligation can be estimated sufficiently reliably.

Financial liabilities

Financial liabilities are categorized as follows:

- financial liabilities held for trading
- other financial liabilities.

The financial liabilities reported in the First Sensor consolidated financial statements were classified as other financial liabilities.

A financial liability is initially recognized at cost, which is the fair value of the consideration given; transaction costs are included. After initial recognition, interest bearing loans are measured at amortized cost using the effective interest method. Gains or losses resulting from amortization or derecognition are recognized in the income statement using the effective interest method.

Financial liabilities are no longer reported once they have been settled, i.e. once contractual obligations have been settled, cancelled or have expired.

Employee benefits

Defined contribution plans

Defined contribution plans exist for executive board members, directors and senior employees. These are pension commitments in an intercompany provident fund. The company pays fixed monthly amounts into the provident fund. The payments made by the Group into defined contribution plans are recognized in the income statement in the year to which they relate. The same applies to payments made into state pension schemes.

Share options

Share option plans allow selected employees, i.e. the Executive Board, directors and staff of First Sensor, to share in the company's future performance in the medium and long term.

The expenses resulting from the granting of equity instruments and the corresponding increase in equity are recognized over the period within which vesting or service conditions have to be met (vesting period). This period ends on the vesting date, in other words, on the date the employee in question becomes irrevocably entitled. The cumulative expenses reported at each balance sheet date arising from the granting of the equity instruments up to the vesting date reflect the portion of the vesting period that has already expired and the number of equity instruments, according to the Group's best estimate, that will vest at the end of the vesting period. The amount recognized in the income statement reflects the changes in the cumulative expenses at the beginning and end of the reporting period.

No expense is recognized for remuneration entitlements that do not vest. This does not include remuneration entitlements which can only vest subject to fulfillment of certain market conditions. These are deemed vested irrespective of whether the market conditions are fulfilled provided that all other service conditions are met.

The dilutive effect of the outstanding share options is reflected in the calculation of the earnings per share as additional dilution (see note 27 Earnings per share for further details).

Non-current post-employment benefit obligation

Pension payments were agreed for a former director who has taken retirement. Provisions were made for the present value of the pension commitment.

The annual pension payments are shown as utilization of provisions. This is calculated based on an actuarial assessment.

Government grants

Government grants are recognized if there is sufficient certainty that the grants will be provided and that the company satisfies the associated conditions.

Expenditure based grants are reported as income over the period required to match them against the expenditure they are intended to compensate. Grants related to assets are shown on the consolidated balance sheet as deferred investment grants or subsidies. The latter is released as income in equal annual installments over the expected useful life of the relevant asset.

Recognition of revenue

In line with the five-step approach of IFRS 15, revenue is recognized in accordance with IAS 15 when all the following conditions are met:

- First Sensor has transferred to the buyer the significant risks and opportunities associated with ownership of the sold goods and products.
- There is neither a continuing managerial involvement to the degree usually associated with economic ownership, nor

effective control over the sold items and entitlements.
- The amount of revenue can be measured reliably.
- It is probable that the economic benefits associated with the transaction will flow to the enterprise.
- The costs incurred or to be incurred in respect of the transaction can be reliably estimated.

In accordance with the principle of accrual basis accounting set down in IFRS 15, income and expense relating to the same transaction or event are recognized at the same time.

Other operating income

Other operating income is recognized if the economic benefit can be reliably estimated and is gained during the reporting period.

Interest income

Interest is recognized on a time proportion basis that takes into account the effective yield on the asset.

Taxes

Tax assets and liabilities
Current tax assets and current tax liabilities for current and prior periods should be measured at the amount expected to be recovered from (paid to) the taxation authorities. The amount is calculated on the basis of the tax rates and tax legislation effective at the balance sheet date.

Current taxes relating to items reported directly in equity are not entered on the income statement but in equity.

Deferred taxes
Deferred taxes are recognized using the balance sheet related liability method on all temporary differences between the carrying amount of an asset or liability in the balance sheet and the tax base at the balance sheet date. Deferred taxes are recognized for all taxable temporary differences. The following exceptions apply:
- The deferred tax liability must not be recognized when it arises from the initial recognition of goodwill or of an asset or liability in a transaction which is not a business combination and which, at the time of the transaction, affects neither the accounting profits defined under commercial law nor the taxable profit.
- Deferred tax arising from deductible temporary differences in connection with investments in subsidiaries and associated companies is not recognized if the timing of the reversal of the temporary difference is controlled and it is probable that the temporary differences will not be reversed in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, unused tax loss carryforwards and unused tax credits in the amount of the future taxable profit that is likely to be available against which the deductible temporary differences and the unused tax loss carryforwards and tax credits can be utilized.

The following exceptions apply:
- Deferred tax assets are not recognized for deductible temporary differences arising from the initial recognition of an asset or liability relating to a transaction which is not a business combination and which, at the time of the transaction, does not influence either the accounting profit for the period defined under commercial law or the taxable profit.
- Deferred tax assets for deductible temporary differences relating to interests in subsidiaries, affiliated companies or shares in joint ventures are only recognized to the extent that it is probable that the temporary differences will be reversed in the foreseeable future and that sufficient taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is tested on the balance sheet date and written off to the extent that it is no longer probable that a sufficient taxable result will be available against which the deferred tax asset can be at least partly applied. Non-recognized deferred tax assets are tested on every balance sheet date and recognized to the extent that it has become probable that the taxable result in the future will allow the realization of deferred tax assets.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when an asset is realized or a liability is settled, based on tax rates (and tax legislation) that are applicable at the balance sheet date. Future changes to tax rates must be taken into account at the balance sheet date providing the material conditions for their effectiveness exist within the scope of a legislative procedure. Deferred taxes relating to items entered directly in equity are entered in equity and not in the income statement.

Deferred tax assets and deferred tax liabilities are offset against one another if the group has a legally enforceable right to set off current tax assets against current tax liabilities and these relate to taxes levied by the same tax authority on the same tax object.

Leases

Determining whether an agreement is, or contains, a lease is based on the substance of the arrangement and requires an assessment of whether fulfillment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys a right to use the asset.

In the case of financial leases, in which basically all opportunities and risks associated with ownership of the lease asset are transferred to the Group, the lease asset is capitalized at the conclusion of the lease agreement. The lease asset is recognized at fair value or at the present value of the minimum lease payments, if this figure is lower. Lease payments are split into financial expenses and the repayment portion of the residual debt so as to produce a constant rate of interest on the remaining balance of the lease debt. Financial expenses are immediately recognized in the income statement.

If there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the capitalized lease assets are fully depreciated over the shorter of the two periods, expected useful life and the term of the lease agreement.

Lease payments under operating leases are recognized as an expense in the income statement on a straight-line basis over the lease term.

Derivative financial instruments and hedging

Derivative financial instruments and hedging
First Sensor ensures that it has sufficient funds and irrevocable credit lines available to meet its financial obligations at all times. Credit risk, or the risk that a contractual partner fails to meet its payment obligations, is managed by means of loan commitments, credit lines and control measures. Where appropriate, the company obtains security in the form of rights in securities or arranges master netting agreements.

The maximum credit risk relates to the amounts of financial assets capitalized on the balance sheet.

Currency risk
There is no significant exchange rate risk since most of the transactions concluded by the companies within the Group are in euro. However, materials are purchased in US-dollars abroad. To the extent that it is economically appropriate, corresponding forward foreign exchange contracts are concluded for this purpose. Foreign currency risks are reduced by the independent operation of First Sensor Inc. and in part by First Sensor AG invoicing in USD.

Interest rate exposure and hedging
The risk of market interest rate fluctuations to which the Group is exposed results predominantly from non-current financial liabilities with variable interest rates. This risk is countered by borrowing fixed-rate loans and, when variable-rate loans are procured, by concluding derivative financial instruments (interest rate swaps).

Derivative financial instruments are measured at fair value at the time of the agreement and in the following periods. They are reported as assets if their fair value is positive and liabilities if their fair value is negative.

Gains or losses arising from changes in the fair value of derivative financial instruments that do not meet the hedge accounting criteria are recognized immediately in the income statement.

The fair value of interest rate swap contracts is measured by reference to the market values of similar instruments.

As at December 31, 2018, First Sensor had used hedging instruments to hedge interest rate risks (cash flow hedge). These instruments were reported as follows in accordance with the strict criteria for hedge accounting.

The effective portion of the gain or loss from a hedging instrument is recorded directly in equity while the ineffective portion is immediately recognized as profit or loss.

The amounts recognized in equity are reclassified to profit or loss in the period during which the hedged transaction affects profit or loss for the period, for example when hedged financial income or expenses are reported or when a forecast sale takes place.

If hedging results in the recognition of a non-financial asset or a non-financial liability, the amounts recorded in equity become part of the cost at the initial measurement of the non-financial asset or liability.

If a forecast transaction or firm commitment is no longer expected to occur, the amounts previously recorded in equity are transferred to the income statement. When the hedging instrument expires or is sold, terminated or exercised without the hedging instrument being replaced or rolled over into a different hedging instrument, the amounts recorded in equity remain there as separate line items in equity until the forecast transaction or firm commitment occurs. The same applies if it is determined that the hedging instrument no longer meets the hedge accounting criteria.

3. Intangible Assets

In € thousand	Orders on hand	Concessions, licenses and simila	Goodwill	Internally generated intangible assets	Customer base/ brand	Advance payments	Dec. 31, 2017
Cost of purchase							
January 01, 2017	**1,452**	**11,248**	**39,112**	**6,641**	**24,075**	**1,097**	**83,625**
Additions	0	308	0	2,357	0	1,534	**4,199**
Disposals	0	-95	0	-707	0	0	**-802**
Reclassifications	0	762	0	-745	0	0	**17**
Exchange differences	0	-4	0	-27	0	0	**-31**
December 31, 2017	**1,452**	**12,219**	**39,112**	**7,519**	**24,075**	**2,631**	**87,008**
Cumulative depreciation							
January 01, 2017	**1,452**	**9,082**	**9,296**	**1,738**	**12,905**	**0**	**34,473**
Additions	0	799	0	748	2,210	0	**3,757**
Disposals	0	-95	0	-30	0	0	**-125**
Reclassifications	0	44	0	-44	0	0	**0**
Exchange differences	0	-4	0	0	0	0	**-4**
December 31, 2017	**1,452**	**9,826**	**9,296**	**2,412**	**15,115**	**0**	**38,101**
Carrying amount as at January 01, 2017	**0**	**2,166**	**29,816**	**4,903**	**11,170**	**1,097**	**49,152**
Carrying amount as at December 01, 2017	**0**	**2,393**	**29,816**	**5,107**	**8,960**	**2,631**	**48,907**

In € thousand	Orders on hand	Concessions, licenses and simila	Goodwill	Internally generated intangible assets	Customer base/ brand	Advance payments	Dec. 31, 2018
Cost of purchase							
January 01, 2018	**1,452**	**12,219**	**39,112**	**7,519**	**24,075**	**2,631**	**87,008**
Changes of consolidation scope	0	-3	0	0	0	0	**-3**
Additions	0	148	0	1,642	0	207	**1,997**
Disposals	0	-1	0	-189	0	0	**-190**
Reclassifications	0	2,066	0	0	0	-2,059	**7**
Exchange differences	0	1	0	21	0	0	**22**
December 31, 2018	**1,452**	**14,430**	**39,112**	**8,993**	**24,075**	**779**	**88,841**
Cumulative depreciation							
January 01, 2018	**1,452**	**9,826**	**9,296**	**2,412**	**15,115**	**0**	**38,101**
Additions	0	918	0	460	2,177	0	**3,555**
Disposals	0	-1	0	0	0	0	**-1**
Reclassifications	0	0	0	0	0	0	**0**
Exchange differences	0	1	0	0	0	0	**1**
December 31, 2018	**1,452**	**10,744**	**9,296**	**2,872**	**17,292**	**0**	**41,656**
Carrying amount as at January 01, 2018	**0**	**2,393**	**29,816**	**5,107**	**8,960**	**2,631**	**48,907**
Carrying amount as at December 01, 2018	**0**	**3,686**	**29,816**	**6,121**	**6,783**	**779**	**47,185**

Intangible assets neither served as securities for liabilities nor were otherwise restricted at the balance sheet date.

Brands

Brands that were acquired as part of the acquisition of all shares in the Sensortechnics Group in 2011 were identified as intangible assets as follows. The carrying amount is compared with the previous year's figure:

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
In € thousand	797	797	0	0
Total	**797**	**797**	**0**	**0**

The Klay Instruments brand is not amortized. The Sensortechnics and ELBAU brands were written off in full as at December 31, 2015, since both brand names are no longer used as a result of concentrating on the "First Sensor" umbrella brand.

Customer base

Customer bases that were acquired as part of the acquisition of the shares in the Sensortechnics Group in 2011 were identified as intangible assets. The table shows the carrying amounts. The customer bases are amortized over an estimated useful life of 6 to 10 years using the straight-line method. The amortization amount was €2,177 thousand in 2018 (previous year: €2,210 thousand).

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Sensortechnics Customized	3,569	2,617	-952	-26.7
Sensortechnics Distributed	0	0	0	0
First Sensor AG subsidiary Berlin-Weißensee (prev.: ELBAU)	3,205	2,350	-855	-26.7
Klay Instruments B.V.	1,389	1,019	-370	-26.6
Total	**8,163**	**5,986**	**-2,177**	**-26.7**

Development

The development work reported following the acquisition of First Sensor Microelectronic Packaging GmbH is subject to scheduled amortization over 20 years starting from the initial marketing. The effective amortization charge in 2018 amounted to €23 thousand (previous year: €23 thousand). The residual carrying amount was €183 thousand at the balance sheet date.

Following the acquisition of First Sensor Technology GmbH, intangible assets of €672 thousand were reported relating to the company's own developments and technologies. The residual carrying amount was written down to zero in 2017 as planned.

4. Internally Generated Intangible Assets

Internally generated intangible assets are capitalized at First Sensor in connection with developments for new products and technologies. It is assumed in this process that they will be used at a later date and will generate corresponding returns. Carrying amounts of €6,121 thousand (previous year: €5,107 thousand) were reported for internally generated intangible assets as at the balance sheet date. Write-downs of €460 thousand (previous year: €748 thousand) were recognized on these in the year under review.

5. Goodwill

Goodwill as at December 31, 2018 related to the following companies:

In € thousand	2017	2018
First Sensor Lewicki GmbH	1,846	1,846
First Sensor Technology GmbH	1,125	1,125
Former: Sensortechnics-Group	26,390	26,390
MEMSfab GmbH	455	455
Total	**29,816**	**29,816**

To test goodwill for impairment, the value in use of the unit was calculated and compared with the carrying amount. If the carrying amount exceeds the value in use, a valuation allowance is recognized. The value in use is calculated based on the discounting of operating cash flows for the planning period, derived from the WACC method. An indicative check was carried out using the income capitalization approach.

The following basic assumptions were made as parameters for the impairment test:

Assumptions in impairment test	2017	2018
Risk-free basic interest rate	1.25%	1.00%
Market risk premium	7.00%	7.00%
Beta factor	1.0	1.1
Pre-tax borrowing rate	3.00%	2.90%
WACC pre-tax	11.15%	11.50%
WACC after tax	7.63%	8.03%

First Sensor Lewicki GmbH

First Sensor reports goodwill amounting to €1,846 thousand resulting from the acquisition of all shares in First Sensor Lewicki GmbH in 2000. In accordance with IAS 36, goodwill on this company was tested for potential impairment as at December 31, 2018 on the basis of the value in use taking into account the following assumptions:

- Sales are expected to increase slightly between 2018 and 2021.
- A growth rate of 1% in the projection variables for 2022 (terminal value).
- The discount factor based on the WACC method is 8.03% after tax (previous year: 7.63%) and 11.50% before tax (previous year: 11.15%).

As in the previous year, the impairment test did not give rise to any impairment as at the balance sheet date. The Executive Board bases its assumptions relating to forecasts for the determination of value in use on past experience.

First Sensor Technology GmbH / Sensortechnics Group / MEMSfab GmbH

First Sensor acquired all shares in First Sensor Technology GmbH in fiscal year 2010. This acquisition resulted in goodwill of €1,125 thousand. On the basis of the merger agreement dated August 24, 2015, retroactively to January 1, 2015 First Sensor Technology GmbH was merged by transfer of assets with First Sensor AG and was dissolved without being wound up in accordance with section 2 of the German Transformation Act.

First Sensor acquired all shares in the Sensortechnics Group in fiscal year 2011. This acquisition resulted in goodwill of €26,390 thousand. On the basis of the merger agreement dated June 28, 2012, retroactively to 1 January 2012 Sensortechnics GmbH was merged by transfer of assets with First Sensor AG and was dissolved without being wound up in accordance with section 2 of the German Transformation Act. On the basis of the merger agreement dated April 17, 2013 retroactively to 1 January 2013, Elbau Elektronik Bauelemente GmbH Berlin was merged by transfer of assets with First Sensor AG and was dissolved without being wound up in accordance with section 2 of the German Transformation Act.

First Sensor acquired all shares in MEMSfab GmbH in fiscal year 2011. This acquisition resulted in goodwill of €455 thousand. In accordance with a merger agreement dated June 27, 2013 with an addendum dated October 30, 2013, the company merged with First Sensor AG and was dissolved without being wound up.

In fiscal year 2018, the impairment test was changed so that the goodwill figures resulting from the acquisitions of First Sensor Technology GmbH, the Sensortechnics Group and MEMSfab GmbH, which previously had been transferred consistently to First Sensor AG, are subjected to a common impairment test, with First Sensor AG as cash-generating unit.

This change was driven by the fact that at the latest since the merger with First Sensor AG, the value creation process within First Sensor AG takes place increasingly not on an isolated basis in the individual units, but across these individual units. As a result, the development and production process is now managed in such as way that in the individual units specific valuation creation occurs on a specified general basis, no longer in isolation. In addition, in organizational terms, since the introduction of the new SAP ERP system as at January 1, 2018, supply and service relationships between the individual units are no longer mapped and managed on an isolated basis as sub-processes within the respective units, but in an overarching ongoing production process. As a result, the cash flows identified within the units can no longer be regarded largely independently from the other units.

Restructuring of the cash-generating units is not expected to have a material impact on the impairment tests. This is because in impairment tests in previous years, internal expenses and income had already been reallocated, so it is unnecessary to do this in the future.

Goodwill on this company was tested for potential impairment on the basis of the value in use, taking into account the following assumptions:

- Sales are expected to increase slightly from 2018 to 2021.
- A growth rate of 1% in the projection variables for 2022 (terminal value).
- The discount factor based on the WACC method is 8.03% after tax (previous year: 7.63%) and 11.50% before tax (previous year: 11.15%).

As in the previous year, the impairment test did not give rise to any impairment as at the balance sheet date. The Executive Board bases its assumptions relating to forecasts for the determination of value in use on past experience.

6. Property, Plant and Equipment

In € thousand	Land and buildings	Technical equipment and machinery	Office equipment	Advance payments, assets under construction	Dec. 31, 2017
Cost of purchase					
January 01, 2017	**18,373**	**44,641**	**9,760**	**1,410**	**74,184**
Additions	14	1,633	796	6,542	**8,985**
Disposals	0	-246	-126	-42	**-414**
Reclassifications	208	1,858	481	-2,564	**-17**
Exchange differences	8	-27	-49	-1	**-69**
December 31, 2017	**18,603**	**47,859**	**10,862**	**5,345**	**82,669**
Cumulative depreciation					
January 01, 2017	**5,981**	**28,345**	**6,840**	**53**	**41,219**
Depreciation and amortization	619	3,570	1,138	0	**5,327**
Disposals	0	-245	-11	-13	**-269**
Exchange differences	8	-15	-44	0	**-51**
December 31, 2017	**6,608**	**31,655**	**7,923**	**40**	**46,226**
Carrying amount as at January 01, 2017	**12,392**	**16,296**	**2,920**	**1,357**	**32,965**
Carrying amount as at December 01, 2017	**11,995**	**16,204**	**2,939**	**5,305**	**36,443**

In € thousand	Land and buildings	Technical equipment and machinery	Office equipment	Advance payments, assets under construction	Dec. 31, 2018
Cost of purchase					
January 01, 2018	**18,603**	**47,859**	**10,862**	**5,345**	**82,669**
Changes of consolidation scope	0	-9	-2	14	**3**
Additions	150	2,328	895	4,429	**7,802**
Disposals	0	-644	-312	0	**-956**
Reclassifications	0	3,331	86	-3,424	**-7**
Exchange differences	4	12	13	-1	**28**
December 31, 2018	**18,757**	**52,877**	**11,542**	**6,363**	**89,539**
Cumulative depreciation					
January 01, 2018	**6,608**	**31,655**	**7,923**	**40**	**46,226**
Depreciation and amortization	625	3,698	1,147	0	**5,470**
Disposals	0	-644	-226	0	**-870**
Exchange differences	4	1	12	0	**17**
December 31, 2018	**7,237**	**34,710**	**8,856**	**40**	**50,843**
Carrying amount as at January 01, 2018	**11,995**	**16,204**	**2,939**	**5,305**	**36,443**
Carrying amount as at December 01, 2018	**11,520**	**18,167**	**2,686**	**6,323**	**38,696**

Property, plant and equipment with a carrying amount of €14,015 thousand (previous year: €1,954 thousand) served neither as security for liabilities nor were otherwise restricted as at the balance sheet date.

7. Inventories

In € thousand	Dec. 31, 2017	Reclassification as of Jan. 01, 2018	As on Jan. 01, 2018	Dec. 31, 2018	Δ absolute	in %
Raw materials and supplies	11,067	**25**	11,092	14,159	3,067	27.6
Unfinished goods and work in progress	6,340	**3,842**	10,182	12,686	2,504	24.6
Finished goods and products	7,113	**-3,867**	3,246	5,213	1,967	60.6
Advance payments on inventories	106	**0**	106	136	30	28.3
Total	**24,626**	**0**	24,626	32,194	**7,568**	**30.7**

As a result of the introduction of the new ERP system at First Sensor AG, there were system-related classifications in the allocation of products. The mapping of products shifted within the Berlin and Puchheim by Munich locations in the new system thus results in new initial figures for inventories as at January 1, 2018 (start SAP) for the changes in inventories.

The write-down on inventories was recognized as expense and amounted to €137 thousand (previous year: €737 thousand). This expense was reported under cost of materials for write-downs on materials and other supplies and under changes in inventories for unfinished goods, work in progress and finished goods.

As in the previous year, there were no assigned inventories as at the balance sheet date.

8. Trade Accounts Receivables

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Trade accounts receivables	20,922	18,017	-2,905	-13.9
Less allowances for doubtful accounts	-157	-157	25	15.9
Total	**20,765**	**20,765**	**-2,880**	**-13.9**

Accounts receivable are not interest-bearing and are generally due within 30-90 days. Allowances of €132 thousand (previous year: €157 thousand) were made for doubtful receivables from the sale of goods and services. This equates to a default ratio of 0.7% (previous year: 0.8%).

Changes in the allowance account were as follows:

In € thousand	2017	2018	Δ absolute	in %
Beginning of the period	**152**	**157**	**5**	**3.3**
Allocation to expenses	95	48	-47	-49.5
Utilization	-1	0	-1	-
Reversal	-89	-73	16	18.0
End of the period	**157**	**132**	**-25**	**15.9**

As at December 31, 2018, the age structure of past due accounts receivables is as follows:

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Not due	14,442	11,709	-2,733	-18.9
Less than 30 days past due	4,202	3,793	-409	-9.7
Between 30 and 60 days past due	772	989	217	28.1
Between 61 and 90 days past due	303	303	0	-
Between 91 and 120 days past due	215	320	105	48.8
More than 120 days past due	831	771	-60	-7.2
Total	**20,765**	**17,885**	**-2,880**	**-13.9**

Trade receivables with a maturity of more than 120 days contain more than 60% of an individual case, which is highly likely to be in favor of First Sensor AG in the initiated legal proceeding. For the other overdue receivables, appropriate individual value adjustments were made where necessary.

9. Other Current Assets

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Prepayments and accrued income	684	956	272	39.8
Value-added tax receivables	2,090	384	-1,706	-81.6
Insurance claim	143	144	1	0.7
Research and development funding	2	2	0	0
Others	401	1,281	880	219.4
Total	**3,320**	**2,767**	**-553**	**-16.6**

10. Cash and Cash Equivalents

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Cash in hand	20	4	-16	-80.0
Bank balances	25,485	28,530	3,045	11.9
Total	**25,505**	**28,534**	**3,029**	**11.9**

Bank balances are partly subject to variable interest rates for money at call. The fair value of cash and cash equivalents amounted to €28,534 thousand (previous year: €25,505 thousand).

11. Capital Stock

The share capital reported as subscribed capital on the balance sheet totaled €51,111,980.00 as at the balance sheet date (previous year: €51,081,980.00). It was made up of 10,222,396 shares (previous year: 10,216,396 shares), each with a nominal value of €5.00. The share capital of First Sensor AG increased by €30,000.00 year-on-year as a result of subscription rights from the 2013 share option plan being exercised.

2018	Shares*	Share capital**
Beginning of the financial year	**10,216**	**51,082**
Share option plan for 2013	6	30
End of the financial year	**10,222**	**51,112**

2017	Shares*	Share capital**
Beginning of the financial year	**10,208**	**51,042**
Share option plan for 2009	8	40
End of the financial year	**10,216**	**51,082**

* Number of shares in thousand

** In € thousand

Authorized Capital

The Executive Board is authorized to increase the company's share capital by up to €25,379,150.00 by issuing up to 5,075,830 new bearer shares (Authorized Capital 2015/I) up to May 27, 2020, with the approval of the Supervisory Board, in one or more transactions. The capital can be increased against cash or non-cash contributions. Shareholders are granted subscription rights. Shareholders can also be granted subscription rights indirectly in accordance with section 186 (5) AktG (German Stock Corporation Act).

The Executive Board is, however, authorized, with the approval of the Supervisory Board, to disapply the subscription right of shareholders in certain circumstances in accordance with the further provisions of point 5c) of the agenda of the Annual General Meeting as published in the German Federal Gazette (Bundesanzeiger).

As at December 31, 2018, Authorized Capital 2015/I amounted to €25,379,150.00.

Contingent capital

The contingent capital of First Sensor AG is presented in the following table

In € thousand	Dec. 31, 2017	Dec. 31, 2018
Contingent capital 2009/II	109	109
Contingent capital 2013/I	455	425
Contingent capital 2016/II	2,600	2,600
Contingent capital 2017/I	1,200	1,200
Contingent capital 2017/II	19,000	19,000
Total	**23,364**	**23,334**

As at December 31, 2018, contingent capital totaled €23,333,585.00 (previous year: €23,363,585.00). The contingent capital increase will be carried out only to the extent that the bearers of subscription rights exercise the subscription rights granted under the respective share option plans from Contingent Capital 2009/II, Contingent Capital 2013/I, Contingent Capital 2016/II and Contingent Capital 2017/I. The contingent capital increase 2017/II will be carried out only to the extent that the holders of convertible or option bonds exercise their subscription rights. No such bonds had been issued as at the reporting date.

12. Reserves

Changes in reserves were as shown in the statement of changes in equity. The items are explained below:

a) Capital reserves - share premium
Due to the exercising of 6,000 subscription rights from the SOP 2013 at an exercise price of €15.00, in 2018 the capital reserves increased by the exercise price exceeding the computed nominal value per share (€5.00) by €60 thousand in total.

b) Capital reserves – share options
Expenses of €311 thousand (previous year: €140 thousand) resulting from the ongoing share option programs were recognized in the income statement under Personnel expenses and as an addition to capital reserves.

c) Revaluation reserves
The portion of the profit or loss from cash flow hedging instruments that is determined to be an effective hedge is recorded in this item. The actuarial gains and losses from pension provisions are also recorded in this item. The respective tax effects are also recorded here.

d) Currency translation
In the consolidated balance sheet, another reserve is reported within equity for exchange equalization items. This item is for recognizing the differences arising from the conversion of the financial statements of the foreign subsidiaries.

13. Non-Current Post-Employment Benefit Obligation

The employees working at the production facilities in Puchheim by Munich (FSM) received pension commitments. The pension plans are based on the number of years of service. The pension commitments are essentially financed through the recognition of pension provisions. The measurement of employee benefits and the expenses required to cover these benefits are based on the procedures prescribed in IAS 19 (Employee Benefits). As a result of this change, actuarial gains and losses and past service cost are to be recognized in other comprehensive income.

Changes to the defined benefit obligation were as follows:

In € thousand	**2017**	**2018**
Defined Benefit Obligation (DBO) as at January 1	300	277
Reclassifications/changes in the scope of consolidation	0	0
Service cost	0	0
Interest cost	5	5
Actuarial gains (-) / losses (+)	-2	16
Pension payments	-26	-26
Defined Benefit Obligation (DBO) as at December 31	277	272

The pension provisions are to be derived from the defined benefit obligation as follows:

In € thousand	**Dec. 31, 2017**	**Dec. 31, 2018**
Defined Benefit Obligation	277	272
Plan assets	0	0
Balance sheet recognition	**277**	**272**

The post-employment benefit obligations must be deduced as follows from the defined benefit obligation:

In € thousand	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2018
Defined Benefit Obligation	323	312	300	277	272
Plan assets	0	0	0	0	0
Deficit	**323**	**312**	**300**	**277**	**272**

Pension expense was as follows:

In € thousand	2017	2018
Service cost	0	0
Interest cost	5	5
Actuarial gains (-) / losses (+)	0	0
Total	**5**	**5**

The interest cost is recorded separately in the financial result.

Pension payments of €26 thousand are expected for the following fiscal year – as in the previous year.

The calculations are based on the 2018 G mortality tables produced by K. Heubeck and the following assumptions:

In € thousand	Dec. 31, 2017	Dec. 31, 2018
Interest rate	1.90	1.60
Salary trend	0	0
Pension trend	1.80	1.80

A change in the main actuarial assumptions (interest rate, salary trend, pension trend) of 1 percentage point up or down would have an impact of no more than €60 thousand on the defined benefit obligation in each case.

14. Other Provisions

In € thousand	Warranties
Current	1,259
Non-current	0
December 31, 2017	**1,259**
Uitilization	-439
Reversal	-186
Allocation	402
Rebooking	55
December 31, 2018	**1,091**
Current	1,091
Non-current	0

The provision for warranty obligations was recognized for products sold in the past two years. The underlying assumptions applied in calculating the warranty provision are based on sales under warranty and currently available information on claims within the two-year warranty period. In addition, warranty provisions for current claims were recognized in the amount of €338 thousand (previous year: €382 thousand) based on anticipated utilization. These expenses are expected to be incurred within the next fiscal year.

15. Financial Liabilities

In € thousand	Dec. 31, 2017	Dec. 31, 2018
Current up to 1 year	16,115	**3,891**
Non-current	32,184	**44,111**
of which 1 - 5 years	32,184	**37,611**
of which more than 5 years	0	**6,500**
Total	**48,299**	**48,002**

In November 2018, First Sensor AG drew on the €13.0 million KfW loan taken out in 2017 as agreed. The loan with a duration of 10 years and a fixed interest rate of 1.15% p.a. will be repaid in quarterly installments from March 31, 2020. The assignment of machines and equipment at the Berlin-Weißensee location serve as collateral for the loan. Jointly liable are First Sensor Microelectronic Packaging GmbH and First Sensor Lewicki GmbH.

Promissory note loans

First Sensor placed three promissory note loans totaling €28.0 million on December 15, 2015.

As part of the placement, German institutional investors subscribed to promissory notes with terms of five years (€18.0 million, variable rate and €7.0 million, fixed rate) and seven years (€3.0 million, fixed rate). The promissory note pays variable interest with a margin calculated on the basis of 6-month EURIBOR. The financial ratios for the placed promissory notes are leverage and equity ratio.

The fixed-rate promissory note loan of €12.0 million in place since 2013 was repaid on schedule on December 20, 2018.

The key financial ratios are calculated annually. The interest rate risk will be reduced through over the term fixed interest rates and normal hedging mechanisms (see “Derivative financial instruments”).

Leases and hire purchase agreements

The Group has signed leases and hire purchase contracts for a range of technical machinery and office equipment. The leases are all operating leases. The future minimum payments under leases and hire purchase contracts can be reconciled to their present values as follows:

December 31, 2017 In € thousand	Minimum lease payments	Present value of minimum lease payments
Current up to 1 year	1,460	1,405
Between 1 and 5 years	3,415	3,244
More than 5 years	307	289
Total minimum lease payments	**5,182**	**4,938**
Less discount	244	0
Present value of the minimum lease payments	**4,938**	**4,938**

December 31, 2018 In € thousand	Minimum lease payments	Present value of minimum lease payments
Current up to 1 year	1,250	1,190
Between 1 and 5 years	3,089	2,916
More than 5 years	1	1
Total minimum lease payments	**4,340**	**4,107**
Less discount	233	0
Present value of the minimum lease payments	**4,107**	**4,107**

Expenses from leases and hire purchase agreements of €922 thousand (previous year: €888 thousand) were reported in the year under review. € 679 thousand (previous year: €651 thousand) of this amount was recorded for operating leases.

As at December 31, 2018, the net carrying amount of the technical equipment and machinery financed by means of leasing and pledged to the lessor was €3,956 thousand (previous year: €4,653 thousand). Leased assets with a net carrying amount of €180 thousand were added in the fiscal year (previous year: €2,885 thousand).

Others

As at the 2018 balance sheet date, First Sensor had unutilized credit lines of €10,070 thousand (previous year: €11,050 thousand).

16. Other Non-Current Liabilities

Other non-current liabilities mainly include deferred investment grants/allowances of €3,203 thousand (previous year: €3,457 thousand). These relate to government grants and were paid out mainly in the form of investment grants for the new production facilities built in Berlin. The grants paid are dependent on evidence of implementation of the investment measures and compliance with conditions related to retention of the assets and future job creation.

In addition, the negative market values of interest rate hedging instruments of €309 thousand (previous year: €81 thousand) are recognized in other non-current financial liabilities.

17. Other Current Liabilities

In € thousand	Dec. 31, 2017	Dec. 31, 2018
Liabilities due to staff	1,810	3,495
Liabilities from income tax	2,723	652
Liabilities from church tax, social security	97	94
Others	6,062	3,753
Total	**10,692**	**7,994**

All of the other current liabilities are not interest-bearing.

18. Obligations Arising From Employee Benefits

Share option plan

Three share option plans are currently in place:

- Share option plan for 2013 (SOP 2013)
- Share option plan for 2016/II (AOP 2016/II)
- Share option plan for 2017/I (AOP 2017/I)

These plans state that options to acquire ordinary shares may be granted to members of the Executive Board, directors of affiliated companies, employees of the company and employees of affiliated companies.

	SOP 2013	SOP 2016/II	SOP 2017/I
Annual shareholders meeting resolution*	**Aug. 20, 2013***	**May 04, 2016**	**May 27, 2017**
Term of the share option plan	3 years	3 years	2 years
Vesting period (following issue)	4 years	4 years	4 years
Exercise period (folling expiry of vesting period)	5 years	3 years	3 years
Maximum subscription rights (total volume)	**91,000***	**520,000**	**240,000**

*Adjusted to resolution oft he Annual General Meeting on May 27, 2017

Share options are exercised subject to the following conditions.

SOP 2013
The SOP 2013 share option plan has a three-year term. The option program was reduced to 91,000 options by resolution of the Annual General Meeting on May 27, 2017. The plan is divided into three groups of entitled persons:

- For members of the company's Executive Board
- For directors of affiliated companies
- For employees of the company or of affiliated companies

Subscription rights can be issued to entitled persons from the total volume every year during the term of the 2013 share option plan.

Subscription rights may be issued to entitled persons only during the period from the announcement of the previous fiscal year's results by the Executive Board to the end of the fiscal year and not before Contingent Capital 2013/1 has been entered in the commercial register.

The subscription rights may be exercised only after a vesting period. This vesting period lasts for at least four years from the time the subscription rights are granted. The rights may be exercised within five years of the end of the respective vesting period. Options that have not been exercised by the end of this period shall be forfeited without replacement or compensation.

Subscription rights may not be exercised in the three weeks preceding the announcement of quarterly results or in the period between the end of a fiscal year and the publication of the company's consolidated financial statements. The same applies even if an exercise window opens during these blocking periods.

The exercise price for subscription rights is €15.00 per subscription right.

Subscription rights may be exercised within the exercise period only if the performance target has been achieved within a period of six weeks prior to exercise. The performance target has been achieved if the closing price of shares in the company in XETRA (or a comparable successor system on the Frankfurt Stock Exchange) meets or exceeds the exercise price of €15.00 on ten consecutive trading days.

Options are non-transferable, except in the event of the death of the entitled person.

Further details of the granting of options and further conditions for exercising them are determined by the Supervisory Board if members of the company's Executive Board are affected. If employees of the company are impacted or if options are to be granted to directors of affiliated companies, the company's Executive Board shall determine further details.

A total of 185,208 subscription rights have so far been issued to executive board members. After the executive board member leaves the company, these subscription rights are forfeited. In addition, a total of 118,000 subscription rights were granted to directors of affiliated companies and employees of the company and affiliated companies.

SOP 2016/II

The share option plan 2016/II was resolved at the Annual General Meeting on May 4, 2016. It provides for up to 520,000 subscription rights to be issued to members of the Executive Board, directors of affiliated companies in Germany and abroad and managers at the company by December 31, 2019. If subscription rights are forfeited because entitled persons leave the company within the authorization period, a corresponding number of subscription rights may be issued again.

The total volume of the subscription rights share option plan 2016/II breaks down across the groups of entitled persons as follows:

- Members of the company's Executive Board will receive a maximum of up to 160,000 options in total (up to around 30.8%)
- Directors of affiliated companies will receive a maximum of up to 70,000 options in total (up to around 13.5%)
- Managers at the company will receive a maximum of up to 290,000 options in total (up to around 55.7%)

Subscription rights may be issued for the first time in fiscal year 2016.

The subscription rights may be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the subscription rights each have a term of seven years from the issue date; after this they are forfeited without replacement. After the end of the vesting period, subscription rights may be exercised if the performance target has been achieved within a period of 30 trading days prior to exercise. The exercise price corresponds to the average closing price of the share on the 30 consecutive trading days before the respective issue date of the options plus 20%. However, the exercise price for the subscription rights issued in fiscal years 2017 and 2018 amounts to at least €15.00. The performance target has been achieved if the closing price of the share meets or exceeds the exercise price on 30 consecutive trading days. The exercise price for the subscription rights is amounted to €12 per subscription right.

In addition to the achievement of the performance target, exercise of the subscription rights is also subject to the strict requirement that the beneficiary must have acquired one share in the company for every ten subscription rights granted no later than six months after the issue date of the respective subscription rights and must have held these shares continuously in his or her own name up until the date when these subscription rights are first exercised. If there is no such proof of the acquisition of shares, the subscription rights cannot be exercised.

Subscription rights may be inherited but they may not be transferred or sold. They may not be pledged.

In order to service the share option plan 2016/II, the contingent capital 2016/II was created in the amount of €2,600,000.00.

A total of 282,000 subscription rights were granted under the share option plan 2016/II in fiscal year 2016. 110,000 of these subscription rights were granted to the CFO. The value of one option issued amounted to €2.00 and was calculated using the Black-Scholes model.

A total of 67,000 subscription rights were granted under the share option plan 2016/II in fiscal year 2017. 25,000 of these subscription rights were granted to the CFO. The value of one option issued amounted to €3.08 and was calculated using the Black-Scholes model. The calculation was based on the following parameters: Share price on the grant day of €11.73, volatility of 39.4% and an interest rate of 0.0%. In addition, it was assumed that an annual non-exercise rate of 15% would arise.

A total of 93,000 subscription rights were granted under the share option plan 2016/II in fiscal year 2018. 25,000 of these subscription rights were granted to the CFO. The value of one option issued amounted to €7.91 and was calculated using the Black-Scholes model. The calculation was based on the following parameters: Share price on the grant day of €25.20, volatility of 44.32% and an interest rate of 0.0%. In addition, it was assumed that an annual non-exercise rate of 15% would arise.

SOP 2017/I

The share option plan 2017/I was resolved at the Annual General Meeting on May 27, 2017. It provides for up to 240,000 subscription rights to be issued to members of the Executive Board by December 31, 2019. If subscription rights are forfeited because entitled persons leave the company within the authorization period, a corresponding number of subscription rights may be issued again.

Subscription rights may be issued for the first time in fiscal year 2017.

The subscription rights may be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the subscription rights each have a term of seven years from the issue date; after this they are forfeited without replacement. After the end of the vesting period, subscription rights may be exercised if the performance target has been achieved. The performance target has been achieved if the closing price of the share in XETRA (or a comparable successor system on the Frankfurt Stock Exchange) meets or exceeds the exercise price on 30 consecutive trading days prior to exercise. The exercise price corresponds to the average closing price of the share on the 30 consecutive trading days before the respective issue date of the options plus 20%. However, the exercise price for the subscription rights issued in fiscal years 2017 and 2018 amounts to at least €15.00.

In addition to the achievement of the performance target, exercise of the subscription rights is also subject to the strict requirement that the beneficiary must have acquired one share in the company for every ten subscription rights granted no later than six months after the issue date of the respective subscription rights and must have held these shares continuously in his or her own name up until the date when these subscription rights are first exercised. If there is no such proof of the acquisition of shares, the subscription rights cannot be exercised.

In order to service the share option plan 2017/I, the contingent capital 2017/I was created in the amount of €1,200,000.00.

A total of 80,000 subscription rights were granted to the CEO of First Sensor AG under the share option plan 2017/I in fiscal year 2017. The value of one option issued amounted to €4.16 and was calculated using the Black-Scholes model. The calculation was based on the following parameters: Share price on the grant day of €14.14, volatility of 39.4% and an interest rate of 0.0%. In addition, it was assumed that an annual non-exercise rate of 15% would arise.

A total of 80,000 subscription rights were granted to the CEO of First Sensor AG under the share option plan 2017/I in fiscal year 2017. The value of one options issued amounted to €7.91 and was calculated using the Black-Scholes model. The calculation was based on the following parameters: Share price on the grant day of €25.20, volatility of 44.32% and an interest rate of 0.0%. In addition, it was assumed that an annual non-exercise rate of 15% would arise.

19. Sales Revenues

In € thousand	2017	2018	Δ absolute	in %
DACH*	74,303	76,378	2,075	2.8
Rest of Europe	40,414	38,790	-1,624	-4.0
North America	17,293	19,244	1,951	11.3
Asia	14,911	19,416	4,505	30.2
Others	579	1,320	741	127.9
Total	**147,500**	**155,148**	**7,648**	**5.2**

* Germany, Austria, Switzerland, Liechtenstein

Revenues mainly result from the sale of customer-specific semiconductor sensors, sensor systems and development and production services. Sales deductions of €92 thousand were granted in the year under review (previous year: €309 thousand).

20. Other Operating Income

Other operating income breaks down as follows:

In € thousand	2017	2018	Δ absolute	in %
Income from other benefits in kind	678	585	-93	-13.7
Proceeds from reversing provisions	570	476	-94	-16.5
Insurance claim payments	735	426	-309	-42.0
Development grants	633	422	-211	-33.3
Prior-period incom	227	265	38	16.7
Investment allowances	189	159	-30	-15.9
Investment grants	93	95	2	2.2
Others	206	162	-44	-21.4
Total	**3,331**	**2,590**	**-741**	**-22.2**

21. Change in Inventories

In € thousand	2017	2018	Δ absolute	in %
Unfinished goods and work in progress	-317	2.503	2.820	889.6
Finished goods	-1.234	1.977	3.211	260.2
Eliminating unrealized income	66	-9	-75	-115.2
Total	**-1.485**	**4.471**	**5.956**	**401.1**

22. Own Work Capitalized

In € thousand	2017	2018	Δ absolute	in %
Capitalized development costs	1.435	1.630	195	13.6
Other capitalized costs	1.072	335	-737	-68.8
Total	**2.507**	**1.965**	**-542**	**-21.6**

Capitalized costs in 2018 amounted to €1,965 thousand (previous year: €2,507 thousand). Capitalized development costs pursuant to IAS 38 accounted for €1,630 thousand (previous year: €1,435 thousand) of this sum. Other capitalized costs related mainly to measures in connection with the expansion of capacity (supply of media and machines) and technology at the production sites in Berlin-Oberschöneweide and Berlin-Weißensee.

Research and development costs recognized in expenses amounted to €10,171 thousand in 2018 (previous year: €8,578 thousand).

23. Cost of Materials/Purchased Services

The cost of materials/purchased services break down as follows:

In € thousand	2017	2018	Δ absolute	in %
Raw materials and supplies	60,712	65,822	5,110	8.4
Purchased services	8,602	10,273	1,671	19.4
Total	**69,314**	**76,095**	**6,781**	**9.8**

24. Personnel Expenses

The personnel expenses break down as follows:

In € thousand	2017	2018	Δ absolute	in %
Wages and salaries	39,390	41,323	1,933	4.9
Social security contributions including pension plans	7,196	7,726	530	7.4
Total	**46,586**	**49,049**	**2,463**	**5.3**

Personnel expenses include €311 thousand (previous year: €140 thousand) in expenditure related to granting share options. They also include €12 thousand (previous year: €33 thousand) for defined contribution pension plans.

25. Other Operating Expenses

Miscellaneous other operating expenses comprise the following items:

In € thousand	2017	2018	Δ absolute	in %
Costs for premises	2,755	2,551	-204	-7.4
Maintenance and repairs	1,670	2,225	555	33.2
Sales and marketing expenses	1,636	1,630	-6	-0.4
IT-costs	1,057	1,186	129	12.2
Travel costs	909	1,186	227	30.5
Vehicle costs	1,049	1,037	-12	-1.1
Other expenses	665	945	280	42.1
General administration expenses	334	793	459	137.4
Legal and consultancy fees	1,145	770	-375	-32.8
Goods handling costs	704	717	13	1.8
Insurances	563	662	99	17.6
Recruitment costs	368	660	292	79.3
Other expenditures	613	610	-3	-0.5
Warranty expenses	748	407	-341	-45.6
Training costs	315	381	66	21.0
Work clothing and protective equipment	324	370	46	14.2
Investor relations	421	321	-100	-23.8
Prior-preiod expenses	172	298	126	73.3
R&D expenses	201	273	72	35.8
Communication costs	272	256	-16	-5.9
Annual financial statements	161	216	55	34.2
Other taxes	107	143	36	33.6
Supervisory Board remuneration	126	138	12	9.5
Total	**16,315**	**17,775**	**1,460**	**8.9**

26. Income Tax Expenses

The key components of income tax expenses for fiscal years 2017 and 2018 break down as follows:

In € thousand	2017	2018	Δ absolute	in %
Current income tax	2,987	3,320	333	11.1
Prior-period income tax	-146	-6	140	95.9
Deferred taxes	-63	-447	-384	-609.5
Displayed tax amount	**2,778**	**2,867**	**89**	**3.2**

Deferred taxes of €-447 thousand (previous year: €-63 thousand) result from the reversal of temporary differences.

The reconciliation of income tax expense with the product of the reported profit for the period and the applicable Group tax rate with respect to the fiscal years 2017 and 2018 is as follows:

In € thousand	2017	2018	Δ absolute	in %
Pre-tax income	**7,151**	**10,388**	**3,237**	**45.3**
Tax rate	30%	30%		
Calculated tax expenses/income (expenses negative, income positive)	**2,145**	**3,116**	**971**	**45.2**
Current income tax, prior period	-146	9	155	106.2
Different tax rate in other countries	260	-199	-459	-176.5
Used, non-capitalized loss carry forwards	-3	-112	-109	-3,633.3
Tax loss carry forwards, not capitalized	312	75	-237	-76.0
Additional trade income tax	105	53	-52	-49.5
Tax-free income	-8	0	8	100.0
Non-deductible operating expenses	28	18	-10	-35.7
Others	85	-93	-178	-209.4
Tax expenses	**2,778**	**2,867**	**89**	**3.2**

The deferred tax assets and deferred tax liabilities as at the balance sheet date break down as follows before offsetting:

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Property, plant and equipment	85	72	-13	-15.3
Inventories elimination of intercompany profits	33	34	1	3.0
Market value of derivatives	24	93	69	287.5
Other provisions	58	54	-4	-6.9
Deferred tax assets	**200**	**253**	**53**	**26.5**

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Internally generated intangible assets	1,365	1,642	277	20.3
Property, plant and equipment	134	122	-12	-9.0
Other provisions	36	0	-36	-100.0
Acquired customer bases	2,379	1,742	-637	-26.8
Acquired brands	199	199	0	0.0
Deferred tax liabilities	**4,113**	**3,705**	**-408**	**-9.9**

Deferred taxes were offset at the level of the individual companies in the year under review, as they were last year. Income taxes comprise the income taxes paid or payable in the respective countries as well as deferred taxes. The deferred taxes on the market values of derivatives in the context of hedge accounting of €8 thousand (previous year: €16 thousand) as well as on actuarial gains and losses on pension provisions of €5 thousand (previous year: €2 thousand) relate to deferred taxes recognized outside the net profit for the period. Income taxes for 2017 and 2018 include corporation tax, trade income tax, solidarity surcharge and the corresponding foreign taxes. In the Federal Republic of Germany, corporation tax on distributed and undistributed profits is 15%. A solidarity surcharge is levied at a rate of 5.5% on the corporation tax. The trade income tax was calculated on the basis of the assessment rate applied by the relevant municipal authority at 11.55% and 14.35%. Deferred taxes on loss carryforwards at foreign consolidated companies were not recognized for prudential reasons. As in the previous year, there are no tax loss carry forwards for German Group companies.

27. Earnings Per Share

In the calculation of the basic earnings per share, the earnings attributable to the bearers of ordinary shares in the parent company are divided by the weighted, average number of ordinary shares outstanding during the year.

In the calculation of the diluted earnings per share, the earnings attributable to the bearers of ordinary shares in the parent company are divided by the weighted, average number of ordinary shares outstanding during the year and by the weighted average number of ordinary shares which would result from the conversion of all potential subscription rights with a dilutive effect for ordinary shares.

The amounts used to calculate basic and diluted earnings per share are shown in the table below:

In € thousand, unless otherwise indicated	2017	2018	Δ absolute	in %
Net profit attributable to shareholders	4,131	7,396	3,265	79.0
Weighted average outstanding shares (undiluted)	10,211	10,217	6	0.1
Earnings per share (undiluted)	**0.40**	**0.72**	**0.32**	**80.0**
Dilutive effect from share options	49	138	89	1.8
Weighted average outstanding shares (diluted)	10,260	10,355	95	0,9
Earnings per share (diluted)	**0.40**	**0.71**	**0.31**	**77.5**

28. Notes to the Cash Flow Statement

In accordance with IAS 7 "Statement of cash flows", First Sensor reports the cash flow from operating activities using the indirect method, in which the profit or loss for the period is adjusted by the effects of non-cash transactions, deferrals of past or future in and outflows from operating activities and items of income or expense in connection with the cash flow from investment or financing activity. Reconciliation is carried out on the basis of pre-tax income. Tax payments are shown in the operating cash flow, interest received as part of cash flow from investing activities, and interest paid as part of cash flow from financing activities. Almost all the cash flow from financing activities is due to payments. Changes in exchange rates or fair values are absolutely insignificant.

Cash and cash equivalents are defined according to the company's cash management. This includes cash and bank balances:

In € thousand	2017	2018	Δ absolute	in %
Cash on hand	20	5	-15	-75.0
Bank balances	25,485	28,529	3,044	11.9
Total	**25,505**	**28,534**	**3,029**	**11.9**

29. Notes to the Statement of Changes in Equity

In 2018, the company made distributions to shareholders of €1,635 thousand (previous year: €0 thousand).

30. Contingent Liabilities and Other Financial Obligations

Court actions and claims arising from disputes that occur in the ordinary course of business could be enforced against the companies in the group. The risks involved are analyzed in the light of the likelihood of their occurrence. Although the outcome of these disputes cannot always be accurately forecast, the Executive Board is of the view that no material obligations will arise from them.

Further financial obligations arise from renting office premises and office equipment, from leases for capital assets, vehicles and technical office equipment, from building leases and from allocations from defined contribution pension plans. The leases have an average term of between 3 and 20 years and, only in the case of building leases, include options to extend and a purchase option. No obligations of any kind were imposed on the lessee at the conclusion of these leases.

The resultant financial obligations break down as follows:

In € thousand	2019	2020 to 2013	As 2024
Rent and lease expenses	1,925	3,520	822
Purchase obligations	10,333	110	0
Long-term building lease	17	68	612
Total	**12,275**	**3,698**	**1,434**

The purchase obligation in 2018 relates to ordered capital assets and inventories.

31. Segment Reporting

The integrated industrial Group, First Sensor, is a provider of sensor solutions for many different sectors. The individual subsidiaries of the Group occupy different positions in the value chain (wafer, component, module, system) for the manufacture of sensor solutions.

The specific requirements of the customer in each case dictate at which step in the value chain the services are called on.

First Sensor operates as a homogeneous company which encompasses the development, production and sale of sensor chips, sensor components, sensors and sensor systems. Sales are monitored by target market (Industrial, Medical, Mobility) and geographically according to the origin of the customers (DACH region, Europe, North America, Asia).

To ensure a consistent focus on markets and customers, First Sensor caters to the three target markets of Industrial, Medical and Mobility business with its sensor products. However, these do not constitute the basis for internal management and internal reporting. Sales break down across these markets as follows:

In € thousand	2017	2018	Δ absolute	in %
Industrial	75,096	80,387	5,291	7.0
Medical	27,943	34,559	6,616	23.7
Mobility	44,461	40,202	-4,259	-9.6
Total	**147,500**	**155,148**	**7,648**	**5.2**

Every month, the results of the parent company and its subsidiaries are measured, processed and then analyzed by the Executive Board. However, the business units do not represent segments within the meaning of IFRS 8.

Non-current assets and investments in non-current assets relate almost exclusively to Germany and only to a small degree to Europe and North America.

Non-current assets in € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Germany	84,886	85,236	350	0.4
Rest of Europe	99	78	-21	-21.2
North America	365	567	202	55.3
Total	**85,350**	**85,881**	**531**	**0.6**

Investments in € thousand	2017	2018	Δ absolute	in %
Germany	12,950	9,567	-3,383	-26.1
Rest of Europe	43	3	-40	-93.0
North America	191	229	38	19.9
Total	**13,184**	**9,799**	**-3,385**	**-25.7**

Number of employees (FTE)	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Germany	739	805	66	8.9
Rest of Europe	34	33	-1	-2.9
North America	25	25	0	0.0
Total	**798**	**863**	**65**	**8.1**

32. Related Party Transactions

Transactions with individuals or companies who may be subject to the influence of First Sensor or who may exert an influence over First Sensor must be disclosed unless such transactions have already been reported in the consolidated financial statements through the inclusion of consolidated companies.

The following transactions were carried out with individuals and companies deemed parties related to First Sensor:

Board

- Dr. Dirk Rothweiler, Weimar (since January 1, 2017)
- Dr. Mathias Gollwitzer, Karlsruhe (since August 10, 2015)
- Dr. Martin U. Schefter, Bonn (until June 16, 2016)

Please refer to the table below for details of remuneration **paid** to members of the Executive Board:

In € thousand	Dr. Martin U. Schefter	Dr. Mathias Gollwitzer		Dr. Dirk Rothweiler	
Position	CEO	CFO		CEO	
Start of employment	June 17, 2013	August 10, 2015		January 1, 2017	
Termination of employment	June 16, 2016				
	2017	2017	2018	2017	2018
Fixed remuneration	0	300	312	330	330
Additional benefits	0	17	16	30	20
Total	**0**	**317**	**328**	**360**	**350**
Annual variable remuneration	40	261	131	0	157
Perennial variable remuneration					
SOP 2016/II (ends on Dec. 31, 2019)	0	0	0	0	0
Severance payment	0	0	0	0	0
Compensation	61	0	0	0	0
Total	**101**	**261**	**131**	**0**	**157**
Pension expenses	0	0	0	0	0
Total renumeration	**101**	**578**	**459**	**360**	**507**

The following table shows the remuneration **granted** to members of the Executive Board:

In € thousand	Dr. Martin U. Schefter	Dr. Mathias Gollwitzer		Dr. Dirk Rothweiler	
Position	CEO	CFO		CEO	
Start of employment	June 17, 2013	August 10, 2015		January 1, 2017	
Termination of employment	June 16, 2016				
	2017	2017	2018	2017	2018
Fixed remuneration	0	300	312	330	330
Additional benefits	0	17	16	30	20
Total	**0**	**317**	**328**	**360**	**350**
Annual variable remuneration	40	100	108	120	120
Perennial variable remuneration					
SOP 2016/II (ends on Dec. 31, 2019)	0	77	198	0	0
SOP 2017/I (ends on Dec. 31, 2019)	0	0	0	333	633
Severance payment	0	0	0	0	0
Compensation	61	0	0	0	0
Total	**101**	**177**	**306**	**453**	**753**
Pension expenses	0	0	0	0	0
Total renumeration	**101**	**494**	**634**	**813**	**1,103**

The contract concluded with former CEO, Dr. Martin U. Schefter, ended on June 16, 2016. In 2017, the remaining variable remuneration and settlement amount were paid.

Dr. Mathias Gollwitzer assumed the role of CFO on August 10, 2015. He receives fixed annual remuneration of €312 thousand and a variable target component of €108 thousand. In the year under review, 25,000 subscription rights were issued to him under the share option plan SOP 2016/II with an exercise price of €31.32, which valued at €7.91 each in line with the Black-Scholes model. In the event of a change of control, he is entitled to a one-off payment up to €700 thousand if he resigns within one month of the change of control. He will be subject to a non-competition clause for a period of 6 months from the end of his contract of employment for which he will receive a monthly, subsequent compensation of 50% of a twelfth of his fixed salary applicable at the time.

Dr. Dirk Rothweiler assumed the role of CEO on January 1, 2017. He receives fixed annual remuneration of €330 thousand and a variable target component of €120 thousand. In the year under review, subscription rights were issued to him under the share option plan SOP 2017/I with a exercise price of €31.32. These came to a total of 80,000 share options valued at €7.91 each in line with the Black-Scholes model. In the event of a change of control, he is entitled to a one-off payment up to €700 thousand if he resigns within one month of the change of control.

The additional benefits under contracts of executive board members include cash benefits for the private use of company cars, accommodation allowances, allowances for trips home and relocation costs.

The variable remuneration components of executive board contracts are linked to the achievement of specific ratios by the company. 70% of the variable salary is dependent on quantitative targets and 30% on qualitative targets. The qualitative targets are agreed individually between each executive board member and the Supervisory Board.

In the year under review, variable components amounting to €288 thousand (previous year: €301 thousand) were paid out, which are reported under annual variable remuneration. Multi-annual remuneration components have been agreed under share option plans.

No remuneration was paid to former executive board members or directors or to their surviving dependents in the fiscal year. As at December 31, 2018, former executive board members had no subscription rights.

Supervisory Board

Remuneration of the Supervisory Board is regulated by Article 13 of the Articles of Association and determined by the Annual General Meeting. In accordance with the resolution of the Annual General Meeting on May 23, 2014, there was a new regulation for supervisory board remuneration. After the fiscal year has ended, members of the Supervisory Board receive remuneration of €20 thousand for each full year of membership of the Supervisory Board. This increases to €50 thousand for the Chairman and to €30 thousand for the Deputy Chairman. The members of the Supervisory Board are covered by third-party financial loss insurance (D&O insurance) taken out by the company at an appropriate level in the interests of the company. The company pays the premiums for this insurance. No deductible has been agreed.

The company reimburses each member of the Supervisory Board for any reasonable expenses incurred in the performance of their duties for which proof has been provided and for any value-added tax that applies to their remuneration.

Remuneration for the members of the Supervisory Board amounted to €120 thousand in fiscal year 2018 (previous year: €112 thousand). Supervisory Board members do not receive any performance-related remuneration and do not participate in the company's share option plan.

Other related parties

The director of a subsidiary leased an office property to the subsidiary at standard market conditions. He received €96 thousand (previous year: €95 thousand) for this.

No other transactions with other related parties took place in the year under review.

33. Financial Risk Management

Risk management for financial instruments

First Sensor sells its products and services worldwide and purchases materials on an international market, which leads to market risks owing to changes in exchange rates.

The company also finances its operations partly with bank loans, which involve interest rate risks owing to variable interest conditions. The company hedges the interest rate risk. As required, foreign exchange risks are reduced by concluding foreign exchange forward transactions in connection with material purchases.

The company's main financial instruments comprise trade accounts receivable, cash and cash equivalents, promissory note loans, utilized overdraft facilities and bank loans. The aim of these financial liabilities is to finance the company's business operations. The principal risks result from default, liquidity, currency, interest rate and fair value risks. There are no other price risks from financial instruments.

The company has concluded interest rate swaps to hedge against interest rate risks.

Fair value risk

The fair value of the financial assets and financial liabilities is recognized at the amount at which the relevant instrument could be exchanged in a market transaction (excluding forced sale or liquidation) between willing parties.

The methods and assumptions used to calculate fair values are as follows:

- Cash and cash equivalents and current deposits, trade accounts receivables, trade accounts payables and other current liabilities are shown at their carrying amount, owing to their short terms.

- The fair value of unquoted instruments, loans and other financial liabilities, obligations under finance leases and other non-current financial liabilities is estimated by discounting the future cash flow on the basis of interest rates currently available for borrowings on similar terms, credit risks and remaining maturities.

First Sensor enters into derivative financial instruments with various banks with a good credit rating. The interest rate swaps are measured using a valuation technique with input parameters that can be observed on the market. Among the most frequently used measurement methods are forward price and swap models using present values. The models include various variables such as the credit rating of business partners, foreign exchange spot and forward rates and yield curves. Changes to the counterparty default risk had no effects on the assessment of the hedge effectiveness and other financial instruments measured at fair value.

Fair value hierarchy

The Group uses the following hierarchy for each valuation technique to determine and record fair values of financial instruments:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: techniques where all input parameters which have a material effect on the recognized fair value are observable, either directly or indirectly.
- Level 3: techniques using input parameters which have a material effect on the recognized fair value and are not based on observable market data.

As at December 31, 2018, First Sensor measured specific liabilities at fair value using the level 2 valuation technique. These liabilities comprise several interest rate swaps to hedge the interest rate risk.

There were no changes in the calculation of fair value during the period under review.

Derivative financial instruments

The First Sensor Group uses interest rate swaps to hedge the exposure to interest rate risk arising from variable rate liabilities and forward foreign exchange transactions to hedge exposure to currency risk. The following table shows the market values:

Interest rate hedging

In € thousand	Maturity	Hedge	Interest rate	Nominal 2017	Nominal 2018	Market value 2017	Market value 2018
Interest rate swap I (3145170UK)	Dec. 31, 2020	3M EURIBOR	3.83 %	626	418	-42	-20
Interest rate swap II (3467328UK)	Dec. 31, 2020	3M EURIBOR	2.17 %	308	205	-12	-6
Interest rate swap/interest rate cap (50W8OY5G-N4FRA20170406000000253109305	Dec. 21, 2022	6M EURIBOR + Cap	0.27 %	18,000	18,000	-27	-284
				18,934	**18,623**	**-81**	**-310**

In 2018, no foreign exchange hedges were concluded.

Currency sensitivity

The domestic subsidiaries usually have trade business in euro. Only a small amount of trade accounts receivables and trade accounts payables were nominated in foreign currencies. Appreciation or depreciation of the euro by 10% compared with the major currencies would have a maximum impact on the profit of €0.4 million (previous year: €0.4 million).

Appreciation or depreciation of the euro by 10% compared with the relevant currencies would decrease or increase the exchange equalization item in equity by a maximum of €0.4 million (previous year: €0.4 million) because financial statements of subsidiaries denominated in foreign currencies are converted using the modified reporting date method.

Interest rate sensitivity

The risk of market interest rate fluctuations to which the Group is exposed results from interest-bearing cash investments and from floating-rate liabilities that are not hedged against interest rate risks with interest rate hedging instruments.

Since the vast majority of First Sensor's floating rate liabilities are hedged against interest rate risks via interest rate swaps, the Group is exposed to interest rate risk only to a minor degree. A change in interest rates of 100 basis points would have a maximum impact on net profit of €0.1 million (previous year: €0.1 million).

Direct effects on equity from interest rate hedging instruments used in hedge accounting would amount to approximately €+/-0.1 million if the interest rate were to increase by 15 basis points or were to decrease by 10 basis points.

Liquidity risk

The Group monitors liquidity using an automated planning tool. This tool assesses cash and cash equivalents on a daily basis, the terms of financial investments and financial assets (e.g. receivables, other financial assets) together with expected cash flow from business activities.

As at December 31, 2018, the Group's financial liabilities show the following maturities. All data are based on contractual, non-discounted payment obligations.

In € thousand	Due within 1 year	Due between 1 to 5 years	Due in over 5 years	Dec. 31, 2018 Total
Interest-bearing loans	3,891	37,611	6,500	**48,002**
Trade accounts payables	12,558	0	0	**12,558**
Other liabilities	7,994	0	0	**7,994**
Total	**24,443**	**37,611**	**6,500**	**68,554**

In € thousand	Due within 1 year	Due between 1 to 5 years	Due in over 5 years	Dec. 31, 2018 Total
Interest-bearing loans	16,115	32,184	0	**48,299**
Trade accounts payables	7,885	0	0	**7,885**
Other liabilities	10,692	0	0	**10,692**
Total	**34,692**	**32,184**	**0**	**66,876**

Capital management

The primary aim of capital management at the company is to ensure a high credit rating and an equity ratio that is appropriate to the risk position and strategy, which helps to support the business and maximize shareholder value. Minimum equity ratios are stipulated as conditions in some loan agreements. The equity ratio also affects the credit rating and represents one of several factors determining the applicable interest rate. The credit rating is also a deciding factor for customers when deciding which company to award a contract to.

The Group takes into account the equity ratio to manage its capital.

In € thousand	Dec. 31, 2017	Dec. 31, 2018	Δ absolute	in %
Shareholders' equity	81,899	88,767	6,868	8.4
Total assets	159,577	168,383	8,806	5.5
Equity ratio in %	51.3	52.7	1.4	2.7

The company fulfilled the key ratios (covenants) required under loan agreements in the year under review.

34. Further Notes in Line With HGB Regulations

The following notes contain additional information constituting mandatory components of the Notes to the Financial Statement as defined in the German Commercial Code (HGB).

Board

Name	Position on the Board
Dr. Dirk Rothweiler	CEO (since January 1, 2017)
Dr. Mathias Gollwitzer	CFO (Ssince August 10, 2015)

As CEO, Dr. Dirk Rothweiler is responsible for business policy guidelines, company law, corporate strategy, corporate communication, M&A, investments, subsidiaries, sales and marketing, research and development, product development, production, market analysis and market development, as well as Supervisory Board concerns.

Dr. Mathias Gollwitzer is appointed Chief Financial Officer. He is responsible for finance, investor relations, planning, controlling, reporting, human resources, law, IT, purchasing, Group risk management, internal control and compliance.

Supervisory Board

Name/ job title	Position on the Board	Membership of statutory supervisory board	Membership of comparable domestic or foreign supervisory committees
Prof. Dr. Alfred Gossner President Munich Business School	Chairman of the Supervisory Board since September 11, 2012 Re-election on May 24, 2017	Bayern Innovativ GmbH, Nürnberg, since 2003 until 2/2018	None
Götz Gollan Board member at equinet Bank AG, Frankfurt am Main (until August 31, 2018) Board member at Nanogate SE, Quierschied-Göttelborn (since September 1, 2018)	Deputy Chairman of the Supervisory Board since September 11, 2012 (member since June 17, 2010)	None	None
Marc de Jong CEO LM Wind Power A/S, Kolding, Denmark CEO InnoMarket B.V. Eindhoven, Netherlands	Member of the Supervisory Board since May 23, 2014	None	Technical University Eindhoven, Netherlands (Member of the Supervisory Board)
Prof. Dr. Christoph Kutter Director to the Fraunhofer EMFT, Munich	Member of the Supervisory Board since May 24, 2017	None	VDI/VDE Innovation+-Technik GmbH, Berlin (Member of the Supervisory Board)

Disclosure in accordance with Article 160 (1) 8 AktG

According to the voting rights notifications submitted to us, the following individuals/companies held more than 3% of the shares in First Sensor AG as at December 31, 2018. This information may deviate from the current voting rights held if a reporting threshold has not been reached since the last notification, meaning that the person or institution concerned was not required to submit a voting rights notification:

Individual/ company	Domicile	Date of notification	Date of threshold touched	Date of publication	Threshold value reached, exceeded or fallen below	Percentage of shares at time of notification		Allocation according to
						%	Voting rights	
DPE Deutsche Private Equity B.V. Aktionär: FS Technology Holding S.à.r.l.	Amsterdam Netherlands	Aug. 14, 2018	Nov. 26, 2015	Aug. 14, 2018	3%, 5%, 10%, 15%, 20%, 25% and 30% exceeded	36.02	3,659,419	Article 34 WpHG
Teslin Capital Management BV Fonds: Midlin NV	Maarsbergen, Netherlands	Jun. 05, 2018	Mar. 21, 2016	June 06, 2018	3%, 5% exceeded	5.03	511,548	Article 34 WpHG
Teslin Capital Management BV Fonds: Gerlin NV	Maarsbergen Netherlands	Jun. 25, 2018	Jun. 21, 2018	Jun. 28, 2018	3%, 5% exceeded	5.01	512,278	Article 34 WpHG

Employees

The average number of employees is stated as full-time equivalents (FTE):

Full time equivalent	2017	2018	Δ absolute	in %
Germany	729	777	48	6.6
Europe	34	33	-1	-2.5
North America	24	25	1	2.7
Others	0	0	0	0
Total	**787**	**835**	**48**	**6.1**

Additionally the average number of apprentices was 28 (previous year: 31).

Fees of the auditor

In € thousand	2018
Annual audit	131
Other advisory services	16
Total	**147**

The audit fees for the financial statements comprise the audit of First Sensor AG's separate financial statements pursuant to HGB, First Sensor's consolidated financial statements pursuant to IFRS and the financial statements of major subsidiaries of First Sensor pursuant to HGB. The auditor audits the separate financial statements of the company and the consolidated financial statements for all audit periods starting from 2013.

Waiver of disclosure pursuant to section 264 (3) HGB

The following domestic subsidiaries with the legal status of a limited liability corporation have met the conditions for claiming exemption under section 264 (3) of the German Commercial Code (HGB) and have thus exercised the option not to publish annual financial statements:

- First Sensor Lewicki GmbH, Oberdischingen
- First Sensor Microelectronic Packaging GmbH, Dresden

Payout block

Internally created intangible assets in the amount of €2,482 thousand (previous year: €2,375 thousand) were reported in the balance sheet of the individual financial statements of First Sensor AG. There were also deferred taxes of €744 thousand (previous year: €736 thousand). This led to €1,708 thousand (previous year: €1,639 thousand) that is subject to the payout block.

The difference between the recognition of pension liabilities with an average market interest rate of the last ten years (3.21%) and the last seven years (2.32%) is €15 thousand (previous year: €15 thousand) and is also subject to the payout block in accordance with section 253 (6) sentence 2 HGB.

35. Corporate Governance

The company has issued a declaration of compliance pursuant to section 161 AktG (German Stock Corporation Act) and this is permanently available on the company's website.

36. Supplementary Report

The company is not aware of other key events following the end of the fiscal year, which will affect the net assets, financial position and results of operations.

Berlin, March 11, 2019

First Sensor AG

Dr. Dirk Rothweiler
CEO

Dr. Mathias Gollwitzer
CFO

05 Additional Information

Auditors Report

Audit opinion of the consolidated financial statements and the combined management report

Audit opinion

We have audited the consolidated financial statements of First Sensor AG, Berlin and its subsidiaries – consisting of the consolidated balance sheet as at December 31, 2018, the consolidated statement of comprehensive income, the consolidated statement of changes in equity, the consolidated statement of cash flows for the fiscal year from January 1 to December 31, 2018 and the notes, including a summary of significant accounting policies.

Furthermore, we have audited the combined management report summarized in the management report (subsequently: combined management report) of First Sensor AG, Berlin for the fiscal year from January 1 to December 31, 2018. The non-financial Group declaration included in the company's Annual Report, to which reference is made in the combined management report was not audited in terms of its content in line with German legal regulations. We have not audited the non-financial Group declaration included in the company's Annual Report, to which reference is made in the combined management report in terms of its content in line with German legal regulations.

In our opinion based on the findings of our audit,

- the accompanying consolidated financial statements conform in all material respects with regulations of the International Financial Reporting Standards (IFRS), as applicable in the EU, and the additional German legal regulations to be applied in accordance with section 315 e (1) of the Handelsgesetzbuch (HGB – German Commercial Code) and give a fair view of the asset and financial situation of the Group as at December 31, 2018 and its earning situation for the fiscal year from January 1 to December 31, 2018 and
- the accompanying combined management report conveys a true and fair view of the company's and the Group's situation. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with the German legal regulations and accurately presents the opportunities and risks of the future development. Our audit opinion on the combined management report does not apply to the content of the non-financial Group declaration included in the company's Annual Report and the Group declaration of business management published on the company's website each of which is referred to in the combined management report.

In accordance with section 322 (3) sentence 1 of German Commercial Code (HGB), we declare that our audit has not resulted in any objections to the appropriateness of the consolidated financial statements or the combined management report.

Basis for the audit opinion

We have carried out our audit of the consolidated financial statements and the combined management report in accordance with section 317 of German Commercial Code (HGB) and the EU directive on specific requirements regarding statutory audit of public-interest entities (No. 537/2014; referred to below as “EU Regulation No. 537/2014”), taking into account the principles of proper accounting established by the German Institute of Accountants (IDW). In accordance with these regulations and principles our responsibility is described in the “Responsibility of the auditor for the audit of the consolidated financial statements and the combined management report” section of our audit opinion. We are independent from the consolidated companies in accordance with the European and German regulations on commercial and professional law and have met our other German professional obligations in accordance with these requirements. Furthermore, in accordance with Article 10 (2) f EU Regulation No. 537/2014, we declare that have not carried out any prohibited non-audit services in accordance with Article 5 (1) EU Regulation No. 537/2014. We believe that that the audit evidence we have obtained is sufficient and appropriate to serve as a basis for our audit opinion on the consolidated financial statements and the combined management report.

Particularly key audit matters for the audit of the consolidated financial statements

In particular, key audit matters are such matters which were most significant at our due discretion in our audit of the consolidated financial statements for the fiscal year from January 1 to December 31, 2018. These matters have been taken into account in connection with our audit of the consolidated financial statements as a whole and for forming our audit opinion; we do not provide a separate audit opinion on these matters.

We present what we consider to be the most important audit matter, the goodwill for impairment below:

a) the risk for the financial statements

As at the balance sheet date, the consolidated balance sheet reports six goodwill items with a carrying amount of €29.8 million (previous year: €29.8 million). This corresponds to around 17.7% of total assets (previous year: 18.7%).

The company's disclosures on goodwill are included in the following sections of the notes of the consolidated financial statements: "2. Principles of consolidation", subsection "Intangible assets/(b) Goodwill" and "5. Goodwill".

In accordance with IAS 36.90, cash generating units, to which goodwill has been assigned, are subject to an impairment test at least once a year.

As part of this test, the company uses complex valuation models which are based on forecasts of the future development of the respective operating business and the resulting payment flows. The result of the impairment test is therefore largely subject to the influence of estimated values. As a result, we consider that these matters were of particular importance during our audit.

b) Processes and conclusions of the audit

As part of our audit, we performed plausibility checks on the changes made to part of the composition of the cash-generating units and the planning underlying the impairment tests of all significant goodwill. In doing so, we also assessed these for potentially one-sided exercise of discretion.

In addition to a plausibility check of underlying planning, we assessed the reliability of the forecasts by comparing it to last year's forecasts and the realized actual figures.

In doing so, we paid particular attention to such material goodwill where the recoverable amount of the cash generating unit is only slightly above the carrying amount.

Furthermore, we examined the calculation methods used for their methodologically correct application, derivation of discount rates and, in random samples, the mathematical correctness.

The assumptions and discretionary decisions of the legal representatives which the impairment test of goodwill is based on are within acceptable limits and are balanced overall.

Other information

The legal representatives are responsible for other information. Other information consists of:

- The Group non-financial declaration included in the company's Annual Report,
- The Group declaration of business management published on the company's website, to which reference is made in the combined management report,
- The other parts of the Annual Report, not including the audited consolidated financial statements and combined management report and our audit opinion,
- The Corporate Governance Report under No. 3.10 of the German Corporate Governance Codex and
- the statement in accordance with section 297 (2) sentence 4 HGB on the consolidated financial statements and the statement in accordance with section 315 (1) sentence 5 HGB on the combined management report.

Our audit opinion on the consolidated financial statements and on the combined management report do not apply to the other information and accordingly, we provide neither an audit opinion nor any another form of audit conclusion for this.

In connection with our audit, we have the responsibility to read the other information and in doing so, assess whether the other information

- has significant discrepancies to the consolidated financial statements, combined management report or our figures obtained in the audit or
- appear otherwise significantly misrepresented.

If on the basis of the work we implemented, we come to the conclusion that there is a significant misrepresentation of this other information, we are obligated to report this fact. In this connection, we have nothing to report.

Responsibility of the legal representatives and the Supervisory Board for the consolidated financial statements and the combined management report

The legal representatives are responsible for the preparation of the consolidated financial statements, which comply with the regulations of the International Financial Reporting Standards (IFRS), as applicable in the EU, and the additional regulations in accordance with section 315 e (1) HGB, and the German legal regulations in all material respects, and that the consolidated financial statements give a fair view of the asset, financial and earning situation of the Group in accordance with the above regulations. In addition, the legal representatives are responsible for internal controls, which they have determined as necessary, to enable the preparation of consolidated financial statements that are free from significant – intended or unintended – material misstatements.

In the preparation of the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They also are responsible for disclosing matters, if relevant, in connection to the continuation of the Group as a going concern. Furthermore, they are responsible for preparing the accounts on the basis of the continuation of the Group as a going concern, unless there is the intention to liquidate the Group or discontinue business operations or there is no realistic alternative.

The legal representatives are also responsible for preparing the combined management report, which overall gives a fair view of the Group's situation, and, in all material respects, is in accordance with the consolidated financial statements, complies with German legal regulations and accurately represents the opportunities and risks of the future development. In addition, the legal representatives are responsible for the precautions and measures (systems), which they considered necessary to enable the preparation of a combined management report in accordance with applicable German legal regulations and for providing sufficient suitable evidence for the statements in the combined management report.

The Supervisory Board is responsible for monitoring the Group's accounting processes for preparing the consolidated financial statements and the combined management report.

Responsibility of the auditor for the audit of the consolidated financial statements and the combined management report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements are free as a whole from significant – intended or unintended – material misstatements, and whether the combined management report gives a fair view of the Group's situation overall and is in accordance with the consolidated financial statements in all material respects and with the knowledge gained during the audit, complies with German legal regulations and accurately presents the opportunities and risks of the development and to issue an audit report which includes our audit opinions on the consolidated financial statements and the combined management report.

Reasonable assurance is a high degree of assurance but is no guarantee that an audit conducted in accordance with section 317 HGB and the EU Regulation No. 537/2014 taking into account the principles of proper accounting established by the German Institute of Accountants (IDW) always detects a significant material misstatement. Misrepresentations can result from infringements and misstatements and are considered as significant if they could reasonably be expected to influence, individually or collectively, the economic decisions of addressees on the basis of these consolidated financial statements and combined management report.

During the audit, we exercise due discretion and maintain a critical attitude. Furthermore,

- we identify and assess the risks of material misstatement – intended or unintended – in the consolidated financial statements and in the combined management report, planning and performing audit activities as a reaction to these risks and obtaining audit evidence that is sufficient and appropriate to serve as the basis for our audit opinion. The risk that material misstatements will not be detected is higher with infringements than with misstatements as infringements may include fraudulent conduct, forgery, intentional incompleteness, misrepresentations or overriding internal controls.
- We gain an understanding of the internal control system relevant for the audit of the consolidated financial statements and the precautions and measures relevant for the audit of the combined management report to plan the audit activities which are appropriate under the given circumstances, but not with the aim of providing an audit opinion on the effectiveness of these systems.
- We assess the adequacy of the accounting policies used by the legal representatives and the reasonableness of the values estimated by the legal representatives and the related disclosures.
- We draw conclusions on the adequacy of the reporting principles used by the legal representatives for the continuation of the Group as a going concern, and, on the basis of the audit evidence obtained, whether there is material uncertainty relating to events or conditions, which may raise significant doubts on the Group's ability to continue as a going concern. If we come to the conclusion that there is significant uncertainty, we are obligated to draw attention in the audit opinion to the related disclosures of the consolidated financial statements and the combined management report, or, if these discloses are inadequate, to modify our respective audit opinion. We draw our conclusions based on the audit evidence obtained up until the date of our audit opinion. However, future events or conditions may result in the Group being unable to continue as a going concern.
- We assess the overall presentation, the preparation and the contents of the consolidated financial statements, including the

disclosures and whether the consolidated financial statements represent the underlying transactions and events in a way that the consolidated financial statements are prepared in compliance with the regulations of the International Financial Reporting Standards (IFRS), as applicable in the EU, and the additional regulations in accordance with section 315 e (1) HGB, and the German legal regulations in all material respects, and that the consolidated financial statements give a fair view of the asset, financial and earning situation of the Group in accordance with the above regulations.

- We obtain sufficient appropriate audit evidence for the accounting information of the company or business activities within the Group to provide an audit opinion on the consolidated financial statements and the combined management report. We are responsible for directing, monitoring and implementing the audit of the consolidated financial statements. We take sole responsibility for our audit opinion.
- We assess the consistency of the combined management report with the consolidated financial statements, its compliance with legislation and the view it conveys regarding the Group's situation.
- We perform audit activities on the forward-looking statements presented by the legal representatives in the combined management report. On the basis of sufficient, suitable audit evidence, we have monitored the important assumptions on which the forward-looking statements are based and assess the proper derivation of the forward-looking statements from these assumptions. We do not provide an independent audit opinion on the forward-looking statements or on the underlying assumptions. There is a significant, unavoidable risk that future events will significantly differ from forward-looking statements.

Our discussions with those responsible for monitoring include the planned scope and timing of the audit and significant audit findings, including any deficiencies in the internal control system that we identify during our audit.

We provide those responsible for monitoring with a statement that we have complied with the relevant independence requirements and discuss all relationships and other matters with them that may reasonably be expected to have an impact on our independence and the protective measures adopted.

From the matters which we have discussed with those responsible for monitoring, we determine those matters which were most important during the audit of the consolidated financial statements for the current reporting period and are therefore the key audit matters. We describe these matters in the audit opinion, unless laws or other legislations exclude public disclosure of the facts.

Other legal requirements

Other disclosures in accordance with Article 10 EU Regulation No. 537/2014

We were elected as the auditor of the consolidated financial statements by the Annual General Meeting on May 23, 2018. Following the Annual General Meeting, we were appointed by the Supervisory Board. Since fiscal 2013, we have been continuously engaged as the auditors of the consolidated financial statements of First Sensor AG, Berlin.

We declare that the audit opinions included in this audit opinion are consistent with the additional report to the Supervisory Board in accordance with Article 11 EU Regulation No. 537/2014 (audit report).

Responsible auditor

The auditor responsible for the audit is Mr. Hans-Peter Möller."

Hanover, March 12, 2019
Ebner Stolz GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

Lutz Reichert
Responsible auditor

Hans-Peter Möller
Responsible auditor

Statement by the Legal Representatives (Responsibility Statement) in Accordance With §§ 297 Abs. 2 S. 4, 315 Abs. 1 S. 5 HGB

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, financial position and profit or loss of the group, and the group management report includes a fair review of the development and performance of the business and the position of the group, together with a description of the principal opportunities and risks associated with the expected development of the group.

Berlin, March 12, 2019

First Sensor AG

Dr. Dirk Rothweiler
CEO

Dr. Mathias Gollwitzer
CFO

Financial Calendar 2019

March 21

PUBLICATION OF CONSOLIDATED FINANCIAL REPORT 2018

Publication of Annual Report 2018/press release/ Financial Statement press conference in Berlin

May 3

ANNUAL GENERAL MEETING 2019

PENTA HOTEL, Grünauer Str. 1, 12557 Berlin

May 8

DIVIDEND PAYMENT

Subject to the approval of the Annual General Meeting

May 14

Q1 RESULT

Q1 Interim Report/press release/conference call with analysts & webcast

May 14 – 15

GERMAN SPRING CONFERENCE 2019

Le Meridien Hotel, Frankfurt am Main

August 14

6 MONTH RESULT

6 Month Financial Report 2019/press release/ conference call with analysts & webcast

November 14

Q3 RESULT

Q3 Interim Report/press release/conference call with analysts & webcast

November 25 – 26

GERMAN EQUITY FORUM 2019

Sheraton Frankfurt Airport Hotel, Frankfurt am Main

First Sensor AG
Investor Relations

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