

# We empower the future

Annual Report 2016

# First Sensor in figures

in € million, unless otherwise indicated	2012	2013	2014	2015	2016
Sales revenues	111.9	108.5	124.0	137.7	150.1
Industrial	-	-	68.4	74.1	72.5
Medical	-	-	20.4	23.8	30.7
Mobility	-	-	35.2	39.8	46.9
EBITDA	13.4	11.6	13.5	11.4	19.4
EBITDA margin (%)	12.0	10.7	10.9	8.3	12.9
EBIT	3.6	2.7	4.1	1.2	10.0
EBIT margin (%)	3.2	2.5	3.3	0.9	6.7
Net profit for the period	0.5	-0.5	0.4	-1.5	6.1
Earnings per share (€)	0.05	-0.05	0.02	-0.17	0.57
Cash flow from operating activities	10.0	13.1	12.2	5.0	16.6
Free cash flow	-2.9	5.9	7.5	-1.8	10.0
Balance sheet total	158.6	144.9	144.9	153.5	154.0
Shareholders' equity	69.9	70.0	72.0	71.3	77.5
Equity ratio (%)	44.1	48.3	49.7	46.4	50.3
Net debt	39.0	35.8	29.7	33.0	24.4
Working capital	36.3	28.6	30.3	36.5	35.7
ROCE	2.6	2.3	3.4	1.0	8.5
Incoming orders	117.8	121.4	139.3	142.3	132.9
Orders on hand	73.4	73.7	86.4	90.7	82.2
Book-to-bill-ratio	1.05	1.11	1.12	1.03	0.89
Employees (average of the period)	691	686	719	770	791
Sales revenues per employee	161.9	158.2	172.5	178.8	186.7
Number of shares in thousand as of 31.12.	9,940	9,981	10,131	10,167	10,208

# Company profile

In the growth market of sensor systems, First Sensor develops and manufactures sensors and sensor solutions for the ever-increasing number of applications in the industrial, medical and mobility target markets. Based on tried-and-tested technology platforms, we develop products such as chips, components, sensors and entire sensor systems. These products give our customers a real competitive edge. These customers include well-known industrial groups and young technology companies that utilize our know-how and many years of expertise to develop their own innovative products. Trends such as Industry 4.0, autonomous driving and the miniaturization of medical technology are all driving forces for our growth.

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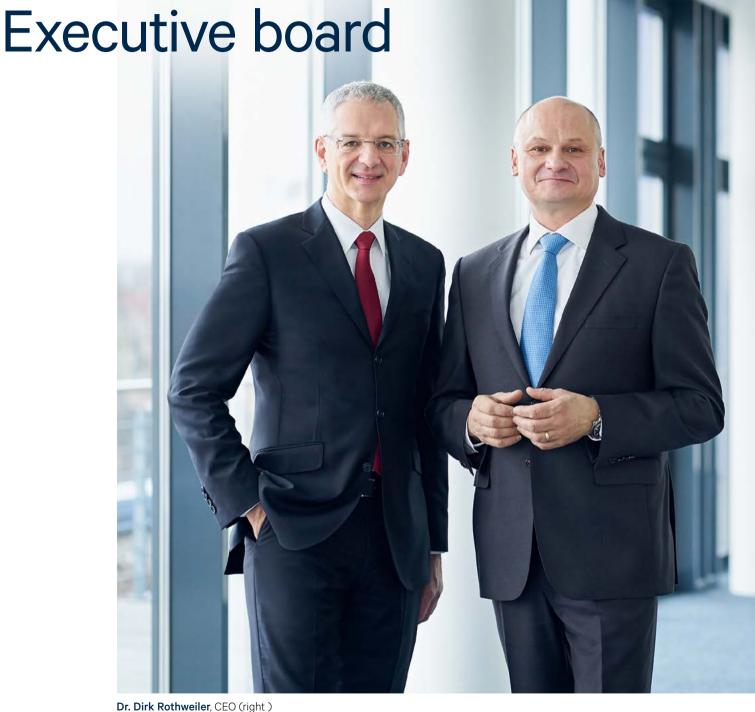
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# We empower the future

### Our Excellence

25 years after the company was established, we are now a leading provider of sensor technology. This success is the result of our commitment to excellence. For us, this begins with customer collaboration. We use our technological expertise and application know-how to help our customers develop the perfect product or find the right solution. But excellence also means ensuring the utmost precision and quality throughout all stages of the value chain across a number of clear processes. This gives rise to exceptionally powerful sensors and sensor systems with tailored features that guarantee sustainable success for both us and our customers. This excellence, combined with our corporate values of innovation and proximity, will continue to serve as the compass for our actions going forward. We will use it as a basis to define and shape the growth markets of tomorrow.

# Foreword by the



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



# Dear shareholders and business partners,

We are pleased to be able to look back on a particularly successful fiscal year. Having already posted record sales in fiscal year 2015, we once again demonstrated that we are a high-growth company in the past fiscal year. With sales growth of 9% compared to 2015, we are at the upper end of our forecast for 2016 and are on track to achieve our growth targets. We passed the €150 million mark for the first time to record total sales of €150.1 million for fiscal year 2016.

At the same time, we demonstrated that First Sensor is capable of translating this volume of business into a significant improvement in profitability. An achievement that is likely to be even more important to us and certainly to you, too. After achieving EBIT margins of 1%, 2% or 3% in past years, in 2016 we generated a margin of 6.7%. This indicates that our activities aimed at improving processes and increasing efficiency are starting to bear fruit. And it also shows that we are coming closer step by step to our goal of achieving an EBIT margin of 10%.

Achieving these figures put us at the upper end of our original expectation at the close of the past fiscal year. The fact that we improved sales growth, EBIT growth and many other key figures significantly year-on-year is the result of the operating excellence that we have firmly anchored in our mission statement and strategy. This umbrella term encompasses all strategic and operating measures that help us to continuously improve our corporate structures and processes. On the following pages, a number of our employees will highlight what kind of an impact these measures have and what excellence means to us in our everyday work.

# Customer focus is the key to success

# A feel for the markets and products of tomorrow

Our commitment to excellence is also reflected in our high level of customer focus, which we believe to be the key to our success. This is how we succeeded in being reappointed by a major German OEM to supply pressure sensors for braking system control. These sensors are being integrated into practically all gasoline engine models of the Group's car brands. Our agreement runs until 2021 and has an anticipated sales volume of around €8 million a year. Our customer was impressed by the combination of technology, product quality and price.

But it is not just our pressure sensors that are impressing customers all over the world; our expertise in optics is and will remain - highly sought-after, too. This is why the Global APD Avalanche Photodiode Market Research Report 2016 acknowledged our leading position in this segment. Avalanche photodiodes (APDs) are used, for example, in LiDAR equipment, which plays a key role in autonomous driving. One of the major companies in this market, Velodyne LiDAR Inc., has recognized the technological quality of our APDs and has now entered into a new strategic supply agreement with us for a volume of several million US dollars over the next three years. Velodyne LiDAR will use First Sensor's avalanche photodiodes across its full product range of LiDAR scanners and supply to a large number of OEMs and technology companies.

Aside from our sensors, the other thing that our customers hold in high regard is our expertise in layout and connection technology. Our photodiode arrays designed for medical technology imaging are one example of this. These products are used in equipment such as PET scanners and CT scanners. We have worked with the Fraunhofer Institute to develop a new frontend technology for this that reduces the wire bonding process from 600 stages to just one, giving us a clear competitive advantage. The product is less prone to error, the yield is greater and the production process is faster – producing a win-win situation for us and the customer.

A key explanation for achievements like these is that we live and love what we do – because our products help to shape and improve the present and the future. Our radiation sensors are being used already to recycle valuable resources in sorting plants for recyclable materials. Our pressure sensors are being used in respiration and anesthesia machines to aid patients' breathing. And our optical sensors are helping motorists to identify traffic signs and hazards as well as keep in their lane and maintain a safe distance.

This situation will certainly continue tomorrow as well. Take our inertial sensors, for example, which will not only allow for a state diagnosis of buildings but also signal to vehicles to reduce their speed when crossing a bridge. Our LiDAR scanners will be used in autonomous vehicles with time-of-flight technology to produce a 360-degree image of the surroundings. And our microring resonators, which we are jointly developing with Charité in Berlin and the Fraunhofer HHI Institute, will be able to use light to identify characteristics from even the tiniest drops of blood. These sensors could be used in the medical technology sector to analyze blood samples in fractions of a second. Speeding up diagnosis would enable doctors to save two thirds of heart attack patients, for example. Around 10% of our workforce is working in our R&D department to turn these visions into a reality. Their project pipeline stretches all the way up to 2020 and, in some cases, beyond.

Software expertise is becoming increasingly important here. Right now, we're helping our customers to make the transition toward intelligent sensor systems. These systems are capable of communicating with other systems and performing control functions – for example to identify tool wear for machine cutting processes at an early stage and change the machine parameters accordingly. Smart systems like these appeal to a large number of customers with a view to Industry 4.0.

# Our focus remains on profitability

# Trust in us and the future

By focusing on the high-growth industrial, medical and mobility markets, we will continue to participate in trends such as Industry 4.0, autonomous driving and the miniaturization of medical technology going forward and leverage these opportunities both quantitatively and qualitatively. To achieve this, we will boost sales and expand internationalization. On this basis, we will continue to grow.

However, this positive business development will be impacted by the scheduled expiry of a major order in the mobility target market at the end of last year. To compensate for this, First Sensor will have to achieve internal growth of as much as €10 million. Consequently, we are only expecting a sales level in the region of €140 million to €145 million in fiscal year 2017. This already takes into account that the market launch of new products can result in delays on the customer's end. In the medium to long term, we continue to anticipate growth rates averaging 10% over the next few years. Not only are these expectations supported by our many development projects, which are based on tangible customer requirements, but they also continue to be supported by market data.

We will focus our efforts on improving profitability in 2017 as well. This is why, on the one hand, we are sticking to our motto of "no sale at any cost." This means that we will accept orders only if they make an adequate contribution to earnings. In tandem with this, we will leverage further optimization potential as planned. We are therefore striving to achieve an EBIT margin of 5% to 6% in fiscal year 2017. The margin target is thus at the level of the original forecast for fiscal year 2016 despite the lower sales guidance compared to 2016. Overall, we are keeping to our goal of achieving an EBIT margin of 10% in the medium term.

Sensors are a fundamental component of the digitalization process; they form the basis for achieving productivity increases and safety in industry, for the advancement of medical technology and for a new era of mobility. We intend to – and will – help shape this future. Our values of innovation, excellence and proximity continue to lay the foundations for this.

Innovation is reflected in our product road map, over the course of which we will bring to market new products and technologies that will secure our long-term growth and the future success of our company. Excellence means that we want to continuously improve what we do and the way we do it. This is what brings about growth in sales and profitability. And more proximity means anticipating customers' requirements and needs even sooner and being more present for our investors.

These values have also shaped our daily work over the past fiscal year. They are embedded in the DNA of our 850 or more employees around the world. We would like to take this opportunity to express our sincere thanks for what you have enabled us to achieve over the past year. We know that with your courage, your motivation and the shared willingness to succeed we will also be able to achieve the goals that we have set ourselves for the future.

We would also like to show our appreciation for the trust that you, our shareholders and business partners, place in us—yesterday, today and tomorrow. Together, we will drive forward First Sensor's development and continue to write our success story. We would greatly value your continued, constructive support in this endeavor.

The Executive Board

Dr. Dirk Rothweiler

J. Tellerit

CEO

Makia followitzer

CFO

# "How do you access new markets all over the world?"

Sales depends not only on strategic market planning but also – and primarily – on face-to-face contact. This is why we're focusing on the targeted expansion of our international presence to increase our proximity to customers in Asia and North America.







# Face-to-tace contact is essential

First Sensor is currently represented on 33 markets worldwide. To target customers in the Asian target market even more effectively, First Sensor relies on strategic market planning and a local presence. After all, direct contact with the customer and significant intercultural prowess are still the be-all and end-all when it comes to acquiring and retaining customers.

As Sales Director Asia & Pacific, Mirtha Valenzuela has been managing First Sensor's sales activities in the Far East since 2013 and is familiar with the business. From Berlin, she manages her 5-person intercultural team, which is based in Berlin and Shanghai.

# "You don't gain access to new markets by sitting at your desk."

The meeting on sales activities in Asia is nearly over. Mirtha Valenzuela has the plans for LASER World of PHOTONICS in Shanghai in front of her and is still discussing the product selection for the international trade fair with her 5-person team and the marketing specialists. "We need to present ourselves well at the trade fair and get a precise idea of what products are in demand on the Asian market right now. After all, Asian customers want innovations and technologies 'made in Germany', and we're their first choice," explains the industrial engineer. She has been managing First Sensor's sales activities in the Far East since 2013 and is familiar with the business.

Trade fairs like LASER are a particularly important way of presenting First Sensor to the local market and coming into contact with customers. In tandem with this, Valenzuela and her team are currently also organizing a business trip to Korea focusing on health care and medical technology. This will require precise scheduling as a number of customer visits have also been arranged. The sales expert regularly gets on a plane to determine local customer requirements, present new products and maintain relations. "Face-to-face contact is essential, but you won't get very far without detailed market analysis and planning. Especially not in Asia," she explains, gesturing to her project plans, which are spread out on the meeting table. "Together with our partners in Asia, we get a close-up picture of the target market." This is followed up with strategic market planning based on parameters like customer structure, stability of market behavior or potential economic influences.

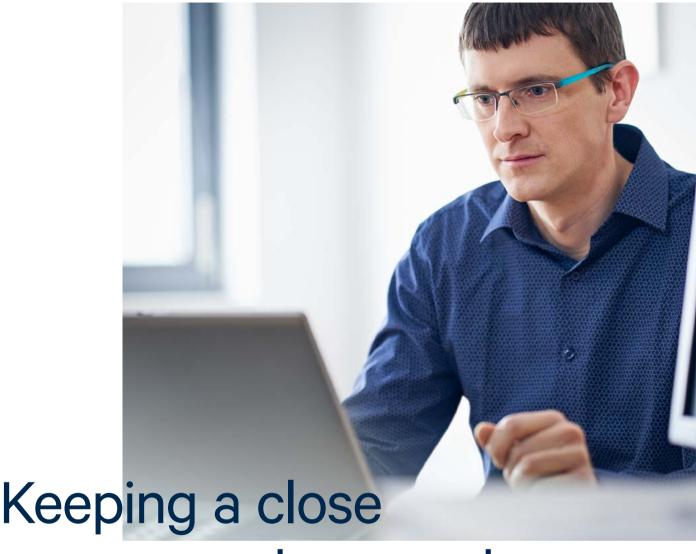
For the Peruvian national, excellence means keeping an eye on intercultural challenges and continuous training in her area of work: "When I came to Germany, it wasn't so much the weather or the food that surprised me – but the massive development potential that so many companies had when it came to service quality and customer focus. The situation here in Germany has improved since, but we're still not where we should be." she states.

These experiences are now helping the Asia expert with her day-to-day business – in the sales business, contact with the customer is ultimately the primary focus. "In Asia, hierarchies and contract negotiations play a completely different role than in Germany. We need to bear differences like this in mind. This is why our sales team has an international makeup," says Valenzuela, looking at the clock as she gathers her things together. The team manager needs to get on. She has a number of offers and price negotiations waiting on her desk. For her, a quick response and flexibility are important sales virtues.

# "How do we enable our customers to be market leaders?"

When it comes down to using innovative sensor solutions to implement our customers' ideas, we always think that crucial bit further ahead. This gives our customers peace of mind that they will be one step ahead of the competition.





eye on market trends

Development of customized sensor solutions is at the very heart of our business success. In addition to an understanding of the market and application know-how, this primarily requires close collaboration with development and production as well as the qualities of a good project manager, as Marcel Einert, Solution Manager at First Sensor in Dresden, tells us.



Marcel Einert has been working at First Sensor since 2011. As Solution Manager, he keeps a constant eye on solutions for customer-specific requirements – from the initial idea to series production.

# "Structured processes with defined stages."

### What is the most common solution that you develop for customers at First Sensor?

All our solutions are one of a kind. This is because they are developed on the basis of a unique set of requirements for a specific customer in one of our markets. Needless to say, we use a common technology platform in solutions development, but this is where the commonality between solutions ends.

# But are there solutions that can be used for cross-market purposes?

Right now, we're helping our customers to make the transition toward intelligent sensor systems. These systems are capable of communicating with other systems and performing control functions – for example to identify tool wear for machine cutting processes at an early stage and change the machine parameters accordingly. Smart systems like these appeal to a large number of customers with a view to Industry 4.0, but they have to be adapted precisely to the specific application in question. This is where we come in.

# If customer requests are so different, how do you go about finding a solution?

We rely on a structured process with clearly mapped out stages. This is an indication of excellence on our part. Not only does this enable us to proceed with extreme efficiency because the objectives are clearly defined and continuously monitored, but the process is also transparent and traceable for the customer.

## Can you name a solution that you are particularly enthusiastic about?

At the moment, that would have to be our photodiode arrays for imaging processes in medical technology. We use these devices to equip machinery ranging from PET scanners to CAT scanners. The new generation of these devices will have a higher resolution and work with much greater precision, such as for identifying cancerous tumors. I'm excited by the fact that our solutions are part of technologies like these that will ultimately save people's lives.

# "How do we engineer products for the world of tomorrow, today?

When developing innovative technologies and products, we don't leave anything to chance. First Sensor follows a structured process from the initial idea through to the finished solution. This ensures that the innovations we create today can be used to shape the future of tomorrow.



First Sensor's goal is to identify and meet the challenges of the future early on. Our development work lays the foundations for creating new products and technologies to make working and living safer, more comfortable and more efficient. To achieve this, the First Sensor development process doesn't begin behind closed doors but with a round table.

# "No looking into a crystal ball"

#### In your view, what challenges does the development of new technologies and sensor solutions entail?

The challenge lies in the fact that we are working with partial products that won't reach market maturity for another ten years. We started developing our avalanche photodiode arrays back in 2000. We're only now at the stage where they're being turned into the basis technology for autonomous driving in LiDAR systems, for example.

#### That sounds tantamount to looking into a crystal ball....

Actually, we have an innovation road map that is continuously revised as part of a strategic process. We know when new products and technologies will be ready for the market. We can tell, for example, by comparing technological progress and market requirements.

# With which innovations will First Sensor still be making headlines in the years to come?

Photonic sensor systems are one exciting development. We're working with Charité in Berlin and the Fraunhofer Heinrich Hertz Institute on developing a new technology platform for ourselves using ring resonators. These sensors could be used in the medical sector to analyze blood samples in fractions of a second. Speeding up diagnosis would allow doctors to save two thirds of patients suffering from a heart attack, for example.





Dr. Marc Schillgalies started his career at First Sensor in 2010. After positions in product management and an appointment as head of the design & simulation development segment, he was appointed to the role of Vice President Development in March 2017 where he is now responsible for all development work at First Sensor.

# Never losing sight of the benefits

The First Sensor development team is responsible for identifying valuable ideas, finding solutions and turning them into a market success. We have a team of 93 specialists - from semiconductor experts to electrical engineers - working to continuously develop our processes and technology platforms. Their job also involves driving forward innovative products and disruptive technologies.

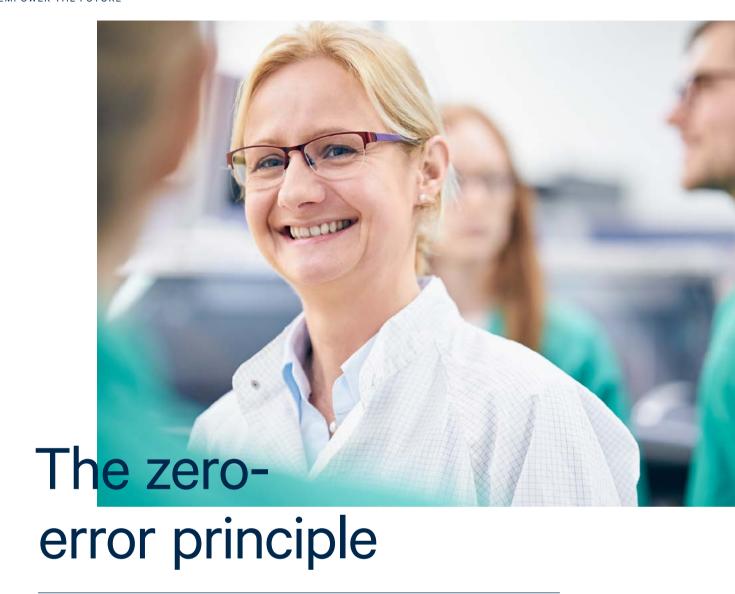
First Sensor currently has 120 ongoing development projects. They all follow a cross-location innovation

process at every stage from computer simulation to system development. This stipulates, among other things, that once a process step is complete a board meeting will be held to discuss how development should proceed to ensure that all activities are geared toward market and customer requirements. This is why sales, solution management and product marketing all sit together at the same table to develop new products and solutions in an attempt to reconcile the forces of market pull and technology push. This is the only way to safeguard the economic benefits of innovations right from the outset.

# "How do clear processes pave the way to the perfect result?"

Keeping an eye on the overall picture is the key to ensuring consistently high product quality. After all, a great many interfaces come into contact during the production process. Clear rules and precise arrangements are required to keep everything running smoothly.





As well as semiconductor production for manufacturing sensor chips, First Sensor AG has five other production locations specializing in layout and connection technology, power electronics and measuring instruments in which its own sensors are used. They all work according to the principle that ensuring consistently high product and production quality costs less than rectifying production errors.



Stephanie Volkmer has been working at First Sensor since 2016. As head of the Weissensee plant in Berlin, she and her 160 or so employees are in charge of assembling complex sensors and producing prototypes.

# "Good processes are what ensures satisfied customers."

Stephanie Volkmer has set herself an ambitious goal. It begins every morning at 9 am with the claim round table and is achieved with tenacity, a good eye and a detailed knowledge of the production processes. And the head of the First Sensor plant in the Weissensee district of Berlin has all of the above. Within the scope of the cross-location "Quality First" initiative, it is her job to eliminate errors. "I'm merciless when it comes to quality," says Volkmer laughing. Together with the five national and three international production locations, the 38-year-old's area of activity constitutes the "workbench" of First Sensor. It is where standard products and customized solutions are manufactured – from minuscule sensor chips to complex sensor systems.

The production unit also assists the development team with prototype production and readies production processes for series production. The particular expertise of the 160 employees based in Weissensee, Berlin, is in prototype and sensor design. "We produce some of our products by hand, and our expertise covers an exceptionally wide variety of versions. This also means that each production stage needs to be accurately executed. Manual operations are often the biggest source of errors," explains the industrial engineer, referring to the highly focused work that takes place under

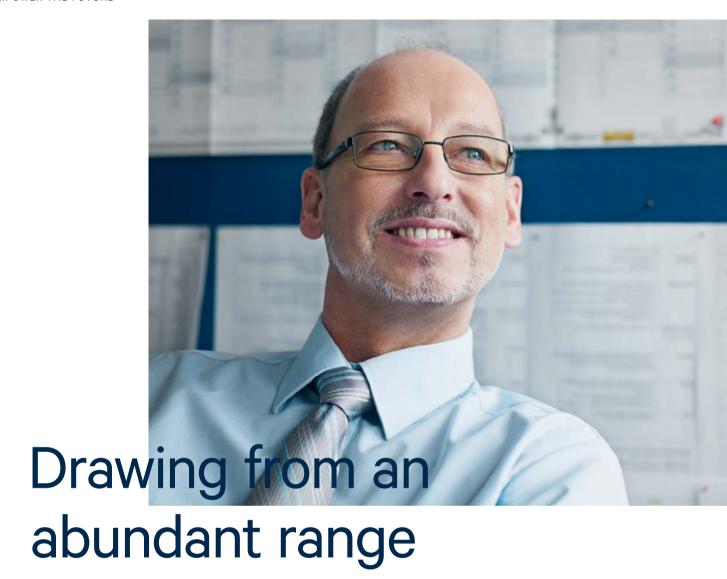
the microscope. Although it doesn't seem like it in the quiet production hall – Volkmer considers precise arrangements to be mandatory: "We need to know the customer's requirements, implement their development specifications, tailor production to these requirements and, naturally, make optimum use of our own location's strengths. Uniform processes are paramount in making this possible." At First Sensor, one such process is supply chain management, which is responsible for issues ranging from order management, production and material requisition planning to goods issue. This process thus regulates communication with suppliers in the operating business and is the first point of contact for customers.

For the industrial engineer, excellence means all locations working continuously to improve their processes as part of the "Quality First" initiative: "Quality management and quality assurance don't just take place selectively but are part and parcel of our daily work. This is why every morning I speak with department representatives about current quality issues out on the shop floor. If I notice a snag or a process that's taking too long, I intervene," says Volkmer. "This is the only way of working in accordance with the zero-error principle and avoiding errors right from the start."

# "How do you find the **perfect fit** for every customer?"

Technologically proven and readily available – customers rely on First Sensor standard products for a great many applications. But no two sensors are the same here either. Technical expertise and a broad understanding of the market form the basis for finding exactly the right product to suit every set of requirements.





In product marketing, an ability to think outside the box is part of the job description. Acting as a liaison between procurement and sales, Jürgen Partosch and his team compile information on the market situation, suitable applications, available products and potential target customers – and also advise customers, as and where required, on how to pick the right sensor.



**Jürgen Partosch** started working for First Sensor in 1993. Based in Munich, he is the head of product marketing for First Sensor standard products.

# "Customer requirements are a central focus."

# First Sensor not only develops sensor solutions but also supplies a wide range of standard products. What benefits does this have?

Whether we're talking about the industrial, medical technology or automotive sector, the application is not always so complex that it warrants a customized sensor solution. This is why our customers greatly appreciate that for standard applications we can offer them a portfolio of roughly 5,000 products that are technologically proven and readily available.

# But how do you find the perfect fit among this multitude of options?

It is crucial to be able to draw from an abundant range to cater to our three markets and their fields of application. Picking out the product from this range that best fits the requirements of our customers requires a good mix of generalists with an overview of the market and technical experts. We have the ideal mix of people here in product marketing. As a liaison between procurement and sales, it is our job to be up to date when it comes to available technologies and products, the situation on our target markets and suitable applications. We use this as a basis to constantly develop our product portfolio further. We also supply advice on the technical specifications of our standard products when contacted by the customer.

# That sounds as though your standard products also factor in customer specifications?

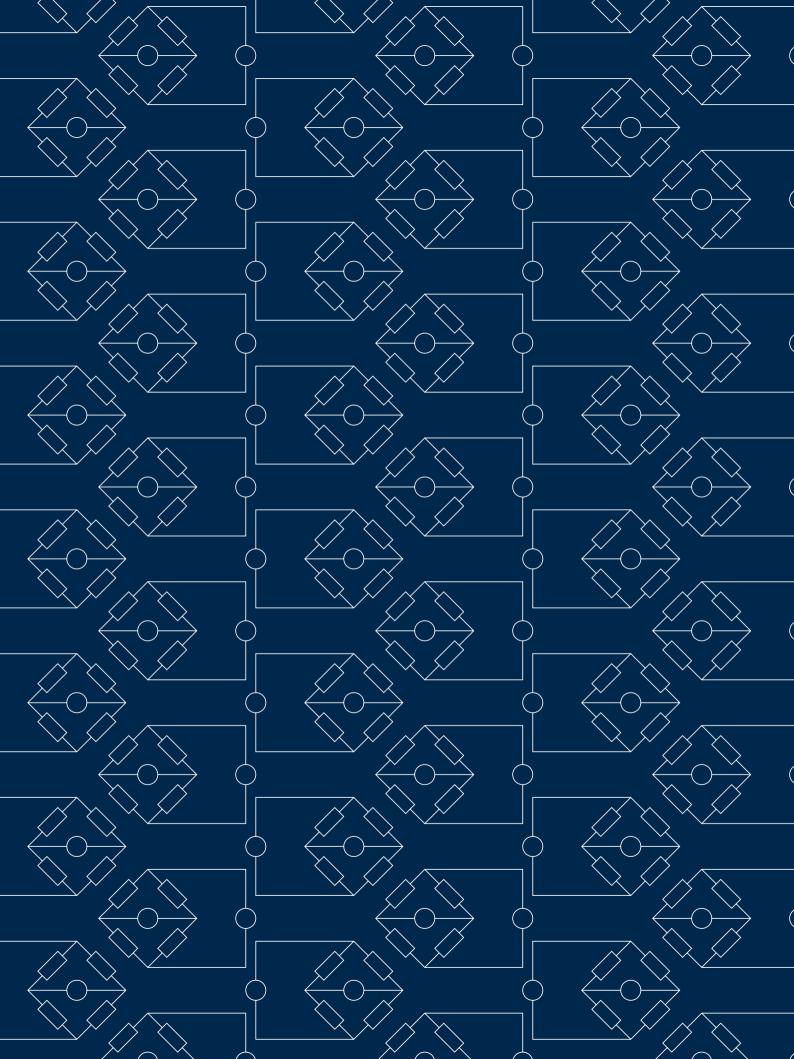
Yes, that's correct. Our standard sensors are prepared to accommodate potential minor modification requests as early as in the development phase. These include signal modifications and software, for example. These modifications can therefore be implemented quickly by our engineering team if requested. We also combine our own sensors with the standard products of partner companies. Hence, customer requirements are a central focus of standard business as well.

## How long does it take for you to identify a suitable product?

Often, we can actually provide an estimation even over the phone. Rapid assistance and in-depth application expertise, combined with direct sales, constitute our unique selling point.

#### Where are the boundaries of your field of work?

When sensors need to be used in an aggressive environment, for example, or signals need to be received outside the available range, this quickly pushes the boundaries of a standard solution. In these cases, we have to engineer a customized sensor solution for the customer. This is the point at which we bring our solution managers on board.



# 2 To our shareholders

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#### Report of the Supervisory Board

In the reporting year, the Supervisory Board fulfilled its duties as prescribed by law, the articles of incorporation and the rules of procedure. It regularly advised the Executive Board in the course of its management of the company, and constantly reviewed and monitored its activity. In addition, it was directly involved in all decisions of strategic and fundamental importance to the company. Both in verbal and in written form, the Executive Board regularly informed the Supervisorv Board of the current business situation, the planning, and the status of strategy implementation, as well as the improvement of organizational procedures and processes. Matters relating to the risk position, risk management and compliance were also dealt with. 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 as the monitoring body, which then discussed them with the Executive Board. All relevant information was passed on promptly and extensively to the Supervisory Board.

Six meetings in person took place in the past fiscal year; details of their content are provided below. In addition, nine circular resolutions were adopted. All the members of the Supervisory Board attended all meetings. At all Supervisory Board meetings, the current business development, the status of implementation of the corporate strategy. key highlights, and opportunities for the company and its subsidiaries were discussed. In addition, the company's risk profile in the context of risk management and key topics with regard to the accounting process were discussed. The Executive Board also provided the Supervisory Board with monthly financial reporting with a comprehensive presentation of the First Sensor Group's current net assets, financial position and results of operations including deviations from targets and detailed comments. In addition, the Chairman of the Supervisory Board and the Executive Board

members Dr. Martin U. Schefter and Dr. Mathias Gollwitzer discussed current topics in regular telephone calls.

By way of a resolution on January 12, 2016, the change in the wording of the articles of incorporation as a result of share options having been exercised by employees of the company in fiscal year 2015 was resolved.

At the meeting on February 2, 2016, the Supervisory Board members' unanswered questions regarding the 2016 budget presented in the last meeting of 2015 and the medium-term planning presented for fiscal years 2016 to 2018 were answered by the Executive Board and both matters were definitively approved. In addition, the head of Production and a plant manager, who were present as guests, were given the opportunity to report in detail on the current status of efficiency improvements. using the example of the Berlin-Weissensee plant, and on the plant's current projects and prospects. The topic of appointing a new head of sales was also on the agenda. Finally, the target agreements for Executive Board remuneration and the organization of the share option program to be put forward for resolution at the upcoming Annual General Meeting were discussed and their key elements were resolved

In a circular resolution on February 9, 2016, the appointment of a head of sales was approved.

At the Supervisory Board meeting held on March 21, 2016, the separate and consolidated financial statements for fiscal year 2015 were discussed in-depth. The auditor stated his findings from the audit during a presentation. Afterwards, First Sensor AG's consolidated financial statements and annual financial statements for fiscal year 2015 were approved. The Supervisory Board also decided on the key aspects of the 2016 share option program and the targets for variable Executive Board

remuneration in 2016 at this meeting. As a special topic, the director of First Sensor Mobility GmbH was invited to speak on the current development and prospects of the Mobility segment at this meeting. In addition, the contents of the Corporate Governance Code and the declaration of compliance in accordance with section 161 of the German. Stock Corporation Act (AktG) were on the agenda and were also approved. Another topic of the meeting was the extension of Dr. Martin U. Schefter's Executive Board mandate. In this context, the Supervisory Board and the Executive Board discussed the goals and content of continuing cooperation and subsequently gave Dr. Schefter time to consider the offer presented to him.

At the meeting held on May 3, 2016, 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 status of the project to improve core processes was discussed and the implementation of a Technology Advisory Board was approved.

CEO Dr. Martin U. Schefter informed the Supervisory Board Chairman Prof. Alfred Gossner in a telephone call on May 25, 2016. and the entire Supervisory Board in an e-mail. that he would not be available for an extension of his mandate and that he would be leaving First Sensor AG at the end of his term of office on June 16, 2016. The Supervisory Board thereupon entrusted CFO Dr. Mathias Gollwitzer with taking on Dr. Schefter's tasks on a provisional basis following his departure and initially managing the company as the sole Executive Board member. As the company temporarily did not comply with section 4.2.1 sentence 1 of the Corporate Governance Code due to its management by a single individual, the declaration of compliance was updated on July 8, 2016, by way of a circular resolution and was subsequently published on First Sensor AG's website.

In addition, four circular resolutions on personnel changes at the company were adopted in the second quarter of 2016.

As part of an ordinary Supervisory Board meeting on July 20, 2016, the Vice President of Technology Strategy and Alliance Management, who attended as a guest, gave a detailed presentation of the strategy and current situation of the development departments within the Group. The Supervisory Board also received a status report on the specialist departments below the CFO.

In a telephone call on August 15, 2016, the Supervisory Board Chairman Prof. Alfred Gossner informed the Executive Board member Dr. Mathias Gollwitzer that Dr. Dirk Michael Rothweiler would be the new CEO of First Sensor AG and that the company would aim to appoint him before the end of 2016. The exact start date had not vet been determined at that time. The Supervisory Board meeting on September 30, 2016, primarily dealt with the topic of the First Sensor Group's production locations. In this context, the head of Production spoke on capacity utilization, potential for synergies, and the optimization of manufacturing processes to improve lead teams and quality in production

On November 4, 2016, the Supervisory Board resolved the appointment of the new CEO Dr. Dirk Michael Rothweiler as at January 1, 2017, by way of a circular resolution.

As a key focus of the meeting on December 6, 2016, the strategic and operational development of the company was presented to the Supervisory Board in detail by the operational managers. Another focus was the medium-term planning for fiscal years 2017-2019 and the plans and measures for implementing the CSR reporting requirement. As a precaution, the Supervisory Board also approved the designated sponsoring agreement between First Sensor and equinet Bank AG that has been in place since January 2014, both for the past and for the future, in accordance with section 114 (1) AktG, as the Deputy Chairman of the Supervisory Board Götz Gollan was appointed to the Executive Board of equinet Bank AG as at September 1, 2016.

In addition to the scheduled meetings, a range of meetings 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 a Executive Board member for banks.

An efficiency review of the Supervisory Board's activity was conducted using a standardized process of Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, 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 Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Hanover, was appointed by the Annual General Meeting on May 4, 2016 to audit the annual financial statements and the consolidated financial statements for fiscal year 2016. Prior to submitting a proposal for appointment, the Supervisory Board obtained a declaration of independence from the auditors.

The financial statements and management report of First Sensor AG prepared by the Executive Board according to the principles of the German Commercial Code (HGB), as well as the consolidated financial statements and the consolidated management report prepared according to the accounting standards of the International Financial Reporting Standards (IFRS) for the fiscal year 2016, including the accounting, have been audited by Ebner Stolz GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Hanover, and granted an unqualified audit opinion.

Throughout the entire auditing process, the Supervisory Board worked closely together with the Executive Board and the auditor. The Supervisory Board received all final documentation relating to the annual financial statements of the limited company and the Group, the Executive Board's proposal on the appropriation of net profit, and the longform audit reports

from the auditor before its meeting on March 16, 2017 and had access to it during the meeting. The above-mentioned documents were conclusively examined during this Supervisory Board meeting and discussed in full in the presence of the auditor. The Supervisory Board subsequently concurred with the results of the audit by the auditor and did not raise any objections in the course of its own examination. 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. It also resolved to follow the Executive Board's proposal on the appropriation of net profit.

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.

The Supervisory Board would particularly like to thank Dr. Martin U. Schefter, who has now left his position as CEO, for his high sense of personal commitment and his loyal collaboration over three prosperous years.

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 16, 2017

First Sensor AG

Prof. Dr. Alfred Gossner

Chairman of the Supervisory Board

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#### First Sensor Share

#### Share price boosted by operating performance

Having closed 2015 with growth of 26.9%, First Sensor's shares gave investors further grounds for satisfaction in the 2016 financial year. The year can be broadly broken down into three periods.

After a positive start to the 2016 financial year in which they traded at €11.47, First Sensor's shares were initially unable to escape the losses on the TecDAX and Prime Standard benchmark indexes, which were triggered by concerns of a slowdown in the Chinese economy and rumors of potential insolvencies in the European banking sector in particular.

The European Central Bank then lowered its key interest rate to a historical low of zero percent, causing the markets to respond with cautious optimism. However, the publication of the figures for the previous financial year - in which First Sensor's earnings were impacted by non-recurring effects but its revenue growth again outperformed the market - and the bold guidance compared with the company's results in recent years were still not enough to motivate investors to increase their shareholdings. As a result, First Sensor's share price reflected the performance of the relevant indexes, moving sideways within a relatively narrow range. The publication of the results for the first quarter in early May and the comprehensive presentation of the company's growth strategy at the Annual General Meeting a few days later did little to change this.

The second period for First Sensor's shares began in late May, when the share price fell on the news that CEO Dr. Martin U. Schefter would not be extending his contract with the company. The surprising outcome of the British referendum on withdrawal from the European Union on June 23 led to increased uncertainty on the markets and pronounced price fluctuations that also affected First Sensor's shares, which fell to their low for the year of €8.64 on July 7.

This also represented the turning point, however, with the shares regaining the ground they had lost against the indexes by the end of August. This was clearly due in part to the strong figures for the first half of the year, which suggested that the company might not only achieve but could even exceed the earnings targets for 2016 that market participants had originally considered to be overambitious.

The third period began in late September. First Sensor's share price started by breaking free from the index range and climbing from €11.05 to €12. It reached €13 on October 14 in the wake of the improved earnings guidance for the 2016 financial year, subsequently taking the €14 mark in late October. The nine-month report in early November supported this dynamic price performance with facts and figures confirming the company's successful business development. The shares then stabilized for several

weeks at just below €14 before climbing slightly in December, reaching an intra-day high for the year of €14.83 – their highest level for more than eight years. The shares closed the year at €14.50, corresponding to an increase of 16.6% over the course of 2016. Investors who successfully took advantage of the upturn in the second half of the year will have enjoyed value growth in excess of 70%. The TecDAX closed 2016 with negative performance of 1.04%, while German blue-chips recorded price growth of 7%.

In addition to positive share price performance, the implementation of the management's "promise and deliver" approach and the intensification of investor relations activities led to an increase in the trading volume. An average of 11,215 shares changed hands every day in 2016 compared with 8,598 in the previous year.

First Sensor's market capitalization increased from €126.5 million at the start of 2016 to €148 million at the end of the year, meaning that its valuation corresponds almost exactly to the revenue volume in the year under review. Within the TecDAX All Share Index, First Sensor is now ranked 54th in terms of trading volume and 60th in terms of market capitalization. This compares with 61st and 65th at the midway point of 2016.

#### Performance of the First Sensor share from January 1 to December 31, 2016

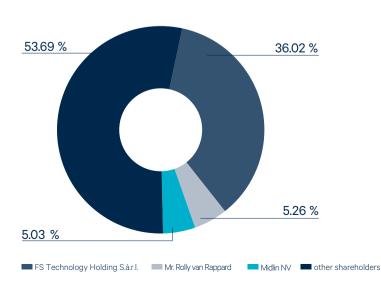


#### **Key figures**

in € thousand. unless otherwise indicated	Dec. 31. 2015	Dec. 31.	Δ	Δ%
Share capital (€)	50,835,480	51,041,980	206,500	0.4
Market capitalization	126,479	148,022	21,543	17.0
Share price (€). XETRA closing price	12.44	14.50	2.06	16.6
Net profit attributable to shareholders	-1,717	5,756	7,473	435.2
Number of shares. weighted	10,154,654	10,171,979	17,325	0.2
Earnings per share (€)	-0.17	0.57	0.74	435.3

The company's share capital amounted to €51,041,980.00 as at the end of the reporting period, divided into 10,208,396 (previous year: 10,167,096) no-par value bearer shares each with a notional interest in the share capital of €5.00. The difference of 41,300 shares is due to the exercise of share options in the past financial year.

#### Shareholder structure as at March 15, 2017 (according to available voting rights notifications)



As previously, the largest shareholder is FS Technology Holding S.à.r.l., an investment vehicle of DPE Deutsche Private Equity GmbH, Munich. While Daniel Hopp sold his last shares in February 2016, we welcomed Rolly van Rappard as a new shareholder. He increased his shareholding to over 5% during the financial year. The Dutch investment boutique Midlin also increased its shareholding to over 5%.

# Corporate Governance Report 2016 and declaration of Business Management

The Executive Board and the Supervisory Board of First Sensor AG are guided by the principles of good corporate governance as set out in the German Corporate Governance Code. At least once a year, they check whether the recommendations and suggestions set out in the Code are followed. The declaration of compliance jointly approved by the Executive Board and the Supervisory Board is then published on the company's website in the Investor Relations, Corporate Governance section. This joint updated declaration of compliance in accordance with section 161 of the German Stock Corporation Act (AktG) in relation to the GCGC version dated May 5, 2015 (published in the Federal Gazette on June 12, 2015) was last issued on March 16, 2017.

The Executive Board and the Supervisory Board report on corporate governance on an annual basis and explain the status of implementation of the more than 100 recommendations and 7 suggestions of the Code. The declaration of business management in accordance with section 289a of the German Commercial Code (HGB) forms part of this report and is also published on the company's website in the Investor Relations, Corporate Governance section.

# Implementation of the German Corporate Governance Code

According to the current declaration of compliance, the company deviates from six recommendations. These deviations are presented and justified in the declaration of compliance. 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 and this is not currently intended to be done in the future, either.

## Diversity and equal opportunity at First Sensor AG

Diversity is increasingly important for an international company like First Sensor. We consider diversity and equal opportunity as key principles of our work environment. Employees from a large number of different countries were working for the First Sensor AG Group as of December 31, 2016. 36.2% of these 804 employees were women.

On September 14, 2015, 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:

 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. At the moment, 15 employees are working at the two management levels below the Executive Board, including three women (which corresponds to a proportion of 20%).

 The company's Executive Board has established targets of 18% for the quota for women at both of these management levels in accordance with section 76 (4) AktG.

On September 21, 2015, 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:

- For the Executive Board, a target of 0% was established for the quota for women in accordance with section 111 (5) AktG.
- b. For the Supervisory Board, a target of 0% was established for the quota for women in accordance with section 111 (5) AktG.

#### Size of the Supervisory Board

In accordance with the Articles of Association, First Sensor AG's Supervisory Board is made up of three members who are elected by the Annual General Meeting.

#### Supervisory Board expertise

The professional and personal requirements to fulfill its duties are regularly analyzed by the Supervisory Board using a comprehensive survey. These are then compared with potential areas that are represented on the board in a SWOT analysis. This results in the basis for continued education for relevant individuals and staff planning.

The variety of responsibilities and duties within the Supervisory Board (such as finance, legal affairs, market and specialized knowledge of sensor technology, internationality, corporate finance and human resources) must be largely reflected by the specialisms of its members. In addition, professional suitability and social skills are to be considered in their selection.

# Objectives for the composition of the Supervisory Board

In view of the particular challenges of business activities at First Sensor AG, the focus on the system provider business and the size of the company and the Group, the Supervisory Board has established the following goals with regard to its intended composition in the future:

- 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, 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 2016 financial year.

With Prof. Alfred Gossner, one shareholder representative with an above-average shareholding is represented on the Supervisory Board; therefore, he is not referred to as an independent member. 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 creation of committees is rejected due to the low number of Supervisory Board members and the rapid decision-making processes that exist.

The Supervisory Board has not specified an age limit for its members or a regular limit for the length of membership of the Supervisory Board.

At the moment, women are not represented on the Supervisory Board.

# Risk management and internal control system

Ein Handling risks responsibly is part of corporate governance at First Sensor. Continuous, systematic management of business opportunities and risks is vitally important for professional business management. It contributes to detecting risks at an early stage, assessing them, and managing them with measures. First Sensor has therefore implemented Group-wide risk management as a permanent process that covers all divisions, continuously analyzes the risk situation, and assesses, manages and controls the risks identified. The Executive Board regularly reports to the Supervisory Board on the current development of the main risks for the Group and on the organization of the internal control system. The Supervisory Board deals with the monitoring of the accounting process on a regular basis. The key features of the risk management system are described in the risk report.

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

Disclosures on securities transactions of the Executive Board and the Supervisory Board in accordance with section 15a of the German Securities Trading Act (WpHG) (Directors' Dealings) in First Sensor AG shares are available in the company register. They can also be found on the internet at www.first-sensor. com in the "Investor Relations" section under "Corporate Governance" and under "Directors' Dealings," which are all currently listed and can be consulted beyond the statutory time lapse of one month.

In the 2016 financial year, CFO Dr. Gollwitzer executed and reported reportable transactions in accordance with section 15a WpHG. In early May, he purchased 16,000 shares on the XETRA trading platform at an average price of €10.74. His equity interest amounts to 0.2%.

Based on the shareholdings reported to the company, Supervisory Board member Marc de Jong held a total of 5,439 shares or 0.1% of the shares (previous year: 5,439 shares or 0.1%). According to Mr. de Jong, he already acquired 45,000 shares before becoming a member

of the Supervisory Board. This results in a shareholding of 50,439 shares or 0.5% in total.

Together, the members of the two bodies hold shares in the company amounting to 0.6% (previous year: 1.2%; reduced as a result of the departure of CEO Dr. Schefter).

#### Remuneration report

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).

# Corporate governance declaration in accordance with section 289a HGB

In accordance with section 289a 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.

Berlin, March 16, 2017

First Sensor AG

Dr. Dirk Rothweiler CEO Dr. Mathias Gollwitzer

CFC

Prof. Dr. Alfred Gossner

Chairman of the Supervisory Board

## Sustainability Report

First Sensor AG voluntarily applies the German Sustainability Code. This is based on the conviction that sustainable management must equally take account of ecological, economic and social interests. With this report for fiscal year 2016, the company already fulfills the reporting requirements applicable from 2017. In the following declaration of compliance, First Sensor reports on how it complies with the criteria of the code or explains in a plausible fashion why a criterion has not been reported on, if applicable.

#### Strategy

### 1. Strategic analysis and measures

First Sensor's corporate strategy stands for sustainable, profitable and resource-efficient growth. At the operational level, there is a wide range of initiatives to address environmental protection or social welfare issues. The company is currently working on combining these in a sustainability strategy. In doing so, we will build on the management handbook, which already ensures that the company operates in line with the same key recognized industry-specific. national and international standards at all locations. Application of this handbook is stipulated as mandatory by the company management. Key aspects of the management handbook are cited in the relevant parts of the explanations below.

#### 2. Materiality

Various aspects have a significant impact on business activities in terms of sustainability, such as the use of resources in connection with production, aspects pertaining to logistics and packaging or the reduction of the use of hazardous materials in production. There has not yet been a systematic analysis of the aspects that the company considers important from the perspective of sustainability. The areas that are particularly important to stakeholders are also being determined. However, it is becoming apparent that an examination of

the supply chain in this regard and HR topics such as training and employee development are likely to be highly relevant as significant social and ecological opportunities and risks. Generally speaking, sustainability aspects have a significant impact on the company's economic situation in some cases. It is therefore in the company's own interests to handle them in a particularly responsible way.

#### 3. Goals

In line with the development of the sustainability strategy and the analysis of the main aspects from an internal and an external perspective, First Sensor intends to develop specific goals for the short-term and medium-term focus of the associated activities in fiscal year 2017. The company is aware of the importance of diversity and a culture of togetherness, and it recognizes the opportunities and challenges of demographic change. For this reason, among others, the goals will particularly focus on the area of human resources.

In addition, the sensor group will also examine the traditional areas: Manufacturing sensor solutions is an energy-intensive process. As well as operating high-temperature furnaces in the frontend process and power-intensive production facilities, maintaining clean rooms and ultra-clean rooms in production requires

significant energy consumption. Electricity consumption has therefore been identified as a key figure for finding ways to make production more resource-efficient and environmentally friendly and for identifying savings potential in the future.

In addition, a global network of suppliers, service providers and production units requires an elaborate logistics process for the transportation of raw materials, intermediates and finished products. First Sensor is aware of this environmental impact. For example, in the area of production controlling, the company intends to work towards implementing logistically optimized material deliveries within the production chain.

The EU directives 2011/65/EU (RoHS) and 1907/2006 (REACH) set out restrictions on the use of certain hazardous substances in electric and electronic devices and govern the use of hazardous substances in devices and electronic components and their distribution. The aim is to eliminate problematic elements from electrical waste. This includes replacing the leaded soldering of electronic components with lead-free soldering, prohibiting environmentally unfriendly flame-retardant materials in plastics, and introducing equivalent replacement products to the greatest possible extent.

The electrical elements and components used must also be free from problematic substances. First Sensor almost exclusively supplies RoHS-and REACH-compliant products. Exceptions are still permitted for individual products. Inventories of non-compliant raw materials are being systematically reduced and disposed of professionally.

### 4. Depth of the value chain

As a manufacturer of chips, sensors and sensor systems, First Sensor purchases raw materials and components from suppliers. The total volume in 2016 amounted to €63.5 million. First Sensor's customers include it in the implementation of their sustainability strategies, and First Sensor in turn includes its suppliers. 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. These individuals also undergo inspections during supplier audits. In 2017, the company will focus on examining the entire value chain in more detail, particularly in terms of scrutinizing the social and ecological quality of upstream products and questioning key suppliers on compliance with social and ecological minimum standards. Another aspect to be seen as having

a positive effect on sustainability is the long service life of First Sensor products. As "distributors" as defined in regulations, customers still receive information about responsible disposal at an early stage.

#### Process management

### 5. Responsibility

The CFO is in charge of corporate social responsibility (CSR). Activities have been delegated to a CSR role within the company. The holder of this role develops the CSR strategy in accordance with the triad of economic, ecological and civil responsibility and is in charge of its implementation. He is responsible for communicating the objectives agreed with the Executive Board and attracting the necessary level of attention at all levels of the company. He also launches new projects, reports on their status, takes measures and coordinates their implementation within the company. The CSR role forms part of the integrated management system, which has been introduced within the Group in the form of a management handbook.

#### 6. Rules and processes

First Sensor has created a management handbook to implement processes that also support the objectives of the sustainability strategy. Based on the principle "as centralized as necessary, as decentralized as possible" guidelines and clear instructions are provided to ensure that responsibilities are clearly regulated across the Group. In this way, a requirement has been laid down in order to integrate changes to daily workflows and the mindset of all employees at all levels of the company. A Group-wide quality management system complements these guidelines in terms of sustainability.

#### 7. Control

First Sensor AG is currently engaged in a process that will end with the definition of performance indicators for the main action areas. Topic areas that have already been identified relate to energy consumption and logistics. Planning and monitoring of the parameters is

to be determined after the process has been completed, so as to ensure that the data analyzed are always comparable. This will form part of future reports.

#### 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 competitive remuneration and an incentive system that is geared toward the achievement of ambitious but by no means 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. The elements of the remuneration system also include a long-term component in the form of participation in two share option plans.

Further details can be found in the consolidated management report and the remuneration report. The company's managers are remunerated based on the achievement of operating and personal objectives in addition to a fixed salary. The company's employees receive remuneration based on the achievement of operating objectives in addition to their fixed salary. The option of integrating social and ecological objectives in the existing variable remuneration components is currently being examined. Members of the Supervisory Board are remunerated as established in the Articles of Association. A component oriented towards sustainability is not provided for.

#### 9. Stakeholder participation

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 fairs and trade fairs allows the company to position itself as an attractive employer.

Thanks to its close cooperation with research institutions and membership of professional bodies, First Sensor is able to identify future technological changes at an early stage and respond appropriately. Last but not least, the capital markets and the banking sector are an important source of financing and must be informed about First Sensor's sustainability policy comprehensively and in good time.

First Sensor's locations are also integrated into their immediate environment and have contact with the authorities and their respective local neighborhoods. To ensure that these stakeholder groups are kept adequately informed, all relevant information is also published on the company's website to the extent required of listed companies. Shareholders can also exercise their rights of information and consultation directly at the Annual General Meeting. The company presents itself and discusses aspects of sustainability at events for investors and media representatives, such as the annual press conference, analyst events and roadshows. In order to compare the goals of the sustainability strategy with the views of stakeholders groups such as investors and employees, dialog with these groups is being increased further.

# 10. Innovation and product management

First Sensor develops sensors and sensor systems, from chips to entire sensor systems. 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, First Sensor's contribution cannot hide the fact that the energy consumption of applications in which sensors and sensor systems are used is several times higher. The contribution towards energy savings at First Sensor itself fluctuates here in the per-mil range overall compared with the energy requirements of end products.

Thanks to a continuous optimization process, First Sensor is striving to make particularly resource-conserving efforts in production. This process comprises the use of energy, the use of raw materials and supplies in addition to the materials and components that are supplied. Employees' ideas are also particularly important in this context, as employees can provide important tips for potential improvements thanks to their extensive knowledge of the processes. This is not only done in the interest of reducing the ecological impact of the company's own activities but is, of course, also in the company's economic interest.

In this context, quality is another important aspect. By means of relevant control systems, quality is continuously improved in the production process. This not only reduces the reject rate and thus prevents production waste, but also secures long-term customer satisfaction and contributes to the fact that First Sensor products are able to fulfill the high standards set for the service life – as a rule, for several years and, in some cases, for decades – of customer products.

Further information on research and development can be found in the consolidated management report.

#### **Environment**

#### 11. Use of natural resources

Across the company, First Sensor verifies to what extent natural resources can be used in business activities. Materials and the input and output of water, land, waste, energy, surfaces, biodiversity and the emissions of the lifecycle of products and services are considered here. In some cases, these data are already gathered by the locations and are currently defined according to uniform standards.

#### 12. Resource management

First Sensor identifies the qualitative and quantitative objectives it 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 at this point.

#### 13. Climate-relevant emissions

At the moment, greenhouse gas emissions as a result of energy consumption are not systematically recorded at First Sensor AG. As part of the development of the CSR program, these values are calculated at a later date where applicable, relevant objectives are worded, reduction measures are implemented and a report is then written on these aspects.

### 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 matters that are of significant importance in the area of strategic HR management in order to link 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. As for the participation of female employees, please refer to the information found in the Corporate Governance report. Since First Sensor is currently only present in countries that have similarly high standards, these declarations affect all company locations. In the future, compliance with fundamental employee rights (ILO standards) will also be required of suppliers.

#### 15. Equal opportunities

First Sensor supports all initiatives that contribute to preserving and promoting equal opportunities and diversity within the company. In addition to the issues mentioned in section 14, the impartial integration of people with disabilities in the work process naturally contributes to this as well. In light of current developments, options will also be assessed to offer job prospects at First Sensor to qualified individuals from the influx of refugees.

Owing to the aging structure, it is also highly relevant 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 men and women receive the same wages for the same work. The conditions for this are established by a grading system that has been used to evaluate all of the positions at the company – regardless of the employee's gender, of course.

### 16. Qualifications

Nearly 30% of employees at First Sensor AG are over 50 years old. The Executive Board is aware that this is no reason to ignore the challenges of demographic trends in the long run. As a growth company, the challenge rather lies in the recruitment of additional employees to secure the planned implementation of the strategy than in concerns related to the loss of expertise as a result of employees leaving due to their age. Should these individuals be interested in employment over a longer period of time, plans to regulate this will be in place on the basis of individual agreements.

### 17. Human rights

Human rights, fundamental principles and employment rights are fully recognized, supported and promoted by First Sensor wherever possible. This includes the company's support for the protection of international human rights and its efforts to make sure to the best of its ability that it is not complicit in human rights violations. The freedom of association among employees, the recognition of the right to collective bargaining and the will to abolish all forms of forced labor, child labor and eliminate discrimination in recruitment and employment are also matters of course. These principles are also conveyed as expected behavior among all partners in the supply chain.

#### 18. Community

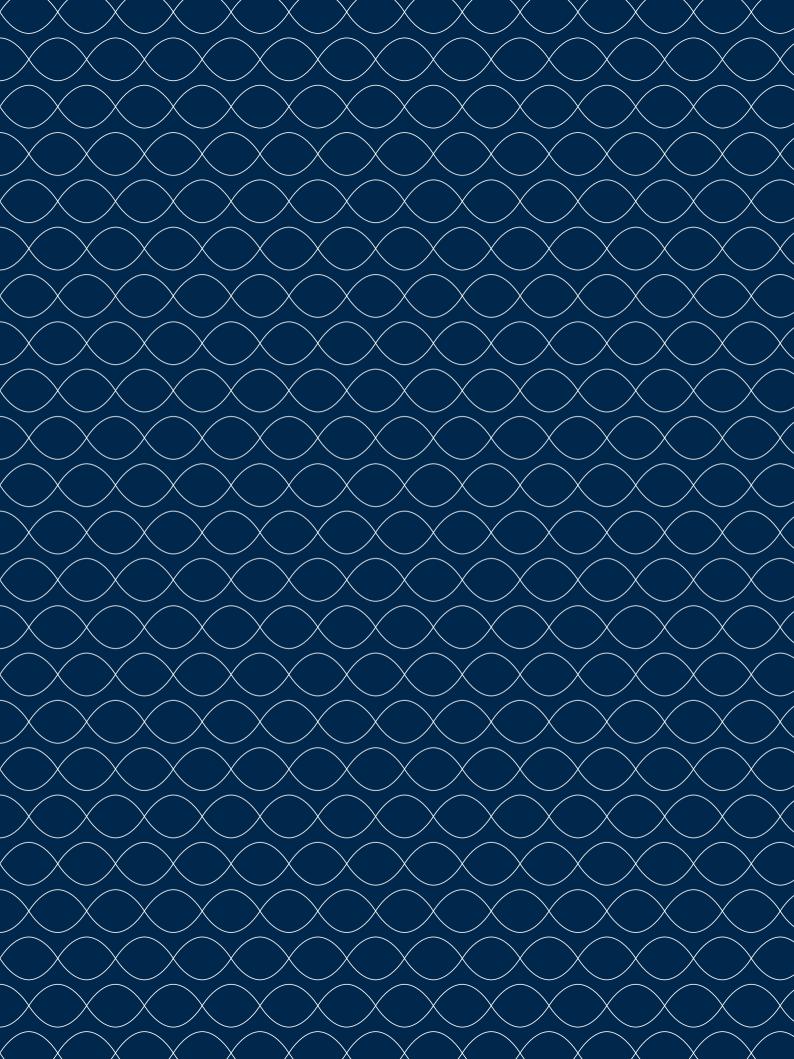
Besides job creation, the main contribution of First Sensor AG and its Group companies to the common good is the payment of taxes, which totaled €7.8 million in Germany last year. This amount consists of all types of taxes that First Sensor was required to pay. In addition, the company gets involved by means of support for local non-profit initiatives and allowing employees to be acknowledged for their volunteer involvement in the form of individual financial support or working hour concessions. The aim is to establish a conceptual basis for these activities so that social commitment will be even more closely linked with the company's values and mission statement in the future.

#### 19. Political influence

First Sensor does not exert political influence based on basic considerations.

# 20. Compliance with the law and regulations

Compliance with the law is a top priority at First Sensor. To provide guidance for all employees, a Code of Conduct has been developed as part of the First Sensor Group's compliance management. This is currently in the process of being coordinated. It combines the obligation to comply with the law with the particular requirements of ethical conduct. As such, it sets a standard for the company internally while also representing an external commitment. The guidelines in the Code of Conduct are dynamic, meaning that they are continuously adapted to new standards of conduct. The section on preventing corruption is particularly important. Corruption is not a trivial offense because it gives the company a supposed advantage in the short term, but rather represents a major risk because it is likely to permanently damage the company's market position. Fairness towards all business partners, customers, suppliers and employees is a condition for long-term corporate success. For this reason, among others, internal and external whistle-blowers are given protection where necessary. Violations of the principles set out in the Code of Conduct are not tolerated. In 2016, there were no breaches of the law or complaints in this regard and there were no corresponding financial penalties that were pending.



# 3 Group Management Report

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# 3 Group Management Report (IFRS) and Management Report of First Sensor AG

Basic information on the First Sensor Group

#### Group structure and business activities

### Legal structure of the Group

The First Sensor Group (also referred to hereinafter as "the Group") consists of the parent company First Sensor AG, domiciled in Berlin, and 10 subsidiaries in which the parent company holds a majority stake. An overview can be found in the Notes under "Basis of consolidation."

#### **Business model**

In the growth market of sensor systems, First Sensor develops and manufactures products and solutions for the ever-increasing number of applications in the industrial, medical, and mobility target markets.

Based on tried-and-tested technology platforms, First Sensor develops products such as sensor chips, sensor modules, and entire sensor systems. These products give customers a real competitive edge. Trends such as Industry 4.0, autonomous driving, and the miniaturization of medical technology will provide strong impetus for growth in the future.

Among First Sensor's customers are well-known industrial groups and young technology companies that utilize the know-how and the many years of expertise of the company to develop their own innovative products. They particularly appreciate the opportunities to make individual adjustments at every stage of the value chain in order to create exceptionally powerful products with tailored features.

First Sensor is increasing its presence on its target markets through new applications developed from sensor systems, for example. They don't just measure; they react intelligently to the measurement results and communicate with other systems. In addition, the company is investing in the internationalization of the Group. The strategy is geared toward sustainably increasing value.

#### Target markets

Operational management of the company at Group level is implemented in line with the principles described under "Management system." By contrast, reporting is supplemented with sales figures for each of the target markets. The business development in the target markets, measured on the basis of available sales data, is thereby compared with the own positioning and corresponding measures are device for the strategic orientation.

#### Locations

The Group has a total of nine locations that primarily specialize in product development and the different stages of the value chain. These comprise the German locations in Berlin (Oberschöneweide and Weißensee), Dresden (Albertstadt and Klotzsche), Oberdischingen, and Puchheim, as well as Dwingeloo (the Netherlands), Westlake Village (USA), and Montreal (Canada). In addition, there are six locations that mainly act as sales companies: Paris (France), Rugby (Great Britain), Val-

kenswaard (the Netherlands), Copenhagen (Denmark), Kungens Kurva (Sweden), and Mansfield (USA). An in-house sales organization is currently being established in China.

This structure firstly bundles expertise predominantly in Germany, where around half of sales are still generated. Secondly, the branches in Europe, North America, and Asia ensure that market potential there can be tapped in a targeted way and that local content for the respective customer requirements is taken into account.

# Products, services and business processes

First Sensor develops, manufactures and sells sensors and customer-specific sensor solutions. The sensors serve to convert non-electric variables (radiation, light, pressure, flow rate, position, speed, fill level, etc.) into electric variables. The product range comprises silicon-based semiconductor elements, sensor chips, sensor modules consisting of a sensor chip, casing, and possibly also electronic components, and complex sensor systems in which sensors perform control functions in combination with actuators or other sensors and software. They process, filter, and interpret complex data and can form a two-way communicative connection with their environment. First Sensor thus covers the entire value chain, which enables it not only to offer standard products, but also to make customer-specific adjustments at every stage in order to develop

individual solutions that are precisely tailored to the respective customer's requirements. Where necessary, third-party components and services are also integrated.

As well as semiconductor production for manufacturing sensor chips as its first major core competence, the company also has additional core competence in layout and connection technology in microelectronics. In addition, the company has expertise in the production of power electronics and actuators and the manufacture of end products for measuring instruments in which its own sensors are used.

In order to create powerful chips, sensor modules and sensor systems that are configured for specific applications, customers – both well-known industrial groups and young technology companies – utilize the extensive know-how and expertise of First Sensor's development units.

Development is of course another core process of this high-tech company. In order to create exceptionally powerful sensors and sensor systems with tailored features, customers utilize First Sensor's extensive know-how and expertise.

Sales represents the interface between customers and the Group. This is where processes ranging from market analysis to customer support and from qualification as a supplier to

the conclusion of a contract are bundled. The internal sales organization is supplemented by a global network of trading partners.

#### Sales markets

In the growth market of sensor systems, First Sensor focuses on products and solutions for the ever-increasing number of applications in the industrial, medical, and mobility target markets. In the 2016 financial year, sales of €72.5 million were generated in the industrial target market, corresponding to 48.3% of total sales. The medical target market contributed €30.7 million, representing a 20.4% share of sales. And in the mobility target market, sales of €46.9 million or 31.3% of total sales were generated.

As before, half of sales are generated in Germany. This amounted to €75.1 million in the 2016 financial year, corresponding to growth of 6.8%. The rest of Europe represented 20.9% of total sales, while the Americas accounted for 7.9% and Asia 9.1%. Whereas on the one hand we are focusing on making optimal use of growth potential on our domestic market with new and existing customers, on the other hand we are also strengthening the Group's international presence with a particular focus on the USA and China.

#### External influences

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 such as safety and comfort. Trends such as Industry 4.0, autonomous driving, and the miniaturization of medical technology will provide strong impetus for growth in the future, too.

At the same time, the complexity of the requirements is increasing and simple sensors are turning into smart sensor systems that analyze measured data themselves and communicate the results with other systems, for example. As a solution provider with many years of expertise, extensive know-how, and the entire value chain within the Group, First Sensor is excellently positioned to cater to these increased customer requirements.

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 the business units

Using the detailed understanding of customer applications in the industrial, medical, and mobility target markets, First Sensor develops products and solutions whose capabilities go far beyond those of standard components already on the market. By focusing on these technology-driven target markets, the company is already playing a role in their rapid growth. In the future, too, First Sensor will benefit from the megatrends that drive these markets. The goal here is to identify and meet the challenges of the future early on – a goal that is firmly anchored in the corporate culture.

For example, Industry 4.0 – the intelligent networking of products and production processes – is a growth driver for the industrial target market. Sensors are a fundamental component of this digitalization process; they form the basis for achieving productivity increases and safety in industry. Thanks to broad technology platforms, First Sensor is in a position to develop specialized solutions that support customers' ever-increasing demand for this process automation.

Another growth driver is the use of sensors in the vehicle industry. A whole range of comfort and safety applications can be realized only with the help of intelligent sensor systems. Partially and fully autonomous driving is possible only thanks to sensor-based driver assistance systems, for example. According to a study by McKinsey, perhaps as many as 50% of all

vehicles sold in 2030 be largely automated and 15% will even drive fully autonomously. The mobility target market is profiting from this trend not only among passenger cars but also increasingly among trucks, commercial vehicles, and specialized vehicles. Based on the several millions of units First Sensor has already delivered and our reputation as a reliable and innovative partner to leading suppliers and automotive groups, the company aim to play an increasingly important role in this market in the future.

In the field of medical technology, too, the trend is towards ever more intelligent solutions that not only measure but also analyze the measurement results themselves and communicate with corresponding control technology, for example. At the same time, the ongoing miniaturization of medical technology means that devices in the nanometer range for new applications, e.g. dialysis machines for home use, are no longer merely visions of the future; self-tracking will become an increasingly important part of the daily routines of billions of people. Many of these decentralized applications allow the monitoring of patient health or the assessment of the success of treatments, thereby ensuring that "e-health" applications will play an important role in the health growth market in the future. First Sensor is aiming to further expand the success in this market.

As a manufacturer of sensors and sensor systems that are "made in Germany," First Sensor has a strong position with many customers in Germany. This base is to be expanded strate-

gically, while additional sales potential is to be tapped in the medium term by increasing the company's international presence.

The overall goal of our corporate strategy is to enhance value continuously and sustainably.

#### Strategic equity investments

As a major player in the highly fragmented sensor systems market, First Sensor is well positioned to play an active role in ongoing consolidation. For the company, "perfect fit" companies are those that support First Sensor vertical integration by offering complementary technology. To further expand the position as a supplier and integrator of smart sensor systems, First Sensor therefore regularly review potential equity investments as part of a "buyand-build" strategy.

#### Strategic financing measures

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. The issue from 2013 resulted in another tranche of €12.0 million that will mature in 2018. This financing allows the company to choose between investing surplus liquidity in company growth or using it for repayment until 2020 and 2022 respectively. As a listed company, First Sensor AG also has the option to use the capital market.

#### Internal management system of the company

The First Sensor Group's operating business is managed by the Executive Board, which generally consists of two people. Following Dr. Martin U. Schefter's departure, however, Dr. Mathias Gollwitzer managed the Group alone in the second half of the 2016 financial year. The Executive Board is monitored by the Supervisory Board, as required by law and the Articles of Association.

The Executive Board develops the corporate strategy and implements it in coordination with the Supervisory Board, taking account of the interests of customers, suppliers, employees and investors to the best possible extent. Based on our strategic objectives, a medium-term plan for a three-year period is drawn up once a year. The detailed annual plan prepared on this basis is coordinated with the Supervisory Board and implemented.

Management of the Group primarily services to monitor this implementation. The aim is identify deviations as early as possible so that suitable measures can be implemented promptly if necessary.

The employees in the first management level below the Executive Board form the management team, with which the Executive Board regularly debates strategic issues, analyzes the current business development, and discusses the identification of opportunities and risks. In addition, 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), net debt, 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): DIH (days inventory held), DSO (days sales outstanding), DPO (days payable outstanding), and DWC (days working capital).

#### Remuneration systems

# Remuneration system for the Executive Board

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 competitive remuneration and an incentive system that is geared toward the achievement of ambitious short-term and long-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. The elements of the remuneration system consist of a fixed and a variable cash component, participation in two share option plans as a long-term incentive, and additional benefits.

The cash component is made up of a fixed and a variable remuneration component. The fixed 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 remuneration component is linked to the achievement of specific targets by the company. 70% depends on quantitative targets and 30% relates to qualitative targets that are agreed individually 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.

In addition, the members of the Executive Board participate in two share option plans (2016/I and 2016/II) that were newly resolved at the 2016 Annual General Meeting as a long-term incentive system.

In accordance with the 2016/I share option plan, the Supervisory Board may issue a total of up to 90,000 subscription rights for shares to the members of the Executive Board at its discretion until the end of 2019. Provided the share price is at least €25, the share options may be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the share options each have a term of nine years from the issue date.

In accordance with the 2016/II share option plan, the Supervisory Board may issue a total of up to 160,000 share options to members of the Executive Board at its discretion until the end of 2019. These share options may likewise be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the share options each have a term of seven years from the issue date. The options from the 2016/II plan may be exercised if the share price is at least equal to the average closing price of shares in the company on the thirty consecutive trading days before the respective issue date of the options plus 20%. The issue price is amounted to €12. In addition to the achievement of the performance target, exercise of the share options is also subject to the strict requirement 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.

All details of the 2016/I and 2016/II share option plans can be found in the agenda for the 2016 Annual General Meeting.

In addition, the members of the Executive Board have contractually agreed claims to additional benefits such as use of a company car, the employer contribution to health and long-term care insurance, accommodation allowances and allowances for trips home in some cases, reimbursement of expenses, and contributions to pensions. In its own interests, the company has taken out D&O insurance with an appropriate deductible for the 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 within one month of the takeover. The amount of this one-off payment does not exceed double the annual remuneration.

An individualized overview of the Executive Board remuneration paid and granted in the 2016 financial year can be found in section 32 of the notes.

# Remuneration system for the Supervisory Board

Remuneration of the Supervisory Board is regulated by Article 13 of the Articles of Association and determined by the Annual General Meeting. 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 his deputy. 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 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 members of the Supervisory Board amounted to €100 thousand in fiscal year 2016. Supervisory Board members do not receive any performance-related remuneration and do not participate in the company's share option plan.

in € thousand	2015	2016
Prof. Dr. Alfred Gossner (Chairperson)	50	50
Götz Gollan (Deputy chairperson)	30	30
Marc de Jong	20	20
Total	100	100

#### Research and development

The technologies that make up the Group's product portfolio are strongly influenced by innovation. Development has the task of developing new sensor solutions and continuously improving existing products. As such, it is a key business process and has a significant influence on the Group's success. Development not only provides the basic technologies, but is also responsible in particular for customer-specific solutions, as well as for the platform and technology strategy, the product development process, and prototype construction.

In view of this significance, the area is continuously reviewed for optimization potential and its processes and interfaces are adjusted where necessary. To ensure that development projects are completed in line with the agreed schedule, budget, and quality in the future, too, it is particularly important for the distributed components in the Group to work together in a coordinated manner and for flexible use and prioritization of the available resources to be ensured

In this context, development is the umbrella terms for four sets of tasks: The Design & Simulation unit is responsible for designing sensors and assemblies and develops methods for measuring physical variables. The Sensor Electronics unit designs circuits, programs microcontrollers, and conceptualizes testing and calibration technology. The responsibilities of the LCT & Process Development unit range from layout and connection technology (LCT) to prototype construction, meaning that this unit bundles a large part of the solutions

expertise for customer-specific developments. The Software & Systems unit focuses on sensor systems. This unit also develops methods for processing and interpreting complex data that form the basis for use of data in the "Internet of Things."

Development primarily bundles cross-site expertise and also provides support at locations where a production facility can be optimized. By means of close, active dialog with research institutes and industry associations, the department also ensures that scientific findings are applied in useful innovations.

### Focus of development activities

R&D activities firstly focus on seeking and testing new measurement methods and thereby developing new sensor chips. Secondly, the requirements for sensor systems are constantly becoming smarter and more complex: They are not only expected to measure, but also to interpret the data, communicate with other systems, consume little energy and take up less space, work extremely reliably, and have the best "form factor" for the relevant application, i.e. fully meet the individual requirements robustly. Furthermore, customers not only expect competitively priced innovations, but also technologies that will still be state-ofthe-art in three to five years. In order to meet these requirements now and in the future. First Sensor must continuously enhance both of its core competencies in chip development and in microelectronic layout and connection technology while also expanding stable cooperations with key suppliers.

Because customer projects generally start with a development process at the beginning of which aspects such as the expected production volume and the duration of production – usually equivalent to the service life of the customer product – can already be estimated, development provides important indications for medium-term corporate planning and visibility.

# Purchase and licensing of R&D expertise

Where necessary for capacity reasons or because of a need for specialist knowledge is not available in-house, Development collaborates with third parties such as the Fraunhofer Institute. The economic scale of these purchased development services is of minor significance.

### **R&D** key figures

in € thousand, unless otherwise indicated	2014	2015	2016
R&D expenses	7,691	7,849	8,839
R&D ratio in %	6.2	5.7	5.9
New capitalization of development costs	780	1,043	1,423
Carrying amounts of capitalized costs	3,489	3,978	4,903
Amortization of capitalized development costs	171	269	542
Number of R&D employees (FTE)	80	83	93
Number of patents and licenses	52	55	35

R&D expenses rose by 12.6% to €8.8 million in the 2016 financial year. The vast majority of these expenses relate to personnel costs. The R&D ratio came to 5.9% of sales. This naturally reflected the significant rise in sales in 2016. In the past financial year, the Group once again invested in expanding its qualified staff.

For this reason, the percentage of employees working in development increased from 10.7% in the previous year to 11.6% (93 employees). Development costs are capitalized only if the criteria in accordance with IAS 38 are met.

#### **R&D** results

The main development projects in 2016 included:

- LiDAR (light detection and ranging) for use in driver assistance systems and for industrial applications
- X-ray sensors for applications in safety and medical technology
- Pressure sensors for applications in industrial and medical technology and in commercial vehicles
- Flow rate sensors, used in both building technology and medical technology
- Actuators for power electronics components in the aerospace sector

These projects are expected to contribute to the Group's sales within six to 24 months.

Applying for patents and utility models in every conceivable case is not the primary goal of development. Instead, 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. The patents are subsequently subject to an annual review. If the market situation or the strategic orientation of the company has changed, or if their value can no longer be proven, the company decides to let certain patents expire. In the 2016 financial year, a number of patents were no longer maintained after long terms.

## Economic report

#### Macroeconomic and sector-related conditions

# Developments in the economy as a whole

Contrary to the skeptical expectations for 2016, which foresaw a slight decline in the global economy, the year developed somewhat better. According to analyses by IfW (Kiel Institute for the World Economy), global economic expansion in 2016 was at a low level but accelerated significantly after the middle of the year. This was largely due to an upturn in production in the United States, but the situation also improved in emerging economies. For example, the Chinese economy saw a return to much stronger growth than before during the summer months. For 2016 as a whole, the increase in global production came to 3.1%. which was slightly above expectations but still lower than in the previous year.

The German economy grew much faster than average in the past year. According to the German Federal Statistical Office, higher government spending and low interest rates in particular contributed to an increase in growth to 1.9%, the highest figure since 2011. The German economy has thus experienced a third year on the rise, ascertains the Association of German Chambers of Commerce and Industry (DIHK).

#### Developments on the sensor market

After below-average growth of 1.5% in total in the past year, the chip industry can expect considerably more momentum and an increase in sales of 7.2% across all sectors in 2017,

according to a study by the American market research institute Gartner. The experts at Gartner expect that the upturn that emerged in the second half of 2016 will pick up pace, expanding the total market to USD 364 billion. They are thus increasing their forecast by USD 14 billion, with USD 10 billion attributable to memory chips.

According to a study analyst at Yole Developpement are forecating an average annual growth of 11.2% to 2020. Increasing regulation, the automotive industry, demand for higher precision, and the goal of preventing accidents in dangerous environments are cited here as the main driving factors. At the same time, the experts note that production volumes are growing faster than sales, as prices are falling due to pressure from OEMs and competitors. They see Europe and the USA as mature markets where there are growth opportunities arising from the use of innovative technologies and the replacement of existing solutions.

#### Industrial

2016 was a year of stagnation for the mechanical engineering industry, while the German Electrical and Electronic Manufacturers' Association (ZVEI) reported slight growth. Despite a whole set of economic obstacles, the industry grew by 1.4% in real terms last year, a higher rate than forecast.

#### Medical

According to the German Medical Technology Association, medical technology accounts for 11% of Germany's gross domestic product and an export volume of more than €100 billion, equivalent to half that of the automotive industry. Different studies put the annual market growth at between 2.3% and 3.5%. The gross value added of the healthcare sector amounted to €324.3 billion in 2015, accounting for a 12% share of the overall economy. The healthcare sector's contribution to value added has been rising continuously for 15 years. Exports by the healthcare sector also rose steadily between 2004 and 2015, with the growth rate averaging 7% per year.

#### Mobility

According to an analysis by PwC, automobile manufacturers' business was booming in 2016 – at least in Europe. After all, even though growth in the EU and the EFTA region is likely to have decreased from 9.5% in 2015 to 6.8%, this still means an increase in the sales volume of more than a million vehicles. Viewed in light of the more difficult political and economic conditions, this is a very respectable result. The bank IKB also examined the situation in the supplier industry. In the study, it comes to the conclusion that growth has slowed. Whereas in 2014 there had been a sales increase of almost 10%, this figure was down to less than 2% in the first half of 2016.

#### Financial position, net assets and results of operations

# Business performance in 2016 and comparison with the forecast development

The First Sensor Group closed fiscal year 2016 successfully. Sales saw an above-average increase of 9.0% to €150.1 million, the EBIT margin came to 6.7% overall, and consolidated net income amounted to €6.1 million, corresponding to earnings per share of €0.57. This makes 2016 the most successful fiscal year in the company's history. Particularly strong growth was recorded in the medical and mobility

target markets. Only in the industrial sector a short decline occured. Overall, the First Sensor Group is well positioned to participate in the trends on its target markets with its products and gradually improve profitability.

### Targets for key performance indicators for fiscal year 2016

For fiscal year 2016, the Executive Board had planned to generate consolidated sales of €145 million to €150 million. The EBIT margin was expected to be between 5% and 6%. Fol-

lowing the successful performance in the first three quarters, this earnings target was raised to between 6% and 7%.

# Comparison of target and actual figures for 2016

The table below shows the figure achieved in the previous year, the budget, the forecast as revised during the year, and the figure achieved in the past fiscal year:

	2015	2016	Forecast 2016	2016
Sales revenues in € million	137.7	145-150	145-150	150.1
EBIT margin in %	0.9	5-6	6-7	6.7

The guidance for fiscal year 2016 was published on March 23, 2016. The EBIT margin forecast was raised on October 14, 2016.

Both the sales planning and the earnings plan-

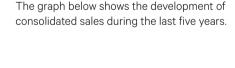
ning (EBIT margin) that was raised during the year were ultimately achieved, with the actual figures being at the upper end of the target range in each case. The business performance in fiscal year 2016 thus exceeded the Execu-

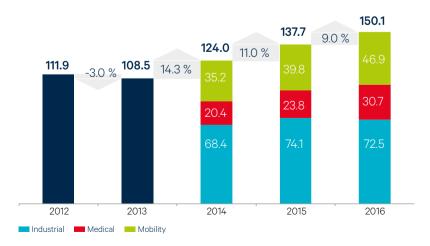
tive Board's original planning in terms of both sales and the EBIT margin. This was primarily due to encouraging top-line growth combined with the successful implementation of the initiated process improvements.

#### **Development of sales**

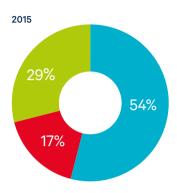
In fiscal year 2016, sales of €150.1 million (previous year: €137.7 million) were generated in

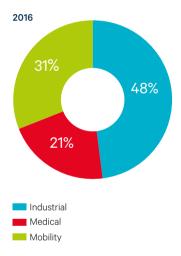
the First Sensor Group, corresponding to growth of 9.0%.





# SALES DISTRIBUTION BY TARGET MARKETS





First Sensor focuses on three target markets: Industrial, Medical and Mobility.

Particularly strong growth was recorded in the medical target market, where sales rose by more than 29% to €30.7 million (previous year: €23.8 million). The mobility target market also developed positively, with sales rising by 17.8% to €46.9 million (previous year: €39.8 million). Only in the industrial sector was there a decline of 2.2% (from €74.1 million to €72.5 million).

However, the difference of €1.6 million was far more than offset by the business performance in the other two sales markets.

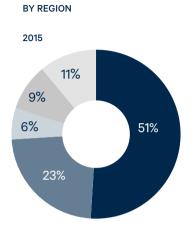
Momentum in the mobility sector diminished over the course of 2016, as a major order here expired as scheduled. Sales in the fourth quarter were €3.3 million lower than in the first quarter.

in € thousand	2015	2016	Δabsolute	in %
Industrial	74,132	72,486	-1,646	-2.2
Medical	23,766	30,705	6,939	29.2
Mobility	39,844	46,920	7,076	17.8
Total	137,742	150,111	12,369	9.0

First Sensor still makes more than half of its sales in Germany and is continuing to generate growth here: In 2016, sales climbed by 6.8% to €75.1 million. The second most important growth driver was business in North America, where sales increased by €3.7 million or 45.3% to almost €12 million. The company made good progress in tapping this market further as part of our internationalization strategy in 2016. Sales in Scandinavia, Asia and Benelux also developed positively, whereas the UK and France showed slight weakness due to general economic factors.

The shares of sales attributable to the different regions changed only slightly. Compared to the previous year, the share of sales generated in Germany declined from 51% to 50%. The share attributable to the rest of Europe decreased slightly from 22.6% to 20.9%, while North America's share of sales rose from 6.0% to €7.9%. The situation in Asia was virtually unchanged, with 9.1% of sales generated here after 9.2% in the previous year.

in € thousand	2015	2016	Δ absolute	in %
Germany	70,318	75,088	4,770	6.8
Scandinavia	13,986	14,802	816	5.8
Asia	12,706	13,665	959	7.5
North America	8,207	11,922	3,715	45.3
Benelux	6,190	6,864	674	10.9
Great Britain	6,855	6,383	-472	-6.9
France	3,174	2,435	-739	-23.3
Italy	904	958	54	6.0
Other	15,402	17,994	2,592	16.8
Total	137,742	150,111	12,369	9.0



SALES DISTRIBUTION

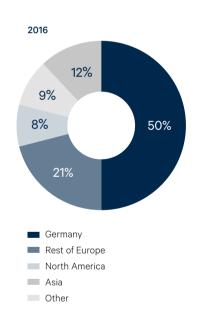
#### Order situation

The substantial increase in sales in fiscal year 2016 was countered by a decline in orders on hand, which fell from €90.7 million to €82.2 mil- order from an automobile manufacturer that lion over the course of the year (-9.4%). There was also a decline in incoming orders, which

fell to €132.9 million after €142.3 million in the previous year. This was largely due to a major expired as scheduled in 2016.

in € thousand	2015	2016	∆absolute	in %
Sales	137,742	150,111	12,369	9.0
Incoming orders	142,319	132,936	-9,383	-6.6
Orders on hand	90,724	82,232	-8,492	-9.4
Book-to-bill-ratio	1.03	0.89	-0.14	-13.6

The ratio of incoming orders to sales (book-to-bill ratio) consequently fell to 0.89 (previous year: 1.03), putting it at the lower end of the long-term average.



#### **Earnings**

Starting with sales of €150.1 million (previous year: €137.7 million), changes in inventories of finished goods and work in progress and other own work capitalized roughly offset one another in 2016, with the result that the total performance also amounted to €150.1 million (previous year: €137.6 million).

Despite the significant increase in sales, the cost of materials including purchased services rose by only €3.1 million from €69.3 million to €72.4 million. The ratio in relation to sales fell. from 50.3% to 48.2%. Gross income accordingly improved from 49.7% to 51.8% in percentage terms and rose by €9.7 million from €71.1 million to €80.8 million in absolute terms. This improvement, which is largely responsible for the year-on-year leap in earnings, firstly resulted from efficiency improvements that were achieved by insourcing some components, for example. Secondly, valuation allowances on inventories decreased year-on-year to €0.6 million (previous year: €3.1 million). These factors were countered by increased use of temporary workers, the costs of which were up €0.6 million on the previous year.

The rise in personnel costs to €44.1 million (previous year: €41.9 million) results from the workforce expansion over the course of the fiscal year and from the usual percentage increases in wages and salaries. However, the ratio of personnel costs to sales fell slightly from 30.5% to 29.4%, also reflecting the achievement of efficiency improvements.

Other operating expenses were even down slightly year-on-year, decreasing by €0.6 million to €17.2 million. While legal and consultancy costs were reduced by €1.1 million and warranty expenses by €0.6 million, there were increases in a number of items, including sales and marketing costs (up €0.4 million) and IT costs (up €0.2 million).

EBITDA (earnings before interest, taxes, depreciation and amortization) improved by 71% to €19.4 million (previous year: €11.4 million), corresponding to an EBITDA margin of 12.9% (previous year: 8.3%).

Depreciation on property, plant and equipment and amortization of intangible assets and purchase price allocations amounted to €9.4 million in fiscal year 2016 (previous year: €10.1 million).

EBIT improved overall to €10.0 million after €1.2 million in the previous year (the previous year's earnings were negatively impacted by non-recurring effects of €2.7 million). This corresponds to an EBIT margin of 6.7% (previous year: 0.9%), which is at the upper end of the range of 6% to 7% most recently set as a target by the Executive Board.

Reflecting the successful financial management by way of debt rescheduling and the more favorable interest rate, net interest expenses amounted to €1.8 million (previous year: €2.2 million). As a result of hedging activities, the foreign exchange result was positive at €0.5 million (previous year: €-0.2 million).

Tax expenses increased in line with the improved earnings situation to €2.6 million (previous year: €0.4 million). The tax rate in the Group consequently amounted to 30.0%.

Consolidated net income totaling €6.1 million remained for fiscal year 2016, corresponding to earnings per share of €0.57 (previous year: €-1.5 million, €-0.17 per share). This is the best earnings figure in the Group's history.

#### Financial position

The aim of First Sensor's financial management is to ensure adequate liquidity at all times 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 concluding forward foreign exchange contracts. Derivative financial instruments are used solely for hedging operating business and minimizing the impact of financial transactions.

#### Capital structure

As at the end of 2016, the First Sensor Group's equity amounted to €77.5 million (previous year: €71.3 million), corresponding to an equity ratio of 50.3%. Meanwhile, financial liabilities totaled €48.2 million (previous year: €54.5 million).

€40.0 million of the financial liabilities result from the placement of promissory notes maturing in 2018, 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 from 2013 re

sulted in another tranche of €12 million that will mature in 2018. 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 promissory note loans, contractual covenants have been agreed to the end of the year in each case. At December 31, 2016, First Sensor fulfilled all required key financial ratios.

in € thousand	2015	2016	∆absolute	in %
Leverage, net debt to EBITDA	2.90	1.26	-1.64	-56.6
Interest cover ratio, EBITDA to interest expenses	6.5	11.1	4.6	70.8
Equity ratio	37%	41%	4%p	10,8

The contractually stipulated calculation method was used for these figures.

Net debt (financial liabilities less cash and cash equivalents) fell by a quarter in 2016. It is presented in the table below:

in € thousand	2015	2016	Δabsolute	in %
Non-current financial liabilities	46,543	43,599	-2,944	-6.3
Current financial liabilities	7,987	4,640	-3,347	-41.9
Cash and cash equivalents	-21,523	-23,791	2,268	10.5
Net debt	33,007	24,448	-8,559	-25.9

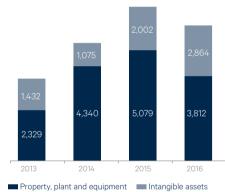
As at the 2016 balance sheet date, First Sensor also had unused credit lines of €13.3 million (previous year: €8.6 million). The weighted average cost of capital as at the end of the fiscal year came to roughly 3.5%.

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.

There were no restrictions in 2016 with regard to the availability of the loans granted. The longstanding business relationships with the financing partners once again proved stable. As a listed company, First Sensor also has capital market instruments available to it.

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

#### **INVESTMENTS**



#### **DEPRECIATION AND AMORTIZATION**



#### Investments

Investments in property, plant and equipment in 2016 focused on the modernization and expansion of capacity at the production facilities in Berlin-Oberschöneweide and Dresden,

where the company invested in machinery. Investments in intangible assets primarily related to the introduction of SAP as uniform ERP software.

in € thousand	2015	2016	$\Delta$ absolute	in %
Investments intangible assets	2,002	2,864	862	43.1
Investments in property, plant and equipment	5,079	3,812	-1,267	-24.9
Investments	7,081	6,676	-405	-5.7
Disposal of non-current assets and investments	325	59	-266	-81.8
Other effects	18	39	21	116.7
Cash flow from investment activities	6,738	6,578	-160	-2.4
Amortization of intangible assets	4,405	3,653	-752	-17.1
Depreciation of property, plant and equipment	5,751	5,766	15	0.3
Depreciation and amortization	10,156	9,419	-737	-7.3

The amount of the investments was lower than depreciation and amortization, as some investment projects were delayed and have continued into fiscal year 2017. Furthermore, they include amortization of the purchase price allocation in the amount of  $\le$ 2.4 million (previous year:  $\le$ 3.2 million).

#### Liquidity

Cash flow from operating activities increased by €11.6 million year-on-year from €5.0 million to €16.6 million. It was positively influenced in particular by the higher earnings before taxes

of €8.7 million (previous year: €-1.2 million).

The following table shows the abridged consolidated cash flow statement:

in € thousand	2015	2016	Δabsolute	in %
Cash flow from operating activities	4,979	16,568	11,589	232.8
Cash flow from investment activities	-6,738	-6,529	209	3.1
Cash flow from financing activities	8,716	-7,770	-16,486	189.1
Change in cash and cash equivalents	6,957	2,269	-4,688	-67.4
Exchange differences	41	-1	-42	-102.4
Cash and cash equivalents at the beginning of the financial year	14,525	21,523	6,998	48.2
Cash and cash equivalents at the end of the financial year	21,523	23,791	2,268	10.5
Free cash flow	-1,759	10,039	11,798	670.7

Cash flow from investing activities fell to €6.5 million in fiscal year 2016 (previous year: €6.7 million). Free cash flow, which represents the difference between operating cash flow and cash flow from investing activities, reached €10.0 million, the highest figure in the company's history.

Cash flow from financing activities amounted to €-7.8 million. The previous year's positive balance of €8.7 million was influenced by the placement of promissory note loans.

Cash and cash equivalents increased from €21.5 million to €23.8 million in fiscal year 2016. From the perspective of capital management,

the Group's liquidity position thus remains satisfactory. First Sensor was thus able to meet its payment obligations from operating business at all times again in 2017.

In order to allow an assessment of 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 changes compared with the previous year show improvements in all grades of liquidity.

in %	2015	2016	Δabsolute	in %
Cash ratio	90.7	108.1	17.4	19.2
Quick ratio	173.9	209.3	35.4	20.3
Current ratio	288.3	326.7	38.4	13.3

#### Net assets

Total asset increased to €154.0 million in fiscal year 2016 (previous year: €153.5 million). As a result of the retained earnings for fiscal year 2016, the equity ratio rose to 50.3% (previous year: 46.4%).

#### Assets

As at the end of 2016, non-current assets amounted to €82.1 million and were thus down €3.0 million compared to the previous year (€85.1 million). The decrease is mainly attributable to scheduled depreciation of property, plant and equipment and scheduled amortization of intangible assets. The amount of goodwill remained unchanged at €29.8 million.

Current assets climbed by €3.5 million to €71.9 million. While inventories were reduced from €27.1 million to €25.9 million in spite of the higher business volume, trade receivables rose by €1.4 million to €18,4 million. Cash and cash

equivalents increased year-on-year to €23.8 million (previous year: €21.5 million), representing a comfortable level again.

#### **Equity and liabilities**

On the equity and liabilities side of the balance sheet, equity increased by €6.2 million in absolute terms to €77.5 million (previous year: €71.3 million). Subscribed capital increased by 0.4% as a result of the 41,300 shares with a nominal value of €5.00 per share (€206 thousand) that were issued under the 2009 share option plan. As a result of the net income of €6.1 million for fiscal year 2016, retained earnings rose to €8.2 million.

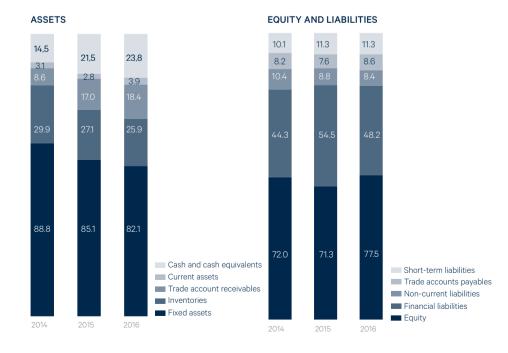
Non-current liabilities decreased from €55.3 million to €52,0 million, primarily due to scheduled repayments of financial liabilities. Current liabilities likewise fell by €2.3 million to €24.6 million; this was also due to scheduled repayments of financial liabilities. This was

partly offset by a €1.0 million increase in trade payables and a €0.9 million increase in other current liabilities.

Working capital (the sum of inventories plus trade receivables, less trade payables) was reduced further despite the rise in sales and amounted to €35.7 million as at the end of 2016 (previous year: €36.5 million).

Capital employed also decreased to €117.8 million (previous year: €121.6 million). Combined with the significant improvement in profitability, this resulted in a pronounced increase in the ROCE (return on capital employed) to 8.5% (previous year: 1.0%).

Net debt fell from €33.0 million to €24.4 million in fiscal year 2016. The ratio of net debt to equity (gearing) amounted to 31.5% as of the balance sheet date (previous year: 46.3%).



# Net assets, financial position and results of operations, of First Sensor AG (HGB)

There were no changes in the basis of consolidation in the year under review.

	Jan. 1 –	Jan. 1 –		
	Dec. 31,	Dec. 31,		
in € thousand	2015	2016	Δabsolute	in %
Sales	69,647	72,029	2,382	3.4
Change in inventories of finished goods and work-in-progress	-1,014	-1,148	-134	-13.2
Other own work capitalized	845	746	-99	-11.7
Other operating income	2,588	3,692	1,104	42.7
	72,066	75,319	3,253	4.5
Cost of materials	-28,559	-29,141	-582	-2.0
Expenses for services	-6,452	-5,001	1,451	22.5
	-35,011	-34,142	869	2.5
Salaries and wages	-19,421	-21,380	-1,959	-10.1
Expenses for social securities	-3,790	-3,765	25	0.7
	-23,211	-25,145	-1,934	-8.3
Depreciation and amortization of intangible assets and property, plant and equipment	-6,812	-5,927	885	13.0
Write-downs of current assets	-552	-480	72	13.0
Other operating expenses	-12,842	-11,261	1,581	12.3
	-6,361	-1,636	4,725	74.3
Income from profit and loss transfer agreement	5,717	6,033	316	5.5
Income from investments	1,500	1,350	-150	-10.0
Income from appreciations to fixed assets	0	537	537	_
Interest income	369	148	-221	-59.9
Write-downs of financial assets	0	-58	-58	-
Interest expenses	-2,063	-1,680	383	18.6
	5,523	6,330	807	14.6
Results from ordinary operations	-839	4,694	5,533	659.5
Income taxes	1,254	-1,289	-2,543	-202.8
Other taxes	-56	-36	20	35.7
Net loss for the financial year	359	3,369	3,010	838.4
Retained earnings	-1,367	-1,008	359	26.3
Net profit (previous year net loss)	-1,008	2,361	3,369	334.2

Sales increased by €2.4 million year-on-year. The gross margin improved by 2.6 percentage points to 52.3% (previous year: 49.7%). This was chiefly attributable to the significant decrease in valuation allowances on inventories in comparison to the previous year.

Other operating income, which primarily resulted from investment grants, intragroup allocations to subsidiaries, reversals of provisions and exchange gains, amounted to €3.7 million (previous year: €2.5 million).

Personnel expenses increased by €1.9 million to €25.1 million (previous year: €23.2 million). This increase was mainly due to the workforce expansion. Accordingly, the personnel expenses ratio rose from 33.3% to 34.9%.

Savings can be observed in the area of **other operating expenses**. The decrease of €1.6 million is chiefly due to lower expenses for legal and consultancy services and reduced expenses for warranties.

Amortization of intangible assets and depreciation of property, plant and equipment

in the amount of €5.9 million (previous year: €6.8 million) primarily relates to depreciation of machinery and equipment, operating and office equipment, and production and office buildings.

The difference is due to the figures written down in the previous year for brand names that are no longer used. In addition, **write-downs of current assets** were recognized on the receivables from the subsidiary in Canada in the amount of €0.5 million (previous year: €0.6 million).

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 from profit transfers** in the amount of €6.0 million (previous year: €5.7 million). In addition, a distribution by a subsidiary resulted in **income from investments** in the amount of €1.4 million (previous year: €1.5 million).

Other interest and similar income is mainly attributable to loans to affiliated companies. Interest and similar expenses improved by €0.4 million to €1.7 million (previous year: €2.1 million) as a result of optimized financing instruments and loan repayments.

The following table shows the balance sheet as at December 31, 2016:

## **ASSETS**

2015	2016	Δabsolute	in %
2,242	2,071	-171	-7.6
1,552	2,137	585	37.7
24,535	22,378	-2,157	-8.8
441	1,097	656	148.8
26,507	25,029	-1,478	-5.6
32,618	32,560	-58	-0.2
87,895	85,272	-2,623	-3.0
17,770	16,528	-1,242	-7.0
6,372	7,052	680	10.7
5,553	9,527	3,974	71.6
1,467	1,156	-311	-21.2
14,323	13,858	-465	-3.2
45,485	48,121	2,636	5.8
502	453	-49	-9.8
731	0	-731	-100.0
134,613	133,846	-767	-0.6
	2,242 1,552 24,535 441 26,507 32,618 87,895 17,770 6,372 5,553 1,467 14,323 45,485 502 731	2,242     2,071       1,552     2,137       24,535     22,378       441     1,097       26,507     25,029       32,618     32,560       87,895     85,272       17,770     16,528       6,372     7,052       5,553     9,527       1,467     1,156       14,323     13,858       45,485     48,121       502     453       731     0	2,242       2,071       -171         1,552       2,137       585         24,535       22,378       -2,157         441       1,097       656         26,507       25,029       -1,478         32,618       32,560       -58         87,895       85,272       -2,623         17,770       16,528       -1,242         6,372       7,052       680         5,553       9,527       3,974         1,467       1,156       -311         14,323       13,858       -465         45,485       48,121       2,636         502       453       -49         731       0       -731

#### **EQUITY AND LIABILITIES**

in € thousand	2015	2016	Δabsolute	in %
Share capital	50,835	51,042	207	0.4
Capital reserves	20,532	20,610	78	0.4
Earning reserves	1,004	1,004	0	0.0
Net profit (previous year net loss)	-1,008	2,361	3,369	334.2
Equity	71,363	75,017	3,654	5.1
Special account with reserve characteristics	3,774	3,480	-294	-7.8
Provisions	4,972	4,258	-714	-14.4
Liabilities to banks	9,206	4,564	-4,642	-50.4
Promissory note loans	40,000	40,000	0	0.0
Payments received on account of orders	197	164	-33	-16.8
Trade accounts payables	3,861	5,257	1,396	36.2
Due to affiliated companies	520	180	-340	-65.4
Other liabilities	720	594	-126	-17.5
Deferred tax liabilities	0	332	332	
Equity and liabilities	134,613	133,846	-767	-0.6

The equity of First Sensor AG amounted to €75.0 million at the reporting date (previous year: €71.4 million). This corresponds to an equity ratio of 56.0% (previous year: 53.0%). The increase in the equity ratio is chiefly due to the improvement in earnings and the decrease in total assets as a result of repaid loans.

Cash and cash equivalents amounted to €13.9 million at the balance sheet date (previous year: €14.3 million). Please refer to the tables in the Group for information on the financing situation. result from ordinary operations of €4.7 million

The company's Executive Board and Supervisory was considerably higher than the expected Board will propose to the Annual General Meeting that the retained earnings for fiscal year 2016 in the amount of €2,361,291 be carried forward to new account.

In its business plan, the Executive Board is forecasting sales of €70-75 million and positive results from ordinary operations in fiscal year 2017. Whereas the previous year's sales forecast (between €75-80 million) was not achieved, the figure (positive result from ordinary operations).

First Sensor AG had 431 employees (FTEs) at the end of the year (previous year: 417) plus 23 apprentices (previous year: 18). The following table provides a breakdown of the workforce across the individual units.

Number of employees (FTE)	Dec. 31, 2015	Dec. 31, 2016	Δabsolute	in %
Berlin-Oberschöneweide	170	198	28	16.5
Attributable due to the merger of First Sensor Technology GmbH to Berlin-Oberschöneweide	17	0	-17	-100.0
Munich branch	75	71	-4	-5.3
Berlin-Weißensee branch	154	161	7	4.5
Chemnitz branch	1	1	0	0.0
Total	417	431	14	3.4

#### Overall picture

The First Sensor Group saw a very positive business development in 2016. Sales increased to €150.1 million, corresponding to above-average organic growth of 9.0%. The medical and mobility sales markets displayed particularly high growth rates of 29.2% and 17.8% respectively. The strategic focus on the three target markets thus proved to be the right approach again.

First Sensor also moved a major step closer to its goal of sustainably improving profitability

in the Group. Due to the positive business performance, the target for the EBIT margin was raised during the year from between 5% and 6% to between 6% and 7%. The company closed the year within this range – and even at the upper end of it. As such, the sales and earnings forecasts for fiscal year 2016 proved accurate overall.

#### Development of non-financial performance indicators

### **Employees**

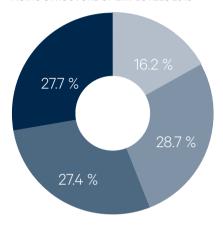
The First Sensor Group had a total of 804 employees (FTEs – full-time equivalents) as at the reporting date December 31, 2016, compared with 773 in the previous year. The workforce expansion was particularly attributable to sales, product management, and development. In addition, 33 apprentices are employed at First Sensor (previous year: 29).

To enable the company to react flexibly to fluctuations in orders, peak volumes are absorbed using temporary workers. At December 31, 2016, the number of temporary workers was 41 (previous year: 39), although this number was also considerably higher at times during the year.

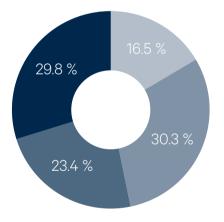
At €44.1 million, personnel expenses in the year under review were 5.3% higher than the prior-year level of €41.9 million. This was firstly due to the workforce expansion and secondly to the usual wage and salary increases. Further information on the breakdown of personnel costs can be found in the notes.

Sales per employee (average FTEs) improved to €189.8 thousand (previous year: €178.9 thousand) as a result of sales growth, reflecting further increases in efficiency.

#### AGING STRUCTURE OF EMPLOYEES 2015



#### AGING STRUCTURE OF EMPLOYEES 2016



Age under 30 years

Age between 31 and 40 years

Age between 41 and 50 years

More than 51 years

The age structure of the workforce did not change significantly in comparison to the previous year:

Total	100.0	100.0	-	-
More than 51 years	27.7	29.8	2.1	7.6
Age between 41 and 50 years	27.4	23.4	-4.0	-14.6
Age between 31 and 40 years	28.7	30.3	1.6	5.6
Age under 30 years	16.2	16.5	0.3	1.9
Aging structure of employees in %	2015	2016	∆absolute	in %

The company-wide sickness absence rate at First Sensor was calculated in 2016 and was found to be 6.0% (previous year: 5.2%). This comparatively high rate was taken as grounds to initiate internal measures for its reduction within the company (return-to-work interviews, promotion of fitness activities and health days).

The proportion of female employees was virtually unchanged at 32.2% (previous year: 36.1%); this is a comparatively high proportion for a technology company.

With 32.4%, around one-third of employees at the company have a university degree (previous year: 32.1%). This figure increased as against the previous year due to the proportional increase in the number of employees in the areas of sales and development.

First Sensor has supported employees for many years in financially securing their standard of living in retirement, with an employee financed pension plan model. This is based on deferred compensation and an employer financed private pension allowance.

In view of demographic change and the resulting shortage of skilled workers, 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, industrial clerks and specialists in warehouse logistics. At the end of 2016, 33 apprentices were employed at the company, four more than in the previous year.

First Sensor invested €373 thousand in staff training in fiscal year 2016 (previous year: €250 thousand). This increase was primarily due to a management development program aimed at communicating methodological expertise, strategic thinking and actions and strong management.

The need for staff development within the
First Sensor has supported employees for many
years in financially securing their standard of
living in retirement, with an employee financed

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.

With a global grading system, First Sensor has established the conditions for evaluating 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 in order to position the company as an attractive employer for existing and new employees.

# Implementation of the defined core processes

The company's core processes have been developed and implemented in a Group-wide project and operational instructions have been derived from this. The success of these measures is reflected in the improved earnings situation. In this context, First Sensor placed a great deal of importance on high efficiency, low losses, satisfied customers, reliable suppliers and, in particular, effective and motivated employees. The optimization of interface management is being advanced continuously in order to identify weaknesses and leverage potential for improvement.

### **Quality management**

To ensure that cooperation between the plants and at the interfaces with customers and suppliers is quick and smooth, a uniform CAQ software for quality management and assurance at all of the First Sensor Group's plants has been implemented.

Preparations have also been made for the introduction of an energy management system

This project coincides with the roll-out of uniform software for environmental management and occupational health and safety. This helps to ensure that all of the relevant statutory and official requirements are met. The software is also a highly effective, upgradeable tool for informing and training all employees. This means that the conditions have been established for

the certification of the locations in accordance with environmental and energy management standards.

The key achievements resulting from this will be reflected in streamlined, uniform processes for reducing additional expenses, clearly defined interfaces and responsibilities, a central quality management system with key figures for measuring effectiveness and efficiency, the presentation of a consistent image to customers and suppliers, support for new business, and support for purchasing activities as part of supplier management.

The following certifications are currently audited and the following guidelines are currently applied at First Sensor:

Types of certifications	
DIN EN ISO 9001	Certification of quality management systems
DIN EN 9100	Certification of quality management systems for aviation, aerospace and defense
DIN EN ISO 14001	Certification of environmental management systems
DIN EN ISO 13485	Certification of quality management systems for medical products
ISO/TS 16949	Certification of quality management systems for automotive industry
Guidelines	
MIL-STD 883	Test Method Standard Microcircuits for Military Applications
IPCJ-STD-001	Requirements for Soldered Electrical and Electronic Assemblies
IPC A 610	Acceptability of Electronic Assemblies
DVS 2810 / 2811	DVS-Regelwerk für Drahtbonden und Prüfverfahren
DLR-RF-PS-STD-008	Requirements for Capability Approval of Monolithic Microcircuit Technologies
ESA PSS/ECSS/ESCC	ESA Procedures, Standards and Specifications for Space Applications
RTCA DO 160	Environmental Conditions and Test Procedures for Airborne Equipment

### GROUP MANAGEMENT REPORT

# 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

# Macroeconomic and sector-related conditions

The experts at the International Monetary Fund (IMF) expect global economic growth to increase from 3.1% in 2016 to 3.4% in 2017 and 3.6% in 2018. However, the IMF and various other organizations, including the Federation of German Industries (BDI), emphasize in their forecasts that uncertainty has increased as a result of the change of government in the USA, as this is expected to represent not a normal transition but a paradigm change.

For the euro zone, the IMF anticipates a slight decline in growth. After an increase of 1.7% in 2016, the common currency area is expected to grow by 1.6% in each of the next two years. The rate for Germany is slightly lower at 1.5% each year, which is also below the growth rate of 1.7% recorded in 2016

#### Development of the sensor market

Sensors are key technologies that are essential to many innovations in different industries. The number of sensors is growing significantly in the automotive industry and in consumer products, industrial applications and medical technology. Analysts at Yole Developpement expect the sensor market to exceed the USD 15 billion mark for the first time in 2017. They are forecasting average annual growth of 11.2% up to 2020. For First Sensor's three target markets, they anticipate growth rates of 10.8% in industrial, 11% in medical and 10% in mobility.

Based on a survey of its mostly small and medium-sized members, the German AMA Association for Sensors and Measurement anticipates sales growth of 5.0% in the current year. This represents a year-on-year increase of 1.0%. Furthermore, the association expected that the number of sensors used would double every five years and forecasts a long-term increase to 100 sensors for each of the world's inhabitants. As a result of increasing networking, they believe that demand for sensors is

growing overall – and particularly demand for smart sensors. What is needed in mechanical engineering, in process technology and in the field of autonomous driving is an intelligent combination of different sensor data in the form of sensor fusion, so that sensors can use intelligent algorithms to make a decision in the field already as to which events need to be reported to the next highest system level.

#### Market and competition

As a manufacturer of sensors and a developer of customer-specific sensor systems, First Sensor competes with a large number of international companies. As a niche player, First Sensor is not in competition with manufacturers that primarily produce and sell standard sensors in large quantities.

Analyzing the market shares of the companies operating in this sector is still difficult, according to Yole Developpement, as the variety of types of sensors, major differences in their fields of application, the low transparency of both large corporations and small players on the market, and the different roles that the companies play in the supply chain make it virtually impossible to make a reliable assessment.

#### Industrial

The market research company Gartner anticipates average growth of 9% in the industrial sector of the semiconductor industry between 2014 and 2020, largely driven by the Internet of Things (IoT).

According to AMA, Industry 4.0 and IoT are currently major topics in sensor and measuring technology. It describes data as "the blood in the veins of Industry 4.0 and the IoT," and these data are gathered by sensors and analyzed by measuring technology. For this reason, the members of this association expect Industry 4.0 and IoT to provide a significant boost to the sector's growth in the medium and long term.

#### Medical

Sensors for medical technology are becoming increasingly important, according to mt-medizintechnik, the publication of the VDI Society for Technologies of Life Sciences. In many devices in medical, analytical and laboratory technology, they are important components for physical, optical, chemical, biochemical and analytical measurement methods. The market for sensor technology and microsystems in medical technology is currently experiencing high growth rates, particularly driven by mobile systems for patient monitoring and diagnostics, radiology, and assistance systems for healthy and independent living for senior citizens (AAL).

According to a study by the German Medical Technology Association, the sector will continue to be a growth market. They expect demand for healthcare services to keep increasing and forecast global growth rates of 5% per year. Demand for medical technology is expected to develop particularly dynamically until 2020 in emerging economies, where average annual growth of between 9% and 16% is anticipated.

#### Mobility

Following significant increases in recent years, there are now signs of considerably slower growth in the core markets of the global automotive industry. The business consultancy PwC thus anticipates an increase in sales volumes of only 2.7% in Europe in 2017 – representing a considerable slowdown compared to the 6.8% achieved in 2016. The outlook for the US market is even more cautious, with sales figures here potentially even falling by 0.5% in 2017 due to rising interest rates. PwC fears that the automotive industry will no longer be able to escape the general problems in Europe. They expect consumer sentiment to deteriorate again in view of several upcoming elections.

Despite this dip in medium-term expectations on the automobile sales market, key technologies for new applications in vehicles are on the rise.

According to a study by the research institute Markets and Markets, for example, the market volume for LiDAR systems – a key component for autonomous driving – already came to around USD 1.4 billion in 2016 and is expected to rise to USD 3.2 billion by 2022, with average growth rates of 12.4% per year.

# Forecast for the business development in 2017

For fiscal year 2017, First Sensor anticipates a sales of €140 million to €145 million. This estimate takes account of the fact that First Sensor must first generate internal growth of up to €10 million in order to compensate for the scheduled expiration of a major order in the Mobility segment at the end of last year. This already takes into account that the market launch of new products can result in delays. on the customer's end. In the medium to long term, we continue to anticipate growth rates averaging 10% over the next few years. Not only are these expectations supported by our many development projects, which are based on tangible customer requirements, but they also continue to be supported by market data.

	2016	Target 2017
Sales in € million	150.1	140-145
EBIT margin in %	6.7	5-6

#### Industrial

In the past fiscal year, the industrial target market accounted for roughly 48% of the

Group's sales. The customers are a relatively heterogeneous group consisting of international corporations on the one hand and smaller technology companies on the other hand. Our strategy is aimed at expanding sales with existing customers by increasingly also offering them solutions from other product areas of our portfolio. Furthermore, it is becoming apparent that First Sensor is no longer just perceived as a sensor manufacturer, but is increasingly also being commissioned to map complex functions for customer-specific applications. The company is glad to take on this challenge, as the Group's pooled expertise also enables it to develop and offer systems that go far beyond the standard solutions available on the market.

At the same time, the sensor technology group also supplies customers in this target market with standard products that are modified where necessary. The particular benefit here is the time to market, since repeated or additional qualification of these products is of course no longer necessary in general. In addition to the expansion of its existing business, First Sensor particularly expects growth from the standardization of solutions, from new products and from selective cooperations with new prospective customers.

#### Medical

With the share of sales now at 20% and growth of 29% in 2016, First Sensor has proved that in focusing on this target market it is implementing a promising strategy. It is currently concentrating on three fields of application for sensors: respiration and pneumology, dialysis and infusion, and diagnostics, for example for X-rays. In these areas, the company has specific expertise that creates added value for its customers, while it is also participating in the technological trends driving growth here.

The Group is aiming to match the success of the past fiscal year. However, it is likely to be a challenge to replicate this leap in growth.

#### Mobility

As a result of strong growth in the past fiscal year, the company displayed an exceptionally successful business performance in the mobility target market. This success cannot automatically be repeated in 2017, as the company will first have to compensate for a major order that has expired as scheduled. However, the Group is well positioned for this: Firstly, the added value share in existing business is increasing due to the growing share of sensor systems and the product portfolio is being expanded further. Secondly, the company is benefiting from a significant increase in demand for driver assistance systems, not only in passenger car business but also for commercial vehicles and specialized vehicles. The future technology of autonomous driving will be a major driving factor for the use of technologies. At the same time, legal requirements are also promoting the use of driver assistance systems, with optional equipment increasing becoming standard.

The product pipeline of the development department is well filled. The projects that are currently being launched on the market will soon contribute to sales to an increasing extent. Compared to the previous year, considerable progress has been made across the entire range of technologies offered by First Sensor. Targeted development of software expertise will also enable the company to advance systems business even more intensively. The field of LiDAR in particular offers interesting prospects here.

#### **Earnings**

First Sensor will focus its efforts on improving profitability in 2017 as well. This is why, on the one hand, we are sticking to our motto of "no orders only if they make an adequate contri-

to earnings. In tandem with this, we will leverage growth required to compensate for a major further optimization potential as planned. We are therefore striving to achieve an EBIT margin of 5% to 6% in fiscal year 2017. The margin target is thus at the level of the original forecast for fiscal year 2016 despite the lower sales guidance compared to 2016. Effects such as fluctuations in purchase prices, risks relating to process stability, increases in wages and salaries, the uncertain product mix with regard to the cost of materials, and increased training expenses in connection with the introduction of a uniform ERP system prompt the company to describe this estimate as the real-case scenario. Overall, we are keeping to our goal of achieving an EBIT margin of 10% in the medium term.

#### Financial position and net assets

First Sensor expects to generate a markedly positive cash flow again in fiscal year 2017. In particular, systematic working capital management should have a corresponding effect here. On the other hand, the technology group expects the investment volume to increase again to between €8 million and €10 million in 2017 after two years of generally below-average volumes. By contrast, depreciation and amortization are currently expected to come to a largely unchanged level. Surplus liquidity can be used to repay financial liabilities or invested in growth.

#### Overall picture

The macroeconomic and sector-specific environment in 2017 currently seems favorable for achieving the targets for the fiscal year. The sale at any cost." This means that we will accept Executive Board of First Sensor is expecting for the Group to generate sales of €140 million to €145 million. This takes account of the internal order that expired as scheduled in fiscal year 2016. First Sensor anticipates an EBIT margin of between 5% and 6%.

> Nonetheless, 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, including those relating to the anticipated general economic development, prove to be inaccurate.

#### Report on opportunities and risks

In this report, opportunities and risks refer to influences or events that are likely to result in the short-term and medium-term corporate development exceeding or falling short of the management's planning. The goal of opportunity management is therefore to recognize and seize these opportunities at an early stage, while risk management is intended to ensure not only that risks are identified in good time, but also that any countermeasures are taken promptly in order to control and minimize the impact on the company.

#### Risk management system

First Sensor is exposed to a range of risks in the course of its business activity that are inextricably linked to its business actions. In dealing with these risks, the company is guided by three principles: Risks that could pose a threat to the Group's continued existence must be avoided in all circumstances. The remaining risks are identified at an early stage, assessed, managed with measures, and controlled as best possible. Where economically expedient, residual risks are insured, thus minimizing their effects on the business performance. Based on these principles, First Sensor has implemented Group-wide risk management as a permanent process that covers all divisions, continuously analyzes the risk situation, and assesses, manages and controls the risks identified.

#### Goals

The goal of risk management is not to eliminate all risks, as this could also mean missing out on opportunities for success. Instead, the objective is to identify an optimal balance between opportunities and risks in line with the First Sensor Group's corporate strategy and thereby contribute to achieving the company's goals.

#### Strategy

Different strategies are pursued depending on the assessment of the risks. Risks that could have serious disadvantages for the company's development or even threaten its continued existence are systematically avoided. In order to limit and reduce risks, a large number of processes and checks have been implemented, for example in quality assurance. Some risks are limited in terms of their impact, for example by setting certain maximum values. Where possible and expedient, risks are outsourced, for example to insurance companies. And certain risks are deliberately accepted in a controlled manner.

#### Structure and processes

The structures and processes of risk management are identical throughout the Group. As part of monthly, quarterly, and annual reporting, risk reports are prepared by all operating units in line with uniform standards. These reports are analyzed in the departments Business Processes and Compliance, Controlling and Finance, and are communicated to the Executive Board. Risks are recorded in nine categories and rated according to their probability of occurrence and their impact on the financial position, net assets and results of operations. The probability of occurrence and effects are weighted on a scale from zero to three and multiplied with each other. If the overall risk is greater than or equal to six, measures for managing the risk are defined. To assess and monitor cumulative risk and individual risks as well as the associated opportunities on a cross-process and cross-company basis, regular business reviews were conducted between the Executive Board and managers of the respective units in the year under review.

#### Principal risks

The following presentation reflects the risk categories used in internal reporting. The report covers risks that seem capable of 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.

#### Market risks

In our sales markets, there is a risk that competitors may gain significant market share with products that are technologically equal or superior. Furthermore, customers may prove cautious in calling up orders or placing new ones, or may postpone orders, not least due to cyclical effects on First Sensor's target markets, which could lead to a drop in sales. These risks are countered by means of targeted innovations and continuous diversification of our customer base.

A total of 18.9% of consolidated sales are generated with the three biggest customers, and the biggest customer accounts for 7.5% of sales. If these customers were to change their order behavior or switch to a different supplier, this could have a significant impact on corporate planning. Due to our longstanding close

relationships with these companies and supply agreements that generally cover several years, we consider this risk to be limited and focus intensively on customer value and close dialog in order to control the risk.

In addition, we are experiencing growing uncertainty in the economic environment, which is displaying protectionist traits in some regards and may have a negative impact on global trade, at least in some individual cases.

Overall, we rate market risks as "medium," although individual effects on the sales situation could be significant.

#### Sales risks

Sales risks primarily include those that directly influence the sales and earnings planning. This relates to business with new customers. as well as to the question of whether the sales with existing customers that are forecast in the planning can be generated and whether the calculated margins can be achieved on the market. In addition, the product range must fit with customers' expectations and deliveries must be made in line with the agreed schedule and quality. Supply shortages, including as a result of production downtime, and quality problems in particular may have a negative impact on the company's reputation and sales. Risks arising from warranties are secured against with IT risks are rated as "medium." provisions. The amount of these provisions is based on past experience and estimates by insurance companies and there is no quarantee that these figures will always be accurate for the future, too. In addition, there is a risk that development projects may not be completed to customers' satisfaction, that could impact the medium-term sales development.

Sales risks are rated as "medium."

#### Procurement risks

The increasingly successful second source strategy has reduced the risk that severe delays, quantity discrepancies, lack of availability or shortcomings in the quality of deliveries may have a significant negative impact on the earnings situation. At present, the Group also procures items from suppliers in the UK. From the current perspective, it seems that the effects of customs- and exchange-rate-related price increases as a result of "Brexit" can be addressed sufficiently in advance.

Risks from procurement are therefore rated as "low."

#### IT risks

In many parts of the company, IT structures constitute an essential basis for making operating business possible. We guard against a total or partial failure, including as a result of external influences (cyber-crime), with the latest technology. Considerable resources are tied up in investments in the preparation and implementation of new technologies, and in particular the planned SAP roll-out at another three locations in order to increase process efficiency. This may have a negative impact on day-to-day operations during the project term.

#### Liquidity risks

Liquidity risks play only a minor role in the current company situation, as the main key figures have improved considerably in recent years. In connection with the promissory note loans issued, First Sensor has undertaken to adhere to certain key financial ratios (covenants), which are reviewed regularly and must meet the required targets at the end of the year. Any breach of the covenants will provide extraordinary

grounds for termination. If the agreement is not terminated as a result, the breach will increase the interest margin. The company complied with the covenants as at December 31, 2016, and there is no reason to expect the covenants to be breached during the forecast period.

Also in view of the cash flow development, these risks are therefore classified as "low."

#### Interest rate and exchange rate risks

In the past year, and also in the future, there are risks that the basis used for calculating variable interest could increase. Corresponding precautions have been taken in the form of interest rate hedges. Changes in exchange rates, particularly that of the US dollar, also have an influence on procurement and sales. We hedge known purchasing volumes in US dollars using forward foreign exchange contracts. In addition, price escalation clauses are used to limit the currency risk from sales in the US-dollar area.

For these reasons, interest rate and exchange rate risks are rated as "low"

#### Receivables and inventory risks

Defaults on trade receivables that resulted in corresponding valuation allowances were of only minor significance again in 2016 (0.7%). We avoid such defaults by means of appropriate credit limits and a coordinated dunning process. With regard to inventories, both raw materials and supplies and also finished goods and work in progress may represent a risk if the sales planning proves to be inaccurate or if the product mix changes. The associated risks will be managed preventively to an even greater extent in order to reduce significant impairment losses.

Overall, receivables and inventory risks are rated as "low."

#### Human resources risks

First Sensor is subject to the risk that it may prove impossible to hire the additional staff required for the planned levels of growth or that these staff can only be hired at higher costs than anticipated, including as a result of the shortage of specialist staff. This risk relates in particular to highly qualified employees, but also affects the staffing of the sales team. First Sensor counters this risk with internal professional development programs, an externally effective employer branding process, and longterm demand planning. A grading plan also ensures that typical industry salaries are paid. Risk is also reduced by identifying key persons and their key expertise and by implementing corresponding rules on representation.

Human resources risks are therefore rated as "medium"

#### Insurance risks

First Sensor uses safeguarding mechanisms to transfer risks to third parties in an appropriate manner. This includes an extensive insurance framework, as well as instruments that can be used to eliminate or reduce interest rate or exchange rate fluctuations. Examining the risk situation, adapting the instruments in line with the risk situation, and assessing the effectiveness of the protective measures taken is therefore an integral part of risk management.

Risks from existing insurance are classified as "low."

#### Other risks

In the area of intangible assets, First Sensor has capitalized development costs of €4.9 million and goodwill of €29.8 million. These are tested for impairment on a regular basis (see notes for details). In this context, 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, the risk of impairment

losses on goodwill could generally increase. There are no signs of either of these developments at present.

Other risks are rated 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 and the continued existence of the Group is not threatened in any way.

#### Opportunity management system

As with risks, opportunities within the Group are processed transparently and systematically incorporated in business decisions. They represent future developments or events that may lead to a positive deviation from forecasts or targets for the company.

#### Opportunity categories

First Sensor differentiates between opportunities based on whether they mainly contribute to a positive deviation from the target for sales or for earnings.

#### Sales-related opportunities

There is an opportunity that it may be possible to launch products on the market faster than expected and that demand may exceed the original expectations. Potential also arises from products that were developed for particular customer applications but can also be used by new or existing customers in other target markets. We also see opportunities to expand our presence with existing customers by convincing them to purchase an increasingly large product portfolio from First Sensor. We see major opportunities in the overarching trends that dominate our target markets: From Industry 4.0 to autonomous driving, from smart cities to medical technology, sensors play a key role everywhere. In addition, we are continuing to advance the internationalization

process and tapping markets in which First Sensor has generated lower sales than in its domestic market. One major new customer may potentially be enough for the planning to be exceeded. And last but not least, we are open to strategic measures in the field of non-organic growth, provided the companies fit with our overarching goals.

#### **Earnings-related opportunities**

It is in the nature of things that an unplanned increase in sales would initially have a significant impact on earnings (economies of scale). In addition, we are working on optimizing a large number of processes and structures. 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. We continue to see such potential in production, where further improvements in efficiency can be achieved. Similarly, further margin potential can be leveraged in procurement by means of strategic purchasing.

## Summary of the opportunity situation

First Sensor is well positioned to systematically take advantage of the opportunities for the Group with its products in its strategic target markets. While on the one hand we are working purposefully to tap into these opportunities, on the other hand it is generally unlikely that we will be able to achieve successes here in the short term. For this reason, among others, we attach great importance to quarterly reporting to our shareholders to allow them to participate in this progress in a timely manner.

#### Risk reporting in line with the use of derivative financial instruments

First Sensor uses derivative financial instruments solely for hedging interest rate and exchange rate risks. On the one hand, this involves forward foreign exchange contracts to reduce the impact of exchange rate fluctuations when purchasing materials in foreign currency. Further details can be found in item 33 of the notes to the consolidated financial statements.

On the other hand, interest rate swaps have been concluded to hedge interest rate risks in connection with the promissory note loans issued. Detailed information is provided 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 credit rating.

#### Accounting-related internal control system

The goal of the internal control system (ICS) is to ensure reliable and transparent financial reporting. In order to achieve this goal, appropriate structures, processes, and checks have been implemented. 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 ICS is developed by the Executive Board and its effectiveness is monitored by the Supervisory Board.

The Group companies prepare their financial statements on a decentralized basis in line with the local legal requirements. The respective accounting is based on corporate guidelines in the form of accounting and consolidation manuals and supplementary procedural instructions such as the intercompany guideline. Uniform reporting structures are

ensured by means of standardized notification formats, IT systems, and IT-based reporting and 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 audited at the end of the financial 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.

The implementation of checks ensures with the greatest possible certainty that (consolidated) financial statements are prepared in accordance with the regulations. The dual control principle naturally applies to all key processes. In addition, precautions are taken to increase the reliability of the accounting process by assigning roles with the appropriate expertise in each case and by analyzing unusual transactions in the system. Spot checks and plausibility analyses are also performed and are supplemented by on-site compliance

audits and internal checks several times a year. Access by headquarters to all of the Group's accounting systems and bank accounts is also ensured at all times.

The Executive Board is kept informed of the results of these checks on an ongoing basis. These discussions also include regular deviation analyses in which the anticipated accounting results are compared with the actual results. This ensures that the Executive Board can decide on measures to secure the planned business performance at an early stage where necessary.

All measures taken and the ongoing development and amendment of the ICS contribute to guaranteeing that the accounting is reliable. However, even appropriate and functional systems cannot guarantee with absolute certainty that risks will be identified and managed.

# Takeover-related disclosures and information in accordance with sections 289 (4) and 315 (4) HGB

#### Composition of subscribed capital

Subscribed capital amounted to €51,041,980.00 at the reporting date December 31, 2016 (previous year: €50,835,480.00) and is divided into 10,208,396 no-par value bearer shares (previous year: 10,167,096 no-par value bearer shares), meaning that each share has a notional interest in the share capital of €5.00.

All of the company's shares carry the same rights and obligations. Each share grants the bearer one vote at the Annual General Meeting and determines the extent of the shareholders' participation in the company's profits.

## Restrictions affecting voting rights or the transfer of shares

In accordance with section 136 (1) AktG, shares directly or indirectly held by members of the Executive Board and the Supervisory Board are subject to statutory restrictions affecting voting rights with respect to the vote on the approval of the actions of the members of the Executive Board and the Supervisory Board for the respective financial year. The Executive Board is not aware of any further restrictions affecting voting rights or the transfer of shares.

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

An interest of 36.02% is held by FS Technology Holding S.à.r.l., Luxembourg, which is attributable to the NN Group B.V., Netherlands

# Holders of shares with special rights conferring control powers

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

#### 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.

# Statutory provisions and Articles of Association concerning the nomination and dismissal of Executive Board members and amendments to the Articles of Association

The provisions governing the nomination and dismissal of members of the Executive Board and amendments to the Articles of Association are determined in line with statutory regulations

#### Authorization of the Executive Board to issue shares and repurchase shares

In addition to contingent capital for the issue of stock options for members of the Executive Board and employees, the company has Contingent Capital 2012 encompassing up to 3,800,000 no-par value bearer shares for granting shares to the holders of convertible or option bonds in the event that the holders

exercise their conversion or option rights.

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.

The Executive Board is authorized to acquire treasury shares up to a maximum of 10% of the share capital.

## Agreements on compensation in the event of a takeover bid

In the event of a change of control at First Sensor AG, a maximum amount in the form of cash has been allowed for each of the members of the Executive Board if the member in question 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 14, 2017

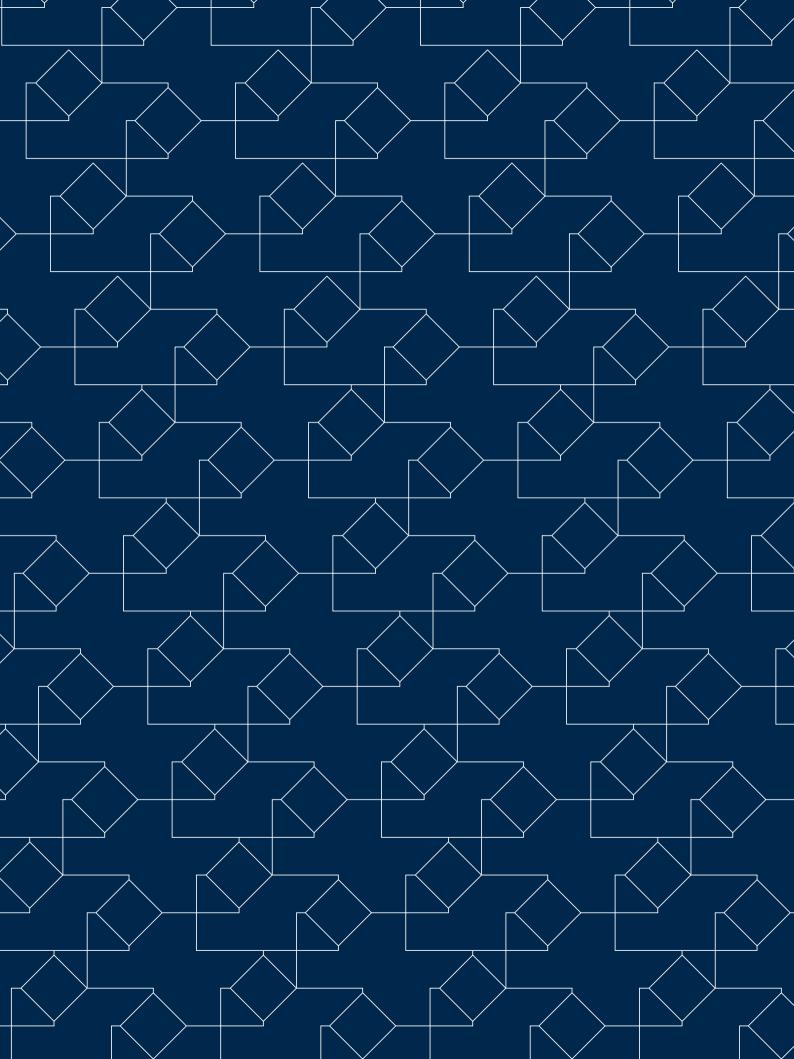
First Sensor AG

Dr. Dirk Rothweiler

CEO

Makian falls
Dr. Mathias Gollwitzer

CFO



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# 4 Financial Statements 2016 (IFRS)

### Consolidated balance sheet (IFRS)

#### Consolidated balance sheet ASSETS

ACCETC in Cabanasand	Natas	Dec. 31,	Dec. 31,	Ch a m m a a
ASSETS in € thousand	Notes	2015	2016	<u>Changes</u>
Intangible assets	(3)	16,246	14,433	-1,813
Internally-generated intangible assets	(4)	3,978	4,903	925
Goodwill	(5)	29,816	29,816	0
Property, plant and equipment	(6)	35,036	32,965	-2,071
Total non-current assets		85,076	82,117	2,959
Inventories	(7)	27,135	25,856	-1,279
Trade accounts receivables	(8)	17,004	18,426	1,422
Tax refund claims		908	593	-315
Other current assets	(9)	1,850	3,258	1,408
Cash and cash equivalents	(10)	21,523	23,791	2,268
Total current assets		68,420	71,924	3,504
Total ASSETS		153,496	154,041	545

### Consolidated balance sheet EQUITY AND LIABILITIES

EQUITY AND LIABILITIES in € thousand	Notes	Dec. 31, 2015	Dec. 31, 2016	Changes
Share capital	(11)	50,835	51,042	207
Capital reserves	(12)	16,527	16,707	180
Revenue reserves	(12)	1,004	1,004	0
Currency translation	(12)	62	-108	-170
Revaluation reserves	(12)	-227	-347	-120
Retained earnings		2,476	8,232	5,756
Minority interest		594	935	341
TOTAL Equity		71,271	77,465	6,194
Non-current post-employment benefit obligation	(13)	312	300	-12
Other non-current provisions	(14)	430	0	-430
Long-term loans, excluding current portion	(15)	46,543	43,599	-2,944
Other non-current liabilities	(16)	4,487	4,241	-246
Deferred tax liabilities	(26)	3,524	3,861	337
Total non-current liabilities		55,296	52,001	-3,295
Income tax provisions and liabilities		1,456	1,057	-399
Other current provisions	(14)	1,739	1,502	-237
Short-term loans and current portion of long-term loans	(15)	7,987	4,640	-3,347
Payments received on account of orders		1,171	910	-261
Trade accounts payables		7,612	8,611	999
Other current liabilities	(17)	6,964	7,855	891
Total current liabilities		26,929	24,575	-2,354
TOTAL Equity and liabilities		153,496	154,041	545

## Consolidated statement of comprehensive income (IFRS)

#### Consolidated income statement

in € thousand	Notes	Jan. 1 – Dec. 31, 2015	Jan. 1 – Dec. 31, 2016	Changes
Sales revenues	(19)	137,742	150,111	12,369
Other operating income	(20)	2,844	2,913	69
Changes in inventories in finished goods and work-in-progress	(21)	-1,222	-1,251	-29
Other own work capitalized	(22)	1,043	1,423	380
Cost of material and purchased services	(23)	-69,282	-72,382	-3,100
Personnel expenses	(24)	-41,905	-44,129	-2,224
Other operating expenses	(25)	-17,848	-17,270	578
Profit from operations (EBITDA)		11,372	19,415	8,043
Depreciation of property, plant and equipment and amortization of intagible assets		-10,156	-9,419	737
Earnings before interest and tax (EBIT)		1,216	9,996	8,780
Interest income		18	40	22
Interest expenses		-2,199	-1,826	373
Currency gains		1,636	738	-898
Currency losses		-1,844	-220	1,624
Income before tax and minority interest		-1,173	8,728	9,901
Income tax expenses	(26)	-355	-2,631	-2,276
Net profit/loss for the period		-1,528	6,097	7,625
Net profit/loss for the period attributable to First Sensor AG shareholders		-1,717	5,756	7,473
Net profit/loss for the period attributable to minority interest		189	341	152
Earnings per share in € (basic=diluted)	(27)	-0.17	0.57	0.74

## Other comprehensive income

in € thousand	Jan. 1 – Dec. 31, 2015	Jan. 1 – Dec. 31, 2016	Changes
Net profit/loss for the period	-1,528	6,097	7,625
Actuarial gains and losses on defined benefit plans	-8	-9	-1
Taxes on other comprehensive income	2	2	0
Items not subsequently reclassified to the income statement	-6	-7	-1
Changes from currency translation	275	-170	-446
Revaluation of derivative financial instruments	291	-162	-452
Taxes on other comprehensive income	-87	49	136
Items that can be subsequently reclassified to the income statement	479	-283	-762
Total comprehensive income	-1,055	5,807	6,862
There of attributable to First Sensor AG shareholders	-1,244	5,466	6,710
Thereof attributable to minority interest	189	341	152

## Consolidated statement of changes in equity from January 1 to December 31, 2015 (IFRS)

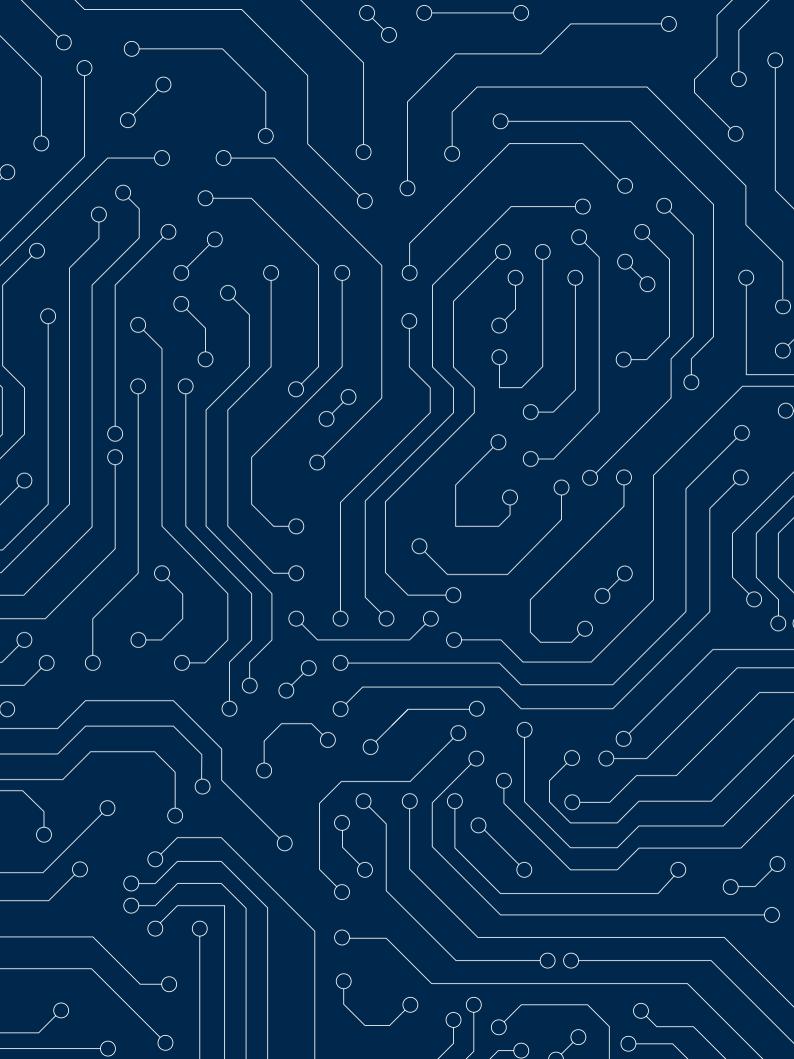
in € thousand	Number of shares in thou.	Capital stock	Capital reserves	Revenue reserves	Currency translation	Revalua- tion reserves	Retained earnings	Minority interest	Total sharehol- ders' equity
As at January 1, 2015	10,131	50,655	16,363	1,004	-213	-425	4,193	405	71,982
Net profit/loss for the period	0	0	0	0	0	0	-1.717	189	-1,528
Other comprehensive income	0	0	0	0	275	198	0	0	473
Total comprehensive income	0	0	0	0	275	198	-1.717	189	-1,055
Share-based remuneration	0	0	95	0	0	0	0	0	95
Capital increase	36	180	69	0	0	0	0	0	249
Appropriation of earnings	0	0	0	0	0	0	0	0	0
As at December 31, 2015	10,167	50,835	16,527	1,004	62	-227	2,476	594	71,271

## Consolidated statement of changes in equity from January 1 to December 31, 2016 (IFRS)

in € thousand	Number of shares in thou.	Capital stock	Capital reserves	Revenue reserves	Currency translation	Revaluation reserves	Retained earnings	Minority interest	Total sharehol- ders' equity
As at January 1, 2016	10,167	50,835	16,527	1,004	62	-227	2,476	594	71,271
Net profit/loss for the period	0	0	0	0	0	0	5,756	341	6,097
Other comprehensive income	0	0	0	0	-170	-120	0	0	-290
Total comprehensive income	0	0	0	0	-170	-120	5,756	341	5,807
Share-based remuneration	0	0	102	0	0	0	0	0	102
Capital increase	41	207	78	0	0	0	0	0	285
Appropriation of earnings	0	0	0	0	0	0	0	0	0
As at December 31, 2016	10,208	51,042	16,707	1,004	-108	-347	8,232	935	77,465

## Consolidated statement of cash flow from January 1 to December 31, 2016 (IFRS)

in € thousand	Jan. 1 – Dec. 31, 2015	Jan. 1 – Dec. 31, 2016	Changes
Income before tax and minority interest	-1,173	8,728	9,901
Interest paid	1,794	1,740	-54
Depreciation of property, plant and equipment and amortization of intangible assets	10,156	9,419	-737
Income/loss from the disposal of fixed assets	334	129	-205
Other non-cash expenses and income	95	102	7
Changes in provisions	840	-688	-1,528
Changes in working capital	-6,265	856	7,121
Changes in other assets and liabilities	505	-1,075	-1,580
Income tax paid	-1,307	-2,643	-1,336
Cash flow from operating activities	4,979	16,568	11,589
Payments for investments in property, plant and equipment and intangible assets	-7,081	-6,676	405
Proceeds from disposal of property, plant and equipment, intangible assets and investments	325	123	-202
Interest received	18	24	6
Cash flow from investment activities	-6,738	-6,529	209
Proceeds from shareholders	249	285	36
Repayments for financial liabilities	-8,215	-6,501	1,714
Proceeds from loans	18,494	210	-18,284
Interest paid	-1,812	-1,764	48
Cash flow from financing activities	8,716	-7,770	-16,486
Net change in cash and cash equivalents	6,957	2,269	-4,688
Currency differences from converting funds	41	-1	-42
Cash funds at the beginning of the financial year	14,525	21,523	6,998
Cash funds at the end of the financial year	21,523	23,791	2,268



# 5 Notes to the consolidated interim financial statements

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# 5 Notes to the consolidated interim financial statements (IFRS)

#### 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 16, 2017.

#### Reporting principles

First Sensor's consolidated financial statements for 2016 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 2016, 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 of 12/31/2016:

Amendments to standards:

- Amendments to IAS 1 "Presentation of Financial Statements": Disclosure Initiative (entry into force on January 1, 2016)
- Amendments to IAS 16 "Property, Plant and Equipment and IAS 38 "Intangible Assets": Clarification of Acceptable Methods of Depreciation and Amortization (entry into force on January 1, 2016)
- Amendments to IAS 16 "Property, Plant

and Equipment" and IAS 41 "Agriculture": Agriculture - Bearer Plants (entry into force on January 1, 2016)

- Amendments to IAS 19 "Employee Benefits":
   Employee Contributions (entry into force on February 1, 2015)
- Amendments to IAS 27 "Separate Financial Statements": applying the equity method in separate financial statements (entry into force on January 1, 2016)
- Amendments to IFRS 10 "Consolidated Financial Statements", IFRS 12 "Disclosure of Interests in Other Entities" and IAS 28 "Investments in Associates and Joint Ventures": Investment Entities - applying the consolidation exception (entry into force on January 1, 2016)
- Amendments to IFRS 11 "Joint Arrangements": Accounting for Acquisitions of Interests in Joint Operations (entry into force on January 1, 2016)
- Various amendments: IASB 2010 2012 Annual Improvement Project (entry into force on February 1, 2015)
- Various amendments: IASB 2012 2014 Annual Improvement Project (entry into force on January 1, 2016)

New standards:

- None

New interpretations:

- None

#### Published standards and interpretations for which application was not mandatory for IFRS financial statements as of December 31, 2016:

Amendments to standards:

- Amendments to IAS 7 "Cash Flow Statements": Disclosures on changes in certain financial liabilities (entry into force on January 1, 2017) \*
- Amendments to IAS 12 "Income Taxes":
   Recognition of deferred tax assets for unrealized losses (entry into force on January 1, 2017) \*

New standards:

- IFRS 9 "Financial Instruments" (entry into force on January 1, 2018)
- IFRS 14 "Regulatory Deferral Account" (entry into force on January 1, 2016) \*\*
- IFRS 15 "Revenue from Contracts with Customers" (entry into force on January 1, 2018) \*
- IFRS 16 "Leases" (entry into force on January 1, 2019) \*

New interpretations:

- None
- \* EU endorsement not yet given.
- \*\* IFRS 14 is not to be included in EU law

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 are not expected to have any significant effects on the statement of financial position or the income statement. As a result of the new provisions of IFRS 16, assets and liabilities will increase and the equity ratio will decrease. These effects have not yet been quantified in detail. However, the company does not expect the decrease in the equity ratio to result in its being unable to comply with agreements on the minimum equity ratio that have been made in the context of loan agreements. 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 2019 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	Head office	Core business activity	Ownership interest
First Sensor Lewicki GmbH	Oberdischingen	Manufacture and sale of microelectronic components and assemblies	100 %
First Sensor Microelectronic Packaging GmbH	Dresden	Manufacture and sale of microelectronic components and assemblies	100 %
First Sensor Mobility GmbH	Dresden	Dresden  Development, production and sale of microelectronic and micromechanical sensor systems, components, modules and microsystems	
First Sensor France S.A.S.	Paris, Sale of sensor modules France		100 %
First Sensor Inc.	Westlake Village, USA	Development, production and sale of sensor systems and sale of sensor chips	100 %
First Sensor Singapore (FSG) Pte. Ltd.	Singapore	No longer operationally active	100 %
Klay Instruments B. V.	Dwingeloo, The Industrial solutions Netherlands		100 %
First Sensor Technics Ltd.	Rugby, England	Sale of sensor modules	100 %
First Sensor Corp.	Montreal, Canada	Development of sensor modules	100 %
First Sensor Scandinavia AB	Kungens Kurva, Sweden	Sale of sensor modules	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 trans-ferred, 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 IAS 39. 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 of 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.

# Business combinations and goodwill - before December 31, 2008

Based on the methods applied for accounting of company acquisitions as of December 31, 2008, the following different principles applied in comparison to the above requirements:

Transaction costs directly attributable to the acquisition constituted part of the acquisition costs.

The non-controlling interest (formerly, "minority interest") was measured as the relevant share of the identifiable net assets of the acquired company.

In the case of business combinations achieved in stages, individual acquisition transactions were recorded separately. An interest acquired subsequently did not affect the goodwill from the previous acquisition transaction.

When the Group acquired a company, embedded derivatives accounted for separately by the acquired company at the time of the acquisition were only revalued if the business combination resulted in a change to the cont-

ract terms which would have caused significant changes to the payment flows otherwise resulting from the contract.

A contingent consideration was only recognized if the Group had a present obligation, more likely to result in an outflow of resources embodying economic benefits than not, and a reliable estimate could be made. Subsequent adjustments to the contingent consideration affected the goodwill.

#### Shares in associated companies

Associated companies are holdings in which First Sensor is able to exercise significant influence over financial and business policy. Accounting uses the equity method. The goodwill calculated from the difference between the costs and the share of revalued equity at the time of the acquisition is included in the carrying amount of the affiliated company.

If the carrying amount of the holding exceeds the recoverable amount, the asset is written down to its recoverable amount. The recoverable amount is the higher of the fair value less the costs to sell and the value in use. The impairment is recognized in the income statement under "Share in the profit or loss of associated companies".

The share in the net income attributable to the interests held is recognized in earnings from financial assets recognized using the equity method. Proportionate losses and intragroup profits from transactions with affiliated companies, which have to be eliminated, are offset against the carrying amount of the interest in the income statement.

There were no interests associated companies as at the balance sheet date.

#### **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 Ex-change 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:

	Dec. 31,	Dec. 31,
Exchange rates	2015	2016
US Dollar USD	1,0887	1,0541
Britische Pfund GBP	0,7340	0,8562
Swedish Krona SEK	9,1895	9,5525
Singapore Dollar SGD	1,5417	1,5234
Canadian Dollar CAD	1,5116	1,4188

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 of 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 dere-

cognized 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".

whether a financial asset is impaired. If there is objective evidence of impairment on loans and receivables recog-nized 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 First Sensor assesses at the balance sheet date 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 €-115 thousand for the fiscal year (previous year: €-92 thousand).

#### **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.

Plant 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 plant 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 develop-ment 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. Capitali-zation 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; this has been fulfilled.
- The intention is to complete the intangible asset, use or sell it.
- The ability exists to use or sell the intangible asset.
- There is a 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 four years using the straight-line method.

#### (b) Goodwil

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 begins when the product is marketed.

#### (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 of 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 (good-will 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.

If the probability of an outflow of resources embodying economic benefits for the company is low, no contingent liability is disclosed.

#### 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, canceled 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

A share option plan allows 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

Revenue is recognized in accordance with IAS 18 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 IAS 18, 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**

#### Income tax expenses

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, for all carry forward of unused tax losses and unused tax credits in the amount of the future taxable profit that is likely to be available against which the deductible temporary differences, the carryforward of unused tax losses and unused 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

#### Credit and liquidity risk

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 dollars abroad. 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, 2016, 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 meas-urement 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 similar	Goodwill	Internally generated intangible assets	Customer base/ brands	Advance payments	Dec. 31, 2015
Cost of purchase						<u> </u>	
January 1, 2015	1,452	11,677	39,112	4,416	24,075	131	80,863
Additions	0	793	0	853	0	356	2,002
Disposals	0	-1,595	0	-37	0	0	-1,632
Reclassifications	0	227	0	-29	0	-46	152
Exchange differences	0	3	0	-29	0	0	-26
December 31, 2015	1,452	11,105	39,112	5,174	24,075	441	81,359
Cumulative depreciation							
January 1, 2015	1,452	9,133	9,296	927	7,681	0	28,489
Depreciation and amortization	0	1,134	0	269	3,002	0	4,405
Disposals	0	-1,577	0	0	0	0	-1,577
Exchange differences	0	2	0	0	0	0	2
December 31, 2015	1,452	8,692	9,262	1,196	10,683	0	31,319
Carrying amount as at January 1, 2015	0	2,544	29,816	3,489	16,394	131	52,374
Carrying amount as at January 1, Buchwert 31. Dezember 2015	0	2,413	29,816	3,978	13,392	441	50,040
		Concessions, licenses and	0 1 11	Internally generated intangible	Customer base/	Advance	Dec. 31,
in € thousand Cost of purchase	Orders on hand	similar _	Goodwill	assets	<u>brands</u>	payments	2016
January 1, 2016	1,452	11,105	39,112	5,174	24,075	441	81,359
Additions	0		0	1,571	0		2,864
Disposals		-504		-123			-627
Reclassifications				-8			0
Exchange differences			0	27		0	29
December 31, 2016	1,452	11,248	39,112	6,641	24,075	1,097	83,625
Cumulative depreciation							
January 1, 2016	1,452	8,692	9,296	1,196	10,683		31,319
Depreciation and amortization		889	0	542	2,222		3,653
Disposals	0	-499	0	0		0	-499
Reclassifications	0	433	0	-433		0	0
Exchange differences	0	0	0	0		0	0
December 31, 2016	1,452	9,082	9,262	1,738	12,905	0	34,473
Carrying amount as at January 1, 2016	0	2,413	29,816	3,978	13,392	441	50,040
Carrying amount as at December 31, 2016	0	2,166	29,816	4,903	11,170	1,097	49,152

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 acqui- follows. The carrying amount is compared with sition of all shares in the Sensortechnics Group the previous year's figure: in 2011 were identified as intangible assets as

Total	797	797	0	0
Brand Klay Instruments	797	797	0	0
in € thousand	2015	2016		in %
	Dec. 31,	Dec. 31,		

The Klay Instruments brand is not amortized. The Sensortechnics and ELBAU brands were written off in full as of December 31, 2015, since umbrella brand.

both brand names are no longer used as a result of concentrating on the "First Sensor"

#### **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 (previous year: €2,221 thousand). 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 €2,222 thousand in 2016

	Dec. 31,	Dec. 31,		
in € thousand	2015	2016	∆absolute	in %
Sensortechnics Customized	5,473	4,521	-952	-17.4
Sensortechnics Distributed	77	33	-44	-57.1
First Sensor AG subsidiary Berlin-Weißensee (prev.: ELBAU)	4,915	4,060	-855	-17.4
Klay Instruments B.V.	2,130	1,759	-371	-17.4
Total	12,595	10,373	-2,222	-17.6

#### 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 2016 amounted to €23 thousand (previous year: €23 thousand). The residual carrying amount was €229 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 remaining carrying amount as of December 31, 2016, was €24 thousand.

### 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. €4,903 thousand (previous year: €3,978 thousand) were reported for internally generated

intangible assets as at the balance sheet date. Write-downs of €416 thousand (previous year: €269 thousand) were recognized on these in the year under review.

#### 5. Goodwill

Goodwill as at December 31, 2016 related to the following companies:

in € thousand	Dec. 31, 2015	Dec. 31, 2016
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

of the unit was calculated and compared with the carrying amount. If the carrying amount exceeds the value in use, a valuation allowance

To test goodwill for impairment, the value in use is recognized. The value in use is calculated based on operating cash flows for the planning period, discounted using 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	Dec. 31, 2015	Dec. 31, 2016
Risk-free basic interest rate	1.50 %	0.90 %
Market risk premium	6.00 %	7.00 %
Beta factor	1.0	1.0
Pre-tax borrowing rate	3.50 %	3.50 %
WACC pre-tax	10.21 %	10.74 %
WACC after tax	6.99 %	7.35%

#### Lewicki First Sensor 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, 2016 on the basis of the value in use taking into account the following assumptions:

- Sales are expected to remain virtually constant from 2016 to 2019.
- les for 2020 (terminal value).
- The discount factor based on the WACC method will be 7.35% after tax (previous year: 6.99%) and 10.74% before tax (previous year: 10.21%).

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

First Sensor acquired all shares in First Sensor Technology GmbH in fiscal year 2010. This acquisition resulted in goodwill of €1,125 thousand. In accordance with IAS 36, goodwill on this company was tested for potential impairment as at December 31, 2016 on the basis of the value in use taking into account the following assumptions:

- Sales are expected to increase slightly from 2016 to 2019.
- A growth rate of 1% in the projection variab- A growth rate of 1% in the projection variables for 2020 (terminal value).
  - The discount factor based on the WACC method will be 7.35% after tax (previous year: 6.99%) and 10.74% before tax (previous year: 10.21%).

There was no impairment as at the balance sheet date.

#### Sensortechnics Group

First Sensor acquired all shares in the Sensortechnics Group in fiscal year 2011. This acquisition resulted in goodwill of €26,390 thousand. In accordance with IAS 36, the Sensortechnics Group goodwill was tested for potential impairment as at December 31, 2016 on the basis of the value in use taking into account the following assumptions:

- Sales are expected to increase slightly from 2016 to 2019.
- A growth rate of 1% in the projection variables for 2020 (terminal value).
- The discount factor based on the WACC method will be 7.35% after tax (previous year: 6.99%) and 10.74% before tax (previous year: 10.21%).

No impairments resulted from this analysis in fiscal year 2016.

#### MEMSfab GmbH

First Sensor acquired all shares in MEMSfab GmbH in fiscal year 2011. 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.

The merger has no effect on the goodwill of €455 thousand (previous year: €455 thousand). This goodwill results mainly from the successive realization of synergies, which is expected as a result of the company acquisition.

There was no impairment as at the balance sheet date.

## 6. Property, plant and equipment

in € thousand	Land and buildings	Technical equipment and machinery	Office equipment	Advance payments, assets under construction	Dec. 31, 2015
Cost of purchase	_	_			
January 1, 2015	18,975	40,746	8,014	2,269	70,004
Additions	24	1,292	1,148	2,615	5,079
Disposals	-731	-1,954	-615	-81	-3,381
Reclassifications	22	3,153	424	-3,751	-152
Exchange differences	23	82	36	0	141
31. Dezember 2015	18,313	43,319	9,007	1,052	71,691
Cumulative depreciation					
January 1, 2015	5,165	22,971	5,416	40	33,592
Depreciation and amortization	685	3,969	1,066	31	5,751
Disposals	-486	-1,718	-555	-18	-2,777
Exchange differences	13	43	33	0	89
December 31, 2015	5,377	25,265	5,960	53	36,655
Carrying amount as at January 1, 2015	13,810	17,775	2,598	2,229	36,412
Carrying amount as at December 31, 2015	12,936	18,054	3,047	999	35,036
in € thousand	Land and buildings	Technical equipment and machinery	Office equipment	Advance payments, assets under construction	Dec. 31, 2016
Cost of purchase					
January 1, 2016	18,313	43,319	9,007	1,052	71,691
Additions	25	1,655	992	1,140	3,812
Disposals	0	-960	-293	-90	-1,343
Reclassifications	37	612	43	-692	0
Exchange differences	-2	15	11	0	24
December 31, 2016	18,373	44,641	9,760	1,410	74,184
Cumulative depreciation					
January 1, 2016	5,377	25,265	5,960	53	36,655
Depreciation and amortization	602	4,005	1,159	0	5,766
Disposals	0	-929	-290	0	-1,219
Exchange differences	2	4	11	0	17
December 31, 2016	5,981	28,345	6,840	53	41,219
Carrying amount as at January 1, 2016	12,936	18,054	3,047	999	35,036
Carrying amount as at December 31, 2016	12,392	16,296	2,920	1,357	32,965

Property, plant and equipment with a carrying amount of €2,740 thousand (previous year: €3,567 thousand) neither served as security for liabilities nor were otherwise restricted as at the balance sheet date. Due to the early expiration of a product line in the Mobility segment in fiscal year 2017, additional depreciation of around €290 thousand was recognized on machinery used solely for manufacturing this product line.

#### 7. Inventories

Total	27,135	25,856	-1,279	-4.7
Advance payments on inventories	30	51	21	70.0
Finished goods and products	9,014	8,672	-342	-3.8
Unfinished goods and work in progress	7,714	6,501	-1,213	-15.7
Raw materials and supplies	10,377	10,632	255	2.5
in € thousand	2015	2016	∆absolute	in %
	Dec. 31,	Dec. 31,		

The write-down on inventories was recognized as expense and amounted to €587 thousand (previous year: €3,086 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.

There were no longer any assigned inventories as of the balance sheet date (previous year:  $\in$ 557 thousand).

#### 8. Trade accounts receivables

Total	17,004	18,426	1,422	8.4
Less allowances for doubtful accounts	-92	-152	-60	-65.2
Trade accounts receivables	17,096	18,578	1,482	8.7
in € thousand	2015	2016	Δabsolute	in %
	Dec. 31,	Dec. 31,		

Accounts receivable are not interest-bearing and are generally due within 30-90 days. Allowances of €152 thousand (previous year: €92 thousand) were made for doubtful receivables from the sale of goods and services. This equates to a default ratio of 0.8% (previous year: 0.5%).

Changes in the allowance account were as follows:

in € thousand	2015	2016	Δabsolute	in %
Beginning of the period	92	92	0	0.0
Allocation to expenses	108	102	-6	-5.6
Utilization	-3	0	3	100.0
Reversal	-105	-42	63	60.0
End of the period	92	152	60	65.2

As at December 31, 2016, the age structure of past due accounts receivable is as follows:

	Dec. 31,	Dec. 31,		
in € thousand	2015	2016	∆absolute	in %
Not due	14,077	14,397	320	2.3
Less than 30 days past due	2,201	2,549	348	15.8
Between 30 and 60 days past due	379	619	240	63.3
Between 61 and 90 days past due	111	203	92	82.9
Between 91 and 120 days past due	67	328	261	389.6
More than 120 days past due	169	330	161	95.3
Total	17,004	18,426	1,422	8.4

#### 9. Other current assets

Value-added tax receivables	166	1,916	1.750	1,054.2
Insurance claims	142	141		-0.7
Research and development funding	36	2	-34	-94.4
Others	815	534	-281	-34.5
Total	1,850	3,258	1,408	76.1

# 10. Cash and cash equivalents

Total	21,523	23,791	2,268	10.5
Bank balances	21,513	23,785	2,272	10.6
Cash in hand	10	6	-4	-40.0
in € thousand	2015	2016	Δabsolute	in %
	Dec.31.	Dec. 31.		

Bank balances are partly subject to variable interest rates for money at call. The fair value of cash and cash equivalents amounted to  $\[ \le \] 23,791$  thousand (previous year:  $\[ \le \] 21,523$  thousand).

# 11. Subscribed capital

The share capital reported as subscribed capital on the balance sheet totaled €51,041,980.00 as at the balance sheet date (previous year: €50,835,480.00). It was made up of 10,208,396 shares (previous year: 10,167,096 shares), each with a nominal value of €5.00. The share capital of First Sensor AG increased by €206,500.00 year-on-year as a result of share options from the 2009 share option plan being exercised.

	Number of	Share
2016	shares	capita
Beginning of the financial year	10,167	50,835
Share option plan for 2009	41	207
End of the financial year	10,208	51,042
	Number of	Share
2015	shares	capita
Beginning of the financial year	10,131	50,655
Share option plan for 2009	36	180
End of the financial year	10,167	50,835

#### **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 2015/1) 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 circum-stances 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, 2016, 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:

	Dec. 31,	Dec. 31,
in € thousand	2015	2016
Contingent capital 2009/II	355	149
Contingent capital 2012	19,000	19,000
Contingent capital 2013/I	1,665	1,665
Contingent capital 2015/I (rescinded by resolution of the General Meeting on Mai 4, 2016)	2.875	0
Contingent capital 2016/I	0	450
Contingent capital 2016/II	0	2,600
Total	23.895	23.864

As at December 31, 2016, contingent capital totaled €23,863,585.00 (previous year: €23,895,285.00). 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, Contin-gent Capital 2013/I, Contingent Capital 2016/I and Contingent Capital 2016/II. The convertible or option bonds on which Contingent Capital 2012 is based were not issued up to the balance sheet date. The contingent capital 2015/I was canceled by resolution of the Annual General Meeting on May 4, 2016.

#### 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 41,300 share options from the SOP 2009/II at an exercise price of €6.02 and €7.20 respectively, in 2016 the capital reserves increased by the exercise price exceeding the nominal value per share (€5.00) by €78 thousand in total.

#### b) Capital reserves - share options

Expenses of €102 thousand (previous year:

€95 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 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	2015	2016
Defined Benefit Obligation (DBO) as at January 1	323	312
Reclassifications / changes in the scope of consolidation	0	0
Service cost	0	0
Interest cost	7	5
Actuarial gains (-) / losses (+)	8	9
Pension payments	-26	-26
Defined Benefit Obligation (DBO) as at December 31	312	300

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

Balance sheet recognition	312	300
Plan assets	0	0
Defined Benefit Obligation	312	300
<u>in</u> € thousand	2015	2016
	Dec. 31,	Dec. 31,

An overview of the changes in the defined benefit obligation and plan assets is shown in the following table:

Deficit	325	310	323	312	300
Plan assets	0	0	0	0	0
Defined Benefit Obligation	325	310	323	312	300
in € thousand	2012	2013	2014	2015	2016
	Dec. 31,				

Pension expense was as follows:

Total	15	14
Actuarial gains (-) / losses (+)	8	9
Interest cost	7	5
Service cost	0	0
in € thousand	2015	2016

The ongoing service cost and the actuarial gains and losses are recognized as a personnel expense in the statement of comprehensive income. The interest cost is recorded separately in the financial result.

Pension payments of  $\ensuremath{\mathfrak{C}}$ 26 thousand are expected for the following fiscal year – as in the previous year.

The calculations are based on the 2005 G mortality tables produced by K. Heubeck and the following assumptions:  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1}{2$ 

	Dec. 31,	Dec. 31,
<u>in %</u>	2015	2016
Interest rate	1,95	1,70
Salary trend	0	0
Pension trend	1,80	1,80

A change in the material mathematical assumptions (interest rate, salary trend, pension trend) by 1 percentage point upwards or downwards would have a maximum impact of €60 thousand respectively on the defined benefit obligation.

# 14. Other provisions

in € thousand	Warranties	Others	Total
Current	1,620	119	1,739
Non-current	430	0	430
Dec. 31, 2015	2,050	119	2,169
Utilization	-293	-119	-412
Reversal	-761	0	-761
Allocation	431	75	506
Dec. 31, 2016	1,427	75	1,502
Current	1,427	75	1,502
Non-current	0	0	0

The provision for warranty obligations relating to products sold in the previous two years was classified as a liability. The underlying assumptions for the calculations of warranty provisions are based on sales for which guarantees have been provided and on information currently available regarding complaints within the two-year warranty period. Warranty provisions of €431 thousand (previous year: €1,050 thousand) were created for ongoing complaints in accordance with anticipated utilization. These expenses are expected to be incurred within the next fiscal year.

#### 15. Financial liabilities

Total	54.530	48.239
of which more than 5 years	3,000	3,000
of which 1 - 5 years	43,543	40,599
Non-current	46,543	43,599
Current up to 1 year	7,987	4,640
in € thousand	2015	2016
	Dec. 31,	Dec. 31,

#### Promissory note loans

First Sensor placed three promissory note loans totaling  $\[ \le \] 28.0$  million on December 15, 2015. The variable rate promissory note loan for  $\[ \le \] 19.0$  million placed in December 2013 was repaid early with the cash and cash equivalents received in order to take advantage of the favorable interest-rate situation for the company and to secure liquidity for growth.

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 specified for the placed promissory notes were the debt/equity ratio and the equity ratio.

The fixed-rate promissory note loan of €12.0 million in place since 2013 has a term until December 20, 2018.

The key financial ratios will be calculated annually. The interest rate risk will be reduced through 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, 2016	Minimum lease	Present value of minimum lease
in € thousand	payments	payments
Current up to 1 year	549	489
Between 1 and 5 years	1,340	1,257
More than 5 years	135	124
Total minimum lease payments	2,024	1,870
Less discount	154	0
Present value of the minimum lease payments	1,870	1,870
December 31, 2015	Minimum lease	Present value of minimum lease
in € thousand	payments	payments
Current up to 1 year	1,017	972
Between 1 and 5 years	2,047	1,931
More than 5 years	514	461
Total minimum lease payments	3,578	3,364
Less discount	-214	0
Present value of the minimum lease	3,364	3,364

payments

Expenses from leases and hire purchase agreements of €1,404 thousand (previous year: €947 thousand) were reported in the year under review. €235 thousand (previous year: €533 thousand) of this amount was recorded for operating leases.

As at December 31, 2016, the net carrying amount of the technical equipment and machinery financed by means of leasing and pledged to the lessor was €2,740 thousand (previous year: €2,492 thousand). Leased assets with a net carrying amount of €354 thousand were added in this fiscal year (previous year: €1,207 thousand).

#### Others

As at the 2016 balance sheet date, First Sensor had unused credit lines of €13,250 thousand (previous year: €8,550 thousand). As in the previous year, none of these lines were utilized.

#### 16. Other non-current liabilities

Other non-current liabilities mainly include deferred investment grants/ allowances of €3,739 thousand (previous year: €4,147 thousand). These relate to govern-ment 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 €502 thousand (previous year: €340 thousand) are recognized in other non-current financial liabilities.

#### 17. Other current liabilities

Total	6,964	7,855
Others	3,991	3,493
Liabilities from church tax, social security	28	82
Liabilities from income tax	746	2,295
Liabilities due to staff	2,199	1,985
in € thousand	2015	2016
	Dec. 31,	Dec. 31,

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

# 18. Obligations arising from employee benefits

#### Share option plan

Four share option plans are currently in place:

- Share option plan for 2009 (SOP 2009)
- Share option plan for 2013 (SOP 2013)
- Share option plan for 2016/I (SOP 2016/I)
- Share option plan for 2016/II (SOP 2016/II)

 Performance share program (canceled by AGM resolution on May 4, 2016)

the Executive Board, directors of affiliated

These plans state that options to acquire ordinary shares may be granted to members of

companies, employees of the company and employees of affiliated companies.

	SOP 2009	SOP 2013	SOP 2016/I	SOP 2016/II
Annual shareholders' meeting resolution	June 9, 2009	August 20, 2013*	May 4, 2016	May 4, 2016
Term of the share option plan	3 years	3 years	3 years	3 years
Vesting period (following issue)	3 years	4 years	4 years	4 years
Exercise period (following expiry of vesting period)	5 years	5 years	5 years	3 years
Maximum subscription rights (total volume)	290,000	333,000*	90,000	520,000

<sup>\*</sup>Adjusted by resolution of the Annual General Meeting on May 28, 2015

Share options are exercised subject to the following conditions:

#### **SOP 2009**

The SOP 2009 share option plan has a three-year term. A maximum of 290,000 options from the total volume for the share option plan can be issued in yearly tranches to all entitled parties within this term.

In fiscal year 2009, 160,000 subscription rights (1st tranche: 80,000, 2nd tranche: 80,000) and in fiscal year 2010, 130,000 subscription rights were granted to employees, senior executives and members of the Executive Board.

The exercise price is the average price for the company's shares in the XETRA trading system (or comparable successor) during the five trading days preceding the announcement of the issue amount for the subscription right, but no less than the proportionate amount of the share capital attributable to one share.

The average price for the options issued on November 17, 2009 was €6.02; the price for the options issued on December 9, 2009 was €5.80 and the price for the options issued on August 25, 2010 was €7.20.

Shares acquired by exercising the options carry full voting rights and dividend entitlement.

Options can only be exercised if the exercise hurdle has been reached at least once in the six week period prior to exercise ("exercising window"). The exercise hurdle has been reached if the closing price of shares in the company in XETRA (or a comparable successor system) exceeds the exercise price by at least 30% on ten consecutive trading days.

The options may not be exercised in the three weeks prior to the announcement of the quarterly results or in the period between the fiscal year end. Options may not be exercised either in the period extending from the day on

which the company publishes a share subscription offer to its shareholders or the option to purchase bonds with conversion or option rights in the electronic German Federal Gazette (Bundesanzeiger), until the date on which the company shares are once again quoted "ex subscription rights" on the Frankfurt Stock Exchange or another stock exchange (blocking periods).

The same applies even if an exercise window opens during these blocking periods. Furthermore, entitled parties must comply with the restrictions set down in general legislation such as the German Securities Trading Act (insider trading).

The maximum term (vesting period plus exercise period) for an option is eight years.

#### **SOP 2013**

The SOP 2013 share option plan has a three-year term. The option program was reduced to 333,000 options by resolution of the Annual General Meeting on May 28, 2015. The plan is divided into three groups of entitled persons:

- A maximum of 215,000 options for members of the company's Executive Board (up to around 64.6%)
- A maximum of 20,000 options for directors of affiliated companies (up to around 6.0%)
- A maximum of 98,000 options for employees of the company or of affiliated companies (up to around 29.4%)

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 concerned 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. These subscription rights were forfeited as a result of the Executive Board members leaving the company. A total of 118,000 subscription rights were granted to directors of affiliated companies and employees of the company and affiliated companies.

#### SOP 2016/I

The share option plan 2016/I was resolved at the Annual General Meeting on May 4, 2016. It provides for up to 90,000 subscription rights to be issued to members of the Executive Board by December 31, 2019. If share options are forfeited because entitled persons leave the company within the authorization period, a corresponding number of share options may be

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

The share options may be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the share options each have a term of nine years from the issue date; after this they are forfeited without replacement. After the end of the vesting period, share options may be exercised if the per-formance target has been achieved within a period of 30 trading days prior to exercise. The performance target has been achieved if the closing price of the share meets or exceeds the exercise price of €25.00 on ten consecutive trading days.

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/I, the contingent capital 2016/I was created in the amount of €450,000.00. No share options were granted under the share option plan 2016/I in fiscal year 2016.

#### 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 share options are forfeited because entitled persons leave the company within the authorization period, a corresponding number of share options may be issued again.

share option plan 2016/II breaks down across the groups of entitled persons as follows:

- 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 share options may be exercised for the first time after a vesting period of four years from the respective issue date. Overall, the share options 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, share options 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

The total volume of the share options under the consecutive trading days before the respective issue date of the options plus 20%. However, the exercise price for the share options issued in fiscal years 2017 and 2018 amounts to at - Members of the company's Executive Board 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 share options is also subject to the strict requirement 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 of the respective share options and must have held these shares continuously in his or her own name up until the date when these share options are first exercised. If there is no such proof of the acquisition of shares, the share options 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 share options 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 the option issued amounted to €2.00 and was calculated using the Black-Scholes model. The calculation was based on the following parameters: Share price on the grant day of €9.20, volatility of 35% and an interest rate of 0.0%. In addition, it was assumed that a non-exercise rate of 20% would arise as a result of the additional condition of acquiring treasury shares.

#### **PSP 2015**

The performance share plan 2015 was canceled by resolution of the Annual General Meeting on May 4, 2016. This also applies to the contingent capital 2015/1.

The following table shows the number and the weighted average exercise prices (WAEP) of the share options granted for fiscal years 2015 and 2016:

	Dec. 31, 2015		Dec. 31, 2016	
in € thousand	Quantity	WAEP	Quantity	WAEP
Outstanding at the beginning	334,110	12.68	330,025	13.58
Vested at the beginning	95,902	6.91	59,817	6.92
Granted in the year	65,000	15.00	282,000	12.00
Forfeited in the year	33,000	14.53	167,208	14.91
Exercised in the year	36,085	6.91	41,300	6.88
Outstanding at the end	330,025	13.58	405,517	12.59
Vested at the end	59,817	6.91	16,517	6.99

For options outstanding at the end of the period under review, the exercise prices range between €6.02 and €15.00 (previous year: €6.02 and €15.00). The average remaining term of these options is 6.3 years. Personnel expenses of €102 thousand were recognized in the year under review (previous year: €95 thousand).

# 19. Sales revenues

in € thousand	2015	2016	∆absolute	in %
Germany	70,318	75,088	4,770	6.8
France	3,174	2,435	-739	-23.3
Benelux	6,190	6,864	674	10.9
Italy	904	958	54	6.0
Great Britain	6,855	6,383	-472	-6.9
Scandinavia	13,986	14,802	816	5.8
North America	8,207	11,922	3,715	45.3
Asia	12,706	13,665	959	7.5
Others	15,402	17,994	2,592	16.8
Total	137,742	150,111	12,369	9.0

Revenues mainly result from the sale of customer-specific semiconductor sensors, sensor systems and development and production services. Sales deductions of €324 thousand were granted in the year under review (previous year: €377 thousand).

# 20. Other operating income

Other operating income breaks down as follows:

in € thousand	2015	2016	Δabsolute	in %
Proceeds from reversing provisions	468	761	293	62.6
Income from other benefits in kind	601	581	-20	-3.3
Insurance claim payments	102	357	255	250.0
Investment allowances	343	291	-52	-15.2
Investment grants	163	100	-63	-38.7
Prior-period income	68	19	-49	-72.1
Development grants	755	546	-209	-27.7
Others	344	258	-86	-25.0
Total	2,844	2,913	69	2.4

# 21. Change in inventories of finished goods and work in progress

Total	-1,222	-1,251	-29	-2.4
Finished goods	746	47	-699	-93.7
Unfinished goods and work in progress	-1,968	-1,298	670	34.0
in € thousand	2015	2016	∆absolute	<u>in %</u>

# 22. Own work capitalized

Total	1,043	1,423	380	36.4
Other capitalized costs	372	103	-269	-72.3
Capitalized development costs	671	1,320	649	96.7
in € thousand	2015	2016	Δabsolute	in %

Capitalized costs in 2016 amounted to €1,423 thousand (previous year: €1,043 thousand). Ca- the expansion of capacities (supply of media pitalized development costs pursuant to IAS 38 and machines) and technology at the producaccounted for €1,320 thousand (previous year: €671 thousand) of this sum. Other capitalized

costs related mainly to measures connected to tion site in Berlin-Oberschöneweide and the expansion of the ERP system.

Research and development costs recognized in expenses amounted to €8,839 thousand in 2016 (previous year: €7,849 thousand).

# 23. Cost of materials/purchased services

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

in € thousand	2015	2016	Δabsolute	in %
Raw materials and supplies	62,092	65,597	3,505	5.6
Purchased services	7,190	6,785	-405	-5.6
Total	69.282	72.382	3,100	4.5

# 24. Personnel expenses

The personnel expenses break down as follows:

Total	41.905	44.129	2,224	5.3
Social security contributions including pension plans	6,918	6,695	-223	-3.2
Wages and salaries	34,987	37,434	2,447	7.0
in € thousand	2015	2016	Δabsolute	in %

Personnel expenses include €102 thousand (previous year: €95 thousand) in expenditure related to granting share options. They also include €32 thousand (previous year: €24 thousand) for defined contribution pension plans.

# 25. Other operating expenses

Miscellaneous other operating expenses comprise the following items:

Total	17,848	17,270	-578	-3.2
Other taxes		113	41	56.9
Supervisory Board remuneration	104	114	10	9.6
Expenses related to other periods	334	154	-180	-53.9
Annual financial statements	176	177	1	0.6
Communication costs	266	277	11	4.1
Work clothing and protective equipment	299	305	6	2.0
Investor relations	173	331	158	91.3
Training costs	250	373	123	49.2
General administration expenses	249	379	130	52.2
R&D expenses	211	414	203	96.2
Recruitment costs	330	462	132	40.0
Warranty expenses	1,148	556	-592	-51.6
Other expenses	580	578	-2	-0.3
Insurance	618	608	-10	-1.6
Goods handling costs	739	660	-79	-10.7
Other operating materials	714	676	-38	-5.3
IT-costs	667	865	198	29.7
Travel expenses	772	869	97	12.6
Vehicle costs	1,007	1,009	2	0.2
Sales and marketing expenses	1,218	1,617	399	32.8
Maintenance and repairs	1,741	1,848	107	6.1
Legal and consultancy fees	3,293	2,171	-1,122	-34.1
Costs of premises	2,887	2,714	-173	-6.0
in € thousand	2015	2016	Δabsolute	in %

# 26. Income tax expenses

The key components of income tax expenses for fiscal years 2015 and 2016 break down as follows:

Displayed tax amount	355	2,631	2,276	641.1
Deferred taxes	-733	388	1,121	152.9
Prior-period income tax	122	-76	-198	-162.3
Current income tax	966	2,319	1,353	140.1
in € thousand	2015	2016	∆absolute	in %

Deferred taxes of €388 thousand (previous year: €733 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 2015 and 2016 is as follows:

in € thousand	2015	2016	Δabsolute	in %
Pre-tax income	-1,173	8,728	9,901	844.1
Tax rate	30 %	30%	=	-
Calculated tax expenses/income (expenses negative, income positive)	352	-2,618	-2,970	843.8
Current income tax, prior period	-122	76	198	162.3
Different tax rate in other countries	-151	41	192	127.2
Used, non-capitalized loss carry forwards	212	0	-212	-100.0
Tax loss carry forwards, not capitalized	-401	-82	319	79.6
Additional trade income tax	-81	-73	8	9.9
Tax-free income	21	13	-8	-38.1
Non-deductible operating expenses	-111	-3	108	97.3
Others	-74	15	89	120.3
Tax expenses —	-355	-2,631	-2,276	-641.1

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

Dec. 31,	Dec.31,		
2015	2016	Δabsolute	in %
1,197	290	-907	-75.8
91	88	-3	-3.3
95	68	-27	-28.4
129	194	65	50.4
27	29	2	7.4
1,539	669	-870	-56.5
Dec. 31,	Dec. 31,		
2015	2016	Δabsolute	in %
979	1,154	175	17.9
195	151	-44	-22.6
16	2	-14	-87.5
3,674	3,024	-650	-17.7
199	199	0	0.0
5,063	4,530	-533	-10.5
	2015 1,197 91 95 129 27 1,539 Dec. 31, 2015 979 195 16 3,674 199	2015 2016  1,197 290  91 88  95 68  129 194  27 29  1,539 669  Dec. 31, Dec. 31, 2015 2016  979 1,154  195 151  16 2  3,674 3,024  199 199	2015         2016         Δabsolute           1,197         290         -907           91         88         -3           95         68         -27           129         194         65           27         29         2           1,539         669         -870           Dec. 31, 2015         2016         Δabsolute           979         1,154         175           195         151         -44           16         2         -14           3,674         3,024         -650           199         199         0

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 of €151 thousand (previous year: €102 thousand) as well as on actuarial gains and losses on pension provisions of €2 thousand (previous year: €2 thousand) relate to deferred taxes recognized outside the net profit for the period.

Income taxes for 2015 and 2016 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. The estimated tax loss carry forwards for consolidated companies in Germany do not expire and amount to €1,816 thousand (previous year: €4,765 thousand) with respect to corporation tax and €0 thousand (previous year: €3,127 thousand) with respect to trade income tax. These were included in the valuation in the amount of €1,816 thousand and capitalized as deferred tax assets. The loss carry forwards are estimated in the absence of tax assessment notices.

# 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 ordinary shares with dilution effect into ordinary shares.

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

in € thousand	2015	2016	Δabsolute	in %
Net profit attributable to shareholders	-1,717	5,756	7,473	435.2
Weighted average outstanding shares (undiluted)	10,155	10,172	17	0.2
Earnings per share (undiluted)	-0.17	0.57	0.74	435.3
Dilutive effect from share options	21	6	-15	-71.4
Weighted average outstanding shares (diluted)	10,176	10,178	2	0.0
Earnings per share (diluted)	-0.17	0.57	0.74	435.3

#### 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, so that interest and tax payments are shown as separate items within the operating cash flow.

Cash and cash equivalents are defined according to the company's cash management. This includes cash and bank balances. The composition of the cash was adjusted accordinggly and is expressed as follows.

in € thousand	2015	2016	∆absolute	in %
Cash on hand	10	6	-4	-40.0
Bank balances	21,513	23,785	2,272	10.6
Total	21,523	23,791	2,268	10.5

# 29. Notes to the statement of changes in equity

The company did not make any distributions in 2016 (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 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 could be enforced against the companies in the leases for capital assets, vehicles and technical office equipment, from building leases and from The resultant financial obligations break down 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.

as follows:

Total	10,899	5,593	3,844
Long-term building lease	22	88	815
Purchase obligations	8,937	13	0
Rent and lease expenses	1,940	5,492	3,029
in € thousand	2017	to 2021	2022
		2018	From

The purchase obligation in 2017 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.

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:

Total	137,742	150,111	12,369	9.0
Mobility	39,844	46,920	7.076	17.8
Medical	23,766	30,705	6,939	29.2
Industrial	74,132	72,486	-1,646	-2.2
in € thousand	2015	2016	Δabsolute	in %

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, 2015	Dec. 31, 2016	Δabsolute	in %
Germany	84,466	81,256	-3,210	-3.8
Europe	133	104	-29	-21.8
North America	477	757	280	58.7
Total	85,076	82,117	-2,959	-3.5
Investments in € thousand	2015	2016	Δabsolute	in %
Germany	6,665	6,026	-639	-9.6
Europe	10	29	19	190.0
North America	406	276	-130	-32.0
Total	7,081	6,331	-750	-10.6
Number of employees (FTE)	Dec. 31, 2015	Dec. 31, 2016	Δabsolute	in %
Germany	718	747	29	4.0
Europe	30	34	4	13.3
North America	24	23	-1	-4.2
Others	<u> </u>	0	-1	-100.0
Total	773	804	31	4.0

# 32. Transactions between related parties

may be subject to the influence of First Sensor financial statements through the inclusion of or who may exert an influence over First Sensor consolidated companies. must be disclosed unless such transactions

Transactions with individuals or companies who have already been reported in the consolidated. The following transactions were carried out

with individuals and companies deemed parties related to First Sensor:

#### **Executive Board**

Dr. Martin U. Schefter, Bonn (until June 16, 2016) Dr. Mathias Gollwitzer, Karlsruhe (since August 10, 2015) Dr. Dirk Rothweiler, Weimar (since January 1, 2017) Joachim Wimmers, Cologne (until March 31, 2015)

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

in € thousand	Dr. Martin U	. Schefter		r. Mathias Gollwitzer		Joachim Wimmers
Position		CEO		CFO		CFO
Start of employment	Jun	e 17, 2013	Augus	st 10, 2015	Mai	rch 1, 2012
Termination of employment	Jun	e 16, 2016			Marc	h 31, 2015
	2015	2016	2015	2016	2015	2016
Fixed remuneration	300	138	118	300	55	0
Additional benefits	8	5	20	56	8	0
Total	308	143	138	356	63	0
Annual variable remuneration	155	95	0	39	100	0
Perennial variable remuneration	0	0	0	0	0	0
SOP 2013 (term 3 years)	0	0	0	0	0	0
SOP 2016/I (term 3 years)	0	0	0	0	0	0
SOP 2016/II (term 5 years)	0	0	0	0	0	0
Severance payment	0	0	0	0	400	0
Compensation	0	81	0	0	0	0
Total	155	176	0	39	500	0
Pension expenses	0	0	0	0	0	0
Total	463	319	138	395	563	0

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

			D	r. Mathias		Joachim
in € thousand	Dr. Martin U	. Schefter		Gollwitzer		Wimmers
Position		CEO		CFO		CFO
Start of employment	Jur	ne 17, 2013	Augus	t 10, 2015	March 1, 20	
Termination of employment	Jun	e 16, 2016			Marc	h 31, 2015
	2015	2016	2015	2016	2015	2016
Fixed remuneration	300	138	118	300	55	0
Additional benefits	8	5	20	56	8	0
Total	308	143	138	356	63	0
Annual variable remuneration	150	69	39	100	100	0
Perennial variable remuneration	0	0	0	0	0	0
SOP 2013 (term 3 years)	44	0	0	0	0	0
SOP 2016/I (term 3 years)	0	0	0	0	0	0
SOP 2016/II (term 5 years)	0	0	0	220	0	0
Severance payment	0	0	0	0	400	0
Compensation	0	81	0	0	0	0
Total	194	150	39	320	500	0
Pension expenses	0	0	0	0	0	0
Total	502	293	177	676	563	0

The contract concluded with the CEO, Dr. Martin U. Schefter, for a period of three years began on June 17, 2013 and ended on June 16, 2016. The contract stipulates that Dr. Schefter shall receive fixed annual remuneration of €300 thousand and a variable target component of €150 thousand. In the year of his departure, these amounts were paid pro rata temporis. Furthermore, he receives compensation for a subsequent non-competition clause in the amount of €12,500 per month for a period of 12 months after the end of the employment contract. A provision for the full amount has accordingly been recognized under personnel expenses. The share options granted to date were forfeited when the employment contract ended.

Dr. Mathias Gollwitzer assumed the role of CFO on August 10, 2015. He receives fixed annual remuneration of €300 thousand and a variable target component of €150 thousand. In the year under review, subscription rights were issued to him under the share option plan SOP 2016/II with a exercise price of €12. These came to a total of 110,000 share options valued at €2.00 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 employ-ment for which he will receive a monthly, subsequent compensation of 50% of a twelfth of his fixed salary applicable at the time.

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 €134 thousand (previous year: €255 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 of December 31, 2016, former Executive Board members had no share options..

#### 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 passed at the Annual General Meeting on May 23,

2014. Supervisory Board remuneration was revised. 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 his deputy. 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 members of the Supervisory Board amounted to €100 thousand in fiscal year 2016 (previous year: €100 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 €94 thousand (previous year: €94 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. Foreign currency risks are partly reduced by concluding forward foreign exchange contracts in connection with purchases of materials.

The company's main financial instruments comprise trade accounts receivable, cash and cash equivalents, promissory note loans, utilized overdraft facilities and money market loans. parties. The methods and assumptions used to The aim of these financial liabilities is to finance calculate fair values are as follows: 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 from variable interest agreements.

#### 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

- 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 tech-nique 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, 2016, 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 transac-tions to hedge exposure to currency risk. The following table shows the market values:

#### Interest rate swaps and caps

in € thousand	Maturity	Hedge	Interest rate	Nominal 2015	Nominal 2016	Market value 2015	Market value 2016
Interest rate swap I (3145170UK)	Dec. 31, 2020	3M EURIBOR	3.83 %	1,044	835	-106	-73
Interest rate swap II (3467328UK)	Dec. 31, 2020	3M EURIBOR	2.17 %	513	410	-29	-21
Interest rate swap II III (3665880UK)	Oct. 14, 2016	3M EURIBOR	2.15 %	4,775	0	-72	0
Interest rate swap II IV (4449932L)	Oct. 14, 2016	3M EURIBOR	2.15 %	4,775	0	-72	0
Interest rate swap II V (841175)	Dec. 30 2016,	3M EURIBOR	0.29 %	9,400	0	-61	0
Interest rate swap VI (1145807)	Dec. 21, 2020	6M EURIBOR	0.53 %	0	18,000	0	-408
				20.507	19.245	-340	-502

#### Foreign exchange hedges in 2016

						Traded	
		Buying	Nominal	Selling	Nominal	exchange	
in € thousand	Maturity	currency	purchase	currency	sold	rate	Market value
FX Option (European)	Dec. 27, 2017	USD	3,000	EUR	2,671	1,12300	-108
FX Option (European)	March 29, 2017	USD	750	EUR	674	1,11200	-37
			3,750		3,345		-145

#### Foreign exchange hedges in 2015

						Traded	
		Buying	Nominal	Selling	Nominal	exchange	
in € thousand	Maturity	currency	purchase	currency	sold	rate	Market value
Forward foreign exchange contact	Jan. 29, 2016	USD	500	EUR	471	1,06110	-12
FX Option (number of fixings 5)	Mar. 31, 2017	USD	3,000	EUR	2,679	1,12300	-47
CFX Option (Window)	Mar. 29, 2017	USD	3,000	EUR	2,778	1,15500	-31
			6,500		5,928		-90

The stated fair values are based on the market values of equivalent financial instruments as at the balance sheet date (level 2 in the fair value hierarchy). All interest rate swaps were intended to hedge cash flow and were classified as effective.

#### 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 €0.3 million (previous year: €0.3 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 only exposed to interest rate risk 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, 2016, 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, 2016 Total
Interest-bearing loans	4,640	40,599	3,000	48,239
Trade accounts payables	8,611	0	0	8,611
Other liabilities	7,855	0	0	7,855
Total	21,106	40,599	3,000	64,705
	Due within	Due between	Due in over	Dec. 31, 2015
in € thousand	1 year	1 to 5 years	5 years	Total
Interest-bearing loans	7,987	43,543	3,000	54,530
Trade accounts payables	7,612	0	0	7,612
Other liabilities	6,964	0	0	6,964
Total	22,563	43,543	3,000	69,106

# Capital management

The primary aim of capital management at the company is to ensure a high credit rating and a good equity ratio, 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 uses the equity ratio to monitor its capital:

in € thousand	Dec. 31, 2015	Dec. 31, 2016	Δabsolute	in %
Shareholders' equity	71,271	77,465	6,194	8.7
Total assets	153,496	154,041	545	0.4
Equity ratio in %	46.4	50.3	3.9	8.4

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

# 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 Com-mercial Code (HGB).

#### **Board**

Name	Position on the Board	
Dr. Martin U. Schefter	CEO (until June 16, 2016)	
Dr. Mathias Gollwitzer	CFO (since August 10, 2015)	
Dr. Dirk Rothweiler	CEO (since January 1, 2017)	

As CEO, Dr. Dirk Rothweiler is responsible for business policy guidelines, company law, corporate strategy, corporate communication, management development, M&A, investments, subsidiaries, sales and marketing, research and development, product development, production, market analysis and market development, and shareholder and investor support 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 boards	Membership of comparable domestic or foreign supervisory committees	
Prof. Dr. Alfred Gossner Member of the board for Finance, Controlling, IT Fraunhofer-Gesellschaft, Munich	Chairman of the Supervisory Board since September 11, 2012	Bayern Innovativ GmbH, Nuremberg, since 2003	None	
Götz Gollan Member of the board of equinet Bank AG, Frankfurt am Main	Deputy Chairman of the Supervisory Board since September 11, 2012 (member since June 7, 2010)	None	None	
Marc de Jong Managing Director Innomarket Consultancy BV, Eindhoven, The Netherlands	Member of the Supervisory Board since May 23, 2014	None	Technical University Eindhoven, The Netherlands (Member of the Supervisory Board) Sioux BV, The Netherlands (Member of the Supervisory Board)	
CEO LM Wind Power A/S, Kolding, Denmark				

#### 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, 2016. 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 publication	Threshold value reached exceeded or fallen below	Percentage of shares at time of notification		Allocation according to	
,				•		%	Stimmrechte		
ING Groep N.V.	Amsterdam, The Netherlands	Nov. 06, 2015	Nov. 05, 2015	Nov. 09, 2015	3%, 5%, 10%, 15 %, 20 %, 25% and 30% exceeded	36.02	3,659,419	Article 22 paragraph 1 sentence 1 no. 1 WpHG	
Total voting power we	re attributable to ING	Groep N. V.:							
- NN Insurance Eurasi - Nationale Nederland - Nationale Nederland - Parcom Capital B.V Parcom Deutschland - FS Technology Holdi The same voting right DPE Deutsche Private The attributable voting Equity B.V., each of wf - DPE Deutsche Private - Deutsche Private Equity B.V Parcom Capital B.V Parcom Deutschland - FS Technology Holdi	en Nederland B.V. en Levensverzekering II GmbH & Co KG ng S.à.r.l. s are also attributable Equity B.V., Schiphol g rights are held by the nich has a share of the te Equity GmbH uity Administration Gi II GmbH & Co. KG	e to the follow I Airport, The ne following c e voting rights	ing companies: Netherlands ompanies contr	olled by D <b>PE D</b>	leutsche Private Irmany, of 3% or more:				
Midlin N.V.	Maarsbergen, The Netherlands	Mar. 21, 2016	Mar. 21, 2016	Mar. 24, 2016	5% exceeded	5.03	511,548	Article 22 paragraph 1 sentence 1 no. 1 WpHG	
Grandeur Peak Global Advisors LLC	Salt Lake City, Utah, United States of America	, Feb. 17, 2016	Feb. 17, 2016	Feb. 22, 2016	3% exceeded	2.89	293,679	Article 22 paragraph 1 sentence 1 no. 1 WpHG	
Rolly van Rappard		Jun. 17, 2016	Jun. 17, 2016	Jul. 04, 2016	5% exceeded	5.26	534,474	Article 22 paragraph 1 sentence 1 no. 1 WpHG	

#### **Employees**

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

Average full time equivalents	2015	2016	∆absolut	in %
Germany	696	735	39	5.6
Europe	30	33	3	10.0
North America	22	23	1	4.5
Others	22	0	-22	-100.0
Total	770	791	21	2.7

Additionally the average number of apprentices was 29 (previous year: 21).

#### Fees of the auditor

Total	147
Other advisory services	7
Annual audit	140
in € thousand	2016

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

# 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 com-pany's website.

# 36. Supplementary report

The key components and conditions remained similar in structure. 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 14, 2017

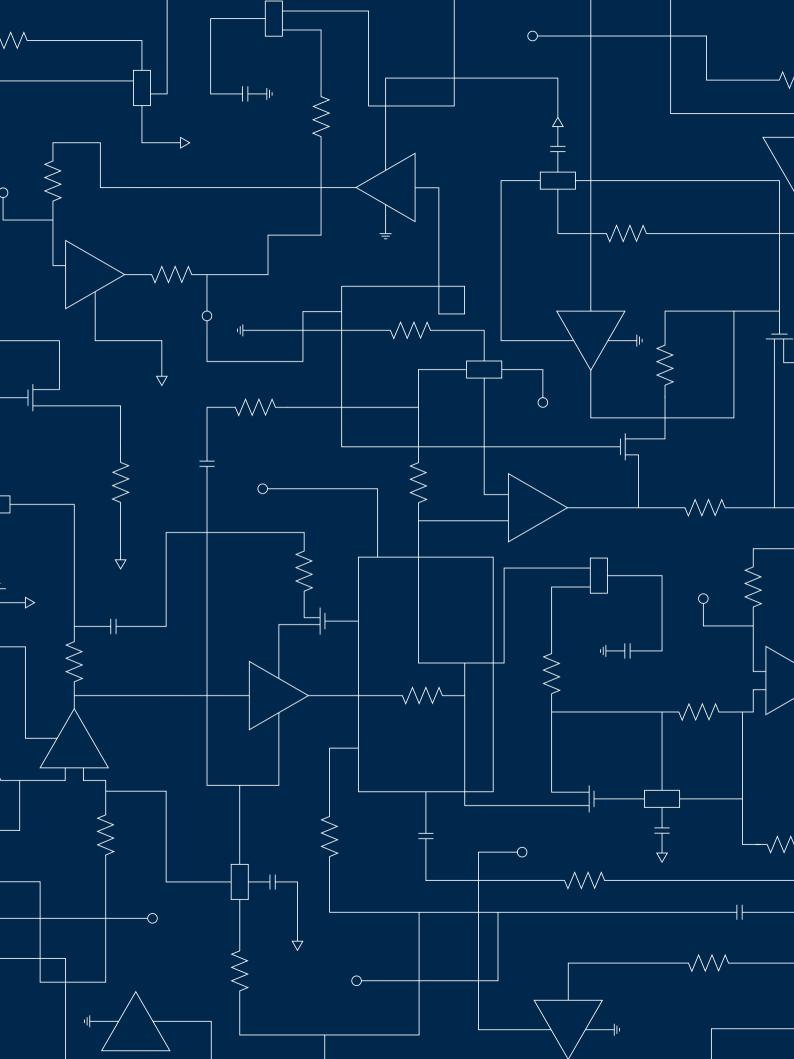
First Sensor AG

Dr. Dirk Rothweiler

CEO

Dr. Mathias Gollwitzer

CFO



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# 6 Further information

#### Auditors's report

On behalf of First Sensor AG, Berlin, we have audited the consolidated financial statements – consisting of the balance sheet, the statement of comprehensive income, the statement of changes in equity, the cash flow statement and the notes – and the consolidated management report for the fiscal year from January 1 to December 31, 2016.

Preparation of the consolidated financial statements and the consolidated management report in accordance with the regulations of the International Financial Reporting Standards (IFRS), as applicable in the EU, and the additional regulations to be applied in accordance with section 315 a (1) of the German Commercial Code (HGB) is the responsibility of the legal representative of the company. Our task is to provide an assessment of the financial statements and the consolidated management report on the basis of our audit.

We have carried out our audit in accordance with section 317 of German Commercial Code (HGB), taking into account the German principles of proper accounting established by the German Institute of Accountants (IDW). These principles stipulate that the audit is planned and conducted in such a way that misstatements and infringements having an impact on the asset, financial and profit situation conveyed by the financial statements

and consolidated management report under consideration of the basic principles of proper accounting can be recognized with reasonable assurance. When defining the audit activities, knowledge about the business activity and the economic and legal environment of the group, as well as expectations of possible errors are taken into account.

Within the scope of the audit, the effectiveness of accounting-related internal control systems and evidence for statements made in the financial statements and consolidated management report are mainly examined on the basis of spot checks.

The audit comprises the assessment of annual accounts of the companies included in the financial statements; the delineation of the scope of consolidation, the accounting and consolidation principles applied and the main estimates of the legal representative, as well as appraisal of the audit provides a sufficiently secure basis of our assessment.

Our audit did not raise any objections.

According to our assessment from knowledge gained during the audit, the consolidated financial statements conform with the regulations of the International Financial Reporting Standards (IFRS), as applicable in the EU, and

the additional regulations to be applied in accordance with section 315 a (1) of the German Com-mercial Code (HGB) and give a fair view of the asset, financial and earning situation of the group, in accordance with the above regulations.

The consolidated management report is consistent with the consolidated financial statements, complies with the legal provisions, conveys a true and fair view of the company's and the Group's situation, and accurately represents the opportunities and risks of the future development.

Hanover, March 16, 2017

Ebner Stolz GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

Steffen Fleitmann Auditor Hans-Peter Möller Auditor

# Statement by the legal representatives (responsibility statement) in accordance with section 264 (2) sentence 3 and section 289 (1) sentence 5 HGB

To the best of our knowledge, and in accordance with the applicable reporting principles, the financial statements give a true and fair view of the assets, financial position and profit or loss of the group, and the consolidated 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 14, 2017

First Sensor AG

Dr. Dirk Rothweiler

J. Cellerit

CEO

Makkan falle Dr. Mathias Gollwitzer

CFC

# Legal notice, financial calendar 2017 and Contact

# Legal disclaimer

This report contains statements of a predictive nature and does not represent any incitement to purchase shares of First Sensor AG, but rather is intended exclusively for information purposes with regard to possible future developments at the company. All future-oriented specifications in this consolidated financial report were produced on the basis of a propability-based plan and represent statements regarding the future which cannot be guaranteed.

#### Financial calendar 2017

Date	Торіс	Location
March 20, 2017	Publication of consolidated financial report 2016	
March 20, 2017	Annual press conference 2017	First Sensor AG, Peter-Behrens-Str. 15, 12459 Berlin
May 18, 2017	Q1, Interim Report	
May 24, 2017	Annual General Meeting	Penta Hotel, Grünauer Str. 1, 12557 Berlin
August 10, 2017	6-Month Financial Report	
November 9, 2017	Q3, Interim Report	
November 27 to 29, 2017	Deutsches Eigenkapitalforum 2017	Sheraton Frankfurt Airport Hotel & Conference Center

As we cannot rule out the possibility of delays, we recommend that you consult the latest set of dates at http://www.first-sensor.com

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This consolidated financial report as at December 31, 2016 is available in German and English. Both versions are also available for download on the internet at **www.first-sensor.com**.

