



# BEYOND THE OBVIOUS

ANNUAL REPORT 2017

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# BEYOND THE OBVIOUS

They work in the background. But their influence and performance are conspicuous. Sensors are integral elements of our everyday life.

The Annual Report 2017 provides insights into the hidden world of sensors and the almost limitless spectrum of SICK applications. Whether for end-to-end baggage tracking at international airports, as part of Europe's largest bridge-building project, at ports throughout the world, for the resource-conserving processing of wood, or for mapping penguin colonies in the Antarctic – SICK sensors keep the world moving.

# SICK AT A GLANCE

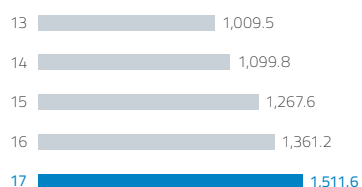
## Key figures

		2013	2014	2015	2016	2017	Change in %
Sales	in EUR million	1,009.5	1,099.8	1,267.6	1,361.2	1,511.6	11.0
EBITDA	in EUR million	125.9	144.1	175.4	198.8	204.5	2.9
EBIT	in EUR million	88.3	103.2	129.1	147.9	148.8	0.6
Net income	in EUR million	59.2	69.8	90.8	104.0	104.3	0.3
Cash flow	in EUR million	81.9	83.8	112.1	122.8	101.8	17.1
<b>Employees</b>							
on December 31		6,597	6,957	7,417	8,044	8,809	9.5
annual average		6,506	6,820	7,239	7,806	8,486	8.7
trainees <sup>1</sup>		260	255	267	293	324	10.6
Personnel expenses	in EUR million	429.0	464.2	526.3	574.3	639.8	11.4
Investments <sup>2</sup>	in EUR million	65.7	82.4	83.8	82.8	95.3	15.1
Depreciation	in EUR million	37.6	40.9	46.4	50.9	55.7	9.4
R&D expenditure	in EUR million	102.3	116.2	129.0	143.4	169.4	18.1
Total assets	in EUR million	649.2	762.9	862.9	950.1	1,066.2	12.2
Equity	in EUR million	321.6	374.6	451.8	522.0	584.4	12.0
Equity ratio	in %	49.5	49.1	52.4	54.9	54.8	
Net return on equity	in %	22.6	22.9	25.2	24.9	21.7	
ROCE	in %	19.2	19.1	21.1	21.8	19.5	
Net return on sales	in %	5.9	6.3	7.2	7.6	6.9	
Earnings per share	in EUR	2.26	2.66	3.47	3.97	3.98	0.3

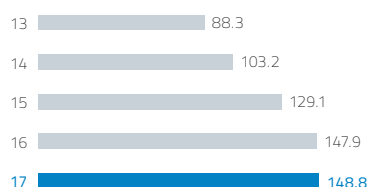
<sup>1</sup> annual average

<sup>2</sup> in property, plant and equipment and intangible assets

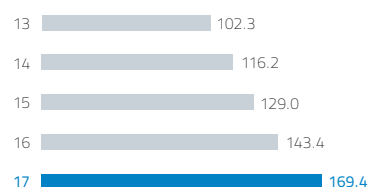
### SALES IN EUR MILLION



### EBIT IN EUR MILLION



### R&D EXPENDITURE IN EUR MILLION





# OUR BUSINESS FIELDS

## FACTORY AUTOMATION



The automotive and consumer goods industries, mechanical engineering, the electronics and solar industries, and drive technology are the target industries within the factory automation business field. Non-contact sensors, camera systems, encoders, and distance measurement systems all serve to control manufacturing, packaging, and assembly processes, to carry out quality assurance, and to ensure machine safety.

## LOGISTICS AUTOMATION



In the logistics automation business field, the focus is on airports, industrial vehicles, building management, building safety and security, ports, trade and distribution centers, courier, express, parcel and postal service providers, cranes, and the traffic sector. In all of these areas, SICK's sensors shape and optimize the entire logistics chain: Whether automating material flow processes or increasing the speed, efficiency, and reliability of sorting, picking, and warehousing processes.

## PROCESS AUTOMATION



Within the process automation business field, SICK delivers sensors, customized systems, and services for analysis and process measurement technology. SICK thus provides smart solutions for waste incineration plants, power, steel and cement plants, oil and gas industry applications, as well as for chemical and petrochemical plants and refineries. Together, these solutions make an important contribution to protecting our environment.



# FOREWORD BY THE EXECUTIVE BOARD

DEAR SHAREHOLDERS,  
BUSINESS ASSOCIATES, EMPLOYEES,  
AND FRIENDS OF SICK,

Sales were strong in 2017. The SICK Group achieved record values for the eighth consecutive year. We have exceeded the 1.5 billion mark with double-digit growth in sales and orders received. An increase of almost ten percent in earnings before interest and tax completes the picture. This growth trajectory is reflected in all our sales regions and business fields.

Our lasting success is based on close collaboration with our customers and their great interest in our sensor technologies. We are grateful for the trust placed in us, often over many years. It is an honor and a commitment for us.

Because we think of ourselves as a partner to our customers. Working together with them to find the best possible solutions for individual challenges and thus creating added value – that is what drives us. Whereby we can rely on our broad range of products and our technological competence. We also recognize, however, that the requirements are becoming more and more complex: We are increasingly developing intelligent sensor solutions with our customers. We profit here from a great wealth of experience. For more than ten years, we have been combining our products to create systems and supplementing them with services involving installation, commissioning, and maintenance. SICK stands for sensor intelligence. The smart combination of the three business models – serial



Executive Board of SICK AG:  
Dr. Mats Gökstorp, Dr. Martin Krämer,  
Dr. Robert Bauer, Reinhard Bösl,  
Markus Vatter

products, systems, and services – will open up further opportunities for growth in the future. Whereby we consider our constantly growing expertise in technologies and applications to be our core competence, especially against the background of increasing digitalization. This expertise helps us develop innovative sensors for factory, logistics, and process automation. At the same time, this knowledge can be transferred to databased Industry 4.0 applications. We have already proven this: We open the doors to the world of Industry 4.0 via the open community for SICK AppSpace or by equipping AGVs with highly rugged and reliable sensor systems. Autonomous operations beyond those hitherto familiar are possible thanks to sensor intelligence from the SICK Group.

It is very clear to us, now and in the future: We want to exploit and help shape the opportunities of Industry 4.0 without neglecting classic industrial automation. Both will progress hand in hand. We consolidate success in industrial automation with continuous innovation, greater efficiency in existing structures, and targeted investments. Visionary thinking and actions are required in order to succeed in the world of Industry 4.0. Start-up initiatives within the Group alliance are our path towards opening up Industry 4.0 in collaboration with our customers. We are convinced that it is a major advantage to exploit the strengths of the existing SICK organization and combine them with the benefits of a start-up culture. Bringing these two aspects together means lifting the SICK Group to a new level of development. And it is our outstanding employees – with their competences and enormous commitment – that guarantee our success here. Together with our many years of expertise in sensor intelligence, this forms a solid basis upon which we can build the future of the SICK Group – while never losing sight of our customers' requirements. Optimally meeting their requirements will remain our driving force. The future of sensor intelligence has only just begun.

Sincerely yours,



Dr. Robert Bauer  
(Chairman)

Reinhard Bösl

Dr. Mats Gökstorp

Dr. Martin Krämer

Markus Vatter



# REPORT BY THE SUPERVISORY BOARD

The fiscal year 2017 added another chapter to the SICK Group's success story: The company achieved record values for orders received and sales for the eighth consecutive year – at a time when market conditions are changing rapidly and profoundly. For this reason, the SICK Group continued its strategic alignment upon the requirements of digitalization and Industry 4.0 in 2017 while continuing to successfully process its portfolio business. The strategic work focuses on the conviction that the future security of SICK will greatly depend on its ability to serve classic industrial automation and Industry 4.0 equally well. The Supervisory Board of SICK AG stands behind this strategy of exploiting the company's technological foundations in sensor intelligence and its existing market position to take a leading role in helping to shape the development of the digital world of Industry 4.0. In the opinion of the Supervisory Board, the company is thus ideally positioned for successfully mastering future market upheavals and challenges, and for continuing to achieve solid growth.

## COOPERATION BETWEEN EXECUTIVE BOARD AND SUPERVISORY BOARD

During the fiscal year 2017, the Supervisory Board comprehensively and carefully performed all the duties incumbent upon it under the law, the articles of incorporation, and the rules of procedure. It provided regular advice to the Executive Board on running the company while continually monitoring and reviewing its management activities. Whereby particular attention was paid to the legality, regularity, expediency, and the economic efficiency of the group-wide management activities carried out by the Executive Board. The Supervisory Board discussed company organization with the Executive Board to assure itself of the performance capabilities of this organization. The Executive Board and the Supervisory Board also continuously coordinated the company's strategic alignment. The current status of strategic implementation was discussed at regular intervals. The Supervisory Board was directly involved in all Executive Board decisions of fundamental importance for the company.

The Executive Board notified the Supervisory Board – both verbally and in writing – promptly, comprehensively, and on a regular basis. The Supervisory Board was thus kept informed throughout about the planning, implementation of the strategy, the business situation and development of SICK AG and the Group – including the risk situation, risk management, and compliance. The Supervisory Board was also always informed about business of special significance for the company or the Group. Whereby the Executive Board also addressed instances in which the business development deviated from the defined plans and targets, and explained the reasons for these deviations.

The subject matter and scope of the reports submitted by the Executive Board complied fully with the requirements stipulated by the Supervisory Board. In addition to the reports, the Supervisory Board had the Executive Board provide additional information. In particular, the Executive Board used Supervisory Board meetings to explain and answer any outstanding issues. The Supervisory Board examined the plausibility of the information provided by the Executive Board, critically assessing and challenging it where necessary.



»  
Klaus M. Bukenberger,  
Chairman of the Supervisory Board



The Executive Board also always kept the Chairman of the Supervisory Board and the Chairman of the Audit Committee informed in detail about developments between meetings of the Supervisory Board and its committees. The Chairman of the Executive Board, in particular, held regular consultations with the Chairman of the Supervisory Board in order to discuss strategy, planning, the current business situation and development, including the risk situation, risk management, and compliance, as well as key specific issues and decisions. The Chairman of the Supervisory Board was informed immediately about any major events of fundamental importance for assessing the business situation and development, as well as for the management of the SICK Group.

No conflicts of interest involving members of the Supervisory Board regarding the execution of their duties arose during the reporting year.

## MEETINGS AND DECISIONS OF THE SUPERVISORY BOARD

The Supervisory Board of SICK AG held four ordinary meetings at company headquarters during the fiscal year 2017. The Board used these meetings to address all issues of relevance to the company and make the necessary decisions. A decision to endorse a construction project at the Waldkirch site that is subject to approval according to the rules of procedure was also made by means of a circulated document. For some time during each meeting, the Supervisory Board met without the presence of the Executive Board, enabling the Supervisory Board to discuss points on the agenda that either concern the Executive Board itself or which require strictly internal discussion within the Supervisory Board. The Supervisory Board meetings focused on the following topics, in particular:

At the ordinary Supervisory Board meeting held on March 28, 2017, the Executive Board informed the Supervisory Board comprehensively and in detail about business development during 2016. The members of the Boards jointly analyzed important changes and new insights. Then, in the presence of the auditor, the Supervisory Board examined the accounting and Group accounting for SICK AG for the fiscal year 2016, with the audits of the financial statements conducted by the auditor Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (EY) and with the Executive Board's proposed appropriation of the retained earnings generated during the fiscal year 2016. The Audit Committee reported on all aspects for which it is responsible within the context of the accounting and Group accounting of SICK AG, in particular regarding the nature and scope of its audit of the documents relating to the financial statements. The Committee recommended that the entire Board approve these documents. The auditor then explained its audit results and their consideration at the meeting of the Audit Committee on March 16, 2017. The audit results were discussed with the Supervisory Board and the auditor answered any questions raised by the Board. The Supervisory Board approved the result of the audit of the financial statements. Following the final results of its own review, the Supervisory Board raised no objections and approved the accounting and Group accounting of SICK AG for the fiscal year 2016. The Supervisory Board also reviewed the Executive Board's proposal for the use of the retained earnings and approved it on the recommendation of the Audit Committee. In addition, the Supervisory Board passed its proposed resolutions for the agenda of the Annual General Shareholders' Meeting on May 17, 2017. During this meeting, the Supervisory Board also considered an analysis of the competitive position of the SICK Group compared to direct competitors and comparable family-run companies. The agenda also included the successful integration of the former joint venture SICK Metering Systems NV, Kalmthout, Belgium, into the SICK Group during the fiscal year 2016. Similarly, the Supervisory Board took a positive view of the merger between the US subsidiaries SICK Maihak, Inc. and SICK, Inc. and the further development of the management organization there.

At its ordinary meeting on May 17, 2017, the Supervisory Board examined current business performance as well as integration of the subsidiary Schädler SICK SpA, Santiago de Chile, Chile, into the SICK Group and the business development taking place there. The Executive Board's proposed restructuring of joint ventures in the Chinese market was also examined, having already been approved by the Supervisory Board in December 2016. The Executive Board also presented detailed plans for construction projects at the Reute and Waldkirch sites. The meeting concluded by addressing the departure of the Supervisory Board members Gabriele Pontiggia, Roland Schiller, Dr. Ronaldo H. Schmitz, and Prof. Dr. Horst Wildemann with effect from the end of the Annual General Shareholders' Meeting on May 17, 2017.

The newly elected members Dr. Bernd Cordes, Sebastian Glaser, Dr. Eberhard Veit, and Thomas Weckopp were welcomed at the inaugural meeting of the new Supervisory Board immediately after the end of the Annual General Shareholders' Meeting on May 17, 2017. Klaus M. Bukenberger was elected Chairman of the Supervisory Board and Roberto Hernandez Deputy Chairman during this meeting. Gisela Sick was confirmed as Honorary Chairwoman of the Board. The members of the various committees were also elected (please see "Work in the Supervisory Board committees" below for details).

In addition to analyzing and discussing the current business situation, the ordinary meeting held from September 28 to 29, 2017 focused on a detailed and comprehensive discussion of company strategy as well as company planning, risk planning, and financial planning in the short and medium term. Whereby the Board discussed, in particular, the special challenge facing SICK regarding its having to meet both the future requirements of industrial automation and those arising from digitalization and Industry 4.0 – in technological, organizational, and cultural terms. The agile approach towards developing and marketing a complete sensor solution for automated guided vehicle systems was presented as an example of new Industry-4.0-related requirements. The SICK Group's global IT strategy was also discussed. In addition, the Audit Committee reported on risk management and the planning for the audits of the financial statements for the fiscal year 2017.

At the ordinary meeting on December 14, 2017, the Executive Board reported on current business performance and presented detailed budget and medium-term planning for all Group units for the fiscal year 2018. The Supervisory Board and the Executive Board discussed in detail the targets, framework conditions, and assumptions contained in these plans, along with the resultant opportunities and risks. The Supervisory Board approved the budget presented for 2018, together with its corresponding investments – also in view of the financing described – as well as the medium-term planning for 2019 to 2021. The purchase of a distributor for the process automation business field in Greece and the takeover of the outstanding shares in a joint venture in China were also approved.

## WORK IN THE SUPERVISORY BOARD COMMITTEES

The work of the Supervisory Board was supported by comprehensive preparation and monitoring of subject areas assigned to particular committees. The Audit Committee met twice during the reporting year, while the Investment Committee and Human Resources Committee met once each. The committee chairs reported in detail on the work of their respective committees at each of the subsequent plenary sessions. As in previous years, it was not necessary to convene the Mediation Committee in accordance with Sec. 27 (3) MitbestG ("Mitbestimmungsgesetz": German Co-Determination Act). As a result of the extensive preparatory work carried out by the committees, the entire Board had a broad and comprehensive information base regarding all the fields assigned to the committees. It was therefore always in a position to address the relevant topics thoroughly and efficiently.

The following Supervisory Board members are on the committees:

- Audit Committee: Franz Bausch (Chairman), Prof. Dr. Mark K. Binz, Klaus M. Bukenberger, Dr. Matthias Müller, Thomas Weckopp
- Human Resources Committee: Klaus M. Bukenberger (Chairman), Franz Bausch, Roberto Hernandez, Renate Sick-Glaser, Hermann Spieß
- Investment Committee: Klaus M. Bukenberger (Chairman), Dr. Bernd Cordes, Sebastian Glaser, Engelbert Herbstritt
- Mediation Committee in accordance with Sec. 27 (3) MitbestG: Klaus M. Bukenberger (Chairman), Engelbert Herbstritt, Renate Sick-Glaser, Hermann Spieß

The committees focused on the following key areas in 2017:

- The Audit Committee concentrated on its assigned duties regarding preparation of the audits of the financial statements and recommendations for the entire Board regarding the financial statements. It also examined compliance, risk management, Group taxes, and financing
- The Human Resources Committee examined, in particular, the structure and composition of the Executive Board and the remuneration of its members
- Work in the Investment Committee focused on examining the investment plans for 2018 and the corresponding financial planning

## ANNUAL AND GROUP ACCOUNTING FOR THE FISCAL YEAR 2017

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (EY) was responsible for auditing the accounting and Group accounting of SICK AG for the fiscal year 2017. On May 17, 2017, EY was chosen as the auditor and Group auditor by the Annual General Shareholders' Meeting of SICK AG. The Annual General Shareholders' Meeting thus approved the proposal of the Supervisory Board, which corresponded to the recommendation from the Audit Committee. Prior to the Supervisory Board proposing EY to the Annual General Shareholders' Meeting for selection as the auditor, EY had confirmed that there were no circumstances that could compromise its independence as an auditor, or justify any doubts as to its independence. In this context, EY also declared the scope of any services rendered to the company beyond the audit of the financial statements in the previous fiscal year and any services contractually agreed upon for the following year. EY audited the annual financial statements of SICK AG, prepared in compliance with the HGB ("Handelsgesetzbuch": German Commercial Code), the consolidated financial statements, prepared in line with the International Financial Reporting Standards (IFRS), as well as the combined group management report and management report of SICK AG – and provided unqualified audit opinions. The auditor thus confirmed that, in its opinion and based on the findings of the audit in accordance with the applicable financial reporting framework, the annual financial statements and consolidated financial statements give a true and fair view of the net assets, financial position, and results of operations of SICK AG and the SICK Group. Moreover, the auditor confirmed that the combined group management report and management report of SICK AG are consistent with the corresponding annual financial statements and the consolidated financial statements; that, overall, they provide an appropriate view of the position of the SICK Group and SICK AG; and that they suitably represent the opportunities and risks of future development. All Audit Committee and Supervisory Board members received the audit documents mentioned above, the audit reports prepared by EY, and the Executive Board's proposal concerning the appropriation of retained earnings in good time.

On February 20, 2018, the Executive Board of SICK AG finalized the accounting and Group accounting of SICK AG for the fiscal year 2017, consisting of the annual financial statements, the consolidated financial statements, as well as the combined group management report and management report of SICK AG, and approved these documents for submission to the Supervisory Board.

At the meeting of the Audit Committee on March 15, 2018 and at the accounts meeting of the Supervisory Board on March 22, 2018, the Executive Board explained the accounting and Group accounting of SICK AG and its proposals concerning the appropriation of retained earnings. Members of the Executive Board also answered questions from members of the Audit Committee and the Supervisory Board.

After explanations by the Executive Board, the Audit Committee and Supervisory Board reviewed the audit documents for the company and the Group in the light of EY's audit reports. The auditor who attended the Audit Committee meeting and the Supervisory Board's accounts meeting presented detailed reports on the audit and its results and explained the audit reports. Whereby the auditor also reported that it had not found any material weaknesses in the company's internal control and risk management systems in relation to the accounting process. Both the Audit Committee and the Supervisory Board asked the auditor detailed questions on the results of the audit and on the form and scope of the auditing activities. Discussions with the auditor also dealt with the issue of the legality of the company management, of which the Supervisory Board had assured itself. The Audit Committee also reported to the Supervisory Board on its own review of the accounting and Group accounting of SICK AG, its discussions with the Executive Board and with the auditor, as well as its supervision of the accounting process. The Committee confirmed that as part of its supervisory function it had addressed the effectiveness of the internal control, risk management, and internal auditing systems – and found them effective.

The Audit Committee also reported that according to the information provided by EY, there were no circumstances that might give cause for concern about the auditor's impartiality. Moreover, the Committee reported on its examination of the auditor's independence, taking into consideration the non-audit-related services EY had provided, and the Committee's assessment that the auditor possessed the necessary level of independence.

The Audit Committee and the Supervisory Board were able to satisfy themselves that EY had conducted the audit properly. In particular, they arrived at the conclusion that both the audit reports and the audit itself meet the legal requirements. The Supervisory Board discussed all audit documents for the company and the Group in addition to information from EY and it approved the result of the audit of the financial statements on the basis of the Audit Committee's report and recommendation. Since it also had no objections following the final results of its own review, the Supervisory Board gave its consent to the annual financial statements, the consolidated financial statements, and the combined group management report and management report of SICK AG. The annual financial statements were thus formally adopted. The Supervisory Board agreed with the assessment of the situation of the company and the Group as set out by the Executive Board in the combined group management report and management report of SICK AG. The assessment of the Executive Board was also consistent with the reports submitted by the Executive Board to the Supervisory Board over the course of the year.



The Supervisory Board considered the proposal previously explained by the Executive Board concerning the appropriation of retained earnings – particularly regarding dividend policy, the effects on the liquidity of the SICK Group, and the interests of the shareholders. Following the recommendation of the Audit Committee, the Supervisory Board then accepted and endorsed the Executive Board's proposal concerning the appropriation of retained earnings. The Supervisory Board finally adopted this report to the Annual General Shareholders' Meeting.

The Executive Board also prepared a report on relationships with affiliated companies in the fiscal year 2017 (dependent company report) and presented it to the Supervisory Board together with the audit report prepared by the auditor. The dependent company report was audited by the auditor, who provided the following audit opinion thereon: "Based on our audit and assessment in accordance with our professional duties, we confirm that

1. the factual information in the report is correct and
2. the company's contribution regarding the legal transactions referred to in the report was not inappropriately high."

The Supervisory Board reviewed the Executive Board's dependent company report and the auditor's audit report. In the Audit Committee meeting on March 15, 2018 and the Supervisory Board's accounts meeting on March 22, 2018, the Audit Committee and the Supervisory Board, respectively, had the members of the Executive Board explain the dependent company report. The Executive Board also answered questions on this matter from members of the Committee and the Supervisory Board. The auditor also attended these meetings, reporting on its audit of the dependent company report and its principal auditing results, explaining its audit report and answering questions about it. The Supervisory Board could thus satisfy itself as to the regularity of the dependent company report, the audit of the dependent company report, and the audit report. The Supervisory Board states that following the final results of its own review no objections are to be raised against the final declaration of the Executive Board in the report on relationships with affiliated companies.

The Supervisory Board would like to express its sincere gratitude and appreciation to the members of the Executive Board as well as all the employees in the SICK Group for their great commitment and valuable contributions during the very successful fiscal year 2017.

Waldkirch, March 22, 2018

On behalf of the Supervisory Board



Klaus M. Bukenberger  
(Chairman)

# SICK WORLDWIDE













Accuracy of fleet localization  
via UWB:

12 cm



5 m

Accuracy of fleet localization  
via GSM/GPS

# SMART DATA – SMART PROCESSES

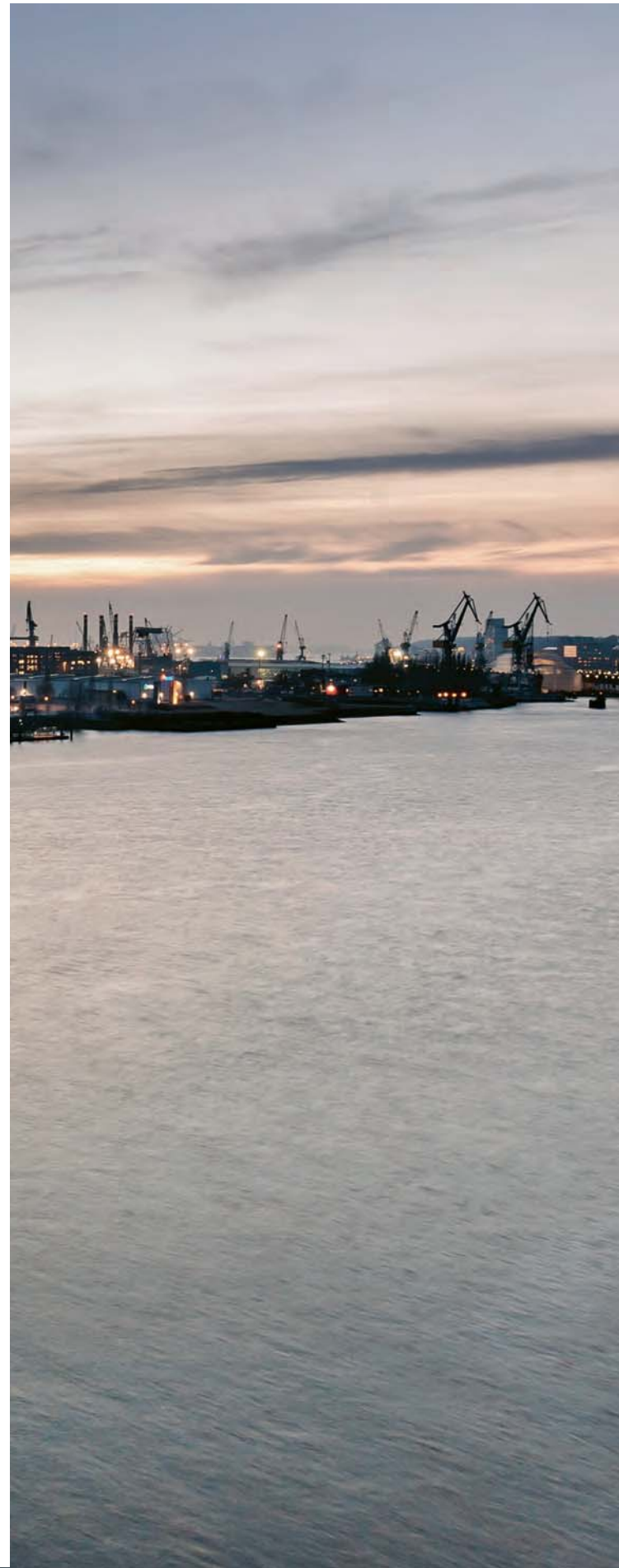


The collection, analysis, and goal-oriented further processing of data – those who efficiently master these activities can control their port, for example.

Gateway systems like the TDC-E (Telematic Data Collector Extended) collect sensor data via a variety of interfaces, make them available in the particular network for associated applications, and thus enable the optimum coordination of all processes with one another.

The TDC-E prepares the incoming data and shows them on an individually configurable user interface. The sensor data from the various networked machines thus provide a complete, up-to-date picture of the running processes. Furthermore, the TDC-E takes over the precise localization and navigation of entire vehicle fleets via GSM/GPS tracking and UWB (ultra-wideband) signals. This visualization of the processes in real time not only enables the comprehensive monitoring of automated processes, but also predictive maintenance.

Mobile communication within the system transmits the data to a customer server or a cloud. On the basis of the incoming data, evaluations can be made in the TDC-E that, in the case of critical conditions, trigger alarms in real time via SMS messages to customers. The received and transmitted data ensure high transparency, can be used for downstream process optimization, and thus contribute towards increased productivity.





# NETWORKED – SENSORS IN THE QUAY AREA



Tonnes and tonnes of goods are loaded and unloaded 24/7 while, around the corner, travelers board cruise liners. Small sensoric assistants ensure that the logistics run reliably and smoothly in all areas of the port. Every single little sensor gets a whole lot of work done in its area. Integrated in a higher-ranking network, however, sensors can achieve even more: With their data, they allow the implementation of interconnected processes, the efficient linkage of work steps, and the forward planning of resources.

In the background – almost invisibly – sensors control the action in the world's ports: Measurement and detection solutions based on LiDAR or radar simplify, for example, navigation of the large quay cranes at the Port of Hamburg. The cranes transport containers from ship-to-shore or shore-to-ship. Whereby the crane operator must keep an eye on the drive path from a great height – despite the possibility of the load blocking the view. The operator must also take care that the suspended containers do not get too near the ship's bridge. Sensors ensure that the operator can navigate without collisions or accidents.

A seaport is a busy microcosm that links up the entire world. Sensor applications ensure the smooth running of all port processes.







The greatest risk is of collisions between quay crane booms and ships. Incidents of this type account for 31% of insurance claim payments.

31%

Sensors on the conveyor belts of the bulk materials terminal monitor the automatic loading of the loose material by ensuring transport of the correct shipping quantity using volume measurements. Sensors also monitor the temperature of easily ignitable materials on the belt, effectively preventing the risk of fire.

But SICK sensors are also used in the traffic management systems of large ferry terminals – for example, the Free Flow Profiler at the Port of Tallinn. This integrated measurement system with 2D LiDAR sensors scans the height, width, and length of vehicles. It passes on the data obtained to the higher-ranking traffic management system and thus enables the rapid loading of vehicles on the various parking levels on board the ferries.

#### COLLECTING AND NETWORKING DATA

The trouble-free meshing of process steps is the key to success for port and terminal operators: More than one hundred million tonnes of goods are transported in ports every year. Ships lying idle can cause costs amounting to several hundred thousand euros per day. Thus, powerful machines and efficient logistics are the top priority. An intelligent IT solution is also essential for networking sensor activities.

The TDC-E gateway system from SICK consolidates the sensor data from cranes, transport vehicles, bulk material conveyor belts, traffic management systems, and many other plants via mobile communications or WLAN. It analyzes the information and passes it on to a server or a cloud in real time. The data obtained is made available for associated applications in the network. All processes can thus be monitored continuously – and optimally coordinated with one another.

Sensors provide, for example, dependable process and service data for self-monitoring and preventive maintenance tasks. “Any need for repairs is reported early due to the continuous monitoring of device performance,” explains Jörg Spiegelhalter, Strategic Industry Manager for Ports and Cranes at SICK. “In addition, the data received and transmitted ensure a high level of transparency. They can be used to optimize downstream logistical processes and thus contribute towards increased productivity. Taken as a whole, the sensor data from the individual networked machines provide an overall picture of all running processes in real time. This considerably simplifies resource planning.”

Entire vehicle fleets at ports can be controlled via the TDC-E. Not just the cranes, but also the reachstackers and AGVs can be precisely localized and navigated thanks to the GSM/GPS function and UWB. The networked port is not a vision of the future. It is reality. The data suppliers have long been in place here.











# WOOD PROCESSING WITH PRO- GRAMMABLE 2D CAMERAS



Industrial image processing is demanding: Long ranges, high resolutions, and short exposure times are just some of the demands faced by the cameras.

The InspectorP65x programmable 2D camera effortlessly masters these challenges: The camera is the ideal solution for demanding automation tasks – with its image resolution of from 2 to 4 megapixels, its IP65 housing, and its flexible high-quality optical design.

The software offers extremely flexible programming thanks to its SICK AppSpace development environment, based on the outstanding HALCON image processing library. Application developers determine the program themselves – with the SICK AppSpace eco-system: Intelligent software tools, powerful, programmable devices, and a dynamic developers community form the basis for individual sensor solutions that enable completely new and adaptive automation approaches, e. g., in wood processing.

2D



- 2D camera (2.1 and 4.2 megapixels)
- Flexible sensor app development





# MADE-TO-MEASURE CLIMATE PROTECTION

From the forest to the wall unit – and always perfectly fitted. Furniture without chipboard panels is almost inconceivable nowadays. The majority of European wood-based products involve chipboard. Programmable camera solutions from SICK ensure a perfect cut and economical use of the wood, a valuable raw material. This protects forests and contributes towards climate protection.



The furniture industry underwent a revolution during the early 1930s: Max Himmelheber, a carpenter's son living in Karlsruhe, developed a stable compressed and glued board made of wood shavings. Before the invention of chipboard only about 40 percent of the wood mass cut down could be used for making furniture.

Industrial wood processing has been running in top gear since then – in Austria too, for example: The Fritz EGGER GmbH & Co. OG chipboard plant in Unterradlberg (in St. Pölten) processes about three million cubic meters of wood per year to make almost 40 million square meters of chipboard. First, the wood shavings are compressed in the forming and press line of the raw panel production plant to make continuous board. Then a programmed multi-diagonal saw cuts out the individual raw panels. Whereby the SicoCam inline board measuring

system from Siempelkamp Logistics & Service GmbH provides the data for accurate cutting. The system determines board length and width, and it calculates the diagonals and the angles at the four corners. This optimizes trimming and cross-cutting, minimizing waste. "The board measurement system is located within the machinery, and the saw can be corrected immediately after any dimensional deviations occur," explains Martin Hinterhofer from the technology department at Fritz EGGER. "The plant allows us to rapidly react to process changes and ensure the quality of the finished products." In addition to optimization of the wood yield, increased safety plays an important role. Now, the chipboard panels no longer have to be manually measured within the hazardous space of the plant, considerably increasing safety at work.



» The Fritz EGGER plant produces 40 million square meters of chipboard panels per year.

40  
million

## PRECISE IMAGING LEADS TO PRECISE CUTTING

The individual panels obtained from the continuous board are measured on a conveyor belt moving at a maximum speed of four meters per second. For this purpose, four InspectorP65x programmable 2D cameras from SICK are mounted on the mobile SicoCam portal above the belt. They have an adjustment accuracy in the 0.01 millimeter range. A W12-2 Laser small photoelectric sensor detects the front of the panels and triggers the cameras. "The software is the heart of our system," explains Dr. Frank Otto, Project Manager at Siempelkamp Logistics & Service GmbH. "Nevertheless, the hardware must also fulfill certain prerequisites. The exposure works in the microsecond range and the cameras are very good here. They generate razor-sharp images despite the high belt speed."

In optoelectronics, and particularly in image processing, configurable products often come up against their limits when the implementation of individual functions is involved. The SICK AppSpace eco-system provides greater scope here for developing customized apps for programmable cameras and optical sensors. Measurement of the panel geometry at the Fritz EGGER chipboard plant requires, for example, height compensation because the panels are under tension after pressing – which can lead to bulges. The SicoCam system balances out these height differences during measurement, using an appropriately programmed app created on the basis of SICK AppSpace.

The inline measuring system from Siempelkamp already today ensures that there is considerably less wood waste in raw panel production at Fritz EGGER. If this example sets a precedent, one tree or another could be standing in the forest for a while longer – before starting its second career as a piece of furniture.









1,400 °C



1,500 m

- Measurement range of up to 1,500 meters
- Measurements on surfaces at temperatures of up to 1,400 °C
- HDDM<sup>+</sup> (High Definition Distance Measurement Plus)
- High measurement accuracy due to multi-echo technology



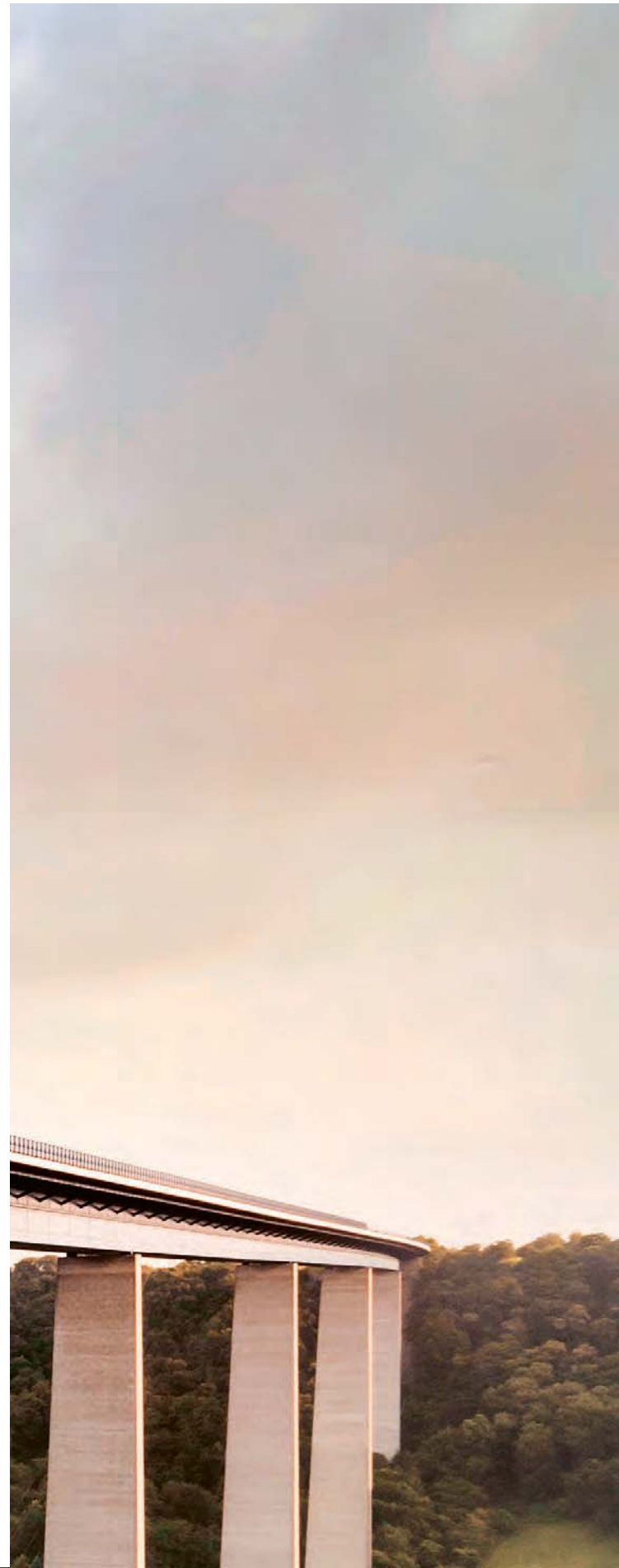
# CLEAR RESULTS FROM LONG DISTANCES



The Dx1000 long range distance sensor measures very long distances both indoors and outdoors and is unaffected by ambient conditions. It is, after all, equipped with innovative HDDM<sup>+</sup> technology and a rugged housing. The DT1000 variant is used for measuring natural objects, while the DL1000 concentrates fully on reflectors.

The DL1000 is in its element when facing harsh analog conditions, such as at the Hochmosel Bridge. It provides clear results despite fog, snow, or rain. Its HDDM<sup>+</sup> technology, based on time-of-flight measurement, makes it resistant to ambient light. Its multi-echo technology comes to the fore if there is precipitation: The DL1000 ignores unwanted echoes along the measurement path and differentiates them from those emitted by the actual target.

If cranes are moved in applications, such as in the steel industry, neither great heat nor smoke emissions bother the DT1000. It even masters measurements on steel at temperatures of 1,400 °C. It offers user-friendly handling and can easily and intuitively be adapted to any application.



# BUILDING BRIDGES

Bridge building has always fascinated humans. The current state of the art of civil engineering at Europe's largest bridge construction site, the Hochmosel Bridge near Zeltingen-Rachtig, is breathtaking – even if one only considers the project's enormous analog dimensions. In the background, innovative digital technology supports construction quality assurance. A DL1000 long range distance sensor measures any deformation, however minor, of the mighty steel-reinforced concrete pillars during shunting of the bridge's steel sections.



This has been a building project of superlatives since 2011 – at 1.7 kilometers long and almost 160 meters tall there is even enough space for Cologne Cathedral below it. The Hochmosel Bridge will close a gap in the European network of highways after its completion in 2018. Thousands of tonnes of steel are shunted in sections from Hunsrück across the Mosel Valley to the opposite side in the Eifel region. During shunting operations, the steel loads of the box girder bridge slide over concrete pillars that are up to 210 meters apart and that should suffer as little deformation as possible under the influence of the occurring frictional forces. Although the construction company, SEH Engineering GmbH, has developed a new type of bridge shunting system that ideally rules out any deformation, it was decided not to do without the accompanying measurements.



The concrete pillars of the Hochmosel Bridge are up to 210 meters apart. The DL1000 measures deformation during the shunting process – however minor.

210 m





## DIGITAL INDUSTRY 4.0 STANDARD HAS REACHED CONSTRUCTION PLANNING

The team entrusted with the measurements – consisting of students and professors from the Trier University of Applied Science – use the DL1000 long range distance sensor that is aimed at reflectors on the pillars at distances of more than 1,500 meters. The sensor is part of a system for measuring deformation developed by the Institute for Standard Software-Based Applications in Civil Engineering (ISA) at the Trier University of Applied Sciences. The combination of time-of-flight measurement, precision engineering, intelligent control, and data processing in real time permits automated determination of deformation. The system can find its measurement target both manually or fully automatically, and carry out measurements at a maximum rate of 1 hertz. A minicomputer can store temperature, date, measurement value, and any resulting deformation in a database in real time, and always display the data. Professor Lungershausen predicts that this system has major potential for the future of a rather conservative construction sector: “The digital Industry 4.0 standard is also increasingly being used in the construction planning phase. In the same way that the transition from the drawing board to the CAD workplace represented a paradigm shift for many planners 30 years ago, they are now facing what will probably be an even greater change.”

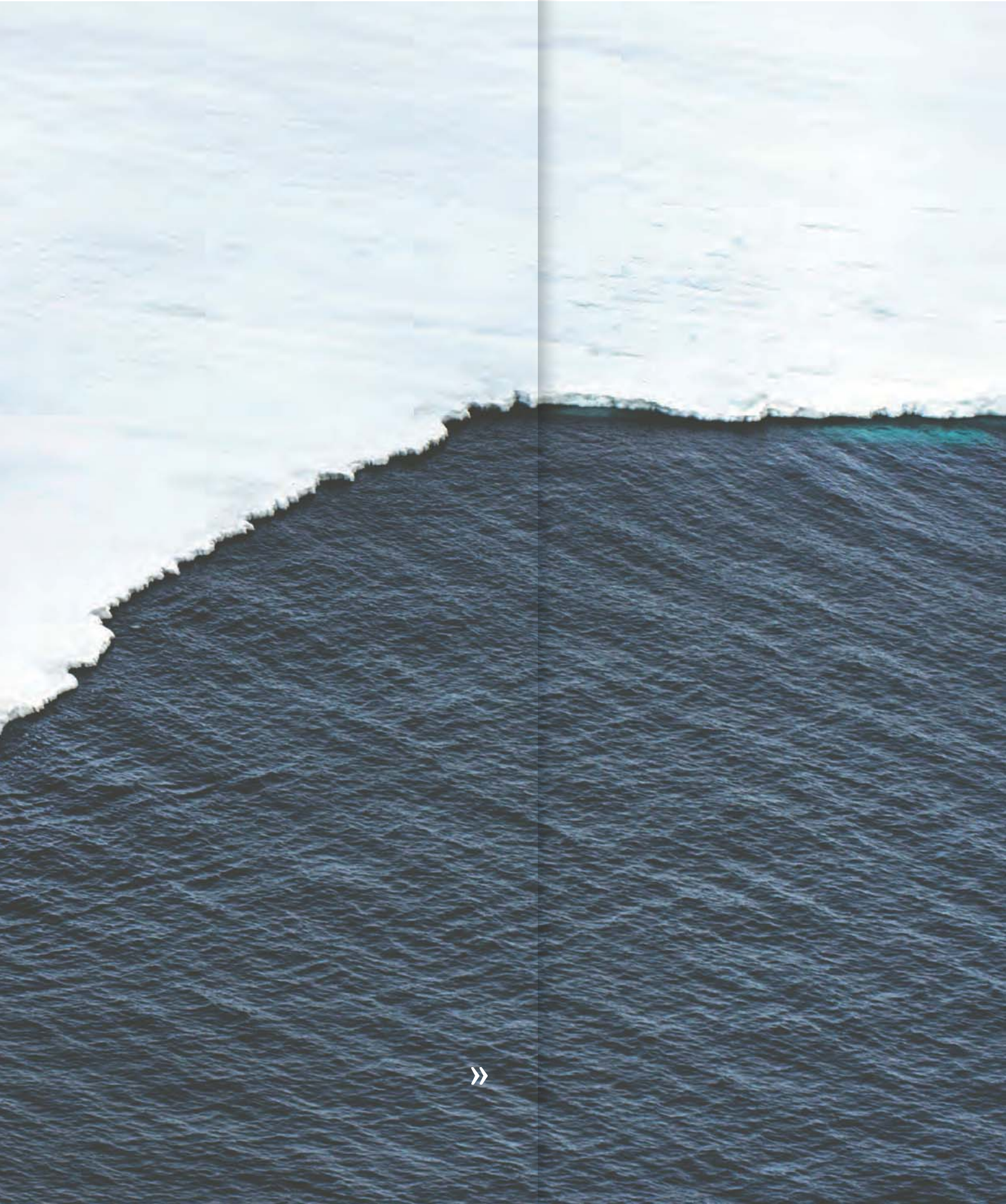
The search for a suitable laser measurement unit ended with the DL1000 long range distance sensor from SICK: “This sensor was ideal for our task. It is designed for very long ranges and the HDDM+ distance measurement process enables measurement ranges of up to 1,500 meters on a reflector,” explains Professor Bender. The distance sensor covers a wide range of applications and is in laser class 1 – so no complicated laser protection measures are necessary. The evaluations of measurement results provided by the DL1000 confirm the calculations of the civil engineers which show that the forces exerted during the newly developed shunting system are almost entirely offset.

During such a shunting process, which takes several days, all parties involved at the Hochmosel Bridge are very tense and have to concentrate fully because the complex process used is not automated – everyone working at the site must exploit their great experience and comprehensive expertise. Whereby monitoring with intelligent measurement technology in the spirit of Construction 4.0 is very welcome.











## 3D LIDAR SENSOR TAKES OFF



3D LiDAR sensors detect their surroundings almost entirely, regardless of whether objects are moving or not. Despite its light design, the LD-MRS LiDAR sensor from SICK on board a drone has a very large working range of 300 meters. Even with jet-black objects (with 10 percent remission), the working range is still 50 meters.

The rugged LD-MRS, also called a multi-layer scanner, is convincing in harsh environments, and not just in polar ice. As an efficient sensor solution in automation it is particularly suitable for collision avoidance in automated vehicles. It is impervious to snow, rain, and dust, and is thus the ideal sensor for outdoor industrial applications in stationary and mobile operation, e. g., in ports and surface mining, for measuring and monitoring tasks, and on industrial vehicles.

The LD-MRS is available with object tracking or field evaluation. It simultaneously scans and measures on up to eight planes and can thus, for example, detect gradients or compensate for the pitching motion of vehicles. It also evaluates up to three consecutive echo pulses per measurement and plane.

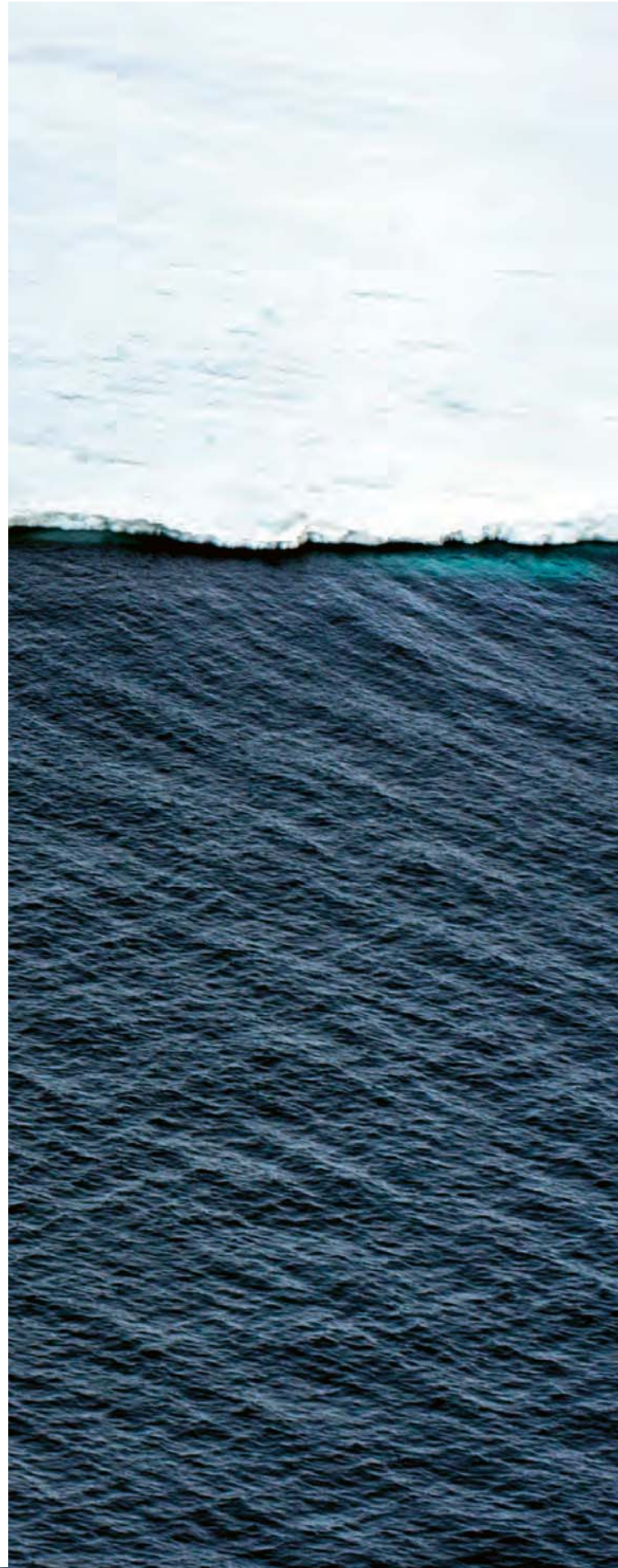


64 objects  
in view  
simultaneously

8 scan  
planes



16 evaluation  
fields





## IN ETERNAL ICE

The climate is changing, it is getting warmer. Will the eternal ice soon become just a stormy sea? How many penguins will then fit on an ice floe? Researchers are seeking answers to the effects of climate change. They count and observe the animals in their elegant black tailcoats. LiDAR sensors are helping them maintain an overview.





300 m



The LD-MRS sensor has a working range of 300 meters. And it even detects dark objects, like the backs of penguins, from a distance of 50 meters.



They hover over the Antarctic on board drones – powerful LD-MRS 3D LiDAR sensors from SICK. The combination of LiDAR sensor and aerial robotics is a very welcome new technology for the researchers and scientists who are mapping and counting penguin colonies. It helps them obtain urgently required information on the effects of climate change. The sensor completely captures its surroundings. Integrated object tracking reduces the counting time for large population areas from several weeks to a few hours.

Normally, the darker the object, the more difficult it is to detect with increasing distance. But the penguins can keep their black tailcoats on. As the working range of the LD-MRS is 300 meters, the LiDAR sensor can still detect even jet-black objects, like the backs of penguins, from a distance of 50 meters. So the sensor can keep its distance, leaving the penguins undisturbed while still being near enough for reliable measurement results.

#### PRECISION LANDING FOR RUGGED FLYWEIGHT

Beyond research and icy realms, the LD-MRS (also called a multi-layer scanner) is particularly convincing in industrial environments: “The harsh conditions at ports and in surface mining are optimum areas of use because the sensor, with its multi-echo technology, can also reliably scan through dust and rain. In response to rising market demand for drone applications, our further development initially focused on the software,” explains Sandra Wienbeck, Product Manager Identification & Measuring at the SICK AG site in Hamburg.

The challenge for use in a drone, however, is to achieve a drastic sensor weight reduction. So the device hardware was further optimized by evaluating suitable materials, while retaining its ruggedness for industrial use. With a weight of 770 grams and an enclosure rating of IP69K, the LD-MRS is currently the lightest sensor with the largest working range available on the market for drone applications.

While flying, a drone generates considerable vibrations that can lead to significant impairment of on-board sensor measurements. “We were able to rule out destabilizing resonances with the help of simulations and data from the most varied of applications. Design and appearance were also important considerations during development, despite this being an industrial product,” reports Sandra Wienbeck. “Leaning on the principles of aerodynamics, we made numerous adaptations in order to achieve a precision landing on the borderline between stability and low weight.” A success that promises convincing results – and not just in Antarctica.











# ALIS NEVER LOSES SIGHT OF FLIGHT BAGGAGE



The ALIS (Airport Luggage Identification System) track-and-trace system from SICK was specially developed for processing flight baggage. ALIS identifies flight baggage unambiguously and guides it through the airport rapidly and reliably. The modular system dependably reads the information from IATA baggage labels. Systems based on laser, camera, or RFID technology are used, depending on requirements.

Laser systems long ago proved their effectiveness for the reliable identification and destination control of flight baggage labeled with a 1D bar code. Whereby position and alignment of the code do not play a role. The laser systems can even read dirty, damaged, or poorly printed bar codes with the help of SMART code reconstruction.

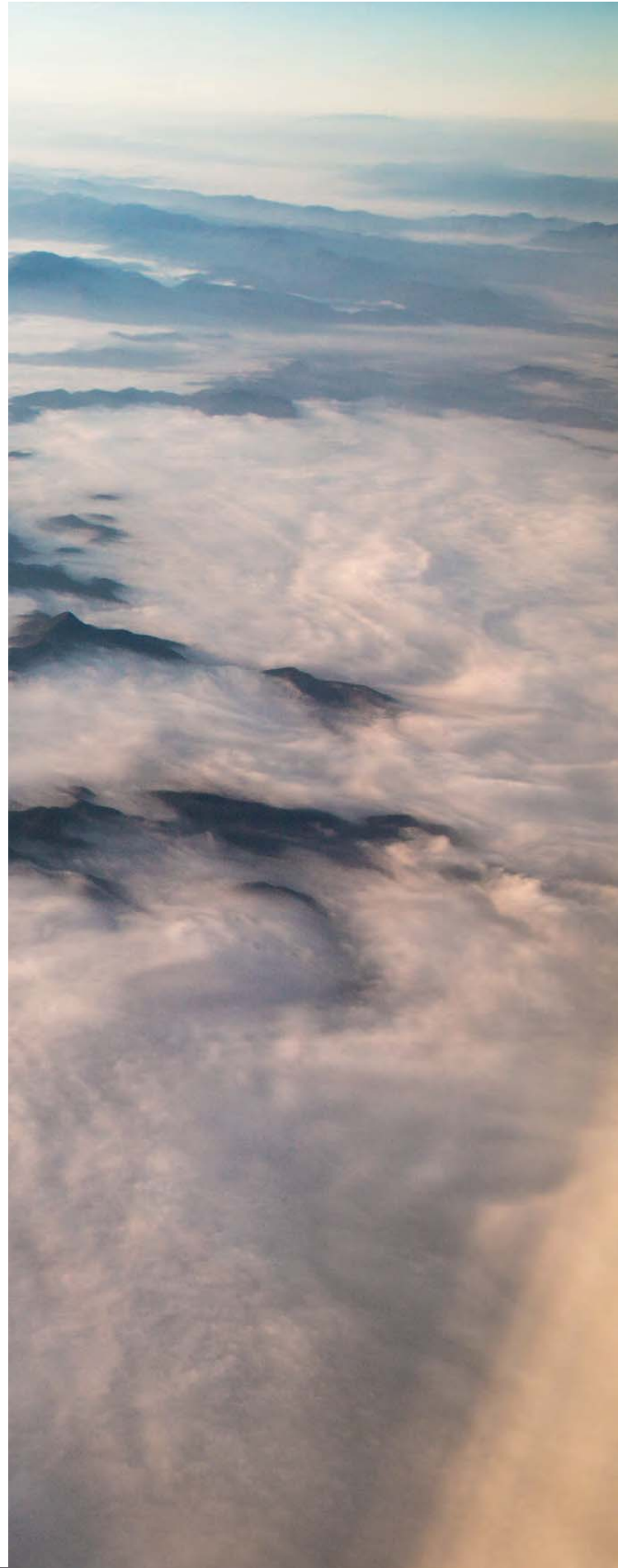
Beyond the ability to identify bar codes, ALIS uses camera technology to supply images for further processing label information (e.g., the flight number) with the help of optical character recognition (OCR) and/or video coding. Thus, flight baggage can also be immediately further transported within the baggage conveyor system in situations in which the baggage source message (BSM) is not available.

ALIS with RFID technology meets the specifications of worldwide IATA standards and is approved for the UHF bandwidths used in Europe, in the USA, and in other countries. Even at high baggage throughput rates, the system guarantees the reliable allocation of labels to pieces of baggage – and thus an error-free sorting process.

3 technologies  
from a single  
source



- Very high read rates
- Laser, camera, and RFID technology for baggage tracking
- Rapid technical upgrades thanks to modular systems
- Leading technology and consulting competence

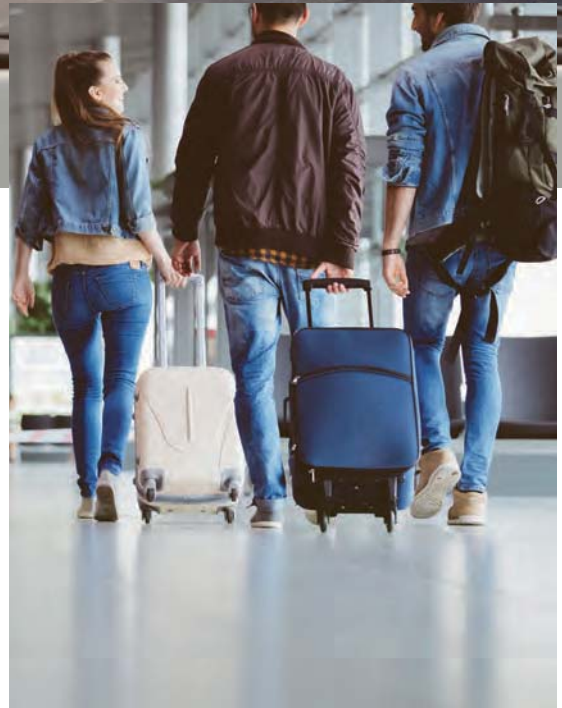


# FROM BEGINNING TO END WITH- OUT GAPS

Worldwide flight traffic is growing rapidly. Airlines transported about four billion passengers in 2017 – corresponding to an increase of 7.1 percent compared to the previous year. Whether frequent fliers or tourists, airline passengers want to be able to collect their suitcases from the baggage carousel at the destination airport without having to worry about whether the baggage will actually arrive safely while they are waiting. There is still room for improvement in the complex logistical processes that airports and airlines have to accomplish. With its ALIS system, SICK has made all end-to-end tracking solutions available to the aviation industry.



A sigh of relief at the baggage carousel: Despite boarding at an international hub and flying many thousand kilometers, passengers and baggage are happily reunited at the destination. The chances for such a positive experience are good at some of the larger international airports – for example at Atlanta Hartsfield-Jackson, Dubai International, Tokyo Haneda, London Heathrow, or Hong Kong International – because all of these airports have installed reading systems from SICK to ensure successful baggage sorting and tracking. But in global terms, airlines still complain about the high costs caused by late, lost, or damaged flight baggage. In their “Baggage Report,” SITA (Société Internationale de Télécommunication Aéronautique) estimated these costs at about USD 2 billion for 2016.







4 billion

» The requirements for end-to-end tracking solutions are rising parallel to passenger numbers: Airlines transported four billion passengers in 2017.

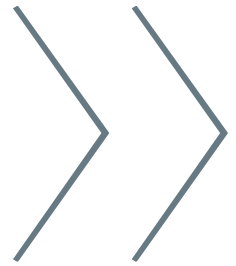
#### RESOLUTION 753 BRINGS MOVEMENT TO THE INDUSTRY

IATA, the worldwide umbrella organization of the airlines, is promoting the further improvement of baggage handling with its Resolution 753 that will come into force in June 2018. In this resolution, the airlines commit themselves to keeping an accurate inventory list of flight baggage. To ensure end-to-end baggage tracking, the path of a piece of baggage must be documented throughout the entire transport – including all responsibilities. The airlines can thus reliably identify and improve weak points. Whereby the focus is on critical transfer points in the transit and arrival areas, for which SICK offers the modular concept of ALIS reading gates with the entire spectrum of intelligent sensors – from laser, through camera, to RFID technology.

“UHF-RFID has long been the favorite technology because pure paper-based information that can be read out with bar code scanners may be damaged or covered. In contrast, the label with the integrated RFID tag need not necessarily be visible for the reading device, and a lot more information can be stored on the chip,” according to Roland Karch. But the extensive implementation of UHF-RFID requires all parties involved in the aviation industry to make major investments and display the necessary patience until an acceptable ROI has been achieved. The accelerating growth of the industry further increases the pressure to improve the handling of the constantly rising quantities of baggage. Whereby SICK supports the industry as an experienced partner. With the largest number of installed automated reading systems for flight baggage labels worldwide, SICK is the market leader in this industry segment and will continue to provide the ideal combination of technology and economic efficiency in future.

#### UPGRADE DURING THE RELAY RACE

“From the start to the end of a flight, the baggage is passed on to the different team players like in a relay race. Airlines, airport operators, and ground handlers must stay fit in order to keep up with the sporty pace and rising demands,” explains Roland Karch, Strategic Industry Manager Airports at SICK. In order to increase the performance of existing plants, SICK has developed special concepts and designed modular systems with which upgrades and the exchange of individual components can be carried out smoothly. A laser system, for example, can be expanded into a hybrid system with laser and camera technology. Even the integration of OCR and video coding, i. e., techniques that can detect and process more information than conventional baggage label systems, is easily possible.



# COMBINED GROUP MANAGEMENT REPORT AND MANAGEMENT REPORT

## FOR SICK AG

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# COMBINED GROUP MANAGEMENT REPORT AND MANAGEMENT REPORT

OF SICK AG FOR THE FISCAL YEAR 2017

Pursuant to Sec. 315 (5) HGB (“Handelsgesetzbuch”: German Commercial Code) in conjunction with Sec. 298 (2) HGB, the SICK group management report has been combined with the management report of SICK AG again this year. The management report is therefore referred to in the following as the combined management report. The financial statements of SICK AG, prepared in accordance with HGB provisions, and the combined management report will be published in the German Federal Gazette (“Bundesanzeiger”) at the same time. Unless stated otherwise, the information provided below applies equally to the SICK Group and to SICK AG. Sections that contain information relating only to SICK AG are designated accordingly. Due to rounding differences, figures may differ slightly from the actual figures. The basis of consolidation is presented in detail in the notes to the consolidated financial statements.

The combined management report for the SICK Group and SICK AG for the fiscal year 2017 is presented below as of the end of the reporting period December 31, 2017:

## FUNDAMENTAL INFORMATION ABOUT THE GROUP

### BUSINESS MODEL

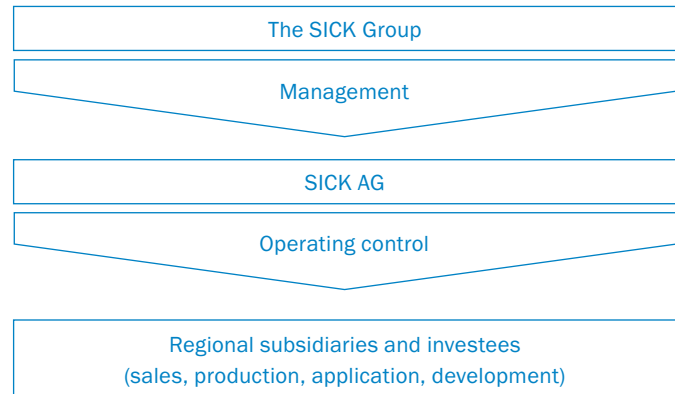
#### Organizational structure of the Group

SICK AG and its subsidiaries (referred to in the following as “the SICK Group”, “SICK” or “the Group”) are one of the world’s leading manufacturers of sensors and sensor solutions for industrial applications.

The parent company of the SICK Group is SICK AG. The company was founded by Dr. Erwin Sick in Vaterstetten near Munich in 1946 and celebrated its 70th anniversary in 2016. SICK AG carries out the tasks of group management from its head office in Waldkirch near Freiburg in Germany. The SICK Group’s basis of consolidation comprised 47 entities in the fiscal year 2017. The SICK Group’s operations are sub-divided into a total of four sales regions: Germany, EMEA (comprising Europe,

the Middle East, and Africa), Asia-Pacific and Americas (consisting of North, Central, and South America). Corporate governance and reporting follow this regional structure. The SICK Group is managed by an Executive Board that comprises five members. A twelve-member Supervisory Board with equal numbers of employer and employee representative forms the oversight body.

#### » ORGANIZATIONAL STRUCTURE OF THE SICK GROUP



The regional structure of the Group reflects the complex structure of the customers and markets. As a result, competence and production centers are located all over the world. The sales function is generally performed by the Group’s own sales and service companies in all key industrial countries. The product-generating entities are controlled from the German locations. Regional product centers have been set up in Savage / Eagle Creek and Stoughton for the US, in Singapore and Johor Bahru (Malaysia) for Asia, and at the German locations as well as in Kunsziget (Hungary) for Europe. These centers develop and produce products for their respective regions and for the global market. The largest manufacturing and development location in Germany is the Group’s headquarters in Waldkirch near Freiburg.

## Business activities and products

The SICK Group is one of the world's leading companies in the field of sensor technology. In line with its brand claim "Sensor Intelligence.", the SICK Group focuses on the development, production, and distribution of sensors, systems, and services for industrial automation technology. Business activities center on creating added value for customers from a wide range of target industries with intelligent sensor solutions. SICK offers these solutions globally in the form of components, systems including software, or individual services, for the business fields of factory, logistics and process automation. The SICK Group's reporting is based on the four aforementioned sales regions.

## Business fields

The **FACTORY AUTOMATION (FA) BUSINESS FIELD** is represented in many industries. In addition to the automotive industry and the field of consumer goods, these include the mechanical engineering, electronics and solar industries as well as drive technology. The most important tasks performed by the non-contact sensors and camera systems as well as the encoders and distance measurement systems in this field include controlling manufacturing, packaging, and assembly procedures as well as quality assurance. With special sensors that reliably detect invisible labeling, SICK protects against product and brand piracy, thus making a major contribution to the safety of customers and consumers. In order to reliably rule out dangers to staff working with potentially hazardous machines, SICK's products, complete solutions, and software solutions under the safetyIQ® brand in the area of safety technology avert potential accident risks. With the help of the bar code, 2D code, and RFID identification technologies as well as volume measurement technology, processes are managed to ensure top-quality end products while at the same time guaranteeing seamless tracking of packaging, an article, or an electronic component if necessary.

The **LOGISTICS AUTOMATION (LA) BUSINESS FIELD** designs and optimizes the entire logistics chain by automating material flows or making sorting, picking, and warehousing processes more efficient, faster, and more reliable. Identifying and directing baggage on transportation and sorting units at airports is one of the areas where solutions from the logistics automation business field are used. Logistics centers as well as numerous courier, express, parcel and postal service providers use bar code readers and volume measurement systems from SICK to deliver millions of packages each year quickly and reliably to the recipient's front door. SICK solutions in the distribution centers of well-known retail groups, clothing companies, automobile manufacturers, or specialist retail chains are also responsible for example for keeping the shelves in retail outlets or boutiques constantly filled and for supplying car salesrooms and garages with supplies and spare parts at

short notice. The automation of sea ports is another domain in which SICK's logistics automation business field operates. In this field, laser scanners have proved their worth in preventing cranes from colliding as well as in positioning containers or track monitoring for container transporters. In the field of traffic, SICK sensors are used in toll systems as well as in controlling ventilation and air circulation systems, thus improving air quality and safety in tunnels.

The **PROCESS AUTOMATION (PA) BUSINESS FIELD** provides sensors as well as tailored system solutions and services for analysis and process measurement technology. With a broad range of products for gas analysis, the concentration of a large number of substances in gas mixtures can be detected. SICK helps its customers reduce greenhouse gas emissions with carbon dioxide analyzers for combustion, process, and drying units, for example. In the field of dust measurement technology, SICK is in a position to detect dust concentrations precisely using different measurement principles, thus ensuring compliance with emission limits, or to identify process disruptions at an early stage. SICK sensor systems carry out various tasks in the area of volume flow measurement, for example determining volume flows in facilities and measuring natural gas volumes for the natural gas industry, or monitoring emissions in industrial processes. With all of these products for waste incinerators, power stations, steel and cement plants, for the oil and gas industry as well as for chemical and petrochemical facilities, SICK makes an important contribution to maintaining an environment worth living in.

## Sales markets

The main sales markets for the SICK Group are industrialized countries as well as those growth regions that are on the cusp of industrialization, particularly in Asia and Latin America. We extend our regional reach by setting up new sales companies and by continuously maintaining a global network of distributors. The distribution center in Buchholz near Waldkirch ensures rapid deliveries to our sales and service companies worldwide.

## External factors influencing the business

The main external factors influencing the business of SICK include changes in the economic environment as well as sector-specific economic developments. These are explained below in "Macroeconomic environment." Other external factors influencing the business and their effects, for example technological progress, more intense competition, changed price levels, changing legal framework conditions and norms, changes in the prices of commodities and intermediate products as well as exchange rate fluctuations, are presented in the opportunity and risk report.

## RESEARCH AND DEVELOPMENT

In view of the significant technological possibilities and competition, continuous investment is needed in research and development (R&D) in order to secure and strengthen our leading market position. The innovation process at SICK therefore has one objective: We want to offer solutions consisting of sensor products, systems, or services that help our customers improve their productivity and flexibility while also conserving resources.

The SICK Group continued to expand its R&D activities in the fiscal year 2017 by investing EUR 169.4 million (prior year: EUR 143.4 million) in order to achieve our R&D goals in our customers' interest. This is equivalent to 11.2 percent of sales (prior year: 10.5 percent). R&D expenses include amortization of development expenses capitalized in prior years of EUR 7.8 million (prior year: EUR 7.3 million). EUR 8.6 million (prior year: EUR 6.7 million) of the total expenses were capitalized in the fiscal year. R&D activities are focused in the German locations.

Thanks to the intensive R&D activities, we have a highly diversified product portfolio that meets the requirements of completely different industries and also serves markets ranging from those that respond quickly to cyclical fluctuations to those that are slower to respond. This makes it easier for us to compensate for any uneven development in our target industries, provoked for instance by cyclical swings, and achieve growth that is above average for the market.

Further impetus for R&D comes especially from intensive dialog with customers, universities, and research institutes. Gearing the global sales organization consistently to the industries served also creates a basis for understanding customers' requirements and translating these into new products, system solutions, and service concepts. An average of 1,114 employees contributed to translating innovative ideas into marketable products in the fiscal year 2017. This figure is up 10.7 percent on the prior year. Additional employees for R&D activities were mainly hired at the German locations.

### Product innovations

The fiscal year 2017 saw the SICK Group drive forward innovations in all product areas, thus supplementing its widely diversified portfolio in key areas.

## » OVERVIEW OF THE MOST IMPORTANT INNOVATIONS

Product innovation	Business field	Description	Benefit to customers
KTS and KTX contrast sensors	FA	<ul style="list-style-type: none"> <li>Print mark detection for controlling industrial labeling processes</li> <li>High-performance contrast sensors</li> </ul>	<ul style="list-style-type: none"> <li>Compact design for installation even where space is limited</li> <li>Excellent contrast resolution and large dynamic range for good performance on complex materials</li> </ul>
OLS optical line guidance sensor	LA	<ul style="list-style-type: none"> <li>Navigation of automated guided vehicles</li> <li>Line guidance sensor for detecting conventional luminescent adhesive tape, irrespective of background, contamination, or surface defects</li> </ul>	<ul style="list-style-type: none"> <li>Large reading field to detect up to three lines, allowing flexible arrangement of branches and junctions</li> </ul>
MLS magnetic line guidance sensor	LA	<ul style="list-style-type: none"> <li>Navigation of automated guided vehicles</li> <li>Invisible line guidance possible by laying the magnetic line below the surface covering</li> </ul>	<ul style="list-style-type: none"> <li>Reliable distinction between up to three magnetic lines</li> </ul>
microScan3 Core – EtherNet/IP™	FA, LA	<ul style="list-style-type: none"> <li>First safety laser scanner with CIP Safety™ via EtherNet/IP™</li> <li>Simple configuration and diagnosis via Ethernet</li> </ul>	<ul style="list-style-type: none"> <li>Safe, reliable, and long-lasting network integration and high machine availability</li> </ul>



Product innovation	Business field	Description	Benefit to customers
Application package for safe speed monitoring at automated guided vehicles	LA	<ul style="list-style-type: none"> <li>Determination of safe speed at a vehicle's main drive axle with DFS60S Pro incremental safety encoder and of safe steering angle with AFS/AFM60S Pro absolute encoder</li> <li>The encoders provide data about the steering angle and path, with the Flexi Soft safety controller as control unit</li> </ul>	<ul style="list-style-type: none"> <li>Easy installation and integration into the vehicles</li> <li>Fast and smooth commissioning</li> </ul>
DUSTHUNTER SP30 (DHSP30) dust measuring device	PA	<ul style="list-style-type: none"> <li>Precise dust measuring device based on in situ scattered light measurement</li> <li>Filter monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Reliable detection of low to high dust concentrations</li> </ul>
VICOTEC320 tunnel sensor	PA	<ul style="list-style-type: none"> <li>Rugged LED-based combined device to measure very low concentrations of NO and NO<sub>2</sub> nitrogen oxides as well as carbon monoxide (CO) and visibility in tunnels</li> </ul>	<ul style="list-style-type: none"> <li>Saving energy and costs for ventilation control and filter monitoring in tunnels</li> <li>Low maintenance costs</li> </ul>
Upgrade kit for FLOWSIC100 Flare analyzer solution	PA	<ul style="list-style-type: none"> <li>Analyzer solution for reducing flow noise and signal drift at very high gas velocities</li> <li>Precise measurements even for very low gas flow volumes</li> </ul>	<ul style="list-style-type: none"> <li>Reliable process control by accurate measurement near to zero point</li> <li>System solution for controlling three different measurement points with a single control unit</li> </ul>
FLAWSIC30 ultrasonic gas flow meter	PA	<ul style="list-style-type: none"> <li>Rugged ultrasonic dual-path gas meter for use in the production of natural gas, e. g., of coal-bed methane</li> </ul>	<ul style="list-style-type: none"> <li>Large turn-down ratio covering all flow rates of gas sources</li> <li>Reliable and consistent measurement without disrupting the flow of gas</li> </ul>
Lector systems with image stitching for image output	FA, LA	<ul style="list-style-type: none"> <li>Image-based code readers for reading bar codes instead of LiDAR sensors or line scan cameras</li> <li>High read rate and high-resolution images thanks to image stitching</li> </ul>	<ul style="list-style-type: none"> <li>Highest read rate in sorting processes while also using OCR/Video Coding or tracking and documentation through image storage</li> </ul>
MAX48 linear encoder	LA	<ul style="list-style-type: none"> <li>Non-contact, reliable, and fully integrated position measurement in hydraulic cylinders</li> <li>Suitable for use in extreme environmental and operating conditions in applications on mobile machines</li> </ul>	<ul style="list-style-type: none"> <li>Reliable path and position measurement for hydraulic cylinders in mobile machines</li> </ul>
MRS1000 multi-layer scanner	LA, FA	<ul style="list-style-type: none"> <li>Collision protection and assistance for all moving objects in production facilities, ports, mines, etc.</li> <li>Reliable and weatherproof monitoring in traffic management, building security, access control or people counting, indoors and outdoors</li> </ul>	<ul style="list-style-type: none"> <li>Highly precise measurement thanks to HDDM+ with multi-echo technology when subjected to environmental influences such as rain, dust, and fog</li> <li>Low set-up costs, as with SICK's 2D LiDAR sensors</li> <li>Low maintenance costs thanks to high weather resistance</li> </ul>
TiM100 2D LiDAR sensor	LA, FA	<ul style="list-style-type: none"> <li>Collision avoidance for automated guided vehicles and machines</li> <li>Area monitoring, protrusion and height detection</li> <li>Presence monitoring in warehouses and monitoring of doors and gates</li> </ul>	<ul style="list-style-type: none"> <li>Fast and cost-effective commissioning</li> <li>Suitable for use in battery-operated vehicles thanks to low power consumption</li> </ul>
CFP Cubic capacitive level sensor	FA, PA	<ul style="list-style-type: none"> <li>Continuous and discontinuous level measurement and simultaneous measurement of temperature</li> </ul>	<ul style="list-style-type: none"> <li>Simple, intuitive operation thanks to predefined menu navigation and integrated display</li> <li>Flexible measurement in containers with oils, water-based liquids, or emulsions without additional accessories</li> </ul>
DOSIC® ultrasonic flow sensor	FA, PA	<ul style="list-style-type: none"> <li>Non-contact detection of the flow volume of conductive and non-conductive liquids based on ultrasonic technology</li> </ul>	<ul style="list-style-type: none"> <li>Flexible measurement system for all industries and liquids</li> <li>Versatile use, also in food and beverage processing, for conductive and non-conductive liquids and for temperature measurement</li> </ul>

## REPORT ON ECONOMIC POSITION

### MACROECONOMIC ENVIRONMENT

The global economy picked up in the second half of 2016 and gained pace in 2017, with the industrialized nations leading the way. Global economic growth amounted to 3.7 percent according to the economists at the International Monetary Fund (IMF) (prior year: 3.2 percent).

#### » OVERVIEW OF GLOBAL ECONOMIC GROWTH

in %	2018 (expected)	2017	2016
Industrialized nations	2.3	2.3	1.7
USA	2.7	2.3	1.5
Eurozone	2.2	2.4	1.8
Germany	2.3	2.5	1.9
Emerging economies	4.9	4.7	4.4
Latin America	1.9	1.3	-0.7
Asia	6.5	6.5	6.4
Global economic growth	3.9	3.7	3.2

Source: IMF, World Economic Outlook, January 2018

The global economic recovery in 2017 was boosted to a very high level by the acceleration of growth in Europe, the US and Japan as well as the stabilization of growth in China. The economic outlook for Latin America has also improved slightly. In 2017, Brazil, South America's biggest economy, was on its way to overcoming the severe recession of recent years.

The positive economic trend was mainly driven by financial and monetary policy, which remained expansive on the whole (particularly in Japan and Europe), private consumption and improved conditions for investment. Growth also improved in important emerging economies. Risks to the global economy stem from the increase in crude oil prices since mid-2017, an increasingly challenging political landscape as a result of the UK's planned departure from the EU, the continuation of conflict between Russia and Ukraine, the refugee crisis, the crisis between North Korea and the US, the rise of populist movements throughout Europe and difficulty forming a government in Germany.

The BDI ("Bundesverband der Deutschen Industrie e.V.": Federation of German Industries) estimates that global industrial output grew by around 3 percent in 2017 (BDI, November 2017 Industry Report), which is the strongest rate of growth since 2011. The mechanical engineering sector, which is the biggest and most important target market for SICK's sensor technology, also overcame last year's stagnation with a return to growth in 2017, both globally and in Germany. The greatest impetus for growth mainly stemmed from the domestic market as well as from countries outside Europe. The VDMA ("Verband Deutscher Maschinen- und Anlagenbau e.V.": German Engineering Federation) therefore expects sales growth of around 3 percent in the 2017 reporting year.

The **GERMAN** economy remained strong in 2017. International trade, household consumption and government spending, and increased investment provided a broad foundation for the growth of the economy.

The economic development in the region of **EUROPE, MIDDLE EAST, AND AFRICA (EMEA)** was positive. The eurozone economy performed slightly better than it did in 2016 thanks to the economic recovery in France and Italy as well as stable growth in Germany. Russia overcame the recession of the prior year in 2017. The economy of the Middle East and Africa region weakened on account of a slowdown in Saudi Arabia's economic growth. The economy of the Persian Gulf was also impacted negatively by political tensions between Saudi Arabia and Qatar.

Within the **NORTH, CENTRAL, AND SOUTH AMERICA (AMERICAS)** region, the US once again proved to be the mainstay of economic growth. The US economy grew by 2.3 percent in 2017. Private consumption saw further strong growth in this region. This was accompanied by a steady improvement in the labor market over the course of the year. The interest rate hikes by the US Federal Reserve have not had a negative effect thus far.

Economic development in the **ASIA-PACIFIC** region hinges on the economic situation in China. Government demand for goods and services on the one hand and private consumption on the other were still the main drivers of growth for the Chinese economy in 2017. Exports, imports, and industrial output rose again in the second half of the year. Structural problems persist, mainly in connection with severe pollution and the high level of debt, for state-owned companies in particular. With overall growth of 6.9 percent, the Chinese economy grew more than originally anticipated in 2017. Japan's economy has stabilized, and is still being shaped by the country's expansive monetary and fiscal policy. The latter is intended to boost the weak growth that has persisted for years.

The general, global economic trend in 2017 was more robust than had been anticipated at the outset of the year. In both April and October, the International Monetary Fund raised its forecast for growth in 2017 by 0.1 percentage points to a total of 3.6 percent on account of the consolidation and increasing stability of growth.

## ENVIRONMENT IN THE SENSOR INDUSTRY

Sensor technology is a growing industry. Perpetual global growth and the ongoing industrialization of the emerging economies (particularly the up-and-coming new industrialized nations in Asia and Latin America) provide the foundation for rising demand for the products and system solutions of the sensor technology industry.

According to a study conducted by the sector association AMA ("AMA Verband für Sensorik und Messtechnik e.V.": AMA Association for Sensor and Measurement), the volume of sales in the German sensor technology industry grew by around 5 percent in 2017 (2016: 4 percent). Almost 90 percent of the AMA's members see the increasing digitalization and connectivity of industrial production as an opportunity for their company. The industry's success is also reflected in its export ratio, which rose by 7 percentage points to 58 percent.

### Advantages of the SICK business model

Our business model is founded primarily on the existence of an independent market for sensor systems and on our conviction that by concentrating on sensor solutions, it is possible to offer intelligent and high-quality products and to produce these efficiently. In line with its "Sensor Intelligence." claim, SICK thus focuses on sensor technology for industrial applications while exploiting all possibilities and facets that sensor technology offers. These possibilities, in particular in the form of higher-performance processors and storage technologies as well as the integration of application knowledge in the software of individual products, ensure that SICK sensors are moving more and more towards sensor intelligence. Such intelligence is essential in order to succeed in moving industrial manufacturing and logistics processes forward towards a Smart Factory, otherwise known as the "Industry 4.0" discussion. Industry 4.0 thus promises huge growth potential for SICK sensors. In order to exploit this potential, it is essential that SICK's products are compatible with as many automation systems as possible and that they have the ability to communicate with overarching cloud levels. Consequently, two of SICK's focal areas of development are currently connectivity and data sovereignty. SICK is involved in the industry bodies of various associations in order to promote the further development of open and defined interfaces. The Group also monitors other technologies and trends considered relevant for the future development of the SICK Group and, if they are considered important, incorporates these in development or cooperation processes. For SICK, solutions

are more than just the use of specific products. This is why the business model is additionally supported by the system and service business. Both areas concentrate on providing customers with complex solutions that go beyond the individual product and that have been customized in line with the respective requirements. As a highly innovative company with a global presence and its own production, development, and sales activities in all important growth regions, SICK is in a good position to benefit accordingly from the sector's growth.

## COURSE OF BUSINESS

### Results of operations

The SICK Group continued to grow in the fiscal year 2017. The results of operations break down as follows:

#### » CONSOLIDATED INCOME STATEMENT

in EUR million	2017	2016	Change in %
Sales	1,511.6	1,361.2	11.0
Changes in inventory	15.1	10.9	38.5
Own work capitalized	23.8	18.9	25.9
Cost of materials	450.7	409.7	10.0
<b>GROSS PROFIT</b>	<b>1,099.8</b>	<b>981.3</b>	<b>12.1</b>
Personnel expenses	639.8	574.3	11.4
Depreciation and amortization	55.7	50.9	9.4
Other operating expenses	259.4	220.5	17.6
Other operating income	9.3	14.2	-34.5
Currency result	-5.7	-2.1	171.4
<b>OPERATING RESULTS</b>	<b>148.5</b>	<b>147.7</b>	<b>0.5</b>
Net investment income/expense	0.3	0.2	50.0
<b>EARNINGS BEFORE INTEREST AND TAX (EBIT)</b>	<b>148.8</b>	<b>147.9</b>	<b>0.6</b>
Net interest income	-3.0	-2.8	7.1
<b>EARNINGS BEFORE TAX</b>	<b>145.8</b>	<b>145.1</b>	<b>0.5</b>
Income tax	40.7	40.3	1.0
Minority interests	0.8	0.8	0.0
<b>CONSOLIDATED NET INCOME (after minority interests)</b>	<b>104.3</b>	<b>104.0</b>	<b>0.3</b>



### Order situation and trend for sales

Total **ORDERS RECEIVED** amounted to EUR 1,542.3 million, up 10.3 percent year on year (prior year: EUR 1,398.9 million). The ratio of orders received to sales (book-to-bill ratio) of 102.0 percent for the fiscal year 2017 was almost on par with the prior year (102.8 percent). The continuation of the positive trend for orders received was due to rising demand combined with the growth of the global economy as well as the launch of new products and system solutions.

**GROUP SALES** also continued to grow, supported by the increase in orders received. They amounted to EUR 1,511.6 million in the fiscal year 2017 – an increase of 11.0 percent compared to the prior year (2016: EUR 1,361.2 million). This means that SICK has continued to perform very well and achieve above-average growth in relation to the growth of the German mechanical engineering sector. The VDMA's forecasts put growth for 2017 at roughly 3 percent.

Thanks to its strong competitive position around the world, the growth of the SICK Group was once again broad-based in the fiscal year 2017. In addition to presence in the established markets, the sales activities in the growth regions around the world also help to increase sales further. The increase in sales clearly exceeded the projected sales figures for 2017, which foresaw growth in the mid to high single-digit percentages.

Sales growth in the four sales regions was as follows:

### » SALES BY REGION

in EUR million	2017	2016	Change in %
Germany	313.6	285.6	9.8
Europe, Middle East, and Africa (EMEA)	550.9	505.7	8.9
North, Central, and South America (Americas)	320.8	292.3	9.8
Asia-Pacific	326.3	277.6	17.5
<b>TOTAL</b>	<b>1,511.6</b>	<b>1,361.2</b>	<b>11.0</b>

Sales in the home market of **GERMANY** once again mainly grew with customers from the logistics automation and factory automation business fields, driven in particular by drive technology, mechanical engineering, intra-logistics, and transport logistics. Sales in the process automation business field once again fell slightly short of expectations, as customers in the oil and gas industry were reluctant to invest. The SICK Group achieved sales growth for the region of 9.8 percent on the prior year in total, at the upper end of the range forecast at the beginning of the fiscal year.

Sales growth in the **EUROPE, MIDDLE EAST, AND AFRICA (EMEA)** region was slightly less pronounced at 8.9 percent. This increase surpassed the forecast for mid-range single-digit percentage growth. The strongest impetus for growth in the fiscal year 2017 came from Italy, where SICK was able to achieve substantial growth in all areas of factory and logistics automation. The company also realized numerous large-scale projects in Europe, in the field of transportation logistics in particular. As in the prior year, sales increased in the electronics and solar industries as well as in the mechanical engineering sector. The decline in the value of sterling as a result of the UK's announced withdrawal from the EU and the depreciation of the Turkish lira over the course of the year impacted the growth of sales in the region.

Sales in **NORTH, CENTRAL, AND SOUTH AMERICA (AMERICAS)** grew 9.8 percent. This fell just short of the forecast for percentage sales growth in the low double digits. The strong growth (as expected) in the US, Canada and Mexico was held back by the modest trend in South America. In the field of factory automation, the strongest sales growth was seen in the automotive industry. The logistics automation business field also grew. This was mainly down to the intralogistics business. Currency trends also impacted sales growth in this region, including the USD / EUR exchange rate in particular.

Growth in the **ASIA-PACIFIC** region was significantly stronger than in prior years. The rise of 17.5 percent in sales was much bigger than the figure for 2016. This meant that the forecast for growth was exceeded. The volume of business increased significantly, particularly in China. Growth there mainly stemmed from the electronics and solar industries, the automotive sector, and fittings for power plants and waste processing and recycling facilities in the field of process automation. Sales rose sharply again in Australia, South Korea, and Singapore as well. Australia in particular benefited from a return to rising levels of investment in the oil and gas industry.

## Costs

The main expense items increased slightly more than sales on the whole in the fiscal year 2017. There was an above-average increase in personnel expenses as well as other operating expenses in particular. These rose sharply on account of the substantial spending on securing SICK's future with an effect on income – particularly in connection with digitalization and Industry 4.0 – and reflect the balance that the company needs to strike between safeguarding short-term income and long-term investment in technology. The most important expense items in the income statement changed as follows:

### » KEY EXPENSE ITEMS

in EUR million	2017	2016	Change in %
Cost of materials	450.7	409.7	10.0
Personnel expenses	639.8	574.3	11.4
Depreciation and amortization	55.7	50.9	9.4
Other operating expenses	259.4	220.5	17.6

At EUR 450.7 million, the **COST OF MATERIALS** was 10.0 percent higher than in the prior year (2016: EUR 409.7 million). However, the increase was slightly lower than the 11 percent rise in sales. This is mainly due to a changed product mix as well as successful procurement management. As a result, the ratio of cost of materials to sales fell slightly from 30.1 to 29.8 percent.

**PERSONNEL EXPENSES** saw a rise of 11.4 percent to EUR 639.8 million (prior year: EUR 574.3 million). This can primarily be attributed to an increase in the global headcount. New employees were hired in the R&D, Sales, and Service areas in particular.

The **AMORTIZATION AND DEPRECIATION** reflects the increase in investment activity in past fiscal years. Investment in 2017 once again focused on building measures and production facilities, above all including various different major construction measures in Germany and other European countries. At EUR 55.7 million, depreciation and amortization in the fiscal year 2017 was 9.4 percent higher than in the prior year (2016: EUR 50.9 million).

**OTHER OPERATING EXPENSES** rose at a much higher rate than revenue, amounting to EUR 259.4 million (2016: EUR 220.5 million). This 17.6 percent increase can mainly be attributed to increased travel

expenses, the ongoing expansion of measures aimed at promoting sales, external development orders, additional capacity in connection with R&D and IT projects, and increasing expenses for repair and maintenance. **OTHER OPERATING INCOME** amounted to EUR 9.3 million, marking a return to a more normal level. Other operating income fell 34.5 percent in comparison to the fiscal year 2016. This fall can mainly be attributed to the one-off effect in 2016 relating to the acquisition of a majority interest in SICK Metering Systems N.V. in Belgium. The **NET BALANCE OF OTHER OPERATING INCOME AND OTHER OPERATING EXPENSES** rose sharply from EUR 206.3 million (2016) to EUR 250.1 million in the past fiscal year. This is 21.2 percent more than in the prior year.

The **CURRENCY RESULT** amounted to EUR -5.7 million as a result of detrimental changes in the exchange rates of relevant currencies.

The **NET INVESTMENT EXPENSE/ INCOME** improved from EUR 0.2 million in the past fiscal year to EUR 0.3 million.

EBIT remained stable on the whole in the fiscal year 2017. The resulting trend corresponds to the planned increase in structural expenses to secure the future of the company. **EARNINGS BEFORE INTEREST AND TAX (EBIT)** of EUR 148.8 million were recorded in total, constituting a marginal, 0.6 percent rise on the prior-year level. The figure for 2016 was EUR 147.9 million, although this includes the aforementioned one-off effect in connection with the acquisition of a majority interest in SICK Metering Systems N.V. in Belgium. The **EBIT MARGIN** as a percentage of sales amounted to 9.8 percent (prior year: 10.9 percent). This meant that the high single-digit percentage figure forecast at the beginning of the year was met.

The **NET INTEREST INCOME** fell from EUR -2.8 million to EUR -3.0 million in the past fiscal year on account of the increase in financial debt.

The **TAX RATE** of 27.9 percent was almost unchanged compared to the prior year's figure of 27.8 percent. The Group's **TAX EXPENSE** amounted to EUR 40.7 million in the past fiscal year (prior year: EUR 40.3 million).

After deducting the tax burden, the share in the **CONSOLIDATED NET INCOME** that is attributable to the shareholders of SICK AG thus amounts to EUR 104.3 million. This constitutes a 0.3 percent rise on the prior-year level (2016: EUR 104.0 million). The **NET RETURN ON SALES** of 6.9 percent fell short of the prior year's figure of 7.6 percent.

## » KEY PROFITABILITY FIGURES

	2017	2016	Change
EBIT (in EUR million)	148.8	147.9	0.6%
EBIT margin (%)	9.8	10.9	-1.1
Consolidated net income (in EUR million)	104.3	104.0	0.3%
Net return on sales (%)	6.9	7.6	-0.7

### Net assets

SICK's net assets remain very solid. **TOTAL ASSETS**, which increased by 12.2 percent to a total of EUR 1,066.2 million, reflect ongoing growth of business activities in 2017 (prior year: EUR 950.1 million). The structure of the company's assets is as follows:

## » CHANGES IN ASSET STRUCTURE

in EUR million	2017	2016	Change in %
<b>ASSETS</b>			
Non-current assets	408.8	371.9	9.9
of which property, plant and equipment	(309.4)	(272.1)	13.7
Current assets	657.4	578.2	13.7
of which cash and cash equivalents	(20.5)	(31.1)	-34.1
<b>TOTAL ASSETS</b>	<b>1,066.2</b>	<b>950.1</b>	<b>12.2</b>
<b>EQUITY AND LIABILITIES</b>			
Equity	584.4	522.0	12.0
Debt capital	481.8	428.1	12.5
of which non-current liabilities	(173.8)	(178.6)	-2.7
of which financial liabilities	(111.9)	(101.7)	10.0
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>1,066.2</b>	<b>950.1</b>	<b>12.2</b>
Net debt	91.4	70.6	29.5
Equity ratio (%)	54.8	54.9	-

At EUR 408.8 million, **NON-CURRENT ASSETS** rose by 9.9 percent on the prior year (2016: EUR 371.9 million). This was influenced to a significant extent by the increase in **PROPERTY, PLANT AND EQUIPMENT**, which rose 13.7 percent from EUR 272.1 million to EUR 309.4 million. This mainly stemmed from investment in securing the future of the SICK Group, which focused on buildings at the German locations and the acquisition of machinery and operating resources. **INTANGIBLE ASSETS** amounted to EUR 67.9 million, roughly on par with the prior year

(2016: EUR 68.4 million). **DEFERRED TAX ASSETS** stood at EUR 27.0 million, down 4.9 percent on the end of the prior year (2016: EUR 28.4 million).

The continued growth of business activities over the course of the reporting year also had an impact on the volume of **CURRENT ASSETS**. These saw a rise of 13.7 percent to EUR 657.4 million (prior year: EUR 578.2 million). **INVENTORIES** grew faster than sales on account of the increase in safety and project stock in other countries, and amounted to EUR 292.4 million as of December 31, 2017, which is a rise of 21.9 percent on the prior year (2016: EUR 239.9 million). Days of Inventory Outstanding (DIO) increased by seven days to 70 days as a result (prior year: 63 days). In line with the rise in business activity, **TRADE RECEIVABLES** also increased at a slightly disproportionately high rate of 11.4 percent to EUR 288.3 million (prior year: EUR 258.8 million). Days of Sales Outstanding (DSO) rose by one day to 69 days as of the end of the year (prior year: 68 days). **OTHER ASSETS** grew by 20.8 percent from EUR 42.7 million to EUR 51.6 million. In addition, **CASH AND CASH EQUIVALENTS** fell by 34.1 percent to EUR 20.5 million (prior year: EUR 31.1 million).

On the equity and liabilities side, the SICK Group recorded a further increase in **EQUITY** thanks to the development and retention of earnings. Equity amounted to EUR 584.4 million at the end of the year, which represents a 12.0 percent jump on the prior year (2016: EUR 522.0 million). The **EQUITY RATIO** remained almost unchanged at 54.8 percent (prior year: 54.9 percent).

As a result of the reduction of non-current financial liabilities by EUR 7.8 million to EUR 85.0 million (prior year: EUR 92.8 million), **NON-CURRENT LIABILITIES** fell slightly in the fiscal year 2017, coming to EUR 173.8 million as of the end of the reporting period (prior year: EUR 178.6 million). **NON-CURRENT PROVISIONS AND OTHER LIABILITIES** rose slightly to EUR 86.6 million (prior year: EUR 84.0 million). This relates to the increase in pension provisions, among other things. For information on the nature, terms to maturity, currency, and interest rates of liabilities, including their main terms and conditions, as well as information on undrawn credit lines available, reference is made to the comments in G. (35) "Financial risk management" in the notes to the consolidated financial statements.

The continued growth of business activities in 2017 also had an impact on the volume of current liabilities. These saw a rise of 23.4 percent to EUR 307.9 million (prior year: EUR 249.5 million). Within the financing structure, **CURRENT FINANCIAL LIABILITIES** rose sharply to EUR 26.8 million (prior year: EUR 9.0 million). **CURRENT TRADE PAYABLES** were up 21.3 percent from EUR 104.8 million to EUR 127.1 million due to the higher volume of business. **OTHER CURRENT LIABILITIES**



jumped 18.1 percent to EUR 121.2 million (prior year: EUR 102.6 million). This is chiefly a result of a rise in other tax liabilities, performance-related pay at SICK AG and higher vacation and flextime credits. **OTHER CURRENT PROVISIONS** also rose 6.1 percent, from EUR 19.6 million to EUR 20.8 million. **TAX LIABILITIES**, on the other hand, fell 11.1 percent year on year to EUR 12.0 million (2016: EUR 13.5 million).

The increased volume of business also led to an increase in current trade receivables and inventories. This increase was not offset by the increase in current liabilities. As a result, **WORKING CAPITAL** rose 15.1 percent to EUR 453.5 million (prior year: EUR 393.9 million). This meant that working capital rose faster than sales, causing Days of Working Capital (DWC) to increase by four days to 108 days (prior year: 104 days).

**NET DEBT** increased from EUR 70.6 million in the fiscal year 2016 to EUR 91.4 million as a result of the growth of business activities and investment in the future.

### Financial position

The financial position is characterized by a very solid trend for operating cash flow and reflects the high level of investment in SICK's forward-looking global market position. It breaks down as follows:

#### » ABRIDGED STATEMENT OF CASH FLOWS

in EUR million	2017	2016	Change in %
Cash flow from operating activities	101.8	122.8	-17.1
Cash flow from investing activities	-95.4	-70.8	34.7
<b>FREE CASH FLOW</b>	<b>6.4</b>	<b>52.0</b>	<b>-87.7</b>
Cash flow from financing activities	-16.0	-39.8	-59.8
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>-9.6</b>	<b>12.2</b>	<b>-178.7</b>

**CASH FLOW FROM OPERATING ACTIVITIES** came to EUR 101.8 million (prior year: EUR 122.8 million) and was influenced by an increase in the amount of working capital required.

**CASH FLOW FROM INVESTING ACTIVITIES** totaled EUR -95.4 million for the fiscal year 2017, which is an increase of 34.7 percent (prior year: EUR -70.8 million). Most of this amount stemmed from investments in property, plant and equipment (EUR 78.8 million) as well as in intangible assets (EUR 16.5 million).

**CASH FLOW FROM FINANCING ACTIVITIES** improved by 59.8 percent to EUR -16.0 million (prior year: EUR -39.8 million). Cash and cash equivalents fell by EUR 9.6 million overall (prior year: increase of EUR 12.2 million).

Despite the increased net debt of EUR 91.4 million (prior year: EUR 70.6 million), the SICK Group's financing remains solid with a debt-equity ratio of 15.6 percent (prior year: 13.5 percent) and an equity ratio of 54.8 percent (prior year: 54.9 percent).

#### » FINANCIAL SOLIDITY

in EUR million	2017	2016
Financial liabilities	111.9	101.7
Cash and cash equivalents	20.5	31.1
<b>NET DEBT</b>	<b>91.4</b>	<b>70.6</b>
Equity	584.4	522.0
<b>DEBT-EQUITY RATIO (%)<sup>1</sup></b>	<b>15.6</b>	<b>13.5</b>
<b>EQUITY RATIO (%)<sup>2</sup></b>	<b>54.8</b>	<b>54.9</b>

<sup>1</sup> Ratio of net debt to equity

<sup>2</sup> Ratio of equity to total assets

### Overall assessment

The SICK Group achieved its projected targets for sales and income in the fiscal year 2017, and even beat its target for sales. The net assets, financial position, and results of operations remained as solid in the fiscal year 2017 as they have been in the past fiscal years, as evidenced by the increase in sales as well as the volume of EBIT, the EBIT margin, and the consolidated net income for the year. The SICK Group thus has an extremely solid capital base, which forms an excellent foundation for the further expansion of business activities and thus further growth for the Group, particularly in light of the challenges of digitalization and Industry 4.0.

## Employees

In connection with the sales growth, the global headcount also increased further in the past fiscal year, with a total of 765 employees joining the Group. At the end of 2017, the headcount at the SICK Group was thus 8,809 in total, which is 9.5 percent more than at the end of 2016 (8,044 employees). This means that the increase was in line with forecasts. This increase in capacity mainly boosted SICK's capabilities in the fields of R&D and production, as well as in its global sales and service organizations.

### » EMPLOYEES AS OF DECEMBER 31

in EUR million	2017	2016	Change in %
Germany	5,224	4,739	10.2
Europe, Middle East, and Africa (EMEA)	1,634	1,469	11.2
North, Central, and South America (Americas)	784	707	10.9
Asia-Pacific	1,167	1,129	3.4
<b>TOTAL</b>	<b>8,809</b>	<b>8,044</b>	<b>9.5</b>

The **AVERAGE AGE OF SICK'S WORKFORCE** was unchanged in 2017 at 40.2. Despite the large number of new hires, the average **SICK LENGTH OF SERVICE** only changed marginally on account of the very low fluctuation rate, and stood at 8.8 years (prior year: 9.0 years). The percentage of women in the workforce of the SICK Group held steady in relation to the prior year, with **WOMEN** accounting for 33 percent of the workforce and **MEN** making up the remaining 67 percent in the past fiscal year. The SICK Group employed 351 trainees as of December 31, 2017 (prior year: 309 trainees).

In addition to the collectively agreed basic pay, SICK offers its employees comprehensive non-tariff compensation benefits such as profit sharing, performance bonuses, compensation for employee inventions, and a company pension scheme.

SICK is especially committed to keeping its employees at the Group for the long term, offering flexible working time models as well as active promotion of healthy living and tailored advanced training, which is coordinated by the internal Sensor Intelligence Academy (SIA). At EUR 11.8 million, the **COST OF BASIC AND ADVANCED TRAINING** and thus of the global addition of skills was therefore 14.6 percent higher in the past fiscal year than in the prior year (EUR 10.3 million). The

advanced training offerings focus on developing specialist knowledge for new business fields, for example system construction or service, and on promoting skills for efficient collaboration throughout the Group.

The offering is complemented by extensive programs to promote healthy living. These go far beyond what is required by law and are seamlessly integrated into the daily work routine.

In the area of learning and development, the newly launched **INTERNATIONAL LEADERSHIP CURRICULUM (iLC)** was established to provide further training for all levels of national and international management. Work was also carried out on establishing a SICK-specific concept on change management, and the "Managing Change" optional module was integrated into the iLC. Furthermore, the focus of HR and organizational development from the fiscal year 2016 was on providing adequate support for the constant change process within the organization, which is authoritatively shaped by market trends such as internationalization, digitalization, and the demand for more and more agility, in order to establish and expand the skills needed for the future.

## RISK AND OPPORTUNITY REPORT

### RISK AND OPPORTUNITY POLICY

Weighing up and entering into opportunities and risks is part of the Group's business success. The risk management function helps the Executive Board and management to effectively monitor and control risks and to fully exploit business opportunities and therefore potential offered by the business.

Risk management is firmly incorporated into many of SICK's corporate processes and is embedded in an opportunity and risk cycle that comprises the central and decentralized planning, management, and control processes and follows uniform group standards. The aim is to enhance the value of the company in the long term.

## RISK AND OPPORTUNITY MANAGEMENT SYSTEM

The risk and opportunity management system of SICK is based on the understanding that risks are a part of daily business. Sophisticated processes and procedures help us to identify, evaluate, and minimize the risks we enter into. We identify the serious risks in particular using a special process, and have integrated various different risk processes in order to identify a number of operating risks. This allows us to influence our strategic, operating, financial, and compliance-related targets to a significant degree.

The Executive Board is ultimately responsible for the efficient management and control of risks and opportunities. Strategic opportunities and risks are also monitored in close partnership with the Supervisory Board.

SICK distinguishes between six categories of risk that can affect the Group or one or more group entities: customer/ market risks, force majeure, management risks, personnel risks, financial risks and process risks.

The first two risk categories mainly materialize as exogenous factors, such as competition-related or economic developments. In this case they are treated as strategic risk factors. The other risk categories comprise risks that mainly impact operations. The opportunities relate to SICK's main strategic and operating categories, such as stronger global economic growth, digitalization and Industry 4.0, internationalization, substantial investment in research and development, a very solid balance sheet structure and strong earnings potential.

The risk and opportunity management system of SICK controls all risks and opportunities as well as the associated business decisions from the business processes of all group entities and companies as well as SICK AG itself. Risks are assigned to one of four risk levels:

Risk level	Type of risk	Details
A	Substantial risk	Risks that pose a direct threat to the ability of the company or its entities/ companies to continue as a going concern
B	Severe risk	Risks that do not pose an existential threat but have the potential to cause significant damage
C	Potential risk	Risks that require special measures to eliminate them and have the potential to incur substantial costs
D	Latent risk	Low risk potential that must nevertheless be monitored as part of business processes

A traffic light system is used to differentiate between the perceived situations for each risk within the various risk levels. Risks assigned a red traffic light require immediate action. Targeted measures are implemented to address risks assigned amber traffic lights, while those judged to be green are constantly monitored as part of the routine operation of the risk management system for all risks in the risk catalog set up by SICK.

Each identified risk is documented in the risk catalog, monitored and hedged using appropriate measures that are stored in a central risk database. One means of hedging risks is the central insurance management. From an organizational perspective, the planning and risk management systems are managed in Corporate Controlling.

### Compliance management and control

The aim of the compliance management system at SICK and the main task of its compliance organization is to be aware of and comply with all statutory regulations and internal guidelines that apply to SICK AG and its group entities. The Executive Board introduced the compliance management system back in 2010 and expressly emphasized its fundamental expectation that all employees in the SICK Group around the world would observe the regulations relevant for SICK.

The Code of Conduct provides the underlying structure for all compliance activities at SICK. In addition to the requirement for conduct that is in line with the law, it addresses all of the core issues of compliance, for example by unequivocally denouncing any type of corruption or arrangements that infringe anti-trust law. In addition, the Code of Conduct addresses matters such as environmental protection, occupational health and safety, equal opportunities for employees, and the confidential handling of trade secrets, and also requires staff to observe the relevant external and internal rules.



The Executive Board's compliance principles describe the compliance management system at SICK. The Compliance Officer and the employees with compliance duties at the subsidiaries and organizational units are responsible for implementing, monitoring, and continuously refining compliance management in the Group. If no Compliance Officer has been appointed, it remains the responsibility of that business area's management. The Compliance Committee defines the compliance requirements in the Group and supports the operating entities in introducing and maintaining appropriate measures. It monitors the effectiveness of compliance management and initiates additional compliance activities as required. The committee is supported by regular internal audits that examine both potential breaches of compliance and weaknesses in the compliance processes. All of the Group's compliance-relevant areas are represented on the Compliance Committee, in particular officers responsible for data protection, occupational health and safety, and the environment, but also the works council and the risk management officers.

Risk management and compliance officers examine risks – including compliance risks – across the Group on an annual basis using the same systems. This harmonized approach is particularly suitable when seeking out new compliance risks, as it is often not possible to clearly demarcate economic process and compliance risks.

## Risks

The risks described below relate to SICK's business activities as a whole. These risks can have negative consequences for SICK's business, net assets, financial position and results of operations as well as its reputation. Risks are divided into six categories:

- Customer / market risks
- Force majeure
- Management risks
- Personnel risks
- Financial risks
- Process risks

### Customer/ market risks

#### Competitiveness

Competition risks may stem from intensified competition, as a result of which SICK is unable to achieve its targets for market share, margins or growth.

SICK counters these risks by constantly analyzing the market, competition and statutory framework in the relevant lines of business and regions. The information obtained in this way allows SICK to develop and offer products and system solutions to meet demand, build on its competitive position, and raise its profile even more. In order to reinforce its competitive position, in 2017 SICK once again pursued its research and development activities in the field of conventional automation, while also developing new fields in connection with digitalization and Industry 4.0.

#### Economic risks

Weak economic growth could have a negative impact on customer demand as a whole and therefore also on demand for SICK's products and system solutions. This could lead to declining unit sales, pressure on margins, and delayed or defaulted payments.

That is why SICK regularly analyzes economic reports and forecasts in order to be able to respond promptly to changes. SICK counters the risk of weak economic performance in significant target industries and regions by diversifying its customer base. The company's offering is also diversified thanks to its good position in the three fields of factory, logistics and process automation.

#### Force majeure

SICK mainly considers force majeure to be exogenous risks to its business in particular. This includes the political landscape in relevant target markets as well as the risks associated with events such as natural disasters, fire, or flooding. This also covers disruptions to media such as the interruption of the supply of power or water to its various locations. In addition to production capacity, this also affects the security of the company's data and IT systems. In addition to comprehensive prevention measures, the main protective measure to preserve the company's value in this respect is sufficient insurance coverage for these loss events. It is, however, also important to ensure that the smooth operation of the company's processes is restored as quickly as possible in the case of a loss event.

### Management risks

Management risks are risks associated with management tasks within the company. These include topics such as strategy development and drawing up location concepts, but also risks associated with cultural transformation and the development of capabilities within the company. The Management Control Circle is used to integrate the decentralized areas of responsibility into institutionalized control and communication cycles with respect to decision-making processes within the company. This involves regularly reporting on and reaching decisions regarding opportunities and risks.

### Personnel risks

Personnel risks could arise as a result of a lack of qualified specialists, without whom an innovative technology company like SICK would be unable to succeed commercially. In response to the intensifying competition for qualified staff, which is compounded by demographic change, SICK must actively present itself as an attractive and secure employer on the global labor market in line with its mission statement, and offer good prospects to its employees.

One of the ways that SICK counters these risks is to focus investment on attracting and promoting junior talent. In addition to building up an international training program (both in the conventional field and with respect to the SensorING trainee program), in 2017 new infrastructures were created in order to be able to adjust the number of training spaces offered to the ongoing growth of the company. A public research center based in Waldkirch and aimed at school-goers was also established in collaboration with other partners in order to generate interest in SICK among schoolchildren at an early age. Social media channels are also actively utilized in order to address young specialists and experts in a targeted manner. For SICK, regular participation in the “Great Place to Work” employer competition is also an important success factor for being perceived as an interesting employer in the labor market.

In order to safeguard employees’ know-how and promote the advancement of capabilities, in the past fiscal year the SICK Sensor Intelligence Academy (SIA) has invested in modern learning methods, a training program that is tailored even more closely to internal requirements, the adaptation of that program for teaching, and a learning management system.

Strong employee loyalty to the company prevents the loss of know-how. Fair and transparent systems of compensation with profit sharing, the targeted development of skills, and a suitable, family-oriented personnel policy as well as qualified health and social management should reduce this risk.

The international alignment of the Group with manufacturing and development locations in the most important growth regions of the world is reducing dependence on regional labor markets.

### Financial risks

#### Liquidity risks

Ensuring that the company is solvent at all times is critical to its ability to continue as a going concern.

The SICK Group’s operational liquidity management comprises a cash concentration process whereby cash and cash equivalents are pooled on a daily basis. This allows liquidity surpluses and shortages to be controlled in line with the requirements of the Group as a whole as well as with those of individual group entities. The maturities of financial assets and financial liabilities as well as estimates of cash flows from operating activities are included in short and medium-term liquidity management.

#### Finance and interest rate risks

The debt finance of the SICK Group is primarily denominated in euros and takes the form of long-term loans and loans against a promissory note. The Group’s creditors are banks and insurance companies with which a long-term trusted business relationship exists. There are sufficient lines of credit in place to meet future investment requirements. The counterparty credit risk in financing is countered by limiting business relationships to dealings with banks with investment-grade credit ratings.

The SICK Group responds to interest rate risks by entering into fixed-interest agreements over the term of its loans. When structuring loan maturities, SICK tries to ensure that these fall due for extension in different fiscal years. Only working capital requirements are financed at floating interest rates in the short term.

#### Currency risks

The global business activities of the SICK Group entail a large number of cash flows in different currencies. The company is particularly sensitive to changes in the exchange rates between the euro on the one hand and the Chinese renminbi and US dollar on the other. Other significant foreign currencies include the pound sterling, the Polish zloty and the Korean won. Depending on the expected risk potential, exchange rates are hedged using traditional forward contracts or options over varying periods.

### Valuation allowances

Default risks from receivables are minimized by ongoing monitoring of the creditworthiness of the counterparty and by limiting the aggregated risks from the individual counterparty. One major component here is a set of rules that contains guidelines for granting and monitoring credit limits. The application of these specifications keeps the default rate for receivables pertaining to sales consistently low. In the fiscal year 2017, it stood at 0.18 percent.

### Process risks

#### Innovation processes

The risks associated with innovation processes may involve opportunities for future product developments being spotted too late, or development costs and times being estimated inaccurately or exceeded in connection with development processes.

SICK counters this risk by means of modern product portfolio management, which manages and controls the content and performance of products and tailors them to the needs of the market. In addition to constantly monitoring market developments, the SICK Group has a systematic product development process that takes account of all key market-related, technical, and economic aspects with the aim of achieving technological leadership. Areas in which a need for action is identified are transferred to projects that are managed using overarching and coordinated methods.

#### Procurement

SICK products feature leading technology and therefore also use state-of-the-art bought-in parts (semiconductor elements to process signals and generate light in particular). Bought-in parts that are developed and produced specifically for SICK create dependencies on suppliers and therefore risks in the event of any kind of disruption to their production or even stoppages. That is why a special inventory management program is used for bought-in parts. This program monitors operating, safety and strategic stocks. Safety and strategic stocks are maintained depending on the degree of risk. All bottlenecks in the supplier market were overcome in 2017.

Risks on the procurement side also stem from price fluctuations as a result of increased costs for materials or bottlenecks in the delivery of certain groups of products. SICK counters these risks with a forward-looking planning system that includes price safeguarding strategies. In general, the SICK Group is not overly affected by price fluctuations on the commodities markets, as substantial value added flows into the products through refining processes that take place at the suppliers.

The consistent implementation of procurement strategies that are geared to specific groups of goods paid off once again in the fiscal year 2017. The expansion of strategic partnerships with existing and new suppliers contributed significantly to stable procurement. The carefully coordinated internal selection of suppliers, timely and comprehensive agreements with suppliers as well as a clearly defined inventory strategy for all parts and components helped considerably to minimize procurement risks.

SICK also uses three measures to mitigate the procurement risk:

- An internal classification system that evaluates major suppliers from a technical, commercial, and strategic perspective
- Special processes for stockpiling strategically relevant components
- Tool life cycle management to improve long-term, stable quality and the supply of SICK-specific, tool-related production materials.

#### Production processes

The main risk within the production processes relates to interruptions to production, and can arise if production facilities or tools are damaged or stop entirely, or if capacity requirements are estimated inaccurately. Basic prevention in this regard involves regular maintenance, constant repair management, and adjusted restart plans in order to minimize the risk of production facility stoppages. Regular risk inspections and damage prevention measures also help mitigate the risk.

Forward-looking and well-functioning, flexible resource and capacity management facilitate needs-based production. Suitable measures are used to identify when machinery and fixtures need to be bought and commissioned, and how production employees need to be recruited and trained at all production locations in order to ensure that deliveries can be made to customers at all times.

The existing global property and business interruption insurance also covers the financial risks arising for the SICK Group from damage to property and the resulting business interruption. All consolidated SICK entities are included in this cover. The insured amount is based on property, plant and equipment as well as the Group's sales.

#### Distribution

Delays to distribution or violations of national and international export restrictions or air freight safety regulations can lead to trading restrictions, lost sales, or delayed deliveries, with higher costs. That is why SICK has introduced an export management system comprising an efficient export control organization and specific export control software.



### Quality

SICK offers its customers safety and process-related products, systems, and services. Errors on the customer side can lead to personal injury, financial loss, or harm to the environment that could form the basis for liability claims or impact the company's reputation.

The high quality and reliability of the products is thus ensured by a quality and environmental policy with a zero tolerance approach to errors at its core as well as an integrated quality management system. Measures in this regard start at the very outset of the product development stage using analytical methods. The requisite quality of suppliers is ensured by always entering into quality assurance agreements and monitoring the quality of supplier parts. The quality assurance measures continue throughout the individual stages of the production process, right through to a precisely defined approval procedure for the production and sale of products. This is supplemented by field observation after delivery of the products. Quality assurance and monitoring procedures are employed for this purpose. Critical errors are countered with a precisely defined action plan. Additional quality standards and processes apply to products designed for personal safety and accident prevention and devices that need to meet the special requirements for explosive environments. Here too, compliance is monitored by independent inspection institutes. A process has also been installed for managing complaints that is used to identify corrective action in order to reduce the risks of recalls. Audit management is carried out to assess the processes and the quality management. The effectiveness of the measures as a whole is assessed continuously by external ISO 9001 audits.

The existing business and product liability insurance covers the financial risks from liability for damage to property and personal injury that could be caused by one of our products. The amount of coverage is based on past experience as well as the volume of sales. All consolidated SICK entities are integrated in this cover.

### IT

IT risks have the potential to impact some of the most important strategic success factors for the SICK Group – the confidentiality, integrity, and availability of data. This is why we have established a comprehensive and modern IT infrastructure in the areas of administration, sales, and production. Continuous investment is made in modern IT systems, thus ensuring that competitive, future-proof, and fit-for-purpose IT solutions are used throughout the Group.

A longer-lasting outage of this complex IT infrastructure or the loss of data could result in considerable business disruption. As a result, the aim of our IT security policy is to identify and analyze IT risks at an early stage and to make them manageable by taking appropriate action. To this end, in 2017 SICK set up and introduced an IT security management system based on the internationally recognized ISO 27001 standard. SICK also received the Baden-Württemberg Security Award in recognition of SICK's existing information security conduct framework and the corresponding policies and processes. This gave rise to a comprehensive security concept that reflects the high value attached to security and data protection at SICK, safeguards the level of security at the SICK Group and actively identifies potential risks.

### Environmental risks

As a company that operates and manufactures on a global scale, SICK's business activities pose a risk to the environment. The main environmental aspects and their risk for the environment are determined annually pursuant to ISO 14001 and managed accordingly.

The use of solvent-based paints is extremely relevant for the environment. The switch to environmentally friendly water-based paints is being successively pursued. Apart from the CO<sub>2</sub> emissions SICK causes in travel or transport, all other intragroup processes are of little relevance for the environment. All CO<sub>2</sub> emissions that are directly caused and measurable (e.g., through business trips or heat generation) are compensated for in accordance with the CDM Gold Standard. SICK tries to select logistics partners that also compensate for their CO<sub>2</sub> emissions wherever possible. Hazardous substances are always stored and used in the collection devices prescribed by water conservation law so that any environmental contamination is prevented in the event of leakage.

The overarching objective of environmental management at SICK is to improve corporate environmental protection above and beyond compliance with official regulations. An internal control system and external audits ensure compliance with environmental and energy management requirements and processes. Matrix certification was carried out successfully once again by TÜV Nord in the reporting year, confirming that SICK AG and all of the German subsidiaries in the SICK Group apply a quality and environmental management system that satisfies the requirements of DIN EN ISO 14001. Furthermore, SICK AG is also certified in accordance with DIN EN 50001 (energy management system) and EMAS (Eco-Management and Audit Scheme) at its Waldkirch, Reute and Buchholz locations, as the relevance of these locations to the environment is higher than at the other locations. SICK Vertriebs-GmbH in Düsseldorf has also been certified. As part of the environmental management system, all operating requirements and processes related to the environment are analyzed in order to minimize or, if possible, eliminate negative effects on the environment. An interdisciplinary committee of experts examines new and amended statutory regulations and norms in terms of their relevance

for SICK and advises the areas concerned of any steps that need to be implemented. Moreover, conformity with norms is ensured by internal and external inspections (compliance audits), by open and direct dialog with the authorities responsible, and by involvement in external professional bodies. A detailed description of the environment-relevant processes including documentation of environmental KPIs is published once a year in the form of a validated environmental declaration.

### Opportunities

SICK is a market leader in the growing sector of sensor technology for industrial applications. SICK's Executive Board and management look for opportunities to exploit potential for growth. Possibilities to achieve stronger growth than planned stem from a number of different strategic and operating opportunities. These are evaluated on a regular basis, and corresponding measures are implemented in order to take advantage of them.

As a global market leader and technological pioneer, the SICK Group is in a better position than most to benefit from the opportunities for growth presented by an innovative sector.

The company sees seven different categories of significant opportunities:

- Opportunities of stronger global economic growth
- Opportunities of digitalization
- Opportunities of Industry 4.0
- Opportunities of internationalization
- Opportunities of substantial investment in research and development
- Opportunities of a very solid balance sheet structure and high earnings power
- Opportunities as an attractive employer

#### Opportunities of stronger global economic growth

The IMF is forecasting the further consolidation of global economic growth in 2018, with an overall increase of 3.9 percent (2017: 3.7 percent). Stronger economic recovery could be seen in South America and the Middle East again in particular. A strong increase in industrial output offers SICK additional prospects for growth. The proliferation of emissions regulations in many countries also presents further prospects of growth for SICK.

#### Opportunities of digitalization

The progress of digitalization is making it possible to process bigger and bigger volumes of data and therefore information. Successfully providing and analyzing and effectively utilizing this information grants clear competitive advantages. As one of the world's leading manufacturers of sensors and sensor solutions for industrial applications, SICK lays the foundation for successful, data-based business models and is able to take advantage of the opportunities presented by digitalization in its own interest and the interest of its customers.

#### Opportunities of Industry 4.0

Industry 4.0 refers to the integration of modern information and communications technology in industrial production. This includes the bundling of various different technological developments that SICK has already been focusing on for many years. The requirements of Industry 4.0 pose particular challenges to the industrial users of SICK's sensors and sensor solutions with respect to the complexity of production. This is because the innovation steps for modern machines are also becoming increasingly rapid and simultaneous. At the same time, machinery and fixtures are steadily becoming more and more automated.

As one of the driving forces behind Industry 4.0 in Germany, SICK regularly evaluates the opportunities presented by Industry 4.0. Suitable measures are constantly being defined and implemented in order to gain an advantage. SICK's product portfolio is very well placed to benefit from this growth market. The company is also constantly analyzing what other product developments could be of relevance.

#### Opportunities of internationalization

SICK is constantly expanding its customer, product, and system base as part of the ongoing internationalization of value added and internal value added in its sales and procurement regions. This global strategic direction presents SICK with numerous opportunities, both in the labor market and through greater proximity to its customers.

#### Opportunities of substantial investment in research and development

SICK is a highly innovative company. It had 1,114 employees working in research and development at the end of 2017. Investment in research and development amounted to EUR 169.4 million in 2017. This represents 11.2 percent of the Group's sales. The opportunities stem from new, successful products and system solutions with the potential to accelerate the company's growth more than average if they are accepted by customers.

### **Opportunities of a very solid balance sheet structure and high earnings power**

The SICK Group has a very solid balance sheet structure, with an equity ratio of 54.8 percent and EUR 20.5 million of cash and cash equivalents. Operating profit (EBIT) of EUR 148.8 million and operating cash flow of EUR 101.8 million bear witness to the company's strong earnings power. SICK's solid balance sheet structure and high earnings power allow it to exploit additional opportunities for growth using its own financial muscle.

### **Opportunities as an attractive employer**

SICK has been named several times as one of Germany's best employers. An attractive system of compensation and exemplary social benefits as well as comprehensive further training opportunities ensure that employees remain loyal to the company for a long time. As a highly innovative company, motivated employees represent a long-term growth opportunity for SICK.

### **General statement concerning risks and opportunities**

Although the assessments of some risks changed over the course of the fiscal year due to external developments, measures implemented by the company, or changes to planning, the overall situation with respect to risks and opportunities and the general conditions in the industry as a whole remain largely unchanged in comparison to the prior year. The overall level of risk faced by SICK remains within a range that is typical for the business.

However, the growing importance of Industry 4.0 and the fact that intelligent sensors are essential as a data basis for smart factories open up major opportunities for technological and economic growth for SICK. The topics of connecting sensor systems to upstream cloud solutions, applications in the data landscape, and data sovereignty are particularly relevant.

The Executive Board firmly believe that the risks and opportunities described for the SICK Group are manageable and do not jeopardize the company's ability to continue as a going concern, either individually or in their totality.

## **REPORT ON EXPECTED DEVELOPMENTS**

The comments regarding the company's anticipated performance in 2018 are based on the information, expectations, and assumptions that were known and available at the time the forecast was issued. As statements concerning the future, these are subject to a high degree of uncertainty.

## **POSITIVE ECONOMIC PROSPECTS FOR 2018 OFFER FURTHER OPPORTUNITIES FOR GROWTH**

The ongoing digitalization and connectivity of industrial manufacturing processes will continue to offer highly innovative and international companies in the sensor technology sector good prospects for growth in 2018. The sector-specific factors fueling growth and the increasing use of sensor technology and corresponding system solutions in the production, storage, and distribution of goods are still the rise of automation, increasing requirements for the management of industrial processes and the distribution of products in the manufacturing industry, increasing quality and documentation requirements, and stricter environmental regulations.

In its current economic forecast (World Economic Outlook, January 2018), the International Monetary Fund (IMF) expects global GDP to grow by 3.9 percent in 2018 (2017: 3.7 percent). This means that global economic growth has picked up considerably since the second half of 2016. This will continue to offer opportunities for growth to the German manufacturing industry in 2018, and particularly to the international companies in the sensor technology sector as providers of key technologies for industrial production.

Based on the continued positive trend for general economic and sector-specific conditions as described in detail in the report on the economic position in the management report, the Executive Board of the SICK Group expects its important financial and non-financial indicators to change as follows.

## **SENSOR INTELLIGENCE REMAINS A PREREQUISITE FOR INDUSTRY 4.0**

Global pressure to intelligently rationalize and improve the efficiency of production, logistics, and other processes remains high. The "smart factory" that is the aim in connection with Industry 4.0 offers particular development opportunities for SICK. Intelligent connectivity in production, logistics, and administrative processes can only be implemented if robust and intelligent sensors capture reality in the form of data and provide these data in the volumes required for Industry 4.0. Industry experts therefore expect total sales to increase dramatically to EUR 205 billion by the year 2020 (source: Intechno Consulting, Basel, Switzerland). This is double the figure for 2010. SICK will continue to gear its product portfolio to recognizing interrelationships at the customer and thus increasing the transparency in the customer's application so that the customer can make better decisions. SICK sensors have to solve the



customer's problems in a simple manner that contributes to improving performance or conserving resources. This applies to all target industries. Comprehensive application knowledge about the respective application is necessary for this. Another pivotal area involves connectivity, in order to guarantee seamless communication from the sensor level via the control level through to the overarching data level (e. g., in the form of a cloud). In turn, an essential prerequisite for this is data sovereignty, to which SICK as a founding member of Industrial Data Space e. V. has made a very firm commitment. Thanks to its broad product and service portfolio, its system and solution competence, its extensive industry expertise and global presence, the SICK Group is in an excellent position to respond to customer demands for intelligent automation solutions that provide this added value, particularly in the context of Industry 4.0.

## SALES FORECASTS FOR THE SALES REGIONS

As the Executive Board of SICK, we expect the growth of the SICK Group's sales to be similar to the prior year based on our current knowledge and the general economic and sector-specific conditions outlined above. We expect sales to grow by a mid to high single-digit percentage in the fiscal year 2018.

### Germany

SICK enjoys a particularly strong market position in the sales region of Germany. Although this means that strong growth rates are correspondingly harder to achieve, we anticipate high single-digit to low double-digit percentage growth thanks to a positive economic outlook and the satisfactory development of orders received. We expect the logistics automation business field to be a particular source of growth.

### Europe, Middle East, and Africa (EMEA)

We once again expect mid-range single-digit percentage growth for the Europe, Middle East, and Africa (EMEA) sales region. Growth in this sales region is therefore likely to be slightly weaker than in the SICK Group's other sales regions. The impact of the UK's pending withdrawal from the EU remains unclear and is inhibiting economic growth in Europe despite a stronger trend in France.

### North, Central, and South America (Americas)

We expect growth in the North, Central, and South America sales region (Americas) to remain solid. The US tax reform is providing an additional boost to the American economy in 2018. The economic trend in South America is also improving. On the whole, sales in the Americas region are therefore expected to increase by a mid-range single-digit percentage in 2018, since some large-scale projects were already implemented prematurely in the fiscal year 2017.

### Asia-Pacific

The growth rates of the Asian economies remain high in 2018. Within the SICK Group as well, the Asia-Pacific sales region is expected to see further dynamic growth in 2018. We anticipate double-digit percentage sales growth. This is likely to slow on account of the unusually strong growth seen in 2017, however, and therefore be in the low double digits.

## EBIT FORECAST

Digitalization and Industry 4.0 require additional investment in R&D activities. Against this backdrop, the company plans to spend a low double-digit percentage of its sales on R&D. It also plans to spend up to 2 percent of its sales on direct investment with an effect on income in internal Start-up initiatives. The focus is on the following central issues:

- The connectivity of our sensor technology in the context of Industry 4.0
- Expanded services based on SICK products and systems
- Safeguarding data sovereignty

The company is aiming to achieve a high single-digit percentage EBIT margin overall in the fiscal year 2018. The target for the EBIT margin ensures a balance between securing income in the short term and technology in the long term.

SICK is a clearly profitable company, with operating profitability in the high single digits as a percentage of sales.

## DEVELOPMENT OF OTHER FINANCIAL PERFORMANCE INDICATORS

Capital management will continue to be pursued in the fiscal year 2018 based on the assumption that liquidity and the equity ratio remain at a high level. At the same time, we are focusing on achieving a low-risk but flexible financing structure. Dividend payments will continue to be made in a way that takes into account the need for investment and the target range for the planned capital structure. The Group's further growth will also be safeguarded by maintaining sufficient liquidity as well as short-term and long-term credit lines that offer flexibility in covering refinancing needs.

## DEVELOPMENT OF NON-FINANCIAL PERFORMANCE INDICATORS

The focus of SICK's non-financial performance is on responsibility for the environment as well as the people at the company and in its environment.

We assume responsibility for the environment as part of our corporate environmental management function at SICK. As in prior years, we will continue to pursue the aim of creating measurable ecological added value for the Group through sustainable activity. The focal areas include the reduction of carbon emissions, environmentally friendly production (especially in terms of resource and energy efficiency as well as the management of harmful substances), and the development of products that make a contribution to environmental protection.

We take responsibility for people through a personnel policy that is still geared to being a fair employer worldwide with high performance standards that employees enjoy working for and where they remain for a long period. This is because qualified and high-performing employees are essential for stable growth. As a result, personnel activities in the fiscal year 2018 will focus on the area of basic training as well as employer branding in order to forge links between SICK and potential skilled staff at an early stage and kindle their enthusiasm for the company. We assume that the headcount of the SICK Group will rise by a large single-digit percentage figure in the coming fiscal year. A variety of health promotion safety measures, including in particular the company-wide application of the system of integrated risk assessment, will make a vital contribution towards maintaining employee performance at its current level. Flexible working times as well as the childcare facilities offered allow SICK employees to achieve a balance between work and family life. Through intensive competency management, the SICK Group will also ensure that employees are involved in continuous further development, both professional and personal, and that executives in particular are trained in contributing actively to the strategic changes

of the Group and can contribute to the Group's growth. As in past years, there will be a special focus on strengthening the competencies for cross-departmental cooperation in a global environment as well as on establishing the organizational methods needed to position the company in a way that it can tackle the challenges of digitalization. SICK is also involved in numerous regional and multi-regional activities around the world aimed at promoting social cohesion, both as a company and through its employees.

## GENERAL SUMMARY OF PROJECTED DEVELOPMENT

Group sales reached a new record level in the fiscal year 2017. Operating profit (EBIT) was up slightly year on year despite an increase in expenses. The operating return remained high at 9.8 percent and beat the original expectations. The SICK Group fulfilled the forecast for 2017 in full.

The outlook for the fiscal year 2018 is also positive on the whole. Global economic growth is consolidating. The economic trend is much more balanced than in previous years. Political tensions and protectionist tendencies remain the main risk factors for the global upturn in 2018, however. But with our innovative portfolio of products and services, the SICK Group stands a good chance of continuing to benefit from increasing demands, particularly in the context of digitalization and Industry 4.0.

### » KEY FIGURES OF THE FORECAST FOR THE FISCAL YEAR 2018

Global economic growth	3.9%
Group sales	High single-digit percentage growth
EBIT margin	Down year on year
Employees	High single-digit percentage growth
R&D investment and spending	Disproportionately strong increase

Our global presence, our balanced portfolio of solutions, and the fact that we are flexible enough to be able to react rapidly to changes provide an excellent basis from which to continue to grow further and secure the SICK Group's high level of profitability in 2018.

## DEPENDENT COMPANY REPORT

More than 50 percent of the shares in SICK AG are held by Sick Holding GmbH, which in turn belongs to the Sick family who founded the company. As a result, the Executive Board prepared a dependent company report in accordance with Sec. 312 AktG ("Aktiengesetz": German Stock Corporations Act), which was audited and on which an auditor's report was issued as part of the audit of the financial statements. The Executive Board declares the following pursuant to Sec. 312 (3) AktG: "In the legal transactions listed in the dependent company report, and according to the circumstances that were known to us when those legal transactions were performed, our company received an appropriate consideration in each legal transaction. We did not undertake, or refrain from taking, any actions motivated by or in the interest of the controlling company or its affiliates."

The following management report explains the development of SICK AG in the fiscal year 2017:

# MANAGEMENT REPORT OF SICK AG

SICK AG has its headquarters in Waldkirch near Freiburg in the State of Baden-Württemberg in Germany. This is the head office of the SICK Group and is also its largest development and production location. The development of the Group's international sales and service companies is closely coordinated with the Waldkirch location in order to mitigate risks. However, to a large extent the companies have their own responsibilities in terms of day-to-day operations.

The financial statements of SICK AG are prepared in accordance with the requirements of the HGB, while the consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS).

The basic statements in the combined management report, in particular in relation to the market and strategy as well as the opportunities and risks relating to business activities, also apply with respect to SICK AG.

The reporting year developed very well for SICK AG. Sales amounted to EUR 1,057.7 million at the end of the reporting period, representing a year-on-year increase of 16.4 percent (2016: EUR 908.3 million).

SICK AG had an average headcount of 3,617 employees in the fiscal year 2017, an increase of 9.4 percent compared with the prior year (2016: 3,305 employees). In addition to this, 207 trainees were employed at the company (prior year: 204). Due to this increased headcount and as a result of the collective wage increase in Germany, personnel expenses rose by 11.2 percent from EUR 276.6 million to EUR 307.5 million.

Amortization and depreciation rose 10.6 percent from EUR 28.3 million to EUR 31.3 million.



Other operating expenses increased by 29.3 percent from EUR 165.1 million to EUR 213.5 million.

The financial result improved from EUR 51.9 million to EUR 62.5 million (up 20.4 percent).

On the whole, the items described yielded a slight decrease in earnings before taxes, which fell from EUR 84.1 million to EUR 80.3 million. This is a decrease of 4.5 percent.

The tax rate decreased from 21.5 percent to 18.9 percent. SICK AG's net income for the year decreased to EUR 64.6 million in total (2016: EUR 65.9 million).

The financial assets of SICK AG increased marginally by 1.7 percent in the fiscal year 2017 from EUR 90.8 million to EUR 92.3 million. The 14.8 percent rise in property, plant and equipment from EUR 184.6 million to EUR 212.0 million due to the high level of investment activity also resulted in an increase in total assets for the fiscal year 2017. This figure totaled EUR 801.6 million as of the end of the year (up 12.2 percent).

On the equity and liabilities side of the balance sheet, this is reflected in a year-on-year rise in liabilities of 14.8 percent to EUR 305.3 million. Provisions rose by 9.2 percent to EUR 107.1 million.

SICK AG's equity increased in the reporting year on account of the slightly higher net income for the year and the fact that revenue reserves rose 11.0 percent to EUR 389.2 million. Debt capital increased by 12.4 percent. The equity ratio decreased marginally from 49.1 percent to 48.5 percent.

In terms of business development, the statements made in the group management report also apply to a large extent to SICK AG.

## SETTING TARGETS FOR THE EQUAL REPRESENTATION OF MEN AND WOMEN IN MANAGEMENT POSITIONS

Effective as of September 30 of the fiscal year 2015, the Supervisory Board of SICK AG set a target of 17 percent of women on the Supervisory Board of SICK AG in accordance with Sec. 111 (5) AktG. As a 'flexible' female quota, this target was to be met or exceeded by June 30, 2017. This percentage was 8 percent on December 31, 2017. The same applies to the target for the percentage of women on the Executive Board of SICK AG, which was set at 0 percent. This percentage was 0 percent at the end of the reporting period.

Furthermore, effective as of September 30, 2015, the Executive Board of SICK AG set a target of 6 percent pursuant to Sec. 76 (4) AktG for the percentage of women in management positions at the level directly below the Executive Board of SICK AG, i.e., the managers who report directly to members of the Executive Board. This target was to be met or exceeded by June 30, 2017. This share came to 14.0 percent as of the reporting date. For management positions at the second level below the Executive Board of SICK AG, i.e., the managers who report directly to the first-level managers described above, a target of 6 percent was likewise set effective as of September 30, 2015 that was to be met or exceeded by June 30, 2017. This figure stood at 14.2 percent on the reporting date.

Waldkirch, March 15, 2018

The Executive Board



Dr. Robert Bauer  
(Chairman)



Reinhard Bösl



Dr. Mats Gökstorp



Dr. Martin Krämer



Markus Vatter



# GROUP FINANCIAL STATEMENTS

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# GROUP FINANCIAL STATEMENTS

FOR SICK AG FOR THE FISCAL YEAR 2017

## » CONSOLIDATED INCOME STATEMENT

of SICK AG for the period from January 1 to December 31, 2017

in EUR k	Notes	2017	2016
<b>SALES</b>	(1)	<b>1,511,553</b>	1,361,173
Changes in inventory		15,102	10,847
Own work capitalized	(2)	23,803	18,923
Cost of materials	(3)	450,695	409,684
<b>GROSS PROFIT</b>		<b>1,099,763</b>	981,259
Personnel expenses	(4)	639,837	574,271
Depreciation and amortization	(5)	55,671	50,869
Other operating expenses	(6)	259,403	220,519
Other operating income	(7)	9,365	14,244
Currency results	(8)	-5,709	-2,108
<b>OPERATING RESULTS</b>		<b>148,508</b>	147,736
Net investment income/expense	(9)	327	175
of which net income/expense from investments accounted for using the equity method		(327)	(137)
<b>EARNINGS BEFORE INTEREST AND TAX (EBIT)</b>		<b>148,835</b>	147,911
Interest expense	(10)	3,292	3,141
Interest income	(11)	233	330
<b>EARNINGS BEFORE TAX</b>		<b>145,776</b>	145,100
Income tax	(12)	40,691	40,280
<b>CONSOLIDATED NET INCOME</b>		<b>105,085</b>	104,820
of which attributable to shareholders of SICK AG		104,324	103,989
of which attributable to non-controlling interests		761	831
<b>EARNINGS PER SHARE (BASIC AND DILUTED)</b>	(13)	<b>3.98 EUR</b>	3.97 EUR

## » CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

of SICK AG for the period from January 1 to December 31, 2017

in EUR k	2017	2016
<b>CONSOLIDATED NET INCOME</b>	<b>105,085</b>	104,820
<b>OTHER COMPREHENSIVE INCOME</b>		
<b>ITEMS THAT WILL NEVER BE RECLASSIFIED TO PROFIT OR LOSS</b>		
Remeasurement of pension obligations	-550	-2,376
Tax effect	311	638
Remeasurement of pension obligations	-239	-1,738
<b>ITEMS THAT WERE OR THAT CAN BE RECLASSIFIED TO PROFIT OR LOSS</b>		
Currency translation differences	-16,249	3,897
Tax effect	0	0
Currency translation differences	-16,249	3,897
<b>OTHER COMPREHENSIVE INCOME</b>	<b>-16,488</b>	2,159
<b>COMPREHENSIVE INCOME</b>	<b>88,597</b>	106,979
of which attributable to shareholders of SICK AG	88,042	106,179
of which attributable to non-controlling interests	555	800

» **CONSOLIDATED STATEMENT OF CASH FLOWS**  
of SICK AG for the period from January 1 to December 31, 2017

in EUR k	2017	2016
<b>CONSOLIDATED NET INCOME</b>	<b>105,085</b>	104,820
<b>ADJUSTMENTS FOR:</b>		
Income tax	40,691	40,280
Net interest income	3,059	2,811
Depreciation and amortization	55,671	50,869
Losses from the disposal of non-current assets	97	113
Income from financial investments	-327	-138
Other non-cash transactions	-2,422	3,042
Change in inventory	-61,725	-16,490
Change in trade receivables and other assets	-49,171	-25,556
Change in non-current provisions	2,939	4,044
Change in trade payables and other liabilities	48,008	4,179
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>141,905</b>	167,974
Interest paid	-2,221	-2,072
Interest received	233	330
Income tax paid	-38,104	-43,447
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>101,813</b>	122,785
Cash received from disposals of non-current assets	406	147
Cash paid for investments in property, plant and equipment	-78,459	-58,210
Cash paid for investments in intangible assets	-15,858	-12,588
Cash received from disposals (cash paid for investments) of financial assets	67	-110
Cash paid for the acquisition of a business unit	-1,529	0
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>	<b>-95,373</b>	-70,761
Acquisition of treasury shares	10	5
Cash paid to owners	-26,205	-36,685
Repayment of finance lease liabilities	-2,062	-2,070
Cash received from loans	18,447	9,910
Cash repayments of loans	-6,169	-10,948
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>	<b>-15,979</b>	-39,788
Effect of changes in foreign exchange rates and changes in consolidated entities on cash and cash equivalents	-1,102	456
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>-10,641</b>	12,692
<b>CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD</b>	<b>31,100</b>	18,408
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>	<b>20,459</b>	31,100

For additional explanations, reference is made to the disclosures in the notes to the consolidated financial statements in D. "Consolidated statement of cash flows."

» **CONSOLIDATED STATEMENT OF FINANCIAL POSITION**  
of SICK AG as of December 31, 2017

**ASSETS**

in EUR k	Notes	2017	2016
<b>A. Non-current assets</b>			
I. Intangible assets	(14)	67,871	68,406
II. Property, plant and equipment		309,373	272,073
III. Investments accounted for using the equity method	(15)	4,023	2,352
IV. Other financial assets	(16)	535	604
V. Deferred taxes	(12)	26,955	28,445
		<b>408,757</b>	<b>371,880</b>
<b>B. Current assets</b>			
I. Inventories	(17)	292,373	239,860
II. Trade receivables	(18)	288,299	258,832
III. Tax receivables	(19)	4,696	5,726
IV. Other assets	(20)	51,617	42,653
V. Cash and cash equivalents	(21)	20,459	31,100
		<b>657,444</b>	<b>578,171</b>
		<b>1,066,201</b>	<b>950,051</b>

**EQUITY AND LIABILITIES**

in EUR k

	Notes	2017	2016
<b>A. Equity</b>			
I. Issued capital	(22)	26,405	26,405
II. Capital reserves	(23)	22,437	22,285
III. Treasury shares	(24)	-3,447	-3,457
IV. Revenue reserves	(25)	535,320	473,408
Equity attributable to the shareholders		580,715	518,641
V. Non-controlling interests		3,733	3,357
		<b>584,448</b>	<b>521,998</b>
<b>B. Non-current liabilities</b>			
I. Financial liabilities	(27)	84,973	92,775
II. Provisions and other liabilities	(28)	86,598	83,991
III. Deferred taxes	(12)	2,236	1,811
		<b>173,807</b>	<b>178,577</b>
<b>C. Current liabilities</b>			
I. Financial liabilities	(27)	26,842	8,963
II. Other provisions	(28)	20,813	19,649
III. Tax liabilities	(29)	11,961	13,505
IV. Trade payables	(30)	127,132	104,774
V. Other liabilities	(31)	121,198	102,585
		<b>307,946</b>	<b>249,476</b>
		<b>1,066,201</b>	<b>950,051</b>



» **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**  
of SICK AG as of December 31, 2017

in EUR k	Issued capital	Capital reserves	Treasury shares
BALANCE AS OF JAN 1, 2016	26,405	22,229	-3,462
Consolidated net income			
Other comprehensive income			
<b>COMPREHENSIVE INCOME</b>			
Change in treasury shares		56	5
Dividend payment			
Other changes			
BALANCE AS OF DEC 31, 2016	26,405	22,285	-3,457
BALANCE AS OF JAN 1, 2017	26,405	22,285	-3,457
Consolidated net income			
Other comprehensive income			
<b>COMPREHENSIVE INCOME</b>			
Change in treasury shares		152	10
Dividend payment			
Other changes			
<b>BALANCE AS OF DEC 31, 2017</b>	<b>26,405</b>	<b>22,437</b>	<b>-3,447</b>

Other comprehensive income includes effects from the remeasurement of pension obligations and from currency translation.

	Revenue reserves	Equity attributable to the shareholders	Non-controlling interests	Equity
	403,675	448,847	2,968	<b>451,815</b>
	103,989	103,989	831	104,820
	2,190	2,190	-31	2,159
	106,179	106,179	800	<b>106,979</b>
		61		61
	-36,685	-36,685		-36,685
	239	239	-411	-172
	473,408	518,641	3,357	<b>521,998</b>
	473,408	518,641	3,357	<b>521,998</b>
	104,324	104,324	761	105,085
	-16,282	-16,282	-206	-16,488
	88,042	88,042	555	<b>88,597</b>
		162		162
	-26,205	-26,205		-26,205
	75	75	-179	-104
	<b>535,320</b>	<b>580,715</b>	<b>3,733</b>	<b>584,448</b>

# IFRS NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

OF SICK AG AS OF DECEMBER 31, 2017

## A. GENERAL DISCLOSURES

### GENERAL

The consolidated financial statements of SICK AG, Waldkirch, Germany, for the year 2017 were prepared according to the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), London, United Kingdom, as adopted by the EU, and according to the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB ("Handelsgesetzbuch": German Commercial Code). The consolidated financial statements consist of the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of changes in equity and the notes to the consolidated financial statements. SICK AG also prepared a group management report.

SICK AG, with registered offices in Waldkirch, Erwin-Sick-Str. 1, Germany, and filed with the commercial register of Freiburg local court under HRB 280355, is the parent company of the SICK Group.

### ECONOMIC BACKGROUND

SICK is one of the leading global manufacturers of intelligent sensors and sensor solutions for industrial applications. The Group has been in the sensor technology business for more than 70 years, has over 8,800 employees worldwide today, and comprises 47 consolidated subsidiaries in over 30 countries as well as numerous equity investments, and agencies.

The company has its main production sites in Germany, China, Malaysia, Hungary, and the United States. SICK is well positioned internationally and has a worldwide distribution network with its own subsidiaries, equity investments, and agencies in all major industrial countries.

### SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

All IFRSs subject to mandatory adoption as of December 31, 2017 have been applied. These include the International Accounting Standards (IAS) as well as the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC). The Group has decided not to early adopt standards or interpretations that are not yet effective. These standards and interpretations are listed in G. (41) "Accounting standards not early adopted."

The fiscal year of the SICK Group and all the entities included in consolidation is the calendar year.

The Group currency is the euro. As a rule, all amounts are stated in thousands of euro (EUR k). Deviations from this rule are indicated accordingly. Due to rounding-off, it is possible that some figures do not add up precisely to the sums stated.

The consolidated financial statements have been prepared on the basis of the historical cost convention, apart from derivatives, equity-settled share-based payment transactions, financial instruments classified as available for sale and current receivables, and liabilities in foreign currency. These are reported at fair value.

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

## EFFECTS OF NEW ACCOUNTING STANDARDS

The accounting principles applied were virtually unchanged on the prior year, except for the following new and amended standards and interpretations effective as of 2017.

Standards/interpretations	Title	Applicable from	Impact on SICK
Amendments to IAS 12	Income Taxes – Recognition of deferred tax assets for unrealised losses	January 1, 2017	Immaterial
Amendments to IAS 7	Statement of Cash Flows – disclosure initiative	January 1, 2017	Extended disclosures in the notes

## B. CONSOLIDATION PRINCIPLES

### CONSOLIDATION METHODS

The consolidated financial statements include the financial statements of SICK AG and its subsidiaries as of December 31, 2017. Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Group obtains control, and continue to be consolidated until the date that such control by the parent ceases.

For a list of group entities, reference is made to pages 126 and 127 of this Annual Report.

The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies.

All intra-group balances, transactions, unrealized gains and losses resulting from intragroup transactions and dividends are eliminated in full.

Comprehensive income within a subsidiary is attributed to the non-controlling interest even if it results in a deficit balance. A change in the ownership interest of a subsidiary that does not involve a loss of control is accounted for as an equity transaction.

Business combinations are accounted for using the purchase method. The cost of an acquisition is the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the Group elects whether it measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Costs incurred in the course of the acquisition are expensed.



If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for the non-controlling interest over the net identifiable assets acquired and liabilities of the Group assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss after reexamination.

Associates and joint ventures are consolidated using the equity method.

## BASIS OF CONSOLIDATION

Besides SICK AG, the consolidated financial statements include six (prior year: five) German and 41 (prior year: 40) foreign fully consolidated subsidiaries (purchase method) in which SICK AG has the direct or indirect majority of voting rights as of the end of the reporting period December 31, 2017.

### Changes in the basis of consolidation

As of January 1, 2017, the entity SICK ATech GmbH, with registered offices in Witten, Germany, is a wholly owned subsidiary of the SICK Group. SICK ATech GmbH develops, produces and markets magnetostrictive position sensors.

The purchase price allocation was completed in the reporting period. This resulted in the following overall effects on the Group's assets and liabilities:

in EUR k	Fair value as of the acquisition date
Intangible assets	602
Property, plant and equipment	371
Other current assets	33
Cash and cash equivalents	25
Non-current liabilities	-164
Current liabilities	-1,975
<b>NET ASSETS</b>	<b>-1,108</b>
Goodwill	1,136
<b>ACQUISITION COST</b>	<b>28</b>
thereof cash	28

The goodwill contains individual intangible assets that by nature are not identifiable in accordance with IAS 38 and for which a value cannot be reliably determined. It essentially represents part of the expected synergy and earnings potential. None of the goodwill is expected to be deductible for income tax purposes.

The acquisition has had no significant impact on sales and consolidated net income since the date of first-time consolidation.

It was necessary to change the legal structure of SICK, Inc., Minneapolis, Minnesota, to continue the successful business development in the American market. The newly founded subsidiary SICK Product & Competence Center Americas, LLC, with registered offices in Minneapolis, Minnesota, commenced operations at the beginning of 2017, and assumed the assets and liabilities of SICK, Inc.

In the reporting year, the SICK Group acquired shares in Mobilisis d.o.o., with registered offices in Varaždin, Croatia. The entity operates in the field of mobile automation and is accounted for using the equity method.

## CURRENCY TRANSLATION

Foreign currency business transactions are translated at the exchange rate prevailing on the date of the transaction. Gains and losses from the settlement of such business transactions, from the translation of monetary assets and liabilities are reported in the income statement.

The separate financial statements of foreign subsidiaries are translated using the functional currency method in accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates." Generally speaking, the entities work independently of one another for financial and economic purposes. The functional currency is the local currency of these entities.

Assets and liabilities, contingent liabilities, and other financial obligations are translated at the closing rate. The income and expenses in the income statement and thus the net profit or loss for the year reported in the income statement are translated at the annual average rate.

The currency difference arising from translation is offset against the revenue reserves in the item currency translation differences.

Goodwill and adjustments of assets and liabilities resulting from the purchase of a foreign entity are translated at the closing rate.

When translating the financial statements of foreign entities accounted for using the equity method, the equity is measured in accordance with the same principles used for consolidated subsidiaries.

Currency translation is based on the following key exchange rates:

Exchange rate 1 EUR =	ISO code	Closing rate Dec. 31, 2017	Average exchange rate 2017	Closing rate Dec. 31, 2016	Average exchange rate 2016
China	CNY	7.8073	7.6260	7.2801	7.3491
United Kingdom	GBP	0.8890	0.8763	0.8547	0.8190
Poland	PLN	4.1826	4.2566	4.4100	4.3628
South Korea	KRW	1,278.3700	1,275.6177	1,265.8400	1,284.3734
USA	USD	1,1947	1,1291	1,0465	1,1066

## C. ACCOUNTING POLICIES

### SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES, AND ASSUMPTIONS

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates, and assumptions that affect the reported amounts of income, expenses, assets and liabilities as well as the disclosure of contingent liabilities at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

The main judgments, estimates, and assumptions are explained in detail below:

Impairment tests for goodwill are carried out at least once a year at the level of the cash-generating unit. The recoverable amount of the cash-generating units is determined based on a value in use calculation. To calculate this, cash flow projections are based on medium-term planning approved by the management. The basic assumptions and carrying amounts are explained in more detail in section F. (14) "Intangible assets."

Development costs are capitalized in accordance with the accounting policy presented. Initial recognition of development costs is based on an assessment by management that the development is both technically and economically feasible. In determining the amounts to be capitalized, management makes assumptions regarding the expected future cash generation of the project, discount rates to be applied, and the expected period of benefits. For a presentation of the carrying amounts of the capitalized development costs, reference is made to pages 120 and 121 of this Annual Report.

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded.

Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. Further details on taxes are presented in section E. (12) "Income tax."

The cost of defined benefit plans and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that can differ from actual developments in the future. These include future anticipated increases in salaries and pensions, the determination of discount rates as well as of biometric data. Due to the complexity of the valuation, the underlying assumptions, and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. Further information about the assumptions used is given in section F. (28) "Provisions and other liabilities".

### REVENUE RECOGNITION

Revenue contains sales of products and services as well as freight and packaging revenue, less discounts and rebates. Revenue for sales of products is recognized upon transfer of risk and title to the customer when the compensation has been contractually agreed or is determinable and the associated receivables are likely to be settled. If the contract prescribes inspection by the customer, the revenue is not recognized until this inspection has been performed. Revenue from the provision of services is recognized when the services are rendered.

## RECOGNITION OF EXPENSES AND OTHER INCOME

Operating expenses are recognized upon utilization of the underlying services or on the date they are incurred. Interest expenses and income are recognized in the income statement in the period in which they are incurred or generated.

## GOODWILL

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is not subject to scheduled amortization, but tested for impairment at least annually in accordance with IAS 36.

For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the business combination. Further details are presented in section F. (14) "Intangible assets."

## INTANGIBLE ASSETS (EXCLUDING GOODWILL)

Intangible assets acquired separately are initially measured at cost. The cost of an intangible asset acquired within the scope of a business combination is its fair value on the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. Internally generated intangible assets are capitalized. As regards intangible assets, it is initially important to determine whether they have a finite or an indefinite useful life. Intangible assets with a finite useful life are amortized over their useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at the end of each fiscal year at the latest. Changes in the expected useful life or the expected pattern of consumption of the future economic benefits embodied in the asset are accounted for by changing the amortization period or method, as appropriate, and treated as changes in accounting estimates. Amortization of intangible assets with a finite useful life is reported in the income statement under the expense category "depreciation" and "amortization." Intangible assets with an indefinite useful life are tested for impairment at least once a year either individually or at the cash-generating unit level. Such intangibles are not subject to systematic amortization.



Industrial rights and similar rights and assets as well as licenses to such rights and assets disclosed under intangible assets are amortized on a straight-line basis over a useful life of three to eight years.

Development costs are capitalized at cost if the recognition criteria of IAS 38 are met. The capitalized development costs generally relate to product innovations; the other internally generated intangible assets include process-related developments, and software developments.

Production costs comprise the costs directly allocable to the development process. Borrowing costs are capitalized if the recognition criteria are met. Capitalized development costs and other internally generated intangible assets are amortized systematically over a useful life of four to six years.

## PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is measured at cost less systematic depreciation over the estimated useful life. These costs comprise the costs for replacement parts that are recognized at the time they are incurred, provided they meet the recognition criteria. The cost of self-constructed plant and equipment includes all costs that can be directly allocated to the production process as well as an appropriate portion of production-related overheads. This also includes production-related depreciation, a proportionate amount of production-related administrative expenses as well as pro rata welfare costs. Borrowing costs for long-term construction projects are capitalized if the recognition criteria are met. Depreciation of property, plant and equipment is mainly charged using the straight-line method of depreciation. The depreciation period and the depreciation method are reviewed at least at each fiscal year end and adjusted for any significant changes.

Specifically, the carrying amounts are based on the following useful lives:

Buildings	10 - 50 years
Technical equipment and machinery	3 - 15 years
Other equipment, furniture and fixtures	3 - 15 years

## IMPAIRMENT LOSSES

An impairment test is performed for all intangible assets (including goodwill) and items of property, plant and equipment if the situation or changes in circumstances indicate that the carrying amount of the assets exceeds the recoverable amount. In addition, goodwill is subjected to an annual impairment test.

If the recoverable amount of the asset falls short of the carrying amount, an impairment loss is recognized. The recoverable amount is the higher of the fair value of the assets less costs to sell and the value in use. The fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction less the costs necessary to make the sale. Value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. The recoverable amount is determined for each asset individually or, if that is not possible, for the cash-generating unit to which the asset belongs.

With the exception of goodwill, impairment losses recognized in prior years are reversed where there is an indication that the impairment recognized for the asset no longer exists or has decreased. The reversal is posted as a gain in the income statement. An increase or reduction of an impairment loss, however, may not exceed the carrying amount of the asset that would have resulted if no impairment losses had been recognized in prior periods.

## FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.

The Group's financial assets mainly include cash, trade receivables, unlisted financial instruments, loan receivables, other assets, and derivative financial instruments with a positive fair value.

The Group's financial liabilities chiefly include trade and other payables, bank overdrafts, loans and borrowings, finance lease liabilities, and derivative financial instruments with a negative fair value. SICK does not make use of the option to classify financial assets or financial liabilities at fair value through profit or loss upon initial recognition (fair value option).

Financial instruments are split into the following classes based on their nature:

- financial assets and liabilities measured at (amortized) cost
- financial assets and liabilities measured at fair value
- Finance lease liabilities

For further information, reference is made to section G. (36) "Financial instruments".

Financial instruments are recognized in the consolidated statement of financial position if a contractual obligation results from the financial instrument. Regular way purchases or sales of financial assets, i.e., purchases or sales under a contract whose terms require delivery of the asset within the time frame established, generally by regulation or convention in the marketplace concerned, are recorded on the date of trading. Financial instruments are initially measured at fair value. The Group takes the directly attributable transaction costs into account in the calculation of the carrying amount only if the financial instruments are not measured at fair value through profit or loss.

Subsequent measurement of financial assets and liabilities depends on their classification into the following categories:

- available-for-sale financial assets
- loans and receivables
- financial liabilities measured at amortized cost
- financial assets and financial liabilities held for trading

The Group does not make use of the category "financial instruments held to maturity."

## AVAILABLE-FOR-SALE FINANCIAL ASSETS

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or are not classified in any of the other categories. After initial measurement, available-for-sale financial assets are measured at fair value with unrealized gains or losses recognized in other comprehensive income until the investment is derecognized, at which time the cumulative gain or loss recorded in other comprehensive income is recognized in the income statement, or determined to be impaired, at which time the cumulative loss recorded in other comprehensive income is recognized in the income statement. Under available-for-sale assets, the Group mainly reports shares in unlisted entities, which were valued at amortized cost, since the fair value could not be determined reliably due to a lack of market values. A sale is not planned.

If the fair values of available-for-sale financial assets fall below cost and there is objective evidence, such as a downgraded credit rating or decline in earnings capability, that the asset is impaired, the Group reverses the accumulated loss recognized directly in equity and releases it to the consolidated income statement. The Group reinstates impairment losses of debt instruments in subsequent periods if the reasons for impairment cease to apply.

## LOANS AND RECEIVABLES

The Group measures financial assets classified as loans and receivables at amortized cost less impairments using the effective interest method. Impairments that serve to take into account the expected default risks are recognized in the form of allowances for individual risks or general credit risks. To determine allowances for general credit risks, financial assets that could potentially be impaired are grouped together by similar credit risk characteristics and collectively evaluated for impairment and impaired as necessary. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the income statement. Receivables and associated allowances are derecognized when there is no realistic prospect of future recovery and all collateral has been realized or has been transferred to the Group.

Interest-free loans and receivables or those with low interest compared to the market level due in more than one year are discounted.

## FINANCIAL LIABILITIES

With the exception of the derivative financial instruments, financial liabilities are measured at amortized cost using the effective interest method.

## DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGE ACCOUNTING

The Group uses derivative financial instruments such as forward exchange contracts to hedge against exchange rate risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

The Group did not conclude any derivative financial instruments during the fiscal years 2017 and 2016 that meet the criteria for hedge reporting pursuant to IAS 39.

## OFFSETTING OF FINANCIAL INSTRUMENTS

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

## INVENTORIES

Inventories are measured at the lower of cost and net realizable value. In addition to direct costs, cost includes an appropriate portion of necessary materials and production overheads as well as production-related depreciation that can be directly allocated to the production process. Administrative and welfare costs that can be allocated to the production process are also considered. Inventories that have a similar nature are measured using the weighted average cost formula. Borrowing costs are not capitalized. Appropriate allowance is made for inventory risks associated with slow-moving stocks, reduced salability, etc. When the circumstances that previously caused inventories to be written down below cost no longer exist, the write-down is reversed.

## DEFERRED TAXES

Deferred tax assets and liabilities are recognized for all temporary differences between the carrying amounts in the tax accounts and the IFRS statement of financial position in accordance with the balance sheet liability method. Deferred tax assets also include tax credits that result from the expected utilization of existing unused tax losses in subsequent years; the realization of which can be assumed with reasonable assurance. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply based on tax laws that have been enacted or substantively enacted in the individual countries at the time of realization.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized. Unrecognized deferred tax assets are reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be realized.

For transactions and other events recognized in other comprehensive income, any taxes on income are also reported in other comprehensive income, not through profit or loss.

Deferred tax assets and deferred tax liabilities are offset if the Group has a legally enforceable right to offset current tax assets and current tax liabilities and these relate to income taxes levied by the same taxation authority on the same taxable entity.



## TREASURY SHARES

Any treasury shares that the Group acquires are recognized at cost and deducted from equity. No gain or loss is recognized in the income statement on the purchase, sale, issue, or cancellation of the Group's own equity instruments.

## SHARE-BASED PAYMENTS

Members of the Executive Board of SICK AG receive a remuneration component in the form of equity instruments ("equity-settled transactions") that is measured at fair value. For more details, reference is made to the comments on the remuneration of the members of the Executive Board of SICK AG in section G. (38) "Related party disclosures."

## PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

The Group's post-employment benefits include both defined contribution plans and defined benefit plans.

The Group's net obligation in terms of defined benefit plans is calculated separately for each plan by estimating the future payments that the employees have earned in the current period and in earlier periods. This amount is discounted and the fair value of any plan assets is deducted from that figure.

The calculation of the defined benefit obligations is carried out annually by a recognized actuary using the projected unit credit method. If the calculation results in a potential asset for the Group, the asset recognized is limited to the present value of any economic benefit in the form of any future reimbursements from the plan or reductions in future contributions to the plan. Any applicable minimum funding requirements are taken into consideration in the calculation of the present value of any economic benefit.

Remeasurements of the net liability from defined benefit plans are recognized directly in other comprehensive income. Remeasurement involves the actuarial gains and losses, the return on plan assets (excluding interest), and the effect of any limit on a defined benefit asset (excluding interest). The Group calculates the net interest expenses (income) on the net liability (asset) from defined benefit plans for the reporting period by applying the discount rate that was used to measure the defined benefit obligations at the beginning of the annual reporting period. This discount rate is applied to the net liability (asset) from defined benefit plans as of that date. Any changes are taken into account that result in the net liability (asset) from defined benefit plans during the reporting period as a result of contributions and benefit payments. Net interest expenses and other expenses for defined benefit plans are recognized in the interest result.

If the plan benefits are amended or a plan is curtailed, the resulting amendment is recognized directly in profit or loss. The Group recognizes gains and losses from the settlement of a defined benefit plan on the settlement date.

Under defined contribution plans, the entity pays fixed contributions into a state or private fund in accordance with legal or contractual provisions or on a voluntary basis and will have no legal or constructive obligation to pay further contributions. The current contribution payments are disclosed in the personnel expenses of the respective year.

Further details about pension obligations are given in section F. (28) "Provisions and other liabilities."

## OTHER PROVISIONS

Pursuant to IAS 37 “Provisions, Contingent Liabilities and Contingent Assets,” provisions are recognized when an entity has a current obligation from a past event that will probably lead to an outflow of resources embodying economic benefits in the future and a reliable estimate can be made of the amount of the obligation. The amount recognized as a provision for recognizable risks and uncertain obligations is based on its probability of occurrence and is not offset against rights of recourse. The amount needed to settle the obligation also includes any expected cost increases at the end of the reporting period. Provisions for warranty claims are recognized taking account of the past or estimated future claims pattern. Non-current provisions due in more than one year are discounted where the effect of the time value of money is material.

## ACCOUNTING FOR LEASES – THE GROUP AS THE LESSEE

Leases are classified as finance leases if all the risks and rewards incidental to ownership of an asset have been transferred to the lessee. All other leases are operating leases.

At the inception of the lease, the Group recognizes finance leases and the corresponding liabilities to the lessor as assets in its statement of financial position at amounts equal to the fair value of the leased asset or, if lower, the present value of the future minimum lease payments, and finance lease liabilities. Depreciation is charged over the shorter of the lease term of the asset and its useful life. The outstanding liability is reduced over the lease term. At the beginning of the lease, the difference between the total lease obligation and the fair value of the leased asset is the finance charge that is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Lease and rent payments paid by the Group under an operating lease are recognized as an expense on a straight-line basis over the lease term.

## GOVERNMENT GRANTS

Government grants related to assets are generally deducted from the cost of the subsidized asset.

Government grants related to income are recorded as other operating income to reflect the effect of the corresponding expenses on profit or loss.

## BORROWING COSTS

Borrowing costs directly attributable to the acquisition, construction, or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. The Group capitalizes borrowing costs for all qualifying assets.

## FAIR VALUE MEASUREMENT

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This applies regardless of whether the price is directly observable or has been estimated using a valuation technique.

When calculating the fair value of an asset or a liability, the Group takes into account certain features of the asset or liability that market participants would also take into consideration when setting the pricing for the purchase of the respective asset or the transfer of the liability as of the end of the reporting period. In these consolidated financial statements, the fair value for measurement and/or disclosure requirements is calculated on this basis.

The fair value is not always available as a market price. Often it has to be calculated based on different measurement parameters. Fair value is rated as Level 1, 2 or 3 depending on the availability of observable parameters and the significance of those parameters for the calculation of the fair value as a whole. The breakdown as of the end of each reporting period is based on the following:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: other techniques for which all inputs that have a significant effect on the recorded fair value are observable, either directly or indirectly (derived from prices)
- Level 3: techniques that use inputs that have a significant effect on the recorded fair value that are not based on observable market data

## CONTINGENT LIABILITIES / ASSETS

Contingent liabilities pursuant to IAS 37 “Provisions, Contingent Liabilities and Contingent Assets” are defined as a possible obligation whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. This pertains to obligations that are not likely to lead to an outflow of resources embodying economic benefits or for which it is not possible to measure the amount of the obligation with sufficient reliability. Pursuant to IAS 37, contingent liabilities are not disclosed in the statement of financial position. They are, however, disclosed in the notes unless the possibility of an outflow of resources embodying economic benefits is remote.

Contingent assets are not shown in the statement of financial position. However, they are disclosed in the notes to the financial statements when an inflow of economic benefits is probable.

## EXEMPTION FROM THE DUTY OF STOCK CORPORATIONS TO PREPARE ANNUAL FINANCIAL STATEMENTS

For fiscal year 2017, the following subsidiaries made use of the exemption pursuant to Sec. 264 (3) HGB:

- SICK Engineering GmbH, Ottendorf-Okrilla
- SICK Management GmbH, Waldkirch
- SICK STEGMANN GmbH, Donaueschingen
- SICK Vertriebs-GmbH, Düsseldorf

## D. CONSOLIDATED STATEMENT OF CASH FLOWS

### GENERAL

The consolidated statement of cash flows presents the source and utilization of cash flows. In accordance with IAS 7 "Statement of Cash Flows," a distinction is made in the statement of cash flows between cash flows from operating activities and cash flows from investing and financing activities.

The cash and cash equivalents presented in the statement of cash flows contain all cash and cash equivalents shown in the statement of financial position, i.e., cash in hand, checks, and bank balances, provided they are available within three months. Cash and cash equivalents are not subject to any restrictions.

Cash flows from investing activities and financing activities are derived from the actual cash payments, while cash flows from operating activities are calculated indirectly from consolidated net income. When performing the indirect calculation, changes in items of the statement of financial position considered in connection with ordinary activities are adjusted for effects from currency translation and from acquisition and sales of subsidiaries and other business units. Interest paid and received and included as cash inflow from operating activities as well as dividends received and income taxes paid are disclosed separately. Investing activities comprise additions to property, plant and equipment and financial assets, as well as additions to purchased intangible assets. This item also shows any additions resulting from the recognition of development costs and other internally generated intangible assets.

## E. NOTES TO THE CONSOLIDATED INCOME STATEMENT

### (1) SALES

For a breakdown of sales by region, reference is made to the group management report.

### (2) OWN WORK CAPITALIZED

in EUR k	2017	2016
Capitalized development work	8,575	6,662
Own work for self-constructed intangible assets and property, plant and equipment	15,228	12,261
<b>TOTAL</b>	<b>23,803</b>	<b>18,923</b>

### (3) COST OF MATERIALS

in EUR k	2017	2016
Cost of materials and supplies and of purchased goods	427,254	388,316
Cost of purchased services	23,441	21,368
<b>TOTAL</b>	<b>450,695</b>	<b>409,684</b>



#### (4) PERSONNEL EXPENSES AND NUMBER OF EMPLOYEES

in EUR k	<b>2017</b>	2016
Wages and salaries	541,222	479,663
Social security, pension, and other benefit costs	98,615	94,608
<b>TOTAL</b>	<b>639,837</b>	<b>574,271</b>

The wages and salaries item includes termination benefits of EUR 1,487 k (prior year: EUR 1,877 k)

#### » EMPLOYEES

	<b>2017</b>			2016		
	Germany	Abroad	Total	Germany	Abroad	Total
Average headcount (excluding trainees):	4,717	3,445	8,162	4,336	3,177	7,513
of which in R&D	(905)	(154)	(1,059)	(830)	(134)	(964)
Trainees	276	48	324	261	32	293
<b>TOTAL</b>	<b>4,993</b>	<b>3,493</b>	<b>8,486</b>	<b>4,597</b>	<b>3,209</b>	<b>7,806</b>

#### (5) DEPRECIATION AND AMORTIZATION

This item pertains to intangible assets and property, plant and equipment.

#### (6) OTHER OPERATING EXPENSES

in EUR k	<b>2017</b>	2016
Administrative and selling expenses	112,884	101,980
Cost of purchased services and repairs	96,902	75,443
Rent and lease expenses	26,723	24,559
Other expenses	22,894	18,537
<b>TOTAL</b>	<b>259,403</b>	<b>220,519</b>

#### (7) OTHER OPERATING INCOME

In addition to cost reimbursements, other operating income includes income from subsidies and other sales. This item includes a profit in the prior year of EUR 2,500 k resulting from remeasurement of the interests in SICK Metering Systems NV at fair value as part of a business combination achieved in stages pursuant to IFRS 3.

## (8) CURRENCY RESULTS

in EUR k	2017	2016
Exchange gains	49,754	32,130
Exchange losses	55,463	34,238
<b>TOTAL</b>	<b>-5,709</b>	<b>-2,108</b>

## (9) NET INVESTMENT INCOME / EXPENSE

in EUR k	2017	2016
Expense from investments accounted for using the equity method	327	137
Income from other equity investments	0	38
<b>TOTAL</b>	<b>327</b>	<b>175</b>

## (10) INTEREST EXPENSE

This item includes interest and similar expenses. For details on the interest effects in relation to pension provisions, reference is made to section F. (28) "Provisions and other liabilities."

In the reporting period, borrowing costs of EUR 65 k (prior year: EUR 130 k) were capitalized in non-current assets. The interest rates used range from 1.7 to 1.8 percent (prior year: from 1.8 to 1.9 percent).

## (11) INTEREST INCOME

This item contains other interest and similar income of EUR 233 k (prior year: EUR 330 k).

## (12) INCOME TAX

in EUR k	2017	2016
<b>Current income taxes</b>		
current tax expense/income (-) for the reporting period	39,436	38,098
tax expense/income (-) relating to other periods	-660	1,241
<b>Deferred tax expense/income (-)</b>		
from temporary measurement differences	2,433	901
from unused tax losses	-518	40
<b>TOTAL</b>	<b>40,691</b>	<b>40,280</b>

The current tax expense is reduced by EUR 99 k (prior year: EUR 0 k) through the use of previously unrecognized tax losses.

Current income tax expense includes corporate income tax (including solidarity surcharge) and trade tax of German entities and comparable income taxes of foreign entities. Withholding taxes are also disclosed here.

As of the end of the reporting period, the German entities have a corporate income tax credit of EUR 0 k (prior year: EUR 324 k).

As in the prior year, no deferred taxes were recognized as of the end of the reporting period on retained earnings by subsidiaries held for the foreseeable future. Timing differences in connection with investments in subsidiaries on which no deferred tax liabilities have been recognized amount to around EUR 6,753 k (prior year: EUR 9,815 k).

Of the deferred taxes recognized in the statement of financial position, an amount of EUR 7,073 k (prior year: EUR 6,764 k) relates to transactions that directly increase equity as of the reporting date.

The income tax expense reported as of the end of the reporting period amounting to EUR 40,691 k (prior year: EUR 40,280 k) is EUR 1,584 k lower (prior year: EUR 1,799 k) than the estimated tax expense of EUR 42,275 k (prior year: EUR 42,079 k). The table below reconciles the estimated tax expense to the income taxes reported:

in EUR k	2017	2016
Earnings before tax	145,776	145,100
Theoretical tax rate (%)	29.0	29.0
<b>ESTIMATED TAX EXPENSE</b>	<b>42,275</b>	<b>42,079</b>
<b>Reasons for the change in theoretical tax expense:</b>		
Deviating foreign tax rates	-5,792	-3,919
Tax rate change	3,843	-46
Taxes from other periods	-660	1,241
Tax-free income	-1,088	-1,161
Non-deductible expenses	1,969	1,792
Tax incentives	-385	-874
Use of unused tax losses that have not yet been recognized	-99	0
Other	628	1,168
<b>INCOME TAXES REPORTED</b>	<b>40,691</b>	<b>40,280</b>
Effective tax rate (%)	27.9	27.8

As in the prior year, the calculation of the estimated tax expense for fiscal year 2017 is based on a theoretical tax rate of 29 percent. This rate is derived from the corporate income tax rate applicable in Germany of 15 percent plus the solidarity surcharge of 5.5 percent of that figure and an average trade tax burden in Germany of 13.2 percent.

Deferred tax assets and liabilities relate to the following:

in EUR k	Deferred tax assets		Deferred tax liabilities	
	2017	2016	2017	2016
Intangible assets	84	20	8,364	7,871
Property, plant and equipment/ financial assets	120	184	5,061	4,533
Inventories	16,931	15,953	1,617	1,278
Other current assets	1,183	1,520	4,554	3,057
Liabilities	25,209	25,163	810	546
Unused tax losses	1,598	1,079	0	0
<b>GROSS VALUE</b>	<b>45,125</b>	<b>43,919</b>	<b>20,406</b>	<b>17,285</b>
Offsetting	-18,170	-15,474	-18,170	-15,474
<b>CARRYING AMOUNT</b>	<b>26,955</b>	<b>28,445</b>	<b>2,236</b>	<b>1,811</b>

The recognition of deferred tax assets is based on management's estimate that sufficient taxable profits will be available in future and that these will lead to realization of the capitalized deferred taxes. This estimate is based on the findings of the past fiscal years as well as on the estimated taxable income.

Unused tax losses developed as follows:

in EUR k	2017	2016
Unused tax losses		
on which no deferred tax assets were recognized	4,587	4,108
of which available for offset for more than ten years	(4,587)	(3,280)
on which deferred tax assets were recognized	5,736	3,533
<b>TOTAL</b>	<b>10,323</b>	<b>7,641</b>

### (13) EARNINGS PER SHARE

in EUR k	2017	2016
Consolidated net income	105,085	104,820
of which attributable to non-controlling interests	-761	-831
<b>OF WHICH ATTRIBUTABLE TO SHAREHOLDERS OF SICK AG</b>	<b>104,324</b>	<b>103,989</b>
Number of shares (weighted average) in thousands	26,208	26,205
Earnings per share (basic and diluted) in EUR/ share	3.98	3.97

In accordance with IAS 33, basic earnings per share are calculated by dividing consolidated net income for the year attributable to the shareholders of SICK AG by the weighted average number of shares outstanding during the year. As SICK AG has only issued no-par value bearer shares, there are no dilutive effects.



## F. NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

For a presentation of the consolidated statement of changes in non-current assets, reference is made to pages 120 and 121 of this Annual Report.

### (14) INTANGIBLE ASSETS

The goodwill acquired from business combinations was allocated to the factory automation, logistics automation, and process automation cash-generating units for impairment testing. These correspond to the business fields. The carrying amounts of the goodwill allocated to the cash-generating units factory automation, logistics automation, and process automation amount to EUR 10,631 k (prior year: EUR 9,649 k), EUR 6,744 k (prior year: EUR 6,942 k), and EUR 7,551 k (prior year: EUR 7,770 k) respectively.

The recoverable amount of the factory automation, logistics automation, and process automation cash-generating units is determined based on a value in use calculation. To calculate this, cash flow projections are based on medium-term planning approved by the management for a three-year period. The financial planning is adjusted to reflect the current information available. Beyond the three-year period, an appropriate growth factor customary for the industry is assumed for the following two years. For the following years, a terminal growth rate of one percent was used.

This planning is based on appropriate assumptions on macroeconomic trends, expected growth rates on the relevant markets, and market shares as well as historical developments. The figures allocated to the key assumptions are based on external sources of information. A discount rate of 10.8 percent (prior year: 9.6 percent) before taxes has been used for the cash flow forecast.

The actual recoverable amounts exceed the carrying amounts of the factory automation, logistics automation, and process automation cash-generating units by EUR 776,103 k (prior year: EUR 1,138,941 k), EUR 360,591 k (prior year: EUR 480,992 k), and EUR 199,733 k (prior year: EUR 40,253 k) respectively.

An increase in the discount rate of one percent or a decrease in long-term growth of one percent was assumed in a sensitivity analysis for the cash-generating units. Based on this, SICK came to the conclusion that the goodwill of none of the cash-generating units would need to be impaired.

The carrying amounts of the capitalized development costs and of the other internally generated intangible assets amount to EUR 25,789 k (prior year: EUR 25,031 k).

The following amounts were recognized in profit or loss for R&D activities in relation to product innovations:

in EUR k	2017	2016
Research costs and non-capitalizable development costs	161,621	136,162
Amortization of development costs	7,770	7,278
<b>TOTAL</b>	<b>169,391</b>	<b>143,440</b>

Expenses for other self-constructed intangible assets are not included in the amounts listed.

## (15) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

The table below provides a summary of financial information for three joint ventures and an associate that are individually immaterial. These entities are presented in the list of group entities on pages 126 and 127 of this Annual Report.

in EUR k	2017	2016
Carrying amounts of the shares:	4,023	2,352
Share in:		
Income from continuing operations	417	208
<b>COMPREHENSIVE INCOME</b>	<b>417</b>	<b>208</b>

## (16) OTHER FINANCIAL ASSETS

in EUR k	2017	2016
Other equity investments	523	591
Sundry other financial assets	12	13
<b>TOTAL</b>	<b>535</b>	<b>604</b>

## (17) INVENTORIES

in EUR k	2017	2016
Materials and supplies	113,756	95,218
Work in process	94,038	62,521
Finished goods and goods for resale	84,327	81,913
Payments on account	252	208
<b>TOTAL</b>	<b>292,373</b>	<b>239,860</b>

Based on the gross value, the value of the inventories was impaired by EUR 39,979 k (prior year: EUR 40,222 k).

## (18) TRADE RECEIVABLES

in EUR k	2017	2016
Trade receivables due from		
third parties	287,671	258,108
entities accounted for using the equity method	628	724
<b>TOTAL</b>	<b>288,299</b>	<b>258,832</b>

Appropriate allowance is made for any risk of receivables being uncollectible or other risks. As in the prior year, the receivables are generally due in up to one year.

Write-downs on trade receivables break down as follows:

in EUR k	<b>2017</b>	2016
<b>AS OF JANUARY 1</b>	<b>10,172</b>	9,439
Exchange rate differences	(594)	85
Utilization / reversals	2,652	1,747
Additions	2,353	2,395
<b>AS OF DECEMBER 31</b>	<b>9,279</b>	10,172

## (19) TAX RECEIVABLES

This item records income tax receivables.

## (20) OTHER ASSETS

in EUR k	<b>2017</b>	2016
Other tax assets	14,430	9,916
Prepaid expenses	7,231	5,371
Derivative financial instruments (held for trading)	1,612	761
Sundry other	28,344	26,605
<b>TOTAL</b>	<b>51,617</b>	42,653

## (21) CASH AND CASH EQUIVALENTS

Bank deposits payable on demand are reported in this item as well as checks and cash. Changes in cash and cash equivalents are shown in the statement of cash flows.

## (22) ISSUED CAPITAL

As in the prior year, capital stock totals EUR 26,405,400 and is divided into a total of 26,405,400 no-par bearer shares. The imputed nominal value amounts to EUR 1.00 per share.

On the basis of the resolution of the Annual General Shareholders' Meeting of May 12, 2015, the Executive Board was authorized, subject to the approval of the Supervisory Board, to acquire – once or several times – up to 2,640,540 treasury shares for the purpose of redemption or resale in the period up to May 11, 2020.

## (23) CAPITAL RESERVES

The capital reserves relate exclusively to share premiums in connection with the capital increases implemented at SICK AG and treasury shares transferred. Owing to the provisions of the German Stock Corporation Act, dividends may not be distributed from the capital reserves.

## (24) TREASURY SHARES

On December 31, 2017, SICK AG had 196,911 (prior year: 200,160) treasury shares with a nominal value of EUR 197 k (prior year: EUR 200 k); this is equivalent to 0.7 percent of the capital stock (prior year: 0.8 percent).

Reconciliation of the number of outstanding shares:

in EUR k	<b>2017</b>	2016
<b>OPENING BALANCE</b>	<b>26,205,240</b>	26,206,175
Acquisition of treasury shares	-1,451	-3,035
Disposal of treasury shares	+4,700	+2,100
<b>CLOSING BALANCE</b>	<b>26,208,489</b>	26,205,240

## (25) REVENUE RESERVES

Revenue reserves include the profits of SICK AG and consolidated subsidiaries earned in prior years and not yet distributed as well as additions due to equity-settled share-based payment transactions. In addition, currency translation differences of EUR -4,752 k (prior year: EUR 11,292 k) are also reported here as well as losses from the remeasurement of pension obligations of EUR 25,557 k (prior year: losses of EUR 25,010 k) less deferred taxes of EUR 7,073 k (prior year: EUR 6,764 k).

## (26) PROPOSED DIVIDEND

Pursuant to Sec. 58 (2) AktG ("Aktiengesetz": German Stock Corporations Act), the proposed SICK AG dividend is based on the retained earnings reported in the statutory annual financial statements of SICK AG.

Pursuant to the resolution of the Annual General Shareholders' meeting of SICK AG of May 17, 2017, a dividend of EUR 1.00 per share was distributed from the retained earnings of SICK AG as of December 31, 2016 for fiscal year 2016, i. e., taking into account treasury shares totaling EUR 26,205 k that are not entitled to dividends.

The company plans to distribute a dividend of EUR 1.00 per share for the past fiscal year 2017 or a total of EUR 26,208 k including treasury shares that are not entitled to dividends.

The individual components of equity and their development in 2017 and 2016 are shown in the consolidated statement of changes in equity.



**(27) NON-CURRENT AND CURRENT FINANCIAL LIABILITIES**

in EUR k	2017 of which due in			2016 of which due in		
	Total	≤ one year	> one year	Total	≤ one year	> one year
Liabilities to banks	109,887	25,064	84,823	97,743	6,890	90,853
Finance lease liabilities	1,928	1,778	150	3,995	2,073	1,922
<b>TOTAL</b>	<b>111,815</b>	<b>26,842</b>	<b>84,973</b>	<b>101,738</b>	<b>8,963</b>	<b>92,775</b>

Financial liabilities due in more than five years come to a total of EUR 5,825 k (prior year: EUR 9,213 k).

Non-current liabilities owed to banks are predominantly fixed-interest loans. The interest rates range from 0.83 to 2.50 percent (prior year: from 0.83 to 4.25 percent).

Non-current liabilities from leases are subject to customary market interest rates.

For additional information about the interest rate risks, reference is made to section G. (35) "Financial risk management."

Financial liabilities do not include any secured liabilities.

in EUR k	Jan. 1, 2017	Cash	Non-cash	Dec. 31, 2017
Liabilities to banks	97,743	12,278	-134	109,887
Finance lease liabilities	3,995	-2,062	-5	1,928
<b>TOTAL</b>	<b>101,738</b>	<b>10,216</b>	<b>-139</b>	<b>111,815</b>

**(28) PROVISIONS AND OTHER LIABILITIES**

Non-current provisions and other liabilities break down as follows:

in EUR k	2017	2016
Provisions for pensions and similar obligations	71,166	69,518
Other non-current provisions	14,916	14,473
Other non-current liabilities	516	0
<b>TOTAL</b>	<b>86,598</b>	<b>83,991</b>

**Provisions for pensions and similar obligations**

Pension provisions are recorded as a result of benefit plans for old age, disability, and surviving dependents' pension obligations. The benefits vary according to local legal, tax and economic conditions and are usually based on the length of service, and salary.

The Group's post-employment benefits include both defined contribution plans and defined benefit plans.

In the case of defined contribution plans, the company makes voluntary contributions to state or private pension funds based on legal or contractual provisions. No further payment obligations arise for the company from the payment of contributions. The current contribution payments are disclosed as a personnel expense for the respective year. Not including contributions to the statutory pension insurance, these amounted to EUR 8,156 k in total in the fiscal year 2017 (prior year: EUR 7,739 k). The contributions to the statutory pension insurance in Germany came to EUR 26,195 k (prior year: EUR 23,723 k) in the fiscal year.

In addition, some of the company pension schemes are based on defined benefit plans that guarantee the beneficiaries lifelong monthly old-age pensions when they reach retirement age. These are co-funded by the company and by the employees.

If pension obligations are reinsured with insurance firms, these employer's liability insurance claims are netted with the provisions and disclosed as plan assets if the criteria of IAS 19 are satisfied.

The amounts recognized in the income statement are as follows:

in EUR k	2017	2016
Current service cost	4,694	4,218
Interest expense	879	959
<b>TOTAL</b>	<b>5,573</b>	<b>5,177</b>

The amounts cited are generally recorded in the personnel expense of the period; the interest components from the obligations are reported as interest expense.

The defined benefit obligations developed as follows:

in EUR k	2017	2016
<b>AS OF JANUARY 1</b>	<b>95,581</b>	<b>89,822</b>
<b>Expenses recognized in income</b>		
Current service cost	4,694	4,218
Interest expense	1,471	1,565
Benefits paid	-3,059	-2,442
<b>Amounts recognized in other comprehensive income</b>		
Change in financial assumptions	-29	2,084
Experience adjustments, gains/ losses	568	558
Employee contributions	405	421
Exchange rate differences/ other changes	-1,330	-645
<b>AS OF DECEMBER 31</b>	<b>98,301</b>	<b>95,581</b>

The average term of the defined benefit obligations in Germany is between 5.9 and 10.1 years (prior year: 12.7 and 13.8 years).

The plan assets chiefly concern pledged employer's liability insurance claims against insurance companies.

Changes in the fair value of plan assets are as follows:

in EUR k	2017	2016
<b>AS OF JANUARY 1</b>	<b>26,063</b>	<b>24,075</b>
Income recognized in income		
Interest income	384	404
Amounts recognized in other comprehensive income		
Return on plan assets	-36	130
Experience adjustments, losses	-18	-8
Employer contributions	2,428	2,566
Benefits paid	-908	-508
Exchange rate differences/ other changes	-778	-596
<b>AS OF DECEMBER 31</b>	<b>27,135</b>	<b>26,063</b>

The Group expects to contribute EUR 1,740 k to its defined benefit pension plans in 2018.

The amounts recognized in the statement of financial position for defined benefit obligations are as follows:

in EUR k	2017	2016
Defined benefit obligations	98,301	95,581
Fair value of plan assets	-27,135	-26,063
<b>PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS</b>	<b>71,166</b>	<b>69,518</b>

The reimbursement rights do not qualify as plan assets as they contain unpledged contributions to employer's liability insurance. These developed as follows:

in EUR k	2017	2016
<b>AS OF JANUARY 1</b>	<b>11,197</b>	<b>9,471</b>
Income recognized in income		
Interest income	208	202
Amounts recognized in other comprehensive income		
Experience adjustments, gains	46	117
Employer contributions	1,646	1,417
Benefits paid	-11	-10
<b>AS OF DECEMBER 31</b>	<b>13,086</b>	<b>11,197</b>

Amounts recognized in other comprehensive income from the remeasurement of the pension obligations are as follows:

in EUR k	2017	2016
Change in financial assumptions	-29	2,084
Experience adjustments, gains/ losses	540	449
Return on plan assets	36	-130
<b>TOTAL</b>	<b>547</b>	<b>2,403</b>

The quantitative sensitivity analysis leads to the following effect on the defined benefit obligations of the significant entities subject to these changes in important assumptions:

in EUR k	2017	2016
Discount rate (+1%)	-5,886	-5,280
Discount rate (-1%)	7,318	6,772
Future salary development (-0.5%)	-309	-282
Future salary development (+0.5%)	308	293
Future pension development (-0.25%)	-1,228	-1,089
Future pension development (+0.25%)	1,270	1,138
Life expectancy (+1 year)	3,216	1,788

The method used to calculate the sensitivity of the obligations to the authoritative actuarial assumptions was the same as that used to calculate the obligation. The effects of the changes in assumptions were determined separately in each case. As a result, possible interdependencies were not analyzed. If a number of assumptions are simultaneously changed, the total impact does not necessarily equate to the sum of the individual effects.

The following mortality tables were used for the main countries as of December 31, 2017:

- Germany: Heubeck 2005G mortality tables (modified)
- Switzerland: BVG 2015

Pension payments of EUR 2,708 k are expected to be made in the subsequent year as part of defined benefit obligations.

Assumed developments on the capital markets over the period in which the obligation is fulfilled are reflected both in the discount rate and in the estimated return on plan assets.

The calculation of pension provisions is based on the following assumptions:

in %	Germany 2017	Germany 2016	Switzerland 2017	Switzerland 2016
Discount rate as of December 31	1.75	1.75	0.70	0.70
Future salary development	3.00	3.00	1.75	1.75
Future pension development	2.00	2.00	0.00	0.00

## Other provisions

Other non-current and current provisions developed as follows:

in EUR k	Jan. 1, 2017	Exchange rate differences/chang- es in the basis of consolidation	Utilization	Reversal	Additions	Discount rate adjustment	Dec. 31, 2017
Personnel and welfare expense	13,660	-96	1,288	148	2,541	127	14,796
Warranties and onerous contracts	11,554	-387	7,825	1,686	10,677	0	12,333
Sundry other provisions	8,908	-657	2,798	596	3,723	20	8,600
<b>TOTAL</b>	<b>34,122</b>	<b>-1,140</b>	<b>11,911</b>	<b>2,430</b>	<b>16,941</b>	<b>147</b>	<b>35,729</b>

The provisions for personnel and welfare expense essentially comprise special German phased retirement obligations ("Altersteilzeit"), long-service bonus obligations, severance payments, and similar obligations.

The provisions for warranties and onerous contracts mainly contain obligations from statutory warranty and non-contractual warranty agreements.

Sundry other provisions account for various discernible individual risks and contingent liabilities based on their probable occurrence.

Other provisions are classified based on their expected utilization as follows:

in EUR k	2017 of which due in			2016 of which due in		
	Total	≤ one year	> one year	Total	≤ one year	> one year
Personnel and welfare expense	14,796	2,381	12,415	13,660	1,680	11,980
Warranties and onerous contracts	12,333	12,333	0	11,554	11,554	0
Sundry other provisions	8,600	6,099	2,501	8,908	6,415	2,493
<b>TOTAL</b>	<b>35,729</b>	<b>20,813</b>	<b>14,916</b>	<b>34,122</b>	<b>19,649</b>	<b>14,473</b>

## (29) TAX LIABILITIES

This item records income tax liabilities.



**(30) TRADE PAYABLES**

in EUR k	<b>2017</b>	2016
<b>Trade payables due to</b>		
third parties	126,852	104,210
entities accounted for using the equity method	123	456
other	157	108
<b>TOTAL</b>	<b>127,132</b>	<b>104,774</b>

As in the prior year, the liabilities are generally due in less than one year.

**(31) OTHER LIABILITIES**

in EUR k	<b>2017</b>	2016
Liabilities to employees	86,529	76,280
Other tax liabilities	24,291	14,327
Social security liabilities	3,847	3,949
Deferred income	1,742	2,289
Derivative financial instruments held for trading	891	1,445
Sundry other liabilities	3,898	4,295
<b>TOTAL</b>	<b>121,198</b>	<b>102,585</b>

As in the prior year, other liabilities are generally due in less than one year.

**G. OTHER NOTES****(32) CONTINGENT LIABILITIES**

As an internationally active company with various fields of business, the Group is exposed to many legal risks. This is especially true of risks relating to warranties, tax litigation, and other legal disputes. The outcome of currently pending and / or future litigation cannot be predicted with certainty. Decisions may therefore result in expenses that are not fully covered by insurance and that may have significant effects on the business and its results. Group management does not expect pending litigation to result in judgments that will significantly and negatively influence the financial position and performance of the Group.

### (33) CONTINGENT LIABILITIES AND OTHER FINANCIAL OBLIGATIONS

#### Contingent liabilities

There are no contingent liabilities subject to disclosure requirements.

#### Other financial obligations

in EUR k	2017	2016
Obligations from operating leases		
due within 12 months	23,215	22,122
due in 13 to 60 months	44,209	39,184
due in more than 60 months	21,691	4,652
<b>TOTAL</b>	<b>89,115</b>	<b>65,958</b>

The obligations from operating leases mainly relate to rent for office space, vehicles, and furniture and fixtures. There are prolongation options for individual agreements. There are no significant restrictions imposed on the Group by entering into these lease agreements.

In addition, the Group has purchase obligations (mainly for property, plant and equipment) and the like amounting to EUR 18,514 k (prior year: EUR 12,779 k) that are due in the next 12 months as well as several maintenance agreements and other obligations that will lead indefinitely to other financial obligations of EUR 23,663 k per year (prior year: EUR 21,718 k).

The remaining financial obligations are on a scale customary for the industry.

### (34) LEASES

#### Lessee

The net carrying amount of assets covered by finance leases breaks down as follows:

in EUR k	2017	2016
Industrial rights and licenses	2,598	4,896
Technical and other equipment, furniture and fixtures	133	285
<b>TOTAL</b>	<b>2,731</b>	<b>5,181</b>

The finance leases are generally designed to include a purchase option and the automatic transfer of ownership. There are no significant restrictions imposed by lease agreements.

Minimum lease installments over the remaining terms of the finance lease agreements and their present value are as follows:

in EUR k	2017	2016
due within 12 months	1,780	2,076
due in 13 to 60 months	152	1,966
due in more than 60 months	0	0
Minimum lease payments from finance leases	1,932	4,042
less expected future interest payments	-4	-47
<b>PRESENT VALUE OF MINIMUM LEASE PAYMENTS</b>	<b>1,928</b>	<b>3,995</b>
<b>Residual term of liabilities</b>		
due within 12 months	1,778	2,073
due in 13 to 60 months	150	1,922
due in more than 60 months	0	0
<b>TOTAL</b>	<b>1,928</b>	<b>3,995</b>

## (35) FINANCIAL RISK MANAGEMENT

Through its financial activities, the Group is subject to various risks that are assessed, managed, and monitored by a systematic and documented risk management system that aims to avoid concentrations of risk.

The Group is exposed to market price risks due to changes in exchange rates or interest rates. On the procurement side, the Group faces commodity price risks. Furthermore, the Group is subject to credit risks resulting primarily from trade receivables. There are also liquidity risks in connection with the credit and market price risks or a deterioration in operations or disruptions on the financial markets. These financial risks could impact negatively on the financial position and performance of the Group.

Details of the Group's management of market risks (exchange rates, interest rates, commodity prices), credit risks, and liquidity risks are presented below.

### (a) Exchange rate risks

The Group performs foreign currency transactions worldwide and is therefore subject to exchange rate fluctuations that have an effect on the assets and earnings of the Group denominated in euros. Foreign currency risks in financing stem from financial receivables and liabilities in foreign currency and loans in foreign currency granted to finance group entities. As far as operations are concerned, the individual group entities mainly carry out their activities in their functional currency. There is also an intensive exchange of goods and services between the group entities.

Furthermore, there are transaction-related exposures due to financial assets and liabilities listed in foreign currencies. Exchange rate risks are managed by forward exchange contracts and options. Derivative financial instruments are used to hedge future revenue against exchange rate risks. Portions of the exposure expected for the next fiscal year in the most important currencies for the Group are hedged.

Risks from the use of derivative financial instruments include, on the one hand, counterparty risks that can be avoided in the selection process. On the other, they lie in the change in the fair value of derivatives; this is, however, generally counterbalanced by the opposing development of the fair value of the underlying.

The hedged revenue amount is calculated on the basis of the estimate for the coming fiscal year. This is derived mostly from past figures based on revenue that are highly probable. The figures are monitored constantly.

IFRS 7 requires that sensitivity analyses be carried out to present market risks, showing how profit or loss and equity would have been affected by changes in the relevant risk variables. Apart from exchange rate risks, the Group is exposed to interest rate risks. The periodic expenses are determined by relating the hypothetical changes of the risk variables to the financial instruments as of the end of the reporting period. It is assumed that the financial instruments as of the end of the reporting period are representative for the entire year.

Exchange rate risks or currency risks as defined by IFRS 7 arise on financial instruments that are denominated in a currency other than the functional currency and that have a monetary nature; differences from the translation of financial statements to the group currency caused by exchange rates are not taken into account. The relevant risk variables are all currencies (other than the functional currency) in which the Group uses financial instruments.

The currency sensitivity analyses are based on the following assumptions:

- Significant non-derivative monetary financial instruments are either denominated in functional currency or transferred to the functional currency using derivatives
- Interest income and expenses from financial instruments are also either reported directly in functional currency or transferred to the functional currency using derivatives. As a result, there cannot be any material effects on the volumes under consideration

The following table demonstrates the sensitivity of the consolidated net income before income tax due to changes in fair value of monetary foreign currency items.

2017	Change in foreign exchange rates in %		Effect on earnings in EUR k	
			Income (+)	Expense (-)
CNY	+10	-10	6,626	-4,233
GBP	+10	-10	1,484	-1,484
KRW	+10	-10	407	-407
PLN	+10	-10	312	-312
USD	+10	-10	5,229	-4,322
<b>TOTAL</b>			<b>14,058</b>	<b>-10,758</b>

2016	Change in foreign exchange rates in %		Effect on earnings in EUR k	
			Income (+)	Expense (-)
AUD	+10	-10	321	-321
CNY	+10	-10	2,866	-1,952
GBP	+10	-10	509	-509
KRW	+10	-10	296	-296
USD	+10	-10	3,112	-2,648
<b>TOTAL</b>			<b>7,104</b>	<b>-5,726</b>

### (b) Interest rate risks

By interest rate risks, the Group means the negative effects on the financial position and performance resulting from changes in interest rates. The external financing consists primarily of fixed-interest rate loans. This is one of the methods used to manage these risks. In addition, derivative financial instruments are used in risk management. Due to the structure of assets and liabilities, interest rate risks are mostly linked to liabilities to banks. Fixed-interest agreements amounting to EUR 90,853 k (prior year: EUR 96,660 k) have been entered into for these. Floating-interest liabilities to banks amount to EUR 19,034 k (prior year: EUR 1,083 k).

Of the liabilities to banks, an amount of EUR 25,064 k (prior year: EUR 6,890 k) is due for repricing within a year, while EUR 84,823 k (prior year: EUR 90,853 k) of these liabilities are due for repricing at a later date.

Under IFRS 7, interest rate risks are presented using sensitivity analyses. These present the effects of changes in market interest rates on interest payments, interest income and expenses, other comprehensive income, and, if applicable, on equity. The interest rate sensitivity analyses are based on the following assumptions:

- Market interest rate fluctuations of non-derivative financial instruments with fixed interest only affect profit or loss if they are measured at fair value. Therefore, the financial instruments with fixed interest that are measured at amortized cost do not constitute interest rate risks as defined by IFRS 7
- Market interest rate fluctuations affect the interest result of non-derivative financial instruments with floating interest for which the interest payments are not designed as underlyings using cash flow hedges against interest rate risks, and are thus included when calculating the earnings-related sensitivities
- Market interest rate fluctuations of interest derivatives (interest rate swaps, interest/ currency swaps) that are not part of a hedge relationship pursuant to IAS 39 affect the other financial result (measurement result from adjusting the financial assets to the fair value) and are therefore taken into account when calculating the earnings-related sensitivities
- Currency derivatives are not subject to any interest rate risks and therefore do not affect interest rate sensitivities

in EUR k	2017		2016	
	+100 Basis points	-100 Basis points	+100 Basis points	-100 Basis points
Effects from financial liabilities and assets	156	-156	233	-233
<b>TOTAL</b>	<b>156</b>	<b>-156</b>	<b>233</b>	<b>-233</b>

### (c) Commodity price risks

The Group is exposed to risks from changes in commodity prices that stem from the procurement of the goods used in production. The Group generally does not use derivative financial instruments to hedge against this risk. Instead, the Group minimizes the risk in combination with quality and procurement assurance aspects using a procurement strategy adjusted to reflect current conditions and changes. This involves continuously assessing potential procurement sources according to regional, technological, qualitative, and price aspects, approving the sources and embedding these in development and production processes accordingly. Sudden price fluctuations due to the cost of materials or supply bottlenecks for certain product groups are countered using a planning basis that is constantly updated and also includes strategic buffer stocks.



**(d) Credit risks**

Credit risk describes the risk of financial loss resulting from counterparties failing to discharge their contractual payment obligations. Credit risk involves both the direct risk of default and the risk of a deterioration in creditworthiness, linked to the risk of a concentration of individual risks.

Credit risk is countered by only maintaining business relationships with first-class banks. Default risks from receivables are minimized by ongoing monitoring of the creditworthiness of the counterparty and by limiting the aggregated risks from the individual counterparty. The maximum risk of default on financial assets corresponds to their carrying amounts.

Business with major customers is subject to special credit monitoring. However, measured in terms of the overall risk potential from the default risk, the receivables from these customers are not significant enough to constitute an extraordinary concentration of risk.

The following table provides information on the extent of the credit risk included in trade receivables (without specific bad debt allowances):

in EUR k	2017	2016
Neither impaired nor past due as of the end of the reporting period	214,364	199,101
Not impaired as of end of the reporting period but past due by the following time periods:		
less than 30 days	30,386	29,254
31 to 90 days	11,561	8,818
91 to 360 days	5,360	3,744
more than 360 days	2,825	2,612

There was no indication as of the end of the reporting period that any impairment losses needed to be recognized on the trade receivables recorded as not impaired.

**(e) Liquidity risks**

Liquidity risk describes the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Group generates liquidity primarily from operations and external financing. The funds are chiefly used to finance working capital and capital expenditures. The Group controls its liquidity by maintaining sufficient cash and cash equivalents, and lines of credit at banks in addition to cash inflows from operating activities. Cash and cash equivalents comprise cash and other assets.

At the end of 2017, short-term and long-term lines of credit and loans totaled EUR 233,576 k (prior year: EUR 206,390 k), of which EUR 109,887 k (prior year: EUR 97,743 k) was utilized.

Operative liquidity management comprises a cash concentration process whereby cash and cash equivalents are pooled on a daily basis. This allows liquidity surpluses and shortages to be controlled in line with the requirements of the Group as a whole as well as of individual group entities. The maturities of financial assets and financial liabilities as well as estimates of cash flows from operating activities are included in short-term and medium-term liquidity management. Detailed information is included in the comments on section F. (27) "Non-current and current financial liabilities."

The following repayment schedule shows how the payments made for financial liabilities as of December 31, 2017 influence the Group's liquidity situation.

The schedule describes the procedure for undiscounted

- principal and interest payments for financial liabilities
- net payments for derivative financial instruments as a total for the respective year
- payments for trade payables and
- payments for other financial liabilities

The undiscounted payments are subject to the following conditions:

- If the contractual party can demand a payment at different times, the liability is reported at the earliest possible repayment date
- Derivative financial instruments include derivatives with negative fair values
- The interest payments for floating-rate financial instruments are calculated on the basis of forward interest rates. This procedure corresponds to calculating the fair value of other financial instruments

The financial liabilities of the Group have the following terms. The disclosures are based on contractual payments without discounting.

in EUR k	Total	2018	2019	2020	2021	2022	≥ 2023
Liabilities to banks	114,861	26,662	27,530	26,395	24,611	3,776	5,887
Finance lease liabilities	1,932	1,780	26	47	43	36	0
Derivative financial instruments	891	891	0	0	0	0	0
Trade payables	127,132	127,132	0	0	0	0	0
Other financial liabilities	3,898	3,898	0	0	0	0	0
<b>TOTAL</b>	<b>248,714</b>	<b>160,363</b>	<b>27,556</b>	<b>26,442</b>	<b>24,654</b>	<b>3,812</b>	<b>5,887</b>

The cash flows from the derivative financial instruments are shown as net figures.

These include foreign exchange contracts with negative market values that break down into a cash outflow of EUR 23,470 k (prior year: EUR 12,404 k) and a cash inflow of EUR 22,579 k (prior year: EUR 13,849 k).

There are also derivative financial instruments with a positive market value that break down into a cash outflow of EUR 173,723 k (prior year: EUR 100,840 k) and a cash inflow of EUR 175,335 k (prior year: EUR 101,601 k).

As of December 31, 2016, the financial liabilities of the Group had the following terms. The disclosures are based on contractual payments without discounting.

in EUR k	Total	2017	2018	2019	2020	2021	≥ 2022
Liabilities to banks	104,382	8,554	7,941	27,531	26,395	24,611	9,350
Finance lease liabilities	4,042	2,076	1,756	35	66	109	0
Derivative financial instruments	1,445	1,445	0	0	0	0	0
Trade payables	104,774	104,774	0	0	0	0	0
Other financial liabilities	4,295	4,295	0	0	0	0	0
<b>TOTAL</b>	<b>218,938</b>	<b>121,144</b>	<b>9,697</b>	<b>27,566</b>	<b>26,461</b>	<b>24,720</b>	<b>9,350</b>

The retained liquidity as well as short-term and long-term lines of credit give the Group adequate flexibility to cover the Group's refinancing needs. The Group is not subject to any concentration of liquidity risk on account of the diverse nature of its financing sources and its cash and cash equivalents.

#### (f) Capital management

The Group's primary capital management objective is to ensure that it maintains a healthy equity ratio with a low-risk and flexible financing structure in order to support its business activity.

The Group manages the way its capital base is structured in light of changes in economic conditions and adjusts it accordingly. To adjust the way the capital base is structured, the dividend payment to shareholders may be adjusted, capital may be returned to shareholders, or new shares may be issued.

The Group monitors its capital taking into account the underlying parameters, e.g., consolidated net income, mainly using the equity ratio. The equity ratio is the ratio of equity in the statement of financial position to total assets. As of December 31, 2017, the equity ratio amounted to 54.8 percent (prior year: 54.9 percent).

### (36) FINANCIAL INSTRUMENTS

#### (a) Fair value of financial instruments

Financial assets and financial liabilities regularly measured at fair value:

in EUR k	Level 1		Level 2		Level 3		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>ASSETS</b>								
Other financial assets	0	0	1,612	761	0	0	1,612	761
thereof derivatives not used for hedging	0	0	1,612	761	0	0	1,612	761
<b>EQUITY AND LIABILITIES</b>								
Other financial liabilities	0	0	891	1,445	0	0	891	1,445
thereof derivatives not used for hedging	0	0	891	1,445	0	0	891	1,445

The fair value of forward exchange contracts is measured using the closing rates on the forward exchange markets. The fair values are calculated on the basis of the mean exchange rate. The calculation method and the variables used are in line with the provisions of IAS 39.

The fair value of options is determined using the Black-Scholes model modified by Garman and Kohlhagen. An option is measured primarily by reference to exchange rates, the respective interest rates of the currency pair, and volatility as of the reporting date as well as its remaining term. Since the option premium has already been recognized as an asset, measurement is at fair value only.

During the reporting periods ending December 31, 2017 and December 31, 2016, there were no transfers between Level 1 and Level 2 fair value measurements, and no transfers into and out of Level 3 fair value measurements.

Financial assets and financial liabilities not regularly measured at fair value:

in EUR k	Level 1		Level 2		Level 3		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>ASSETS</b>								
Other financial assets	0	0	535	604	0	0	535	604
Trade receivables	0	0	288,299	258,832	0	0	288,299	258,832
Other assets	0	0	8,566	8,502	0	0	8,566	8,502
Cash and cash equivalents	0	0	20,459	31,100	0	0	20,459	31,100
<b>EQUITY AND LIABILITIES</b>								
Liabilities to banks	0	0	111,546	99,161	0	0	111,546	99,161
Finance lease liabilities	0	0	1,928	3,995	0	0	1,928	3,995
Trade payables	0	0	127,132	104,774	0	0	127,132	104,774
Other liabilities	0	0	3,898	4,295	0	0	3,898	4,295

The fair value of securities that are included in the portfolio of available-for-sale financial assets and held-for-trading financial assets is determined based on the market price as of the end of the reporting period, if available.

The carrying amounts of trade receivables and payables, other assets, cash and cash equivalents, and other liabilities closely correspond to the fair values due to the short-term maturities.

For liabilities to banks and from finance leases, the present value of the future cash flows was calculated on the basis of matched market interest rates. In the prior year, other liabilities included obligations from contingent consideration from acquisitions calculated as the present value of estimated cash flows.

For the presentation of the carrying amounts and fair values by class and category, reference is made to pages 124 and 125 of this Annual Report.

Measurement of the financial instruments held as of December 31, 2017 at fair value gave rise to the following total gains and losses.

in EUR k	Assets		Liabilities	
	2017	2016	2017	2016
Recognized in the income statement:				
Derivatives not used for hedging	53	-330	-891	-1,445

Income and expenses from measuring held-for-trading financial assets and liabilities at fair value are presented in the currency results or the interest expense and income.

### (b) Net results by measurement category

The following table presents the net gains and net losses from financial instruments taken into account in the income statement:

#### » CATEGORIES PURSUANT TO IAS 39:

in EUR k	2017	2016
Loans and receivables	-949	-381
Financial assets and financial liabilities at fair value through profit or loss (held for trading)	938	-2,035
Financial liabilities at amortized cost	-577	-3,398
<b>TOTAL</b>	<b>-588</b>	<b>-5,814</b>

The net gains and losses from loans and receivables chiefly include the effects of interest, currencies, and impairments.

The net gains and losses from financial assets and financial liabilities at fair value through profit or loss include the results of changes in fair value and from interest income and expenses from these financial instruments.

The net gains and losses from financial liabilities at amortized cost relate first and foremost to results from interest expenses.



**(c) Total interest income and expenses**

The total interest income and expenses for financial assets and financial liabilities not measured at fair value through profit or loss are as follows:

in EUR k	2017	2016
Total interest income	233	327
Total interest expenses	-2,283	-2,199
<b>TOTAL</b>	<b>-2,050</b>	<b>-1,872</b>

**(d) Derivative financial instruments**

As of the end of the reporting period, the replacement values of the derivative financial instruments are as follows:

in EUR k	Contract value or nominal value		Positive replacement value		Negative replacement value	
	2017	2016	2017	2016	2017	2016
Currency instruments without hedging relationship						
Forward exchange contracts	140,592	82,358	639	553	891	1,445
Currency options (OTC) <sup>1</sup>	55,711	32,331	973	208	0	0
<b>TOTAL CURRENCY INSTRUMENTS</b>	<b>196,303</b>	<b>114,689</b>	<b>1,612</b>	<b>761</b>	<b>891</b>	<b>1,445</b>

<sup>1</sup> OTC: over the counter

The foreign currency instruments are principally used to hedge exchange rate risks in CNY, GBP, KRW, PLN, and USD. Currency instruments of EUR 196,303 k (prior year: EUR 114,689 k) have maturities of less than 12 months.

**(37) GOVERNMENT GRANTS**

The Group does not have any earmarked government grants in the fiscal year (prior year: EUR 22 k). Government grants in the prior year mainly consisted of subsidies provided for the capital expenditures at the Ottendorf-Okrilla location in Dresden to support regional economic development. If earmarked subsidies are not used for the designated purpose, they may have to be repaid.

The Group also reported government grants for R&D projects of EUR 2,077 k (prior year: EUR 2,890 k); these are not dependent on the success of the projects. These were recognized as income in full in 2017 in accordance with the percentage of completion of the projects.

### (38) RELATED PARTY DISCLOSURES

Related parties are members of the Executive Board, members of the Supervisory Board of the Group, members of the Sick family, Sick Stiftungs GmbH, Waldkirch, Germany, joint ventures, associates, and Sick Holding GmbH, Freiburg, Germany. Sick Holding GmbH, Freiburg, is the ultimate parent company of SICK AG. Its consolidated financial statements are published in the Bundesanzeiger (German Federal Gazette).

All transactions with joint ventures are made at normal market prices.

The table below provides the total amount of transactions with related parties for the fiscal year, which relate mostly to joint ventures:

in EUR k	2017	2016
Goods and services sold	1,444	1,339
Goods and services purchased	1,248	925
Receivables as of the end of the reporting period	858	1,104
Liabilities as of the end of the reporting period	123	456

The Group's goods and services sold mainly relate to deliveries of goods. The Group primarily received deliveries of the goods and services as part of goods and services purchased. No bad debt allowances were recognized on trade receivables.

As in the prior year, there were no transactions between the Group and Sick Holding GmbH, Freiburg, during the fiscal year other than dividends paid.

In the Group as of December 31, 2017, as in the prior year, there are no receivables and liabilities due from or to members of the Executive Board, apart from outstanding remuneration.

The members of the Executive Board of SICK AG are classified as key management personnel.

Remuneration of EUR 4,684 k (prior year: EUR 4,562 k) granted to these individuals includes short-term employee benefits of EUR 3,652 k (prior year: EUR 3,509 k) expensed in the reporting period, post-employment benefits of EUR 435 k (prior year: EUR 390 k) as well as other long-term benefits of EUR 598 k (prior year: EUR 663 k), of which EUR 299 k (prior year: EUR 332 k) can relate to share-based payments.

A long-term incentive arrangement ("LTI") was concluded with the members of the Executive Board of SICK AG in the fiscal years 2015, 2016, and 2017. One of the prerequisites for receiving the LTI is to belong to the Executive Board of SICK AG for a period of three years.

The assessment base for the LTI is a positive value added accumulated over three fiscal years (either 2015 to 2017, 2016 to 2018, or 2017 to 2019, depending on the contract, referred to as the "time frame"). The LTI is measured as a percentage of the average value added calculated in this period. It is limited to a certain percentage of the fixed remuneration. At the end of the period, the LTI is paid out in shares in SICK AG (max. 50 percent) and in cash (min. 50 percent). In the fiscal year 2017, 4,700 shares were paid out at a price of EUR 49.56 at the end of the 2014 to 2016 time frame under the LTI. The obligations from the cash settlement amount to EUR 299 k as of December 31, 2017. The percentage of shares is determined by the company, taking treasury shares into account. The rate authoritative for translating the percentage to be paid out in shares is the current rate specified by the tax authorities or the respective market price on the date of maturity. If a member of the Executive Board leaves during this three-year period, any entitlement to an LTI for this period is forfeited.

The SICK shares transferred as part of the LTI must be kept in a custodian account with a blocking notice stating that the shares can only be issued subject to the approval of the company. These shares can only be accessed if the member steps down from the Executive Board or retires.

Measurement of the LTI as of December 31, 2017 was based on the consolidated financial statements as of December 31, 2015 to 2017 as well as the planning for the Group for future fiscal years, taking the contractually stipulated limit into account. Based on the share price of EUR 49.56 observed in the fiscal year 2017, the 50 percent share of the LTI, which can be paid in shares, corresponds to EUR 299 k or 6,029 shares.

Compensation to former members of management and their surviving dependents totaled EUR 1,153 k in the fiscal year (prior year: EUR 1,118 k). Provisions totaling EUR 13,661 k (prior year: EUR 13,919 k) were recognized for pension obligations for this group of persons.

Compensation of the Supervisory Board of SICK AG came to EUR 739 k (prior year: EUR 744 k) for supervisory board activities and to EUR 370 k (prior year: EUR 427 k) for activities for SICK AG. Additional compensation for advisory services was not paid.

As of December 31, 2017, as in the prior year, the Sick family has no receivables or liabilities due from or to the Group.

### (39) STOCK OPTION PLANS

From 1999 to 2003, SICK AG had annual employee stock option plans. Around 1.3 million shares were issued as part of employee stock option plans, of which SICK AG has since repurchased 0.3 million shares at market price.

### (40) FEES AND SERVICES PROVIDED BY THE AUDITORS

The following table shows, on aggregate, the fees incurred for the services provided by the auditor Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, Germany, in the fiscal year 2017:

in EUR k	2017	2016
Audits of the financial statements	325	316
Other attestation services	0	0
Tax advisory services	0	10
Other services	101	214
<b>TOTAL</b>	<b>426</b>	<b>540</b>

**(41) ACCOUNTING STANDARDS NOT EARLY ADOPTED**

The IASB and IFRIC have issued additional standards and interpretations. These regulations have not been adopted for this reporting year because they have either not yet been recognized by the EU or their adoption is not yet mandatory.

Generally speaking, the Group intends to adopt all standards when their adoption becomes mandatory for the first time.

Standards/ interpretations	Title	Applicable from	Expected impact on SICK
IFRS 9	Financial Instruments	January 1, 2018	Significant in principle
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	Significant in principle
IFRS 16	Leases	January 1, 2019	Significant in principle
Improvements to IFRSs (2014–2016)	Amendments to various standards (IFRS 1, IFRS 12, and IAS 1)	January 1, 2018	Immaterial
Amendments to IFRS 4	Adoption of IFRS 9 with IFRS 4	January 1, 2018	Not applicable
Amendments to IAS 40	Transfer of Investment Properties	January 1, 2018	Not applicable
Amendments to IFRS 2	Classification and Measurement of Share-based Transactions	January 1, 2018	Immaterial
Amendments to IFRS 15	Clarifications to IFRS 15	January 1, 2018	Not applicable
IFRIC 22	Foreign Currency Transactions and Advance Consideration	January 1, 2018	Immaterial
IFRIC 23	Uncertainty Over Income Tax Treatments	January 1, 2019	Significant in principle
Amendments to IFRS 9	Prepayment Features with Negative Compensation	January 1, 2019	Immaterial
Amendments to IAS 28	Long-term Investments in Associates and Joint Ventures	January 1, 2019	Immaterial
Improvements to IFRSs (2015–2017)	Amendments to various standards (IFRS 3, IFRS 11, IAS 12, and IAS 23)	January 1, 2019	Immaterial
IFRS 17	Insurance Contracts	January 1, 2021	Immaterial

Issued in July 2014, IFRS 9 introduces a uniform approach for classifying and measuring financial assets. The standard is based on the characteristics of the cash flows and the business model by which these cash flows are managed. It also provides a new impairment model that is based on the expected credit defaults. IFRS 9 contains new regulations on the application of hedge accounting in order to better present the risk management activities of an entity, in particular with regard to the management of non-financial risks. The new standard is to be applied as of the first reporting period in a fiscal year that begins on or after January 1, 2018. The Group will adopt IFRS 9 for the first time in the fiscal year 2018; pursuant to transitional provisions of IFRS 9, the prior-year figures will not be adjusted.

The effects of first-time application of IFRS 9 are currently being analyzed and only minor effects are expected for the classification and measurement. The effects of the new impairment model in IFRS 9 on the impairment of debt instruments are still being investigated. The Group assumes that it will use the simplified approach and calculate trade receivables over the entire term. Based on previous analyses, the Group does not expect any significant changes to the impairment amounts.

At this point in time, the new hedge accounting regulations do not appear to have any effects on the financial position or performance of the Group. The Group did not conclude any transactions in the fiscal year 2017 that would meet the recognition criteria for hedging activities pursuant to IAS 39 or IFRS 9, and no such transactions are planned for 2018 at this point in time.

IFRS 15 sets an extensive framework for determining whether, in what amount, and at what point in time revenue is recognized. It replaces existing guidelines on recognizing revenue, including IAS 18 "Revenue," IAS 11 "Construction Contracts," and IFRIC 13 "Customer Loyalty Programmes." IFRS 15 is to be applied to the first reporting period of a fiscal year that begins on or after January 1, 2018.

The Group performed a group-wide assessment on the potential effects of applying IFRS 15. This involved examining business models in terms of the new standards and interpretations. The full analysis and implementation is not yet complete. No significant effects on the financial position or performance of the Group are expected at this point in time. The statement of financial position will be affected by the separate presentation of contract assets and liabilities. The qualitative and quantitative disclosures in the notes to the consolidated financial statements will also be more in-depth. The Group intends to use the modified retrospective method to transition to IFRS 15 for the first-time application as of January 1, 2018.

At the heart of the new standard IFRS 16 is the principle that the lessee should generally recognize all leases as well as the associated contractual rights and obligations in its statement of financial position. In future, lessees will no longer have to make the distinction previously required under IAS 17 between finance leases and operating leases. For lessors, however, the new standard sets forth similar rules to those previously contained in IAS 17. The lease agreements continue to be classified either as operating leases or finance leases. The new requirements are mandatory for fiscal years beginning on or after January 1, 2019. The Group expects that it will use the modified retrospective method to transition to IFRS 16 for the first-time application as of January 1, 2019. It is currently expected that the conversion effect will mainly affect the leased real estate and vehicles.

In 2017, the Group began a group-wide analysis and implementation to capture and illustrate the effects of applying IFRS 16 for the first time. Without being able to make any concrete quantitative disclosures, first-time application will significantly increase assets and liabilities and thus reduce the equity ratio. Furthermore, the type of expenses associated with these leases will change as IFRS 16 replaces the straight-line method of recognizing expenses for operating lease agreements with a depreciation expense for rights of use and interest expenses that stem from liabilities from leases.

In May 2017, the IASB issued IFRIC 23 "Uncertainty over Income Tax Treatments." This interpretation clarifies the requirements for recognizing and measuring uncertain income tax items. As part of estimating the uncertainty, the entity is required to assess the likelihood of the tax jurisdiction accepting the income tax treatment. The new regulation is mandatory for fiscal years beginning on or after January 1, 2019. The Group is currently assessing the potential impact of the standard on its future financial position and performance.

## (42) SUBSEQUENT EVENTS

SICK AG is currently in the process of acquiring the remaining 15 percent of the shares in SICK MAIHAK (Beijing) Co., Ltd., Beijing, China, for approximately EUR 4,400 k. We assume that the transfer of shares will be finalized some time in 2018. At the same time as the acquisition, SICK AG is preparing to sell 15 percent of the shares in Beijing BAIF-Maihak Analytical Instrument Co., Ltd., Beijing, China, for approximately EUR 200 k. This transaction is scheduled to be finalized in the first half of 2018.



## (43) EXECUTIVE BOARD AND SUPERVISORY BOARD DISCLOSURES

### Executive Board

Dr. Robert Bauer, Emmendingen (Chairman)  
Products & Technology

Reinhard Bösl, Freiburg  
Systems & Industries

Dr. Mats Gökstorp, Freiburg  
Sales & Service

Dr. Martin Krämer, Waldkirch  
Human Resources, Procurement, Legal & Compliance

Markus Vatter, Vörstetten  
Finance, Controlling & IT

### Supervisory Board

In accordance with Sec. 95 AktG in conjunction with Art. 8 paragraph 1 of the articles of incorporation and bylaws, the Supervisory Board has 12 members. Six members are elected by the Annual General Shareholders' Meeting and six by the employees in accordance with the provisions of the 1976 MitbestG ("Mitbestimmungsgesetz": German Co-determination Act). The members of the Supervisory Board are:

Gisela Sick, Waldkirch (Honorary Chairwoman)  
Retired

#### Shareholder representatives:

Klaus M. Bukenberger, Schenkenzell (Chairman)  
Corporate Governance Consulting, Stuttgart

Franz Bausch, Hinterzarten  
Tax consultant, chartered accountant

Prof. Dr. Mark K. Binz, Stuttgart  
Lawyer

Sebastian Glaser, Munich  
Managing Director of Sick Holding GmbH, Freiburg  
Member of the Supervisory Board since 2017

Dr. Ronaldo H. Schmitz, Frankfurt  
Former member of the Executive Board of Deutsche Bank AG, Frankfurt  
Member of the Supervisory Board until 2017

Renate Sick-Glaser, Freiburg  
Managing Director of Sick Holding GmbH, Freiburg

Dr. Dipl.-Ing. Eberhard Veit, Göppingen  
Managing Director of 4.0-Veit GbR, Göppingen  
Member of the Supervisory Board since 2017

Prof. Dr. Dr. h. c. mult. Horst Wildemann, Munich  
Head of the Research Institute for Corporate Management, Logistics and Production at the Technical University of Munich  
Member of the Supervisory Board until 2017

**Employee representatives:**

Dr. Bernd Cordes, Emmendingen  
Head of the Global Business Center 07 of SICK AG, Waldkirch  
Member of the Supervisory Board since 2017

Engelbert Herbstritt, Waldkirch  
Chairman of the Group Works Council

Roberto Hernandez, Waldkirch (Deputy Chairman)  
Chairman of the Works Council of SICK AG, Waldkirch  
Chairman of the Central Works Council of SICK AG, Waldkirch

Dr. Matthias Müller, Braunschweig  
Head of Finance in the Federal Presidium of the DGB ("Deutscher Gewerkschaftsbund": Confederation of German Trade Unions),  
Berlin

Gabriele Pontiggja, Winden  
Human Resources Consultant at SICK AG, Waldkirch  
Member of the Supervisory Board until 2017

Roland Schiller, Hinterzarten  
Member of the Management Board of SICK AG, Waldkirch  
Member of the Supervisory Board until 2017

Hermann Spieß, Breisach  
Trade Union Secretary of IG Metall

Thomas Weckopp, Korschenbroich  
Chairman of the Works Council of SICK Vertriebs-GmbH, Düsseldorf  
Member of the Supervisory Board since 2017

#### (44) APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Executive Board on February 20, 2018. The financial statements were then submitted to the Supervisory Board for review.

Waldkirch, March 15, 2018

SICK AG

The Executive Board



Dr. Robert Bauer  
(Chairman)



Reinhard Bösl



Dr. Mats Gökstorp



Dr. Martin Krämer



Markus Vatter



## CONSOLIDATED STATEMENT OF CHANGES IN NON-CURRENT ASSETS

NON-CURRENT ASSETS in EUR k	Acquisition or production costs					Balance as of Dec 31, 2017
	Balance as of Jan 1, 2017	Currency translation differences	Additions	Disposals	Reclassifica- tions	
<b>I. Intangible assets</b>						
1. Purchased industrial property rights and similar rights and assets as well as licenses to such rights and assets	82,333	-616	5,487	1,491	432	86,145
2. Goodwill	25,385	-571	1,136	0	0	25,950
3. Capitalized development costs and other internally generated intangible assets	88,899	-14	9,453	2,305	0	96,033
4. Payments on account	794	-25	384	0	-432	721
	<b>197,411</b>	<b>-1,226</b>	<b>16,460</b>	<b>3,796</b>	<b>0</b>	<b>208,849</b>
<b>II. Property, plant and equipment</b>						
1. Land and buildings including buildings on third-party land	195,764	-1,325	6,687	261	8,759	209,624
2. Technical equipment and machinery	166,102	-839	18,917	3,526	11,578	192,232
3. Other equipment, furniture and fixtures	146,117	-4,156	18,832	8,220	1,085	153,658
4. Payments on account and assets under construction	28,577	-43	34,394	0	-21,422	41,506
	<b>536,560</b>	<b>-6,363</b>	<b>78,830</b>	<b>12,007</b>	<b>0</b>	<b>597,020</b>
<b>TOTAL</b>	<b>733,971</b>	<b>-7,589</b>	<b>95,290</b>	<b>15,803</b>	<b>0</b>	<b>805,869</b>

Additions include the acquisition of ATech GmbH in Witten (industrial property rights and similar rights: EUR 602 k and property, plant and equipment: EUR 371 k).



	Accumulated depreciation / amortization					Net carrying amounts		
	Balance as of Jan 1, 2017	Currency trans- lation differences	Additions	Disposals	Reclassifica- tions	Balance as of Dec 31, 2017	Balance as of Dec 31, 2017	Balance as of Dec 31, 2016
	64,113	-610	7,688	1,481	0	69,710	16,435	18,220
	1,024	0	0	0	0	1,024	24,926	24,361
	63,868	-14	8,695	2,305	0	70,244	25,789	25,031
	0	0	0	0	0	0	721	794
	129,005	-624	16,383	3,786	0	140,978	67,871	68,406
	60,422	-688	6,348	223	50	65,909	143,715	135,342
	104,297	-591	18,258	3,526	-113	118,325	73,907	61,805
	99,768	-3,335	14,682	7,765	63	103,413	50,245	46,349
	0	0	0	0	0	0	41,506	28,577
	264,487	-4,614	39,288	11,514	0	287,647	309,373	272,073
	393,492	-5,238	55,671	15,300	0	428,625	377,244	340,479

## CONSOLIDATED STATEMENT OF CHANGES IN NON-CURRENT ASSETS

NON-CURRENT ASSETS in EUR k	Acquisition or production costs					Balance as of Dec 31, 2016
	Balance as of Jan 1, 2016	Currency translation differences	Additions	Disposals	Reclassi- fications	
<b>I. Intangible assets</b>						
1. Purchased industrial property rights and similar rights and assets as well as licenses to such rights and assets	71,922	238	11,583	1,918	508	82,333
2. Goodwill	19,073	735	5,577	0	0	25,385
3. Capitalized development costs and other internally generated intangible assets	86,528	-19	6,672	4,282	0	88,899
4. Payments on account	596	4	702	0	-508	794
	<b>178,119</b>	<b>958</b>	<b>24,534</b>	<b>6,200</b>	<b>0</b>	<b>197,411</b>
<b>II. Property, plant and equipment</b>						
1. Land and buildings including buildings on third-party land	177,500	415	3,677	238	14,410	195,764
2. Technical equipment and machinery	140,752	415	13,061	3,261	15,135	166,102
3. Other equipment, furniture and fixtures	123,491	1,003	18,443	4,735	7,915	146,117
4. Payments on account and assets under construction	42,961	28	23,048	0	-37,460	28,577
	<b>484,704</b>	<b>1,861</b>	<b>58,229</b>	<b>8,234</b>	<b>0</b>	<b>536,560</b>
<b>TOTAL</b>	<b>662,823</b>	<b>2,819</b>	<b>82,763</b>	<b>14,434</b>	<b>0</b>	<b>733,971</b>

Additions include the acquisition in Belgium (industrial property rights and similar rights: EUR 967 k and property, plant and equipment: EUR 19 k).

	Accumulated depreciation / amortization					Net carrying amounts		
	Balance as of Jan 1, 2016	Currency trans- lation differences	Additions	Disposals	Reclassi- fications	Balance as of Dec 31, 2016	Balance as of Dec 31, 2016	Balance as of Dec 31, 2015
	57,438	236	8,326	1,887	0	64,113	18,220	14,484
	1,024	0	0	0	0	1,024	24,361	18,049
	59,968	-19	8,201	4,282	0	63,868	25,031	26,560
	0	0	0	0	0	0	794	596
	118,430	217	16,527	6,169	0	129,005	68,406	59,689
	54,630	180	5,738	126	0	60,422	135,342	122,870
	92,424	262	15,838	3,261	-966	104,297	61,805	48,328
	89,729	925	12,766	4,618	966	99,768	46,349	33,762
	0	0	0	0	0	0	28,577	42,961
	236,783	1,367	34,342	8,005	0	264,487	272,073	247,921
	355,213	1,584	50,869	14,174	0	393,492	340,479	307,610

## CARRYING AMOUNTS AND FAIR VALUES BY MEASUREMENT CATEGORY IN EUR K

	Measure- ment category pursuant to IAS 39	Carrying amount pursuant to IAS 39					Other carrying amounts	Fair Value 2017
		Carrying amount 2017	(Amortized) cost	at fair value not through profit or loss	at fair value through profit or loss	Carrying amount pursuant to IAS 17		
<b>ASSETS</b>								
<b>Other financial assets</b>								
Other equity investments	FAAFS	523	523				523	
Other financial assets	FAAFS	12	12				12	
Trade receivables	LAR	288,299	288,299				288,299	
<b>Other assets</b>								
Derivatives held for trading	FAHFT	1,612			1,612		1,612	
Other	FAAFS/ LAR/n.a.	28,344	8,566			19,778	28,344	
Cash and cash equivalents	LAR	20,459	20,459				20,459	
<b>EQUITY AND LIABILITIES</b>								
<b>Financial liabilities</b>								
Liabilities to banks	FLAC	109,887	109,887				111,546	
Finance lease liabilities	n.a.	1,928				1,928	1,928	
Trade payables	FLAC	127,132	127,132				127,132	
<b>Other liabilities</b>								
Derivatives held for trading	FLHFT	891			891		891	
Other	FLAC	3,898	3,898				3,898	
<b>Of which aggregated by measurement category pursuant to IAS 39:</b>								
Financial assets held for trading (FAHFT)		1,612			1,612			
Loans and receivables (LAR)		317,051	317,051					
Financial assets available for sale (FAAFS)		808	808					
Financial liabilities held for trading (FLHFT)		891			891			
Financial liabilities at amortized cost (FLAC)		240,917	240,917					

## CARRYING AMOUNTS AND FAIR VALUES BY MEASUREMENT CATEGORY IN EUR K

	Measure- ment category pursuant to IAS 39	Carrying amount pursuant to IAS 39					Other carrying amounts	Fair Value 2016
		Carrying amount 2016	(Amortized) cost	at fair value not through profit or loss	at fair value through profit or loss	Carrying amount pursuant to IAS 17		
<b>ASSETS</b>								
<b>Other financial assets</b>								
Other equity investments	FAAFS	591	591				591	
Other financial assets	FAAFS	13	13				13	
Trade receivables	LAR	258,832	258,832				258,832	
<b>Other assets</b>								
Derivatives held for trading	FAHFT	761			761		761	
Other	FAAFS/ LAR/n.a.	26,605	8,502			18,103	26,605	
Cash and cash equivalents	LAR	31,100	31,100				31,100	
<b>EQUITY AND LIABILITIES</b>								
<b>Financial liabilities</b>								
Liabilities to banks	FLAC	97,743	97,743				99,161	
Finance lease liabilities	n.a.	3,995				3,995	3,995	
Trade payables	FLAC	104,774	104,774				104,774	
<b>Other liabilities</b>								
Derivatives held for trading	FLHFT	1,445			1,445		1,445	
Other	FLAC	4,295	4,295				4,295	
<b>Of which aggregated by measurement category pursuant to IAS 39:</b>								
Financial assets held for trading (FAHFT)		761			761			
Loans and receivables (LAR)		298,290	298,290					
Financial assets available for sale (FAAFS)		748	748					
Financial liabilities held for trading (FLHFT)		1,445			1,445			
Financial liabilities at amortized cost (FLAC)		206,812	206,812					



## LIST OF MAIN SHAREHOLDINGS AS OF DECEMBER 31, 2017

Name and registered offices of the entity	Investment in %	Indirect investment via no.	Consolidation
<b>Parent company</b>			
SICK AG, Waldkirch / Germany			
<b>I. Shares in affiliates</b>			
1. SICK S.à.r.l., Émerainville / France	100.00		
2. SICK (UK) Ltd., St. Albans / United Kingdom	100.00		
3. SICK, Inc., Minneapolis, Minnesota / USA	100.00		
4. SICK B.V., Bilthoven / Netherlands	100.00		
5. SICK AG, Stans / Switzerland	100.00		
6. SICK Pty Ltd., Heidelberg West, VIC / Australia	100.00		
7. SICK A/S, Birkerød / Denmark	100.00		
8. SICK NV/SA, Zellik-Asse / Belgium	100.00		
9. SICK K.K., Tokyo / Japan	100.00		
10. SICK Optic-Electronic S.A., Sant Just Desvern / Spain	100.00		
11. SICK Engineering GmbH, Ottendorf-Okrilla / Germany <sup>1</sup>	100.00		
12. SICK Oy, Vantaa / Finland	100.00		
13. SICK Pte. Ltd., Singapore / Singapore	100.00		
14. SICK AS, Rud / Norway	100.00		
15. SICK AB, Vårby / Sweden	100.00		
16. SICK Sp. z o.o., Warsaw / Poland	100.00		
17. SICK Solução em Sensores Ltda., São Paulo / Brazil	100.00		
18. Sick Optic-Electronic Co., Ltd., Hong Kong / China	100.00		
19. SICK S.p.A., Vimodrone (MI) / Italy <sup>2</sup>	100.00		
20. SICK Kft., Kunsziget / Hungary	100.00		
21. SICK GmbH, Vienna Neudorf / Austria	100.00		
22. SICK spol. s r.o., Prague / Czech Republic	100.00		
23. SICK Management GmbH, Waldkirch / Germany <sup>1</sup>	100.00		
24. SICK Co., Ltd., Seoul / Korea	85.00		
25. SICK Automatisierung International GmbH, Waldkirch / Germany	100.00		
26. SICK China Co., Ltd., Guangzhou / China	100.00	18	
27. SICK STEGMANN GmbH, Donaueschingen / Germany <sup>1,3</sup>	100.00	23	
28. SICK MAIHAK (Beijing) Co., Ltd., Beijing / China	85.00		
29. SICK IVP AB, Linköping / Sweden	100.00		
30. Sensörler ve İleri Cihazlar Kontrol A.Ş., Istanbul / Turkey	100.00		
31. SICK LLC, Moscow / Russia <sup>4</sup>	100.00	25	
32. SICK Vertriebs-GmbH, Düsseldorf / Germany <sup>1</sup>	100.00		
33. SICK d.o.o., Ljubljana / Slovenia	100.00	21	N
34. SICK INDIA Pvt. Ltd., Mumbai / India	100.00	25	

Name and registered offices of the entity	Investment in %	Indirect investment via no.	Consolidation
35. SICK Sensors Ltd., Misgav/ Israel	100.00		
36. SICK S.R.L., Timisoara/ Romania <sup>5</sup>	100.00	25	N
37. SICK TAIWAN Co., Ltd., Taipei/ Taiwan	100.00		
38. SICK Automation Solutions S.A. de C.V., Tlalnepantla/ Mexico	100.00	25	
39. SICK Ltd., Moncton, New Brunswick/ Canada	100.00	3	
40. SICK Automation Southern Africa (Pty) Ltd., Roodepoort, Johannesburg/ South Africa	100.00	25	
41. SICK Sdn. Bhd., Johor Bahru/ Malaysia	100.00	43	
42. SICK System Engineering AG, Buochs/ Switzerland	100.00		
43. SICK Product Center Asia Pte. Ltd., Singapore/ Singapore	100.00		
44. SICK FZE, Dubai/ United Arab Emirates	100.00	25	
45. SICK Sensor (Malaysia) Sdn. Bhd., Petaling Jaya/ Malaysia	100.00	25	N
46. SICK (THAILAND) Co., Ltd., Bangkok/ Thailand	100.00	25	N
47. SICK NZ Ltd., Auckland/ New Zealand	100.00	25	
48. SICK Értékesítő és Szolgáltató Kft., Budapest/ Hungary	100.00	25	N
49. SICK Metering Systems NV, Kalmthout/ Belgium	82.00	11	
50. Vision Solution Engineering s.r.o., Prague/ Czech Republic	100.00	25	
51. SICK Product & Competence Center Americas LLC, Minneapolis, Minnesota/ USA	100.00	3	
52. SICK ATech GmbH, Witten/ Germany	100.00		
<b>II. Equity investments and other interests</b>			
53. SICK OPTEX Co., Ltd., Kyoto/ Japan	50.00		A
54. SICK kluge GmbH, Königswartha/ Germany	50.00	11	A
55. Beijing BAIF-Maihak Analytical Instrument Co., Ltd., Beijing/ China	15.00		N
56. Puls Design A/S, Hvidovre/ Denmark	25.00	7	N
57. WABE gGmbH, Waldkirch/ Germany	16.67		N
58. Schädler SICK SpA, Santiago de Chile/ Chile	50.00	25	A
59. Mobilisis d.o.o., Varaždin/ Croatia	24.99		A

<sup>1</sup> The entities have exercised the exemption provision pursuant to Sec. 264 (3) HGB.

<sup>2</sup> 10 percent of the shares are held by SICK Engineering GmbH, Ottendorf-Okrilla/ Germany (No. 11).

<sup>3</sup> 6 percent of the shares are held by SICK AG, Waldkirch/ Germany.

<sup>4</sup> 15 percent of the shares are held by SICK AG, Waldkirch/ Germany.

<sup>5</sup> 0.5 percent of the shares are held by SICK AG, Waldkirch/ Germany.

N The entities marked N are not included in the consolidated financial statements on grounds of immateriality.

A The entities marked A are included in the consolidated financial statements at equity.

# THE SUPERVISORY BOARD

OF SICK AG

**GISELA SICK**, Waldkirch (Honorary Chairwoman)  
Retired

**KLAUS M. BUKENBERGER**, Schenkenzell (Chairman)  
Corporate Governance Consulting, Stuttgart  
Member of the Supervisory Board since 2002

**Additional Supervisory Board memberships:**

- Carl Mahr GmbH & Co. KG, Göttingen,  
Chairman of the Advisory Board
- Deutsche Bank AG, Stuttgart,  
member of the Advisory Board
- NIBC Bank Deutschland AG, Frankfurt,  
member of the Advisory Board
- ILLIG Maschinenbau GmbH & Co. KG, Heilbronn,  
Deputy Chairman of the Advisory Board
- Investcorp Group, London (UK), Advisory Director
- 7-Industries B.V., Amsterdam (Netherlands),  
member of the Supervisory Board
- TRICOR AG, Bad Wörishofen,  
Deputy Chairman of the Supervisory Board

**FRANZ BAUSCH**, Hinterzarten  
Tax consultant, chartered accountant  
Member of the Supervisory Board since 1999

**Additional Supervisory Board memberships:**

- Deutsche Steuerberater-Versicherung – Pensionskasse  
des steuerberatenden Berufs VVaG, Bonn,  
Chairman of the Supervisory Board

**PROF. DR. MARK K. BINZ**, Stuttgart  
Lawyer  
Member of the Supervisory Board since 2007

**Additional Supervisory Board memberships:**

- Faber-Castell AG, Stein,  
Deputy Chairman of the Supervisory Board
- Fielmann Aktiengesellschaft, Hamburg,  
Chairman of the Supervisory Board

**DR. BERND CORDES**, Emmendingen\*  
Head of the Global Business Center 07, SICK AG, Waldkirch  
Member of the Supervisory Board since 2017

**Additional Supervisory Board memberships:**

- HYDRO Systems KG, Biberach / Baden,  
Member of the Advisory Board

**SEBASTIAN GLASER**, Munich  
Managing Director of SICK Holding GmbH, Freiburg  
Member of the Supervisory Board since 2017

**ENGELBERT HERBSTTRITT**, Waldkirch\*  
Chairman of the Group Works Council  
Member of the Supervisory Board since 2012

**ROBERTO HERNANDEZ**, Waldkirch\*  
(Deputy Chairman)  
Chairman of the Works Council of SICK AG, Waldkirch  
Chairman of the Central Works Council of SICK AG, Waldkirch  
Member of the Supervisory Board since 2007

**DR. MATTHIAS MÜLLER**, Braunschweig \*  
 Head of Finance in the Federal Presidium of the DGB  
 ("Deutscher Gewerkschaftsbund": Confederation of German  
 Trade Unions), Berlin  
 Member of the Supervisory Board since 2002

**Additional Supervisory Board memberships:**

- Berufsbildungswerk Gemeinnützige Bildungseinrichtung des DGB GmbH (bfw), Düsseldorf, member of the Supervisory Board
- BGAG GmbH, Frankfurt, member of the Advisory Board
- RWE Power AG, Essen, member of the Supervisory Board

**GABRIELE PONTIGGIA**, Winden \*  
 Human Resources Consultant at SICK AG, Waldkirch  
 Member of the Supervisory Board until 2017

**ROLAND SCHILLER**, Hinterzarten \*  
 Member of the Management Board of SICK AG, Waldkirch  
 Member of the Supervisory Board until 2017

**DR. RONALDO H. SCHMITZ**, Frankfurt  
 Former member of the Executive Board of Deutsche Bank AG,  
 Frankfurt  
 Member of the Supervisory Board until 2017

**RENATE SICK-GLASER**, Freiburg  
 Managing Director of Sick Holding GmbH, Freiburg  
 Member of the Supervisory Board since 2007

**HERMANN SPIESS**, Breisach \*  
 Trade Union Secretary of IG Metall  
 Member of the Supervisory Board since 2002

**Additional Supervisory Board memberships:**

- Constellium Deutschland GmbH, Singen, Deputy Chairman of the Supervisory Board

**DR. DIPL.-ING. EBERHARD VEIT**, Göppingen  
 Managing Director of 4.0-Veit GbR, Göppingen  
 Member of the Supervisory Board since 2017

**Additional Supervisory Board memberships:**

- Bizerba SE & Co. KG, Balingen, member of the Supervisory Board
- Carl Zeiss AG, Oberkochen, member of the Supervisory Board
- ebm-papst GmbH & Co. KG, Muldingen, member of the Advisory Board
- Heitkamp & Thumann KG, Düsseldorf, member of the Advisory Board
- Phoenix Contact GmbH & Co. KG, Blomberg/Lippe Chairman of the Advisory Board
- TÜV Süd AG, Munich, member of the Supervisory Board
- Wagner International AG, Markdorf and Altstätten/Switzerland, member of the Administrative Board

**THOMAS WECKOPP**, Korschenbroich \*  
 Chairman of the Works Council of SICK Vertriebs-GmbH,  
 Düsseldorf  
 Member of the Supervisory Board since 2017

**PROF. DR. DR. H. C. MULT. HORST WILDEMAN**, Munich  
 Head of Research Institute for Corporate Management,  
 Logistics and Production at the Technical University of Munich  
 Member of the Supervisory Board until 2017

**Additional Supervisory Board memberships:**

- Hamberger Industrierwerke GmbH, Stephanskirchen, member of the Advisory Board
- Interroll Holding AG, S. Antonino (Switzerland), member of the Supervisory Board
- Möhlenhoff GmbH, Salzgitter, Chairman of the Advisory Board
- Rudolf GmbH, Geretsried, Chairman of the Advisory Board
- ZEPPELIN GmbH, Garching, member of the Supervisory Board

\* Employee representative

# INDEPENDENT AUDITOR'S REPORT \*

TO SICK AG

## REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

### AUDIT OPINION

We have audited the consolidated financial statements of SICK AG, Waldkirch, and its subsidiaries (the Group), which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of changes in equity, and notes to the consolidated financial statements for the fiscal year from January 1 to December 31, 2017, including a summary of significant accounting policies. In addition, we have audited the group management report, which has been combined with the management report of SICK AG, for the fiscal year from January 1 to December 31, 2017. In accordance with the German legal requirements, we have not audited the content of the corporate governance statement included in the "Setting targets for the equal representation of men and women in management positions" section on the last page of the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB ("Handelsgesetzbuch": German Commercial Code) and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2017, and of its financial performance for the fiscal year from January 1 to December 31, 2017, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the corporate governance statement referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

\* Translation of the German independent auditor's report concerning the audit of the consolidated financial statements and group management report prepared in German

## BASIS FOR THE AUDIT OPINION

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

## OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the group corporate governance statement pursuant to Secs. 315d in conjunction with 289f (4) HGB, which is included in the "**SETTING TARGETS FOR THE EQUAL REPRESENTATION OF MEN AND WOMEN IN MANAGEMENT POSITIONS**" section of the group management report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

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

## RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility to disclose, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.



Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

## AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures
- Draw a conclusion on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with (German) law, and the view of the Group's position it provides
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Freiburg i. Br., March 16, 2018

Ernst & Young GmbH  
Wirtschaftsprüfungsgesellschaft

Nietzer  
Wirtschaftsprüfer  
(German Public Auditor)

Busser  
Wirtschaftsprüfer  
(German Public Auditor)

# THE EXECUTIVE BOARD

OF SICK AG



## DR. ROBERT BAUER, CHAIRMAN

Products & Technology  
Member of the Executive Board  
since January 1, 2000

Dr. Robert Bauer came to the company in 1994 as Division Manager of Research & Development in the area of automation technology; in 1998, he assumed overall responsibility on the Management Board for Research & Development. Born in Munich in 1960, Robert Bauer studied Electrical Engineering with special emphasis on Electrophysics/Optics at the Technical University of Munich and he received his doctorate in 1990.



## REINHARD BÖSL

Systems & Industries  
Member of the Executive  
Board since July 1, 2007

Born in the East Bavarian Parkstein in 1958, Reinhard Bösl studied Computer Science in Munich. Afterward, he held a variety of positions at Witron Logistik + Informatik GmbH, Parkstein, and became the company's Managing Director in 1998. Since 2004, he had been active in management positions at Kronos AG, Neutraubling, including as Managing Director of the subsidiary Syskron GmbH.

**MARKUS VATTER**

Finance, Controlling & IT  
Member of the Executive  
Board since July 1, 2006

Markus Vatter was born in Wiesbaden in 1966. After obtaining his degree at the Technical University in Darmstadt, the industrial engineer started his professional career at Robert Bosch GmbH, Stuttgart. Afterward, he worked for Müller Weingarten AG, before joining KaVo Dental GmbH, Biberach, in 2001. His most recent position there was that of a Commercial Managing Director.

**DR. MATS GÖKSTORP**

Sales & Service  
Member of the Executive  
Board since May 1, 2013

Born in Stockholm in 1965, Dr. Mats Gökstorp studied Computer Engineering at Linköping University in Sweden and at Case Western Reserve University in the USA. He received his doctorate in 1995. He joined the small university spin-off company Integrated Vision Products AB, where he learned all aspects of entrepreneurship and became the company's Managing Director in 2001. Since 2003, he has held various positions within the SICK Group. In 2007, he was appointed to the Management Board, first as Division Manager and later with overall responsibility for Customer Fulfillment.

**DR. MARTIN KRÄMER**

Human Resources, Procurement,  
Legal & Compliance  
Member of the Executive Board since July 1, 2012

Born in Rottweil in 1960, Dr. Martin Krämer studied law at the universities of Tübingen and Freiburg. He received his doctorate in 1998. From 1991 onward, he practiced initially as a lawyer and partner at the law firm of Dr. Müller und Kollegen in Künzelsau. Then he joined the Lidl & Schwarz Corporate Group, where he worked as Head of the Legal Division. Four years later, he assumed his position as Head of the Legal Department at SICK AG.

# FINANCIAL CALENDAR 2018

APRIL 19 \_\_\_\_\_ Publication of the 2017 balance sheet ratios

MAY 16, 5 P.M. \_\_\_\_\_ Annual General Shareholders' Meeting  
SICK AG's company restaurant, Waldkirch

MAY 21 \_\_\_\_\_ Dividend payment

AUGUST \_\_\_\_\_ Publication of the 2018 half-year figures

# IMPRINT

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Sabine Schmidt

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